
THE
FINANCIAL
CRISIS
INQUIRY REPORT



Final Report of the National Commission
on the Causes of the Financial and
Economic Crisis in the United States

• AUTHORIZED EDITION •

THE FINANCIAL CRISIS INQUIRY REPORT



FINAL REPORT OF THE NATIONAL COMMISSION
ON THE CAUSES OF THE FINANCIAL AND
ECONOMIC CRISIS IN THE UNITED STATES

FINANCIAL CRISIS INQUIRY COMMISSION

AUTHORIZED EDITION


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Findings and Conclusions Regarding the Causes of and Contributors to the Financial and Economic Crisis

Specific Findings

- **There were Dramatic Failures of Corporate Management and Governance**
 - **Management and Governance:**
 - Many systemically important financial institutions, including investment banks, commercial banks, and the GSEs, acted recklessly, exposing their companies to significant losses and, in most cases, failure or rescue by American taxpayers.
 - **Risk Management:**
 - Failures included excessive leverage/inadequate capital, insufficient liquidity including high reliance on “hot money”, highly risky activities, non-transparent off balance sheet risks, and inadequate management systems and controls. These various factors, as well as compensation practices (see below), were interconnected and must be viewed in toto.
 - **Compensation:**
 - Compensation structures and scale created incentives to increase annual revenues and market share, without properly taking into account risks, long term performance, and consequences of loss or failure.
 - **Risky, Complex Securities:**
 - Major financial institutions put their companies and the financial system at risk through their trading in the untested, complex non-prime mortgage related securities that triggered the financial crisis (see below).
 - Among other things, they supported/owned subprime lenders; securitized such securities without proper due diligence and disclosure; created derivative instruments (e.g. synthetic CDOs) that increased leverage and amplified exposure to mortgage assets; and ended up retaining significant such assets on their balance sheets which, in turn, led to substantial losses.
 - At the investment banks, these activities were part of a larger shift from privately held entities focused on investment banking to publicly traded corporations highly focused on trading and principal investments.
 - **Lack of Market Discipline and Regulation:**

- The failures in corporate risk management were particularly important in light of the increased reliance on self-regulation (see below). Faith in the ability of financial institutions and markets to regulate themselves turned out to be misplaced.
 - The lack of market discipline coupled with lack of effective supervision and regulatory gaps was fatal.

- **There Were Significant Failures in Public Sector Leadership, Regulation, and Supervision**
 - **Failure to Use Substantial Powers:**
 - Policy makers and regulators failed to use their substantial, existing powers to protect the financial system and the public. They had broad authority to constrain risky financial products and financial institution risks and excess.
 - Time and time again, the regulators were behind the curve as dangers mounted – outrun and outmatched by Wall Street and market events.
 - Notably, the Fed Reserve, along with other regulators, failed to curb the precipitous decline in mortgage credit standards. As other examples, regulators failed to constrain leverage, effectively oversee off balance sheet entities, and police short term funding by institutions.
 - **Regulatory Gaps and Arbitrage:**
 - Regulatory gaps – including regulatory arbitrage - resulted in a lack of transparency in critical markets. Regulator shopping resulted in weakened supervision through entities such as the OTS and the SEC’s CSE program.
 - These gaps resulted from a failure to keep up with the evolving financial system or deliberate decisions to deregulate or lessen regulatory requirements. In addition, regulators failed to ask for needed authority in areas where they did not have it, but where they identified risks.
 - **Derivatives:**
 - The decision to ban regulation of OTC derivatives played a critical role in the crisis. The lack of regulation resulted in a lack of transparency, excess speculation, increased leverage, non-transparent counterparty risk, and an absence of business conduct rules. In addition, it precluded state regulators (e.g. NY state insurance regulator) from acting.
 - Among other things, credit derivatives facilitated and extended the duration of subprime securitization, helped fuel the housing bubble, increased the leverage of financial institutions, and amplified exposure to the mortgage market.
 - The lack of transparency of OTC derivatives and the substantial interconnections between systemically important institutions resulting from those derivatives played a key role in the panic of 2008.
 - **Deregulation:**
 - The failures in regulation and supervision were in part due to a broadly accepted philosophy – embodied in policy and practice and endorsed by the elected leadership of both parties – that called for a greater reliance on self regulation of financial markets and institutions.
 - Even when regulators sought authority (CFTC, OFHEO), they were rebuffed.
 - As noted above, the combination of weakened regulation and supervision and poor corporate risk management proved devastating.
 - **Power of the Financial Industry:**

- The financial industry exerted substantial power and pressure and undertook extensive lobbying efforts to affect legislation and relax regulation, contributing significantly to weakened oversight.

- **The Housing Boom and Bust Triggered the Financial Crisis**
 - **Declining Mortgage Standards Were Central:**
 - Dramatically and rapidly declining mortgage underwriting standards significantly enlarged the housing bubble and bust.
 - The explosion of poor quality, non- prime loans resulted in unprecedented delinquency and foreclosure rates which triggered a wave of events that ultimately resulted in the financial and economic crisis.
 - Bank regulators were generally not worried about mortgage origination standards since banks were selling loans into the secondary market (see mortgage regulation below).
 - **Failure of Mortgage Regulation:**
 - Regulators failed to halt worsening underwriting standards. While federal and state regulators share in the culpability to varying degrees, prime responsibility rests with the Federal Reserve that had the ability under HOEPA to regulate unfair and deceptive lending and inappropriate subprime lending.
 - The lack of any real effective regulation, coupled with incentives such as yield spread premiums, led to a corruption of the mortgage sector, opening the door to predatory lending, fraud, misrepresentation, and other inappropriate lending.
 - **Non –Prime Mortgage Securitization:**
 - Non-prime mortgage securitization was essential to the origination of the burgeoning numbers of subprime and Alt A loans.
 - System incentives (“no skin in the game”) and the assumption that assets would be moved along the chain/off the books contributed to the creation and sale of increasingly poor quality mortgages.
 - Mortgage securities were packaged and sold without appropriate due diligence and disclosures to investors.
 - As noted above, credit derivatives were an essential component of the subprime and Alt A securitization process.
 - **Credit Rating Agency Failures:**
 - The credit rating agencies were essential to non-prime mortgage securitization and, thus the non-prime mortgage origination business. Their failure to assess the quality of the securities which they rated was seminal to the crisis.
 - But for the rating agencies, the subprime lending and securitization could not have occurred on a significant scale.
 - **GSEs:**
 - The GSEs contributed to, but were not a primary cause of the financial crisis. Their scale mattered and they were dramatic failures, with a deeply flawed business model.
 - They added significant demand for less-than-prime loans – but they followed, rather than led the Wall Street firms. The delinquency rates on the subprime and Alt A loans that they purchased were significantly lower than those purchased by Wall Street firms.
 - They dramatically increased their subprime and Alt participation in the 2005-2007 period primarily to regain market share, but also to a lesser extent to meet affordable housing goals.

- They utilized their political power to successfully resist effective regulation.
 - **Government Housing Policy:**
 - HUD's affordable housing goals resulted in the GSEs buying more high risk mortgages at the margin.
 - There was no evidence in the Commission's inquiry indicating that the Community Reinvestment Act contributed to the crisis.
 - The government's aggressive promotion of homeownership provided cover for the expansion of inappropriate subprime lending (n.b. - homeownership stopped climbing in 2004 and much of the subprime lending activity was for refinancing, not home purchase - let alone first time home purchase).
 - Policy makers failed to ensure that their stated homeownership policy goals were being carried out by sound and sustainable practices on the ground - even community based groups advocating increased homeownership were sounding the alarm over lending practices.
- **Excess Leverage, Risk, and Speculation Fueled the Crisis**
 - **Inadequate Capital:**
 - High leverage/inadequate capital made many financial institutions (e.g. GSEs, investment banks) extraordinarily vulnerable to the downturn in the market. Leverage or capital inadequacy at many institutions was even greater than reported when taking into account "window dressing", off balance sheet exposures (e.g. Citigroup) and derivatives positions (e.g. AIG).
 - When mortgage assets and derivatives began to plummet in value beginning in 2007, many institutions came under enormous financial pressure given their thin capital margins.
 - **"Hot Money":**
 - The financial system, particularly the "shadow banking" system, was extraordinary dependent on "hot money" including short term (including overnight) commercial paper and repo funding.
 - When lenders began to have concerns about the health of certain financial institutions, initially growing out of concerns re their exposure to troubled mortgage related assets, they began to shorten the duration of lending or pull back from lending. As concerns accelerated, liquidity shrank, and questions grew re the financial condition of certain institutions (see transparency below), runs began at institutions.
 - Runs even affected some insured depository institutions (e.g. Indy Mac, Wachovia)
 - **Risk and Speculation:**
 - The increase in risky, complex, and often non-transparent financial products and activities contributed to the vulnerability of firms and the system as a whole. Trading –including proprietary trading – replaced traditional investment banking as the largest source of revenue at investment banks and a sizable source of revenues at traditional banks.
 - Dealing in derivatives had grown exponentially, particularly by systemically important institutions. In the case of synthetic CDOs, these were almost infinitely levered speculative instruments that amplified exposure to default prone mortgages and mortgage securities.
 - The combination of high leverage, reliance on "hot money" and risky and complex financial products was an explosive mix.

- **Too Big to Fail:**
 - Many creditors of large systemically institutions did not exercise discipline when extending credit to such institutions on the assumption that the government would intervene to protect creditors in the event of the potential failure of such institutions.
- **Lack of Transparency and Interconnections Spurred Panic during the Crisis**
 - **Lack of Transparency:**
 - The lack of transparency about the financial condition of various systemically important institutions and their counterparties exacerbated the panic and the financial crisis of 2008. This lack of transparency was due to both decisions by firms re: structuring and disclosure and lack of regulatory requirements re: disclosure.
 - As firms scrambled to get a handle on their own exposures, counterparties and regulators struggled to understand, among other things, the nature and extent of mortgage related holdings, derivative positions, and the cash position of those firms. The lack of knowledge and transparency resulted in panic.
 - **Interconnections:**
 - The extensive interconnections between major financial institutions through a variety of markets and instruments – including the repo market, interbank lending, and OTC derivatives – and the scale and concentration of those exposures (e.g. Fed analyses of Lehman and AIG) were seminal to the crisis. The interconnections – coupled with the lack of transparency – caused panic.

Broad, Overarching Findings

- **The Crisis Was Avoidable**
 - **Public and Private Sector Leadership Failures:**
 - Financial institution leaders failed in the prudent management of their companies.
 - Public leaders and regulators had extensive powers, yet failed to protect the financial system, the economy, and the public from the crisis.
 - If timely and appropriate actions had been taken, the crisis could have been avoided, or at least significantly mitigated.
 - **Warning Signs Ignored:**
 - Numerous warning signs were ignored in the years leading up to the crisis and even after the housing market began to peak and decline in 2005 and 2006.
 - **Excess Liquidity and Government Policy:**
 - Significant cash –including cash from abroad - seeking to invest in real estate assets was a necessary pre-condition for the crisis.

- The Fed and other regulators did not take the actions necessary to constrain the credit bubble.
 - The Fed's policies and pronouncements encouraged the growth of mortgage debt and the housing bubble.
 - **Complacency/Lack of Due Care:**
 - There was a complacency and lack of due care on the part of too many policy makers, regulators, and others (e.g. economists, households) due to a "conventional wisdom" that the business cycles had been mastered (the Great Moderation), financial risk had been quantified and tamed, and financial crises could be handled (the Greenspan Put).
 - Policy makers and regulators did not understand or appreciate the growing risks to the financial system.
 - **Slow and Inconsistent Government Response:**
 - The government's response to the crisis itself in 2006-2008 was flat footed at first and then inconsistent, exacerbating the crisis.
 - The inadequacy of the policy makers' and regulators' response to the crisis left the nation in the fall of 2008 with only two stark choices: potential collapse of the financial system or the infusion of trillions of taxpayer dollars.
 - The inconsistent response worsened the crisis: policy makers saved Bear, placed Fannie and Freddie in conservatorship, and then failed to save Lehman.
- **There was a Breakdown in Accountability, Responsibility, and Ethics**
 - **Tone at the Top:**
 - Primary responsibility for the breakdown rests with those in charge – tone at the top mattered.
 - **Ethical Responsibilities:**
 - Too many companies and individuals created and/or sold financial products without regard to the quality of those products, the conflicts in their activities and the consequences to the larger financial system and economy.
 - **Broad Responsibility:**
 - As the speculative fever took hold, too many people participated in activities that proved to be detrimental to their firms, their clients, their households, and the ultimately the financial system and the economy.
 - Too many households and companies took on more debt than they could afford. Some households that took on debt were misled, steered into inappropriate debt, or did not have the needed financial literacy.
 - **Accountability and Critical Analysis:**
 - Faith in our financial system has been shaken. The economic consequences of the crisis have been profound. Yet, there has been little acceptance of responsibility by many financial industry and public sector leaders who were at the center of this crisis. The lack of critical self examination – a prerequisite for change – has been striking.
 - There have been few people held to account and little or no consequence for inappropriate actions.

- **The crisis and risks remain with us**

- **The Crisis Persists:**

- The country remains in the grips of a severe economic crisis. Unemployment is high. Foreclosures continue to climb, while many families are running into a brick wall as they try to modify mortgages. Future economic security has been diminished for tens of millions of Americans.
- While government actions taken in the fall of 2008 and early 2009 may have stabilized financial markets and major financial institutions, they did not spare the real economy from deep pain. The consequences of the financial crisis of 2007-2008 are likely to be felt for a generation.

- **The Future of Financial Reform Uncertain:**

- The financial reform legislation of 2010 will be largely shaped by some 250 rule making procedures and the outcome of those proceedings is very much up in the air. In addition, no action has been taken on critical issues such as the future of Fannie Mae and Freddie Mac.
- Real reform will require changes beyond legislation - in, among other things, corporate governance, compensation incentives, and risk management as well as standards of ethics and corporate responsibility.

- **The Risks of Future Crisis:**

- There are fewer, bigger systemically important financial institutions now than were before the crisis.
- While the banks have returned to profitability – largely through borrowing cheaply and making money on the spread, there are still significant risks including a still struggling housing sector, significant commercial real estate exposures, and the lack of systemic reform.
- Very little real change has yet occurred.

Part A: “....”

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In examining the worst financial meltdown since the Great Depression, the Financial Crisis Inquiry Commission examined hundreds of thousands of documents and questioned hundreds of individuals—financial executives, business leaders, policy makers, community leaders, people from all walks of life—to find out how and why it happened.

In public hearings and interviews, many financial industry executives and top public officials testified that they had been blindsided by the crisis, describing it as a dramatic and mystifying turn of events. Even among those who worried that the housing bubble might burst, few—if any—foresaw the magnitude of the crisis that would ensue.

Charles Prince, the former chairman and chief executive officer of Citigroup, called the collapse in housing prices “wholly unanticipated.”¹ Warren Buffett, chairman and chief executive officer of Berkshire Hathaway Inc.—the largest single shareholder of Moody’s, which rated \$4.7 trillion in mortgage-backed securities from 2000 to 2007² - told the Commission that “very, very few people could appreciate the bubble,” which he called a “mass delusion”³ that was shared by “300

¹ FCIC hearing, April 8, 2010.

² Preliminary Staff Report, Credit Ratings and the Financial Crisis, June 2, 2010, p. 22.

³ FCIC hearing testimony, June 2, 2010.

million Americans.”⁴ Lloyd C. Blankfein, chairman and chief executive officer of Goldman Sachs Group, Inc., likened the financial crisis to a hurricane.⁵

Regulators echoed a similar refrain. Benjamin Bernanke, chairman of the Federal Reserve since 2006, told the Commission a “perfect storm” had occurred that regulators could not have anticipated, but when asked about whether the Fed’s lack of aggressiveness in regulating the mortgage market during the housing boom was a failure, Bernanke responded, “It was, indeed. I think it was the most severe failure of the Fed in this particular episode.” Alan Greenspan, Fed chairman during the two decades leading up to the crash, told the commission that it was beyond the ability of regulators to ever foresee such a sharp decline. “History tells us regulators cannot identify the timing of a crisis or anticipate exactly where it will be located or how large the losses and spillovers will be.”⁶

In fact, there were warning signs. In the decade preceding the collapse, there were many signs that house prices were inflated, that lending practices had spun out of control, that too many homeowners were taking on mortgages and debt they could ill afford, and that risks to the financial system were growing unchecked. Alarm bells were clanging inside financial institutions, regulatory offices, consumer service organizations, state law enforcement agencies and throughout corporate America, as well as in neighborhoods across the country. Many knowledgeable executives saw trouble and managed to avoid the train crash. While countless Americans reveled in the financial euphoria that seized the nation, many others were shouting

⁴ FCIC interview with Warren Buffett, May 26, 2010.

⁵ Blankfein testifying to FCIC, January 13, 2010, p. 36.

⁶ Alan Greenspan testimony to FCIC, April 7, 2010.

out to government officials in Washington and within state legislatures, pointing out what would become a human disaster, not just an economic debacle.

“Everybody in the whole world knew that the mortgage bubble was there,” said Richard Breeden, former Chairman of the Securities and Exchange Commission appointed by President George H.W. Bush. “I mean, it wasn’t hidden. ... You cannot look at any of this and say that the regulators did their job. This was not some hidden problem. It wasn’t out on Mars or Pluto or somewhere. It was right here... You can’t make trillions of dollars worth of mortgages and not have people notice.”⁷

Paul A. McCulley, a managing director at PIMCO, one of the nation’s largest money management firms, told the Commission that he and his colleagues began to get worried about “serious signs of bubbles” in 2005, and sent out credit analysts to 20 cities to do what he called “old-fashioned shoe leather research,” talking to real estate brokers, mortgage brokers and local investors about the housing and mortgage markets. They witnessed what he called “the outright degradation of underwriting standards,” McCulley told the Commission, and they shared what they had learned when they got back home to the company’s Newport Beach headquarters. “And when our group came back, they reported what they saw, and we adjusted our risk accordingly,” McCulley told the Commission. The company “severely limited” its participation in risky mortgage securities.

Veteran bankers, particularly those who remembered the savings and loan crisis, knew that age-old rules of prudent lending had been cast aside. Arnold Cattani, chairman of Bakersfield-based Mission Bank, told the Commission that he grew uncomfortable with the “extreme speculation”

⁷ FCIC interview with Richard Breeden, Oct. 14, 2010.

he saw in the local homebuilding market, fueled by “voracious” Wall Street investment banks, and opted out of certain kinds of investments by 2005, noting it had all “gone too far, too fast.”⁸

William Martin, vice chairman and chief executive officer of Service 1st Bank of Nevada, told the FCIC that the desire for a “high and quick return” blinded people to fiscal realities.⁹

“You may recall Tommy Lee Jones in *Men in Black*, where he holds a device in the air, and with a bright flash wipes clean the memories of everyone who has witnessed an alien event,” he told the Commission.”¹⁰

Unlike so many other bubbles—tulip bulbs in Holland in the 1600s, South Sea stocks in the 1700s, internet stocks in the early 2000s—this one involved not just another commodity, but rather a building block of community and social life and a cornerstone of the economy--the family home. Homes are the foundation upon which much of our social, personal, governmental, and economic structures rest. Children usually go to schools linked to their home addresses; local governments decide how much money they can spend on roads, firehouses and public safety based on how much property tax revenue they have; house prices are tied to consumer spending. Downturns in the housing industry can cause ripple effects almost everywhere.

When the Federal Reserve cut interest rates early in the decade and mortgage rates fell, home refinancing surged, climbing from \$1.3 trillion in 2001 to \$2.5 trillion in 2003, allowing people to withdraw equity built up over previous decades and consume more, despite stagnant wages. Then home sales volume started to increase, and prices nationwide climbed, rising 67 percent in

⁸ FCIC written and oral testimony, Arnold Cattani, Bakersfield, Calif., Sept. 6, 2010. Transcript page 37.

⁹ FCIC field hearing testimony, William Martin, Las Vegas, Nevada, Sept. 8, 2010.

¹⁰ FCIC field hearing testimony, William Martin, Las Vegas, Nevada, Sept. 8, 2010.

eight years by one measure, hitting a national high of \$227,100 in early 2006.¹¹ Home prices in many areas skyrocketed: Prices tripled in Sacramento, for example, in just five years,¹² and shot up by about the same percentage in Bakersfield, Cape Coral, Miami and Key West. Prices doubled in about more than 200 metropolitan areas, including Las Vegas, Seattle, Washington DC, Seneca Falls, Hilton Head, Boise, Phoenix, Poughkeepsie and Newark.¹³ Housing starts nationwide climbed 58 percent, from 1.3 million in 1995 to more than 2 million in 2005, the peak year.¹⁴ Encouraged by government policies, homeownership reached a record 69.2 percent in the spring of 2004,¹⁵ although it wouldn't rise an inch further even as the mortgage machine kept churning for another three years. By refinancing their homes, Americans extracted \$2.2 trillion in home equity between 2000 and 2007, including \$334 billion in 2006 alone, more than seven times the amount they took out in 1996.¹⁶ Real estate speculators and potential homeowners stood in line outside new subdivisions for a chance to buy houses before the ground had even been broken. Bigger was better, and even the structures themselves ballooned in size,

¹¹ National Association of Realtors national home price data, existing homes sold, comparing second quarters of 1998 (\$135,800) and second quarter 2006 (\$227,100) the national peak in prices.

¹² Sacramento Regional Chart Book, FCIC, prepared for Sacramento field hearing, Sept. 23, 2010.

¹³ CoreLogic Home Price Index for Urban Areas, All Areas Set to 100 index rate in January 2000, and compare to peak of each market.

¹⁴ Privately-owned housing starts, 1-unit structures, Economic Research, Federal Reserve Bank of St. Louis, citing US Department of Commerce, Census Bureau.

¹⁵ US Census Bureau. Residential Vacancies and Homeownership in the Third Quarter 2010, CB10-155, Nov. 2, 2010.

¹⁶ Kennedy-Greenspan Gross Equity Extraction 2008.

as the floor area of an average new home grew by 21 percent, to 2,479 square feet, in the decade from the mid-90s to 2007.¹⁷

Money washed through the economy like water rushing through a broken dam. Low interest rates and then foreign capital helped fuel the boom. Construction workers, landscape architects, real estate agents, loan brokers and appraisers profited on Main Street, while investment bankers and traders on Wall Street moved even higher on the American earnings pyramid and the shares of the most aggressive financial service firms reached all-time highs.¹⁸ Homeowners pulled cash out of their homes to erase mounting credit card debt, pay off medical bills, send their kids to college, install designer kitchens with granite counters, take a vacation or launch new businesses. Renters used new forms of loans to buy homes and to move to suburban subdivisions, erecting swing sets in their backyards and enrolling their children in local schools.

In an interview with the Commission, Angelo Mozilo, the long-time Chairman and CEO of Countrywide Financial—a lender brought down by its risky mortgages—said that a “gold rush” mentality overtook the country during these years, and that he was swept up in it as well. “Housing prices were rising so rapidly—at a rate that I’d never seen in my 55 years in the business—that people, regular people, average people got caught up in the mania of buying a house, and flipping it, making money. It was happening. They buy a house, make \$50,000...and talk at a cocktail party about it...Housing suddenly went from being part of the American dream

¹⁷ Characteristics of New Housing, US Census Bureau.

¹⁸ Weekly wage of New York investment banker, \$16,849, compared to average privately-employed worker, of \$841 per week, according to Wages and Bonuses in Investment Banking, report by the US Bureau of Labor Statistics, Summary 07/07, August 2007.

to house my family to settle down—it became a commodity. That was a change in the culture. It was sudden, unexpected.”¹⁹

On the surface, it looked like prosperity. After all, the basic mechanisms making the real estate machine hum—the mortgage lending instruments and the financing techniques that turned mortgages into investments called securities, which kept cash flowing from Wall Street into the U.S. housing market—were tools that had worked well for many years.

But underneath, something was going wrong. Like a science fiction movie where ordinary household objects turn hostile, familiar market mechanisms were transformed. The time-tested 30-year fixed-rate mortgage, with the 20 percent down payment, went out of style. There was a burgeoning global demand for residential mortgage-backed securities that offered seemingly solid and secure returns. Investors around the world clamored to purchase securities built on American real estate, seemingly one of the safest bets in the world.

Wall Street labored mightily to meet that demand. Bond salesmen earned multimillion dollar bonuses packaging and selling new kinds of loans, offered by new kinds of lenders, into new kinds of investment products that were deemed safe but possessed complex and hidden risks. Federal officials praised the changes—these financial innovations, they said, had lowered borrowing costs for consumers and moved risks away from the biggest and most systemically important financial institutions. But the nation’s financial system had become vulnerable and interconnected in ways that were not understood by either the captains of finance or the system’s public stewards. In fact, several of the largest institutions had taken on what would prove to be debilitating risks. Trillions of dollars had been wagered on the belief that housing prices would

¹⁹ Angelo Mozilo interview with FCIC, Sept. 24, 2010.

always rise and that borrowers would seldom default on mortgages, even as their debt grew.

Shaky loans had been bundled into investment products in ways that seemed to give investors the best of both worlds—high yield, risk-free—but that instead, in many cases, would prove to be high-risk and yield-free.

All this financial creativity was a lot like cheap sangria, said Michael Mayo, managing director and financial services analyst at Calyon Securities. “A lot of cheap ingredients repackaged to sell at a premium,” he told the Commission. “It might taste good for a while, but then you get headaches later and you have no idea what’s really inside.”²⁰

The securitization machine began to guzzle these once-rare mortgage products with their strange-sounding names: alt-A, subprime, and “I-O” (interest-only), low-doc or no doc, ninja (no income, no job, no assets) loans, 2-28s, 3-27s, liar loans, “piggy-back” second mortgages, pay-option, or pick-a-pay. New variants on adjustable rate loans, called “exploding” ARMs, featured low monthly costs at first, but payments could suddenly double or triple, if borrowers were unable to refinance. Loans with negative amortization would eat away the borrower’s equity. Soon there were more than 150 different kinds of mortgages available on the market, confounding consumers who didn’t examine the fine print, baffling conscientious borrowers who tried to puzzle out their implications, and opening the door for those who wanted in on the action.

Many people chose poorly. Some people wanted to live beyond their means, and by 2005, nearly one-quarter of all borrowers nationwide took out interest-only loans that allowed them to defer

²⁰ FCIC, hearing 1, January 13, 2010, transcript page 114.

the payment of principal.²¹ Some borrowers opted for the nontraditional mortgages because that was the only way they could afford to buy or refinance in high-cost areas, and in fact, more than half of all the loans of this kind made in the country went to Californians, where homebuyers used them to get a foothold in the sky-high West Coast housing market.²² Some speculators saw the chance to snatch up investment properties and flip them for profit—and Florida became a particular target for investors who used these loans to acquire real estate.²³ Some were misled by salespeople who came to their homes and persuaded them to sign loan documents on their kitchen tables. Some borrowers naively trusted mortgage brokers who earned more money placing them in risky loans than safe ones.²⁴ As these new loans penetrated each region, home prices rose there, as buyers were able to bid up the prices of houses even if they didn't have enough income to qualify for traditional loans.²⁵

Some of these exotic loans had existed in the past, targeting high-income, financially secure people as a cash-management tool. Some had been targeted to borrowers with impaired credit, offering them the opportunity to build a payment history before they refinanced. But they began to deluge the larger market in 2004 and 2005. The change occurred “almost overnight,” Faith Schwartz, a senior vice president of subprime lender Option One, told the Federal Reserve’s

²¹ Mortgage Bankers Association survey, press release from October 25, 2005

²² Subprime ARMs: Popular Loans, Poor Performance, by Yuliya Demyanyk and Yadav K. Gopalan, Federal Reserve Bank of St. Louis, Spring 2007.

²³ Testimony of Alex Acosta, dean of Florida International University, former US Attorney in Southern Florida; Ann Fulmer, Vice President of Business Relations, Interthinx, Ellen Wilcox, special agent, Florida Department of Law Enforcement, FCIC field hearing in Miami, Sept. 21, 2010.

²⁴ FCIC interview with Julia Gordon and Michael Calhoun, Center for Responsible Lending, Sept. 16, 2010.

²⁵ Restricted Federal Reserve document obtained by FCIC, Residential Mortgage Lenders Peer Group Survey: Analysis and Implications for First Lien Guidance, Nov. 30, 2005, p. 34.

Consumer Advisory Council. “I would suggest most every lender in the country is in it, one way or another.”²⁶

At first not a lot of people really understood the potential hazards of these new loans. They were new, they were different, and the consequences were uncertain.

It soon became apparent that what had looked like new-found wealth was a mirage based on borrowed money. Overall mortgage indebtedness in the United States climbed from \$5.3 trillion in 2001 to \$10.5 trillion in 2007.²⁷ The mortgage debt of American households rose as much from 2001 to 2007 as it had over the course of the country’s more than 200-year history. The amount of mortgage debt per household rose from \$91,700 in 2001 to \$149,000 in 2007.²⁸ With a simple flourish of pen and paper, millions of Americans traded away decades of equity tucked away in their homes.

Under the radar, the lending and the financial services industry had mutated. In the past, lenders had avoided making unsound loans because they would be stuck with them in their loan portfolios. But, with the growth of securitization, it wasn’t even clear who the lender was anymore. The mortgages would be packaged, sliced, repackaged, insured, and sold as incomprehensibly complicated debt securities to a collection of hungry investors. Now even the worst loans could find a buyer.

More loan sales meant higher profits for everyone in the chain. Business boomed for Christopher Cruise, a Maryland-based corporate educator who trained loan officers for

²⁶ Transcript of the Consumer Advisory Council, Thursday, March 30, 2006. Faith Schwartz, senior vice president, Government, Housing and Industry Relations, for Option One Mortgage Company, subsidiary of H & R Block.

²⁷ Flow of Funds, Z1, Federal Reserve

²⁸ Survey of Consumer Finances, Federal Reserve

companies that were expanding mortgage originations. He crisscrossed the country, coaching about 10,000 loan originators a year in auditoriums and classrooms. His clients included many of the largest lenders, including Countrywide, Ameriquest and Ditech. Most of their new hires were young, with no mortgage experience, fresh out of school and previously “flipping burgers,” he told the FCIC. With the right training, however, the best of them could earn more than \$1 million a year.²⁹

“I was a sales and marketing trainer in terms of helping people to know how to sell these products to, frankly in some cases, unsophisticated and unsuspecting borrowers,” he said.

He taught them the new playbook: “You had no incentive whatsoever to be concerned about the quality of the loan, whether it was suitable for the borrower or whether the loan performed. In fact, you were in a way encouraged not to worry about those macro issues,” he said. “...I knew that the risk was being shunted off. I knew that we could be writing crap. But in the end it was like a game of musical chairs. Volume might go down but we were not going to be hurt.”³⁰

On Wall Street, where many of these loans were packaged into securities and sold to investors across the globe, a new phrase was coined: IBGYBG, “I’ll be gone, you’ll be gone.”³¹ That referred to deals that brought in big fees upfront while risking much larger losses a year or two in the future. And, for a long time, IBGYBG worked at every level along the way.

Most home loans entered the pipeline soon after borrowers signed the documents and picked up the keys. Loans were put into packages and sold off in bulk to securitization firms—including

²⁹ FCIC interview with Christopher Cruise, Aug. 24, 2010..

³⁰ FCIC interview with Christopher Cruise, Aug. 24, 2010.Date TK.

³¹ NY Times article.

investment banks such as Merrill Lynch, Bear Stearns and Lehman Brothers, and commercial banks and thrifts like Citi, Wells Fargo and Washington Mutual. The firms would package the loans into residential mortgage-backed securities (RMBS) that would mostly be stamped with Triple A ratings by the credit rating agencies and then be sold to investors. In many cases, the securities were sold off to be repackaged again, into newly formed collateralized debt obligations (CDOs)—often comprised of the riskier portions of RMBS—which would then be sold to other investors. Many of these securities would also receive the coveted Triple-A ratings that investors believed attested to their quality and safety. Some investors would buy an invention from the 1990s called a credit default swap to protect against the securities defaulting. For every buyer of a credit default swap, there was a seller, which now meant two investors made opposing bets, and the layers of entanglement in the securities market would increase.

The instruments grew more and more complex; CDOs bought CDOs, creating CDOs squared. When they ran out of real product, they started creating cheaper- to- produce synthetic CDOs – not composed of real mortgage securities, but just bets on other mortgage products. Each new permutation created an opportunity to extract more fees and trading profits. And each new layer brought in more investors wagering on the mortgage market. So by the time the process was complete, a mortgage on a home in South Florida might become part of dozens of securities owned by hundreds of investors – or parts of bets being made by hundreds more. Timothy Geithner, president of the New York Federal Reserve during the crisis, described the resulting product as “cooked spaghetti” that became hard to “untangle.”³²

³² Timothy Geithner testimony to FCIC, May 6, 2010, page 146.

Ralph Cioffi, spent several years creating CDOs for Bear Stearns and a couple of more years on the repurchase or “repo” desk, where Bear Stearns borrowed money every night to finance its broader securities portfolio. In September 2003, Cioffi created a hedge fund with a minimum investment of \$1 million. As was common, he used borrowed money—up to \$10 borrowed for every \$1 from investors—to buy CDOs. Cioffi’s first fund was extremely successful, earning 17 percent for investors in 2004 and 9 percent in 2005 – after the annual management fee and the 20 percent slice of the profit for Cioffi and his Bear Stearns team [ck] – and growing to \$9 billion by the end of 2005. In the fall of 2006, he created another, more aggressive fund. This one would shoot for leverage of 15 to 1. By the end of 2006, the two hedge funds had \$18 billion invested, half in securities issued by housing-focused CDOs. As a CDO manager, Cioffi also managed another \$18 billion of housing-focused CDOs for other investors. Because his CDOs and hedge funds bought securities from investment banks like Lehman Brothers and Goldman Sachs, Cioffi became “a very popular fellow” on Wall Street, a Bear Stearns colleague told the Commission.³³

Cioffi’s investors and other like them wanted high-yielding mortgage-backed securities. That, in turn, required high-yielding mortgages. An advertising barrage bombarded potential borrowers, urging them to buy or refinance homes. Direct-mail solicitations flooded people’s mailboxes.³⁴ Dancing figures, depicting happy homeowners, boogied on computer monitors. Telephones began ringing off the hook with calls from loan officers offering the latest loan products: 1

³³ FCIC interview with Tom Marano--quote being confirmed.

³⁴ FCIC interview with James Ryan, chief marketing officer at CitiFinancial and John Schachtel, executive vice president of CitiFinancial, Feb. 3, 2010; Letter from Federal Trade Commission Chairman Robert Pitofsky to Dolores S. Smith, director, division of consumer and community affairs, Federal Reserve, about complaint filed by the FTC against First Alliance Mortgage Co., citing use of direct mail solicitations to target homeowners for deceptive loans, Feb. 20, 2001; Joint Report on Recommendations to Curb Predatory Home Mortgage Lending, US Department of the Treasury and US Department of Housing and Urban Development, June 20, 2000.

percent loan! (But only for the first year.) No money down! (Leaving no equity if home prices fell.) No income documentation needed! (Soon dubbed by the industry itself as “liar” loans.) Borrowers answered the call, many believing that with ever-rising prices, housing was the investment that couldn’t lose.

In Washington, four intermingled issues came into play that made it difficult to acknowledge the looming threats. First, boosting home ownership had broad political support – from Presidents Clinton and Bush and successive Congresses, even though in reality the homeownership rate had peaked and was ticking down after the spring home-buying season in 2004. Second, the real estate boom was generating a lot of cash on Wall Street and creating a lot of jobs in the housing industry even at a time when other sectors of the economy were dreary. Third, many top officials and regulators were reluctant to challenge the profitable and powerful financial industry. And finally, policy makers believed that even if the housing market tanked, the broader financial system and economy would hold up.

As the transformation of the mortgage market began to take shape in the late 1990s, consumer advocates and front-line local government officials were among the first to spot the changes, as homeowners surged into their offices seeking help in dealing with mortgages they could not afford to pay. They began raising the issue with the Federal Reserve and other banking regulators.³⁵ Bob Gnaizda, general counsel and policy director of the Greenlining Institute, a California-based non-profit housing group, told the Commission he began meeting with Greenspan at least once a year starting in 1999, each time highlighting to him the growth of

³⁵ FCIC hearing, April 7, 2010.

predatory lending practices and discussing with him the social and economic problems they were creating.³⁶

One of the first places to see the bad lending practices envelop an entire market was Cleveland, Ohio. From 1989 to 1999, home prices in Cleveland rose 66 percent, climbing from a median of \$75,200 to \$125,100,³⁷ while home prices nationally rose about 49 percent in those same years, though the city's unemployment rate, ranging from 5.8 percent in 1990 to 4.2 percent in 1999, tracked the US pattern pretty closely.³⁸ James Rokakis, long-time treasurer of Cuyahoga County, where Cleveland is located, told the Commission that the region's housing market was juiced by "flipping on mega-steroids" with rings of real estate agents, appraisers and loan originators earning fees on each transaction and feeding the securitized loans to Wall Street. City officials began to hear reports that these activities were being propelled by new kinds of nontraditional loans that enabled investors to buy properties with little or no money down and gave homeowners the ability to refinance their houses, regardless of whether they could afford to repay the loans. Foreclosures shot up in Cuyahoga County from 3,500 a year in 1995 to more than 7,000 a year in 2000. Rokakis and other public officials watched as families who had lived in modest residences for years lost their homes. After they were gone, many homes were

³⁶ FCIC interview with Bob Gnaizda, general counsel and policy director, retired, of the Greenlining Institute, March 25, 2010.

³⁷ National Association Realtors median home prices, existing homes, Cleveland and U.S.

³⁸ Bureau of Labor Statistics. National annual figure as reported by Economic Research, Federal Reserve Bank of St. Louis, citing BLS data, Cleveland data from Bureau of Labor Statistics, Local Area Unemployment Statistics, series ID LAUMT39174603, Cleveland-Elyria-Mentor, Ohio Metropolitan Statistical Area.

ultimately abandoned, vandalized and then stripped bare, as scavengers ripped out the copper pipes and aluminum siding to sell for scrap.³⁹

“Securitization was one of the most brilliant financial innovations of the 20th Century,” Rokakis told the Commission. “It freed up a lot of capital. If it had been done responsibly, it would have been a wondrous thing because nothing is more stable, there’s nothing safer, than the American mortgage market. It worked for years. But then people realized they could scam it.”⁴⁰

Officials in Cleveland and other Ohio cities reached out to the federal government for help. They asked the Federal Reserve, the one entity with the authority to regulate risky lending practices by all mortgage lenders, to use power it had been granted in 1994 under the Home Ownership and Equity Protection Act (HOEPA) to issue new mortgage lending rules. In March 2001, Fed Governor Ned Gramlich, an advocate for expanding access to credit but only with safeguards in place, attended a conference on the topic in Cleveland. He spoke about the Fed’s power under HOEPA, declared some of the lending practices to be “clearly illegal,” and said they could be “combated with legal enforcement measures.”⁴¹

Looking back, Rokakis told the Commission, “I naively believed they’d go back and tell Mr. Greenspan and presto, we’d have some new rules...I thought it would result in action being taken. It was kind of quaint.”⁴²

³⁹ FCIC interviews with James Rokakis, Cuyahoga County Treasurer, Nov. 8, 2010; FCIC interview with Alyssa Katz, author of *Our Lot: How Real Estate Came to Own Us*, Bloomsbury: NY, 2009, chapter “Into Oblivion: Cleveland, Ohio, 2006,” p. 78-101.

⁴⁰ FCIC interview with Rokakis.

⁴¹ Remarks by Governor Edward M. Gramlich, at Cleveland State University, March 23, 2001, Federal Reserve Board website.

⁴² FCIC interview with Rokakis

In 2000, at the same time Cleveland was looking for help from the federal government, other cities around the country were doing the same. John Taylor, president of the National Community Reinvestment Coalition, with the support of community leaders from Las Vegas, Detroit, Maryland, Delaware, Chicago, Vermont, North Carolina, New Jersey and Dayton, went to the Office of Thrift Supervision, which regulates savings and loan institutions, asking the agency to crack down on what they called “exploitative” practices they believed were putting both borrowers and lenders at risk.⁴³

The California Reinvestment Coalition, a non-profit housing group based in Northern California, also begged regulators to act, CRC officials told the Commission. The non-profit group had reviewed the loans of 125 borrowers and discovered that borrowers with good credit were being placed into high-cost loans when they qualified for better mortgages and that many borrowers had been misled about the terms of their loans.⁴⁴

There were government reports, too. The Department of Housing and Urban Development and the Treasury Department issued a joint report on predatory lending in June 2000 that made a number of recommendations for reducing the risks to borrowers.⁴⁵ In December 2001, the Federal Reserve Board used the HOEPA law to amend some regulations, including establishing new rules that limited high-interest lending and prevented multiple refinancings over a short

⁴³ Letter from John Taylor, chairman and chief executive officer, National Community Reinvestment Coalition, to Office of Thrift Supervision, July 3, 2000, provided to FCIC; FCIC interviews with Taylor, Josh Silver.

⁴⁴ Kevin Stein interview with FCIC, Details TK

⁴⁵ Joint Report on Recommendations to Curb Predatory Home Mortgage Lending, US Department of the Treasury and US Department of Housing and Urban Development, June 20, 2000.

period of time, if they were not in the borrower's best interest.⁴⁶ FDIC Chairman Sheila Bair, then an assistant treasury secretary in the administration of President George W. Bush, characterized the action as addressing only a "narrow range of predatory lending issues,"⁴⁷ particularly high-interest rate loans that carried hefty upfront fees,⁴⁸ and that it ultimately covered only 1 percent of loans.⁴⁹ In 2002, Gramlich noted again the "increasing reports of abusive, unethical and in some cases, illegal, lending practices."⁵⁰

Bair told the Commission that this was when "really poorly underwritten loans, the payment shock loans" were beginning to proliferate, placing "pressure" on traditional banks to follow suit.⁵¹ She said she and Gramlich considered seeking rules to rein in the growth of these kinds of loans, but Gramlich told her he thought the Fed, despite its broad powers in this area, would not support the effort. Instead, they sought voluntary rules, but that effort fell by the wayside as well.

With minimal government restrictions, the number of nontraditional loans surged and lending standards declined. The companies issuing these loans made profits that attracted envious eyes. New lenders entered the field. Investors clamored for mortgage-related securities and borrowers wanted mortgages. The volume of subprime and nontraditional lending rose sharply. In 2000,

⁴⁶ Federal Reserve Board press release:
<http://www.federalreserve.gov/boarddocs/press/boardacts/2001/20011212/default.htm>

⁴⁷ Statement of Sheila C. Bair, chairman, Federal Deposit Insurance Corp., to the FCIC, Jan. 12, 2010.

⁴⁸ Amendments to Regulation Z (Truth in Lending) under the Home Ownership and Equity Protection Act, Federal Reserve, Dec. 12, 2010. Became effective Oct. 1, 2002.

⁴⁹ FCIC discussion during testimony of Alan Greenspan, April 7, 2010.

⁵⁰ Remarks by Governor Edward M. Gramlich, at the Housing Bureau for Seniors Conference, Ann Arbor, Michigan, January 18, 2002. <http://www.federalreserve.gov/boarddocs/speeches/2002/20020118/default.htm>.

⁵¹ Statement of Sheila C. Bair, chairman Federal Deposit Insurance Corp., to FCIC, Jan. 12, 2010.

the top 25 non-prime lenders originated \$138 billion in loans. Their volume rose to \$213 billion in 2002, and then \$332 billion in 2003.⁵²

California, with its high housing costs, was a particular hotbed for this kind of lending. In 2001, about 24.5 percent of all loans made in the state were riskier, non-traditional loans, rising to 31.3 percent in 2002 and 34.5 percent in 2003.⁵³ In those years, “subprime and option ARM loans saturated California communities,” Kevin Stein, associate director of the California Reinvestment Coalition, testified to the Commission. “We estimated at that time that the average subprime borrower in California was paying over \$600 more per month on their mortgage payment as a result of having received the subprime loan...”⁵⁴

Gail Burks, chairwoman of Nevada Fair Housing, Inc., a Las Vegas-based housing clinic, told the Commission she took her concerns directly to Greenspan at this time, describing to him in person what she called the “metamorphosis” in the lending industry. She told him that in addition to bad lending practices, she was also witnessing a growing sloppiness in the preparation of the loan documents, she said. Many lenders were employing very young loan officers, including many with no previous mortgage industry experience. They were preparing documents hastily and incorrectly, making careless mistakes that caused paperwork nightmares for borrowers.⁵⁵

Lisa Madigan, the attorney general in Illinois, also spotted the emergence of a troubling trend. She joined state attorneys general in Minnesota, California, Washington and Massachusetts in pursuing allegations about First Alliance Mortgage Company, a California-based mortgage

⁵² Inside B & C Lending; 2009 Mortgage Market Statistical Annual, Top Subprime Mortgage Originators.

⁵³ Inside B & C Lending; Market Statistical Annual, Subprime Originations by State, 2001-2003.

⁵⁴ Stein testimony to FCIC at Sacramento field hearing, Sept. 23, 2010.

⁵⁵ FCIC interview with Gail Burks.

lender. Consumers complained they had been deceived into taking loans with hefty fees. The company was then packaging the loans and selling them as securities to Lehman Brothers, Madigan said. The case was settled in 2002 with a \$50 million settlement for borrowers. First Alliance went out of business. But, other firms stepped into the void.

State officials from around the country joined together again in 2003 to investigate another fast-growing lender, California-based Ameriquest.⁵⁶ It became the nation's largest subprime lender, originating \$17 billion in subprime loans in 2002, mostly refinances that let borrowers take cash out of their homes, but with hefty fees that ate away at borrowers' equity.⁵⁷ Madigan told the FCIC, "Our multistate investigation of Ameriquest revealed that the company engaged in the kinds of fraudulent practices that other predatory lenders subsequently emulated on a wide scale: inflating home appraisals; increasing the interest rates on borrowers' loans or switching their loans from fixed to adjustable interest rates at closing; and promising borrowers that they could refinance their costly loans into loans with better terms in just a few months or a year, even when borrowers had no equity to absorb another refinance."⁵⁸

Ed Parker, former head of Ameriquest's Mortgage Fraud Investigations department, told the Commission he detected fraud at the company within one month of starting his job there in January 2003. He told company officials about his findings, but was told to be reactive, not proactive. He heard other departments were complaining he "looked too much" into the loans. In

⁵⁶ "The Monster: How a Gang of Predatory Lenders and Wall Street Bankers Fleeced America—and Spawned a Global Crisis," by Michael W. Hudson, Times Books: New York City, 2010, p. 173.

⁵⁷ Inside B&C Lending, The 2009 Mortgage Market Statistical Annual – Volume I.

⁵⁸ Testimony of Illinois Attorney General Lisa Madigan to the FCIC, Jan. 14, 2010, Washington, DC.

November 2005, he was downgraded from “manager” to “supervisor,” and was laid off in May 2006.⁵⁹

In late 2003, Prentiss Cox, a former Minnesota assistant attorney general, asked Ameriquest to produce information about its loans. He received about 10 boxes of documents. He pulled one file at random, and stared at it. He pulled out another and another. He noted file after file where the borrowers were described as “antiques dealers,” – in his view, a blatant misrepresentation of employment. In another loan file, a disabled borrower in his 80s who used a walker was described in the loan application as being employed in “light construction,” he told the FCIC.

“It didn’t take Sherlock Holmes to figure out this was bogus,” Cox told the Commission.⁶⁰

In trying to figure out why Ameriquest would make such obviously fraudulent loans, a friend suggested that he “look upstream.” Cox suddenly realized the lenders were simply generating product to ship to Wall Street to sell to investors. “I got it,” Cox recalled. “The lending pattern had changed.”

Ultimately, 49 states and the District of Columbia joined in the lawsuit against Ameriquest, on behalf of 240,000 borrowers. The result was a \$325 million settlement.⁶¹ But during the years the investigation was underway, between 2002 and 2005, Ameriquest originated \$180.4 billion in loans, which then flowed to Wall Street for securitization.

⁵⁹ FCIC interview of Ed Parker, May 26, 2010.

⁶⁰ FCIC interview with Prentiss Cox, former assistant attorney general for Minnesota, Oct. 15, 2010.

⁶¹ Mortgage Lender Settles Lawsuit; Ameriquest Will Pay \$325 Million, by Kirstin Downey, Washington Post, Jan. 24, 2006, page D1.

Although the federal government played no role in the Ameriquest investigation, some federal officials said they followed the case. At the Department of Housing and Urban Development, “we began to get rumors” that “Ameriquest” as well as other firms, were “running wild, taking applications over the internet, not verifying peoples’ income or their ability to have a job,” recalled Alphonso Jackson, housing and urban development secretary from 2004 to 2008, in an interview with the Commission. “Everybody was making a great deal of money... and there wasn’t a great deal of oversight going on.” Although he was the nation’s top housing official at the time, he placed the blame on Congress.⁶²

Cox, the former Minnesota prosecutor and Madigan, Illinois attorney general, told the Commission that one of the biggest single obstacles to effective state regulation of unfair lending came from the federal government, particularly the Office of the Comptroller of the Currency, which regulated nationally chartered banks including Bank of America, Citibank and Wachovia. Along with the Office of Thrift Supervision, which regulated nationally chartered thrifts, the OCC had issued rules preempting states from enforcing rules against national banks and thrifts.⁶³ Cox recalled that in 2001, Julie Williams, chief counsel of the Comptroller of the Currency, had delivered what he called a stern “lecture” to the states’ attorneys general, in a meeting in Washington, warning them that the OCC would sue them if they persisted in attempting to regulate the consumer practices of nationally regulated institutions.⁶⁴

Former OCC comptrollers John D. Hawke Jr. and John Dugan told the Commission they were defending the agency’s constitutional obligation to block state efforts to impinge on federally

⁶² FCIC interview with Alphonso Jackson, Oct. 6, 2010.

⁶³ Office of Thrift Supervision lawsuits and actions 1996, 2001, 2002. Details TK

⁶⁴ Cox interview with FCIC.

created entities. They said there were more lending problems among state-chartered lenders, so the states should have been focusing their efforts on their own problems rather than looking to involve themselves in an arena where they had no jurisdiction, that is, federally-chartered institutions. Madigan told the Commission that national banks funded 21 of the 25 largest subprime loan issuers operating with state charters, and that those banks were the end-market for abusive loans originated by the state-chartered firms. She noted that the OCC was “particularly zealous in its efforts to thwart state authority over national lenders, and lax in its efforts to protect consumers from the coming crisis.”⁶⁵

Many states nevertheless pushed ahead with their own lending regulations, as did some cities. In 2003, Charlotte, N.C.-based Wachovia Bank told state regulators that it would not abide by state laws because it was a national bank and fell under the supervision of the OCC. Michigan protested Wachovia’s announcement, and Wachovia sued Michigan. The OCC, the American Bankers Association and the Mortgage Bankers Association entered the fray on Wachovia’s side; the other 49 states, Puerto Rico and the District of Columbia aligned themselves with Michigan. The legal battle lasted four years. The Supreme Court ruled five to three in Wachovia’s favor on April 17, 2007, leaving the OCC its sole regulator. Speaking of the federal government, Cox said, “Not only were they negligent, they were aggressive in trying to stop enforcement actions... Those guys should have been on our side.”⁶⁶

Non-prime lending surged to \$540 billion in 2004 and then \$665 billion in 2005, and its impact began to be felt in more and more places. Many of those loans were funneled into the pipeline by mortgage brokers, who served as the conduit between borrowers and the lenders who financed

⁶⁵ Written testimony of Illinois Attorney General Lisa Madigan to the FCIC, Jan. 14, 2010.

⁶⁶ Cox interview with FCIC.

the mortgages, preparing the paperwork for loans and earning fees from lenders for doing it. More than 200,000 new mortgage brokers entered the field during the boom, and some were less than honorable in their dealings with borrowers.⁶⁷ At least 10,500 people with criminal records became mortgage [brokers] in Florida, for example, including 4,065 who had previously been convicted of fraud, bank robbery, racketeering and extortion, according to an investigative report in 2008. J. Thomas Cardwell, commissioner of the Florida Office of Financial Regulation told the Commission that “lax lending standards” and a “lack of accountability” created significant problems. [cite]

Mark S. Savitt, past president of the National Association of Mortgage Brokers, told the Commission that while most mortgage brokers looked out for borrowers’ best interests and steered them away from risky loans, approximately 50,000 of the newcomers to the field nationwide were willing to do whatever it took to maximize the number of loans they made, and could earn more money putting people in bad loans than good ones. In addition, he told the Commission, some loan-origination firms, such as Ameriquest, were “absolutely” corrupt.⁶⁸

In Bakersfield, California, where home starts doubled and home values tripled between 2001 and 2006, real estate appraiser Gary Crabtree initially felt pride that his birthplace, 110 miles north of Los Angeles, “had finally been discovered” by other Californians. The city, a farming and oil-industry center in the San Joaquin Valley, was drawing national recognition for the pace of development. Wide-open farm fields were ploughed under and divided into thousands of building lots. Home prices jumped 26 percent in Bakersfield in 2002, 17 percent in 2003, and 35

⁶⁷ FCIC interview with Mark Savitt, Nov. 17, 2010.

⁶⁸ FCIC interview with Mark Savitt, Nov. 17, 2010.

percent more in 2004. The median price for a house climbed from \$100,000 in 2001 to almost \$300,000 in 2006.⁶⁹

Crabtree, an appraiser for 48 years, started to think in 2003 and 2004 that things were not making sense. People were paying inflated prices for their homes, and they didn't seem to have enough income to pay for what they had bought. Within a few years, the buyers fell behind on the payments. When he passed some of these same houses, he saw they were vacant. For-sale signs appeared on the front lawns. And when he passed again, he saw that the yards were untended and the grass was turning brown. Next the houses went into foreclosure, and that's when he noticed that the empty houses were being vandalized, which pulled down values for the new suburban subdivisions.”

The Cleveland phenomenon had come to Bakersfield, a place far from the rust belt. Crabtree watched as foreclosures spread like an infectious disease through the community. Houses fell into disrepair and neighborhoods disintegrated.

Crabtree started to study the market to try to understand what was happening, and worked at the effort in earnest in 2005 and 2006. He ended up identifying what he believed were 214 fraudulent transactions in Bakersfield that were allowing insiders to siphon cash off each property transfer. The transactions involved many of the nation's largest lenders. One house, for example, was listed for sale for \$565,000, and sold for \$605,000 with 100 percent financing, though the real estate agent told Crabtree it actually sold for \$535,000. Crabtree realized the gap between the sales price and loan amount allowed these insiders to pocket \$70,000. The terms of

⁶⁹ Bakersfield Regional Chart Book, FCIC background briefing, Bakersfield field hearing, Sept. 7, 2010.

the loan required the buyer to occupy the house, but it was never occupied. Then the house went into foreclosure, and sold in a distress sale for \$322,000.⁷⁰

Crabtree began calling lenders to tell them what he had found, but to his shock, they did not seem to care. He finally reached one quality assurance officer at Fremont Investment & Loan, the nation's eighth-largest subprime lender.

"Don't put your nose where it doesn't belong," he was told.⁷¹

Crabtree took his story to state law enforcement officials, and to the Federal Bureau of Investigation. "I was screaming at the top of my lungs," he said. Crabtree grew infuriated at the slow pace of enforcement and response by prosecutors to a problem that was wreaking economic havoc in Bakersfield.⁷²

At the Washington headquarters of the FBI, Chris Swecker, an assistant director, was also trying to get people to pay attention to mortgage fraud. "It has the potential to be an epidemic," he said at a news conference in Washington in 2004. "We think we can prevent a problem that could have as much impact as the S&L crisis."⁷³

Swecker called another news conference in December 2005 to say the same thing, this time adding that mortgage fraud was a "pervasive problem" that was "on the rise." He was joined by officials from HUD, the U.S. Postal Service and the Internal Revenue Service. The officials told

⁷⁰ Written statement of Gary T. Crabtree to FCIC, Sept. 7, 2010.

⁷¹ Fremont Investment & Loan was ordered etc and etc here

⁷² Gary Crabtree interview with FCIC, Aug. XX, 2010.

⁷³ CNN news report, Sept. 17, 2004: <http://www.cnn.com/2004/LAW/09/17/mortgage.fraud/>

reporters that real estate and banking executives were not doing enough to root out mortgage fraud and that lenders needed to do more to “police their own organizations.”⁷⁴

Meanwhile, the number of cases of reported mortgage fraud continued to swell. Suspicious activity reports, also known as SARs, are reports filed by banks to the Financial Crimes Enforcement Network, a bureau within the Treasury Department.⁷⁵ In November 2006, the network published an analysis that found that mortgage fraud reports had increased 20-fold between 1996 and 2005. The FinCen analysis noted the figures likely represented a substantial underreporting, because two-thirds of all the loans being created were originated by mortgage brokers who were not subject to any federal standard or oversight.⁷⁶ In addition, many lenders who were required to do so did not submit reports.⁷⁷

“The claim that no one could have foreseen the crisis is false,” said William K. Black, an expert on white collar crime and former staff director of the National Commission on Financial Institution Reform, Recovery and Enforcement, created by Congress in 1990, as the savings and loan crisis unfolded⁷⁸

Former Attorney General Alberto Gonzalez, who served from February 2005 to 2007, told the Commission he could not remember the press conferences or news reports about mortgage fraud. Both Gonzalez and former Attorney General Michael Mukasey, who served in 2007 and 2008,

⁷⁵ FCIC Investigative Findings on Mortgage Fraud, p. 10.

⁷⁶ Mortgage Loan Update, An Industry Assessment based Upon Suspicious Activity Report Analysis, Financial Crimes Enforcement Network, Regulatory Policy and Programs Division.

⁷⁷ FCIC interview with Frances San Pedro, Sept. 20, 2010; FinCEN response to FCIC interrogatories, Oct. 14-15, 2010.

⁷⁸ Written testimony of William Black to FCIC, Miami field hearing, Sept. 21, 2010.

told the FCIC that mortgage fraud had never been communicated to them as a top priority.

“National security was an overriding” concern, Mukasey said. [ck] ⁷⁹

To community activists and local officials, however, the lending practices were a matter of national economic concern. Ruhi Maker, a lawyer who worked on foreclosure cases at the Empire Justice Center in Rochester, New York, told Fed governors Bernanke, Susan Bies and Roger Ferguson in October 2004 that she suspected that some investment banks—here she specified “Bear Stearns and Lehman Brothers”—were producing such bad loans that it raised questions about whether the firms would survive.

“We repeatedly see false appraisals and false income,” she told the Fed officials, who were gathered at the public hearing period of a Consumer Advisory Council meeting. She urged the Fed to prod the Securities and Exchange Commission to examine the quality of due diligence by the firms, because otherwise, she said, serious questions could arise about whether they could be forced to buy back bad loans they had made or securitized.⁸⁰

Maker told the board that she feared an “enormous economic impact” could result from the confluence of financial events: flat or declining incomes, a housing bubble and fraudulent loans with overstated values.

In an interview with the FCIC, Maker said Fed officials seemed impervious to what the consumer advocates were saying. The Fed governors politely listened and said little, she said.

⁷⁹ FCIC interview with Michael Mukasey, DATE TK.

⁸⁰ Transcript of the Federal Reserve Consumer Advisory Council Meeting, Oct. 28, 2004.

“They had their economic models, and their economic models did not see this coming,” she said.

“We kept getting back, ‘This is all anecdotal.’”⁸¹

Soon nontraditional mortgages were crowding other kinds of products out of the market in many parts of the country. In 2005, about 23 percent of mortgage borrowers nationwide took out interest-only loans, up from fewer than 2 percent in 2000, with the trend far more pronounced on the west and east coasts.⁸²

Home prices rose quickly in states where nontraditional loans flowed in. [ck data] With their easy credit terms, these loans allowed borrowers to buy more expensive homes and ratchet up the prices in bidding wars. The loans were also riskier, however, and a pattern of higher foreclosure rates frequently followed soon after. By 2005, in thirteen states, at least one in ten of every mortgage outstanding was now a risky, nontraditional loan, up from a miniscule amount years earlier. These states included Arizona, California, Florida, Hawaii, Indiana, Louisiana, Michigan, Mississippi, Nevada, Ohio, Rhode Island, Tennessee and Texas. In a number of other states, the change was less marked. Nontraditional loans penetrated much more slowly, for example, into Montana, North Dakota, South Dakota and Vermont. In those states, home price hikes were lower, but so were foreclosure rates.⁸³

As home prices shot up in much of the country, many observers began speculating about whether the country was witnessing a housing bubble. On June 16th, *The Economist* magazine’s cover story posited that the day of reckoning was at hand, with the headline, “House Prices: After the

⁸¹ FCIC interview with Ruhi Maker, Oct. 25, 2010.

⁸² Many Buyers Opt for Risky Mortgages, Page A1, May 28, 2005, The Washington Post.

⁸³ CoreLogic statistics provided to FCIC.

Fall.” The illustration depicted a brick plummeting out of the sky. “It is not going to be pretty,” the story said. “How the current housing boom ends could decide the course of the entire world economy over the next few years.”⁸⁴

In June 2005, Fed Chairman Greenspan acknowledged the issue, telling the Joint Economic Committee of the U.S. Congress that “the apparent froth in housing markets may have spilled over into the mortgage markets.” For years, he had warned that Fannie Mae and Freddie Mac, subsidized by investors’ beliefs that these institutions had the backing of the U.S. government, were growing so large, with so little oversight, as to create systemic risks for the financial system.⁸⁵ Still, he reassured legislators that the U.S. economy was on a “reasonably firm footing” and that the financial system would be resilient if the housing market turned sour.

“The dramatic increase in the prevalence of interest-only loans, as well as the introduction of other relatively exotic forms of adjustable rate mortgages, are developments of particular concern,” he said. “To be sure, these financing vehicles have their appropriate uses. But to the extent that some households may be employing these instruments to purchase a home that would otherwise be unaffordable, their use is beginning to add to the pressures in the marketplace.

...Although we certainly cannot rule out home price declines, especially in some local markets, these declines, were they to occur, likely would not have substantial macroeconomic implications. Nationwide banking and widespread securitization of mortgages makes it less

⁸⁴ The Economist, June 16, 2005.

⁸⁵ <http://www.federalreserve.gov/boarddocs/testimony/2005/20050406/default.htm>

likely that financial intermediation would be impaired than was the case in prior episodes of regional house price corrections.”⁸⁶

Indeed, Greenspan would not be the only one who would think that a housing downturn would leave the broader financial system largely unscathed. As late as June 2007, after housing prices had been declining for a year, Bernanke testified to Congress that the problems in the housing market were “likely to be contained,” meaning he didn’t expect spillovers to the broader economy.⁸⁷

Some were less sanguine. For example, consumer lawyer Sheila Canavan, of Moab, Utah, told the Fed’s consumer advisory council in October 2005 that 61 percent of recently originated loans in California were interest-only, more than twice the national average. “That’s insanity,” she told the Fed governors. “That means we’re facing something down the road that we haven’t faced before and we are going to be looking at a safety and soundness crisis.”⁸⁸

On another front, while many academics were publishing studies that showed that rising house prices were perfectly rational, and were expressing few worries about the stability of the financial system, some raised pointed alarms. For example, in August 2005, Yale professor Robert Shiller, who along with Karl Case developed the Case-Shiller Index, charted home prices,

⁸⁶ Testimony of Chairman Alan Greenspan, The economic outlook, Before the Joint Economic Committee, U.S. Congress, June 9, 2005, transcript, Federal Reserve Board website.

⁸⁷ Ben Bernanke, “The economic outlook,” testimony before the Joint Economic Committee, U.S. Congress, March 17, 2007, <http://www.federalreserve.gov/newsevents/testimony/bernanke20070328a.htm> (checked)

⁸⁸ Transcript of the Consumer Advisory Council Meeting, Federal Reserve, Oct. 25, 2005. P. 52.

illustrating how precipitously prices had climbed and how distorted the market appeared in historical terms. Shiller warned that the housing bubble would likely burst.⁸⁹

That same month, a conclave of economists gathered at Jackson Lake Lodge in Wyoming, in a conference center nestled amid the Grand Teton National Park. It was a “who’s who of central bankers,” recalled Raghuram Rajan, then chief economist of the International Monetary Fund, who was on leave from the University of Chicago business school. Greenspan was there, so was Bernanke. Jean-Claude Trichet, president of the European Central Bank and Mervyn King, governor of the Bank of England, were among the other dignitaries.⁹⁰

Rajan presented a paper with a provocative title: “Has Financial Development Made the World Riskier?” Rajan posited that executives were being over-compensated for short-term gains but let off the hook for losses—the IBGYBG syndrome. Rajan added that investment strategies such as credit-default swaps could have disastrous consequences if the system became unstable, and that regulatory institutions might not be able to control the outcome.⁹¹

He recalled to the FCIC that he was treated with scorn. Lawrence Summers, president of Harvard University and former U.S. Treasury Secretary, called Rajan a “Luddite,” a historical reference to a social movement that opposed technological change. “...I felt like an early Christian who had wandered into a convention of half-starved lions,” Rajan wrote later.⁹²

⁸⁹ http://www.nytimes.com/2005/08/21/business/yourmoney/21real.html?pagewanted=1&_r=1

⁹⁰ FCIC interview with Raghuram Rajan, Nov. 22, 2010.

⁹¹ FCIC interview with Raghuram Rajan, Nov. 22, 2010.

⁹² Fault Lines, by Raghuram G. Rajan, Princeton University Press, New Jersey, 2010, p. 3.

Susan Wachter, a professor of real estate finance at the University of Pennsylvania's Wharton School, prepared a research paper in 2005 that suggested the United States could have a real estate crisis similar to Asia's in the 1990s. When she discussed her work at the Jackson Hole gathering two years later, it received a chilly reception, she told the Commission. "It was universally panned," she said, and an economist from the Mortgage Bankers Association called it "absurd."⁹³

In 2005, news reports were beginning to highlight signs that the real estate market was weakening. Home sales began to drop, Fitch Ratings reported signs that mortgage delinquencies were rising. That year, hedge-fund director Mark Slipsch of Orix Credit Corp. told participants at the American Securitization Forum, a securities trade group, that investors had become "over optimistic" about the market. "I see a lot of irrationality," he said. He said he was unnerved because people were saying, "It's different this time"—a common rationale before previous collapses.

Some real estate appraisers had also been expressing concerns about the problem for years. From 2000 to 2007, a coalition of appraisal organizations circulated and delivered to Washington officials a public petition signed by 11,000 appraisers, each providing their names and addresses, charged that lenders were pressuring appraisers to place artificially high prices on properties. The petition stated that lenders were "blacklisting honest appraisers" and instead assigning business only to appraisers who would hit the price targets. "The powers that be cannot claim ignorance," appraiser Dennis Black of Port Charlotte, Florida, told the Commission in testimony.⁹⁴

⁹³ FCIC interview with Susan Wachter, Oct. 6, 2010.

⁹⁴ Dennis Black written testimony to FCIC, Miami field hearing, Sept. 21, 2010.

Appraiser Karen Mann of Discovery Bay, California, another industry veteran, told the Commission that lenders had opened subsidiaries to perform appraisals, allowing them to extract extra fees from “unknowing” consumers and making it easier to inflate home values. She said the steep hike in home prices and the unmerited and inflated appraisals she was seeing in Northern California convinced her that the housing industry was headed for a cataclysmic downturn. In 2005, she shut down her office, laid off some of her staff and began working out of her home to cut her overhead expenses and wait out the coming storm.⁹⁵

Despite all the signs that the housing market was slowing, Wall Street just kept going and going, ordering up loans, packaging them into securities, taking profits, earning bonuses. By the third quarter of 2006, home prices were falling and mortgage delinquencies were rising, which spelled trouble for mortgage-backed securities. But, from [September] 2006 on, investment banks created and sold some \$1.2 trillion in mortgage-backed securities and an additional \$346 billion in CDOs.

Not everyone on Wall Street kept applauding, however. Some executives were urging caution. At Lehman Brothers, for example, Michael Gelband, head of fixed income, and chief risk officer Madelyn Antoncic warned against taking on too much risk in the face of growing pressure to compete aggressively against other investment banks. Antoncic, who held the position from 2004 to 2007, was shunted aside: “At the senior level, they were trying to push so hard that the wheels started to come off,” she told the Commission. She was reassigned to a policy position working

⁹⁵ Karen Mann testimony to FCIC, Sacramento field hearing, Sept. 23, 2010.

with government regulators.⁹⁶ Gelband left; Lehman officials blamed Gelband's departure on "philosophical differences."⁹⁷

At Citigroup, meanwhile, Richard Bowen, a veteran banker in the consumer lending group, got a promotion in 2005 when he was named business chief underwriter, overseeing the loan quality of, in peak years, \$90 billion a year in mortgages purchased by CitiFinancial. These mortgages were packaged into securities and resold to Fannie Mae, Freddie Mac and other investors. About a year into the job, Bowen discovered that as much as 60 percent of the loans that Citi were buying were what he called "defective." They did not meet Citigroup's loan guidelines, a dangerous proposition for the company, because if the borrowers were to default on their loans, the investors could force Citi to buy them back. Bowen told the Commission he tried to alert top managers at the firm by "email, weekly reports, committee presentations and discussions," and although he said they expressed concern, it "never translated into any action." Instead, he said, "there was a considerable push to build volumes, to increase market share..."⁹⁸

Moreover, Bowen told the commission, Citi instead began loosening its own standards during these years rather than tightening them, specifically by beginning to purchase stated-income, "liar" loans. "So we joined the other lemmings headed for the cliff," he told the Commission.⁹⁹

He finally took his warnings to the highest spot he could reach—Robert Rubin, [Chairman of the Executive Committee of the Board of Directors] and former US Treasury Secretary in the Clinton Administration [ck title at time], and three other bank officials. He sent a memo to Rubin

⁹⁶ FCIC interview with Madelyn Antoncic, former chief risk officer, Lehman Brothers, July 14, 2010.

⁹⁷ FCIC Investigative Findings on Lehman Brothers, pages 29 and 30. – ck source

⁹⁸ FCIC interview with Richard Bowen, INFO TK

⁹⁹ FCIC interview with Richard Bowen, date TK.

and the others, with the words “URGENT—READ IMMEDIATELY” in the subject lines, and shared his concerns. He told top managers that Citi faced billions of dollars in losses if investors were to demand that Citi repurchase the defective loans.

Rubin told the Commission in a public hearing in April 2010 that Citibank handled the Bowen matter promptly and solved the problem. “I do recollect this and that either I or somebody else, and I truly do not remember who, but either I or somebody else sent it to the appropriate people, and I do know factually that that was acted on promptly and actions were taken in response to it.” Citigroup attorney Brad Karp said the bank undertook an investigation in response to Bowen’s claims and that the system of underwriting reviews was [revised].¹⁰⁰ [check]

Bowen told the Commission he suffered retaliation for pointing out the problems—that he went from supervising 200 people to supervising only two, that his bonus was reduced and that he was downgraded on his performance review.¹⁰¹

Some industry veterans took their concerns directly to government officials. J. Kyle Bass, a Dallas-based hedge fund manager and a former Bear Stearns executive, testified to the FCIC that he told the Federal Reserve in [date] that he believed the housing securitization market was on a shaky foundation. “Their answer at the time was, and this was also the thought that was—that was homogeneous throughout Wall Street’s analysts—was home prices always track income growth and jobs growth. And they showed me income growth on one chart and jobs growth on another, and said, “We don’t see what you’re talking about because incomes are still growing

¹⁰⁰ Brad Karp to FCIC, Nov. 1, 2010.

¹⁰¹ FCIC interview with Richard Bowen, Feb. 27, 2010, p. 104-106.

and jobs are still growing.” And I said, well, you obviously don’t realize where the dog is and where the tail is, and what’s moving what.”¹⁰²

Even those who had profited through the growth of non-traditional lending practices said they became disturbed by what was happening. Herb Sandler, co-founder of mortgage lender Golden West, which was heavily-loaded with Option ARM loans, wrote to officials at the Federal Reserve, the FDIC, the OTS and the OCC, warning that regulators were “too dependent” on ratings agencies and “there is a high potential for gaming when virtually any asset can be churned through securitization and transformed into a AAA-rated asset, and when a multi-billion dollar industry is all too eager to facilitate this alchemy.”¹⁰³

Similarly, Lewis Ranieri, a mortgage finance veteran who helped pioneer the development of the Wall Street mortgage securitization machine in the 1980s, said he didn’t like what he called “the madness” that had descended on the real estate market. Ranieri told the Commission. “I was not the only guy. I’m not telling you I was John the Baptist. There were enough of us, analysts and others, wandering around going ‘look at this stuff,’ that it would be hard to miss it.”¹⁰⁴ Ranieri’s own Houston-based Franklin Bank Corporation would itself collapse under the weight of the financial crisis in November 2008.

Other industry veterans inside the business also acknowledged that the rules of the game were being changed. “Poison,”¹⁰⁵ was the word famously used by Countrywide’s Mozilo, to describe

¹⁰² J. Kyle Bass, testifying to FCIC, Jan. 13, 2010.

¹⁰³ <http://www.goldenwestworld.com/wp-content/uploads/world-savings-basel-anpr-1-18-061.pdf>

¹⁰⁴ FCIC interview with Lewis Ranieri, July 30, 2010.

¹⁰⁵ 4/13/06 Mozilo email to Sieracki, BAC-FCIC-E-00006734227-28, FCIC Investigative Report on Countrywide, p. 31.

one of the loan products his firm was introducing. “In all my years in the business I have never seen a more toxic [product],” he wrote in an internal email.¹⁰⁶ Others at the bank argued that they were offering products “pervasively offered in the marketplace by virtually every relevant competitor of ours.”¹⁰⁷ Still, Mozilo was nervous. “There was a time when savings and loans were doing things because their competitors were doing it,” he told the other executives. “They all went broke.”¹⁰⁸

In late 2005, regulators decided to take a look at the changing mortgage market. Sabeth Siddique, assistant director for credit risk at the Federal Reserve Board, was directed to investigate how broadly loan patterns were changing. He took the questions directly to the [largest] banks in 2005 and asked them how many of which kinds of loans they were making. Siddique found the information “very alarming,” he told the Commission.

First, the growth of nontraditional loans was not isolated to state-chartered institutions in far-flung states, as federal regulators [ck] had publicly stated. In fact, they comprised 59 percent of originations at Countrywide, 58 percent for Wells Fargo; 51 percent for National City; 31 percent at Washington Mutual, 26.5 percent at CitiFinancial, 18.3 percent at Bank of America. Moreover, the banks expected that their originations of nontraditional loans would rise by 17 percent that year, to \$608.5 billion.¹⁰⁹ The review of bank underwriting practices also noted “slowly deteriorating quality of loans due to loosening underwriting standards.”¹¹⁰

¹⁰⁶ 4/17/06 Mozilo email to Sambol and Kurland, BAC-FCIC-E-0000673435

¹⁰⁷ 4/17/06 Sambol email to Mozilo (cc Kurland, McMurray and Bartlett) BAC-FCIC-E-0000673436, FCIC report on Countrywide, p. 32.

¹⁰⁸ 4/17/06 Mozilo email to Sambol (cc Kurland, McMurray and Bartlett) BAC-FCIC-E-0000673436, FCIC investigative report on Countrywide, p. 32.

¹⁰⁹ Confidential Federal Reserve document obtained by FCIC, produced Nov. 1, 2005.

The bank practices analysis found that two-thirds of the nontraditional loans the banks had made in 2003 had been stated-income, minimal documentation variety known as “liar’s loans,” which had a particularly great likelihood of going sour.

The reaction to Siddique’s briefing was mixed. Federal Reserve Governor Bies recalled the response by the Fed governors and regional board directors as divided from the beginning. “Some people on the board and regional presidents...just wanted to come to a different answer. So they did ignore it, or the full thrust of it,” she told the Commission.¹¹¹

The OCC was also pondering the situation. Former Comptroller of the Currency Dugan told the Commission that the push had come from below, from bank examiners who had become concerned about what they were seeing in the field. The agency began considering issuing “guidance,” a kind of nonbinding official warning to banks that non-traditional loans could jeopardize safety and soundness and would invite scrutiny by bank examiners.¹¹² Siddique said the OCC led the effort, which became a multi-agency initiative.¹¹³

Bies said deliberations over the potential guidance also stirred debate within the Fed because some critics feared it would stifle the financial innovation that was bringing record profits to Wall Street and the banks, and that it would make homes less affordable. Moreover, all the agencies—the Fed, the OTS, the FDIC and the National Credit Union Administration--would

¹¹⁰ Fed report, p. 5.

¹¹¹ FCIC interview with Susan Bies, Oct. 11, 2010.

¹¹² Regulators May Warn About New Mortgages: Guidance Would Address the Use of High-Risk Loans,” by Kirstin Downey, June 17, 2005, The Washington Post.

¹¹³ FCIC interview with Siddique, date TK.

need to work together on it, or it would unfairly prevent one group of lenders from doing loans that other lenders were doing. The American Bankers Association and Mortgage Bankers Association opposed it as regulatory overreach.

“...The bankers pushed back,” Bies told the Commission. “The members of Congress pushed back. Some of our internal people at the Fed pushed back...”¹¹⁴

The Mortgage Insurance Companies of America, which represents mortgage insurance companies, weighed in on the other side. “We are deeply concerned about the contagion effect from poorly underwritten or unsuitable mortgages and home equity loans,” they told regulators in a letter in 2006. “...The most recent market trends show alarming signs of undue risk-taking that puts both lenders and consumers at risk.”¹¹⁵

William A. Simpson, the group’s vice president, pointedly referred to past real estate downturns in congressional testimony about a month later. “We take a conservative position on risk because of our first loss position,” Simpson told the Senate Subcommittee on Housing, Transportation and Community Development and the Senate Subcommittee on Economic Policy. “However, we also have a historical perspective. We were there when the mortgage markets turned sharply down during the mid-1980s especially in the oil patch and the early 1990s in California and the Northeast.”¹¹⁶

¹¹⁴ FCIC interview with Susan Bies, Oct. 11, 2010.

¹¹⁵ Insurers Want Action on Risky Mortgages; Firms Want More Loan Restrictions, by Kirstin Downey, Washington Post, page D1, August 19, 2006.

¹¹⁶ MICA Testimony on Non-Traditional Mortgages, Sept. 20, 2006. Statement of William A. Sampson, Mortgage Insurance Companies of America before the Subcommittee on Housing and Transportation and the Subcommittee on Economic Policy. MICA website.

Within the Fed, the debate grew heated and emotional, Siddique recalled. “It got very personal,” he told the Commission. The ideological and interagency turf war lasted more than a year, while the number of nontraditional loans kept growing and growing.¹¹⁷

Consumer advocates kept up the heat. In a Fed Consumer Advisory Council meeting in March 2006, Fed governors Bernanke, Mark Olson and Kevin Warsh were specifically and publicly warned of dangers that non-traditional loans posed to the economy. Stella Adams, executive director of the North Carolina Fair Housing Center, raised concerns that non-traditional lending, “may precipitate a downward spiral that starts on the coast and then creates panic in the east that could have implications on our total economy as well.”¹¹⁸

At the next meeting of the Fed Consumer Advisory Council, held in June 2006, which was attended by Bernanke, Bies, Olson and Warsh, several consumer advocates told Fed governors that alarming incidents were now erupting all over the country. Edward Sivak, director of policy and evaluation at the Enterprise Corp. of the Delta, in Jackson, Mississippi, said that mortgage brokers had told him that property values were being inflated to maximize profit for real estate appraisers and loan originators. Alan White, supervising attorney at Community Legal Services in Philadelphia, reported a “huge surge in foreclosures,” and said that up to half of borrowers he was seeing with troubled loans had been overcharged and given high-interest rate mortgages when their credit had qualified them for lower-cost loans. Hattie B. Dorsey, president and chief executive officer of Atlanta Neighborhood Development, said she worried that houses were being flipped back and forth so much that it would lead to neighborhood “decay.” Carolyn Carter

¹¹⁷ FCIC interview with Siddique, DATE TK.

¹¹⁸ Transcript of Consumer Advisory Council meeting, Federal Reserve, March 26, 2006.

of the National Consumer Law Center in Massachusetts urged the Fed to use its regulatory authority to “prohibit abuses in the mortgage market.”

The balance was tipping. Before he left his post as Fed Chairman in January 2006, Greenspan had indicated he was willing to accept the guidance. Ferguson acted as Greenspan’s lieutenant, shepherding support in the Fed board and among the regional Fed presidents. Bies supported it, and Bernanke did as well. [cite and ck]

More than a year after the OCC initially proposed the guidance, it was issued as an interagency warning that affected banks, thrifts and credit unions nationwide. It was released in September 2006. Dozens of states moved swiftly to duplicate the rules, directing their versions of the guidance to tens of thousands of state-chartered lenders and mortgage brokers.

In July 2008, long after the risky, nontraditional mortgage market had died out and the Wall Street mortgage securitization machine had ground to a halt, the Federal Reserve finally adopted new rules under HOEPA to curb the abuses about which consumer groups had raised red flags for years – including a requirement that borrowers have the ability to repay loans made to them.

By this time, however, the damage had been done. The total value of mortgage-backed securities issued between 2001 and 2006 [update to 2007] reached \$13.4 trillion, according to the Securities Industry and Financial Markets Association. That created a mountain of problematic securities, debt, and derivatives that were resting on real estate assets that were far less secure than they were thought to have been.

By the end of 2007, most subprime lenders had failed or been acquired, including New Century Financial, Ameriquest, and American Home Mortgage. In January 2008, Bank of America announced it would acquire the ailing lender Countrywide. Then, what became clear was that

risk—rather than being diversified across the financial system as had been thought—was concentrated at the largest financial firms. Bear Stearns, laden with risky mortgage assets and dependent on fickle short-term credits, was bought by JP Morgan with government assistance in the spring. Before the summer was over Fannie Mae and Freddie Mac would be put into conservatorship. Then, in September, Lehman Brothers failed and the remaining investment banks, Merrill Lynch, Goldman Sachs, and Morgan Stanley, struggled as they lost the market's confidence. AIG, with its massive credit default swap portfolio and exposure to the subprime mortgage market, was rescued by the government. Finally, many commercial banks and thrifts, with their own exposures to declining mortgage assets and their own exposures to short-term credit markets, teetered. IndyMac had already failed over the summer; Washington Mutual became the largest bank failure in U.S. history. In October, Wachovia was acquired by Wells Fargo. Citigroup and Bank of America fought to stay afloat. Before it was over, taxpayers had committed trillions of dollars through more than two dozen extraordinary programs to stabilize the financial system and to prop up the nation's largest financial institutions.

The crisis that befell the country in 2008 had been years in the making. In sworn testimony to the Commission, former Fed Chairman Greenspan defended his record and said most of his judgments had been correct. "I was right 70 percent of the time but I was wrong 30 percent of the time," he told the Commission. Yet, the consequences of what went wrong in the run up to the crisis would be enormous.

The economic impact of the crisis has been devastating. And the human devastation is continuing. The officially reported unemployment rate hovered at almost 10 percent in [November], but the underemployment rate, which includes those who have given up looking for work and part-time workers who would prefer to work full time, is over 17 percent. And, the

share of unemployed workers who have been out of work for over six months was just above 40 percent. Of large metropolitan areas, the Las Vegas, Nevada and Riverside-San Bernardino, California areas have the highest unemployment with rates of about 15 percent.

The loans were as lethal as many had predicted, and it has been estimated that ultimately 13 million [ck cite] households in the United States may lose their homes to foreclosure. As of xx, foreclosure rates were highest in Florida and Nevada; in Florida, nearly 14% of loans were in foreclosure, and Nevada was not far behind. By xx, nearly one-quarter of American homeowners owed more on their mortgages than their home was worth. In Nevada, the percentage was nearly 70%. Households have lost \$12 trillion in wealth since 2006.

As Mark Zandi, chief economist of Moody's Economy.com, testified to the commission, "The financial crisis has dealt a very serious blow to the U.S. economy. The immediate impact was the Great Recession: the longest, broadest and most severe downturn since the Great Depression of the 1930s...The longer-term fallout from the economic crisis is also very substantial...It will take years for employment to regain its pre-crisis level."

Looking back on the years before the crisis, economist Dean Baker said, "So much of this was absolute public knowledge in the sense that we knew the number of loans being issued with zero down. Now, do we think we have that many more people—who are capable of taking on almost zero down who we think are going to be capable to pay that off—than was true 10, 15, 20 years ago? What'd changed in the world? There were a lot of things that didn't require any investigation at all; it was entirely in the data."¹¹⁹

Warren Peterson, a home builder in Bakersfield, felt that he could pinpoint to the day when the world changed. Peterson built semi-custom homes in an upscale neighborhood, and each

¹¹⁹ FCIC interview with economist Dean Baker, co-founder of the Center for Economic and Policy Research.

Monday morning, he would arrive at the office to a bevy of real estate agents, sales contracts in hand, vying to be the ones chosen to purchase the new homes he was building. He was at the sales office one Saturday in November 2005, and he noticed that not a single purchaser had entered the building.

He called a friend, also in the homebuilding business, who said he had noticed the same thing, and asked him what he thought about it.

“It’s over,” his friend told Peterson.

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Part I: Setting the Stage for the Crisis

Introduction

The financial crisis of 2007 and 2008 was not a single event, but a series of crises that rippled through the financial system and, ultimately, the economy. Distress in one area of the financial markets led to failures in other areas by way of interconnections and vulnerabilities that bankers and government officials had missed or dismissed. When subprime and other risky mortgages - issued during a housing bubble that many experts failed to take seriously - began to default at unexpected rates, a once-obscure market for complex investment securities backed by those mortgages abruptly failed. When the contagion spread to new fronts, investors panicked – and the danger inherent in the whole system became all-too manifest. Financial markets teetered on the edge and brand-name financial institutions were left bankrupt or dependent on the taxpayers for survival.

Federal Reserve Chairman Ben Bernanke insisted through mid-2007 that the subprime mortgage crisis would be contained. He now acknowledges that he missed the systemic risks. “[P]rospective subprime losses were clearly not large enough on their own to account for the magnitude of the crisis,” Bernanke told the FCIC. “Rather, the system’s vulnerabilities, together with gaps in the government’s crisis-response toolkit, were the principal explanations of why the crisis was so severe and had such devastating effects on the broader economy.”

This section of our report explores the origins of risks as they burrowed into the financial system over the past decades. It is a fascinating story with profound consequences – a complex history that could yield its own report. Instead, we focus on four key developments which helped lay the foundation for the crisis that shook our financial markets and economy. Big books have been written about each of them; we stick to the essentials for understanding our examination, which is the recent crisis.

First, we explain the phenomenal growth of the shadow banking system—the investment banks, most prominently, but other financial institutions, too—which freely operated in the capital markets that were beyond the reach of the regulatory apparatus that had been put in place in the wake of the Crash of 1929 and the Great Depression. This new system threatened the once-dominant traditional commercial banks, who took their grievances to their regulators and to Congress, who slowly but steadily removed longstanding restrictions and helped banks break out of the traditional mold and join the feverish capital markets. The result was two parallel financial systems of enormous scale. This new competition not only benefited Wall Street but also seemed to help all Americans, lowering the costs of their mortgages and boosting the returns on their 401(k)'s. Shadow banks and commercial banks were codependent competitors. Their new activities were very profitable—and, it turned out, very risky.

Second, we look at the evolution of financial regulation. To the Federal Reserve and other regulators, the new dual system that granted greater license to market participants appeared to provide a safer and more dynamic alternative to the era of traditional banking. More and more,

regulators looked to financial institutions to police themselves – “deregulation” was the label. Former Fed Chairman Alan Greenspan put it this way: financial “modernization... would permit banking organizations to compete more effectively in their national markets.”¹²⁰ From the Fed’s view, if problems emerged in the shadow banking system, the large commercial banks – which were believed to be well-run, well-capitalized, and well-regulated despite their loosened restraints – could provide vital support. And if problems outstripped the market’s ability to right itself, the Fed took on the responsibility. It did so again and again in the decades leading up to the recent crisis. And, understandably much of the country came to assume that the Fed could always and would always save the day again.

Third, we follow the profound changes in the mortgage industry, from the sleepy days when local lenders took full responsibility for making and servicing thirty-year loans to a new era in which the idea was to sell the loans off as soon as possible to be packaged and sold to investors around the world. New mortgage products proliferated; new borrowers, too. Inevitably, this became a market in which the participants – mortgage brokers, lenders, and Wall Street firms - had more of a stake in the quantity of mortgages signed up and sold, and less in their quality. We trace the history of Fannie Mae and Freddie Mac, privately-owned corporations established by Congress that became dominant forces in providing financing to support the mortgage market while also seeking maximum returns for investors.

¹²⁰ *H.R. 10, the Financial Services Competitiveness Act of 1997*: Testimony of Fed chairman Alan Greenspan before the House Committee on Banking and Financial Services (May 22, 1997), available at <http://www.federalreserve.gov/boarddocs/testimony/1997/19970522.htm>.

Fourth, we introduce some of the most arcane subjects in our report: securitization, structured finance, and derivatives—words that entered the national vocabulary as the financial markets unraveled through 2007 and 2008. Simply and most pertinently put, structured finance was the mechanism by which subprime and other mortgages, many of dubious value, were turned into complex investments often accorded AAA ratings by credit rating agencies with their own conflicting motivations. This entire market depended on finely honed computer models which turned out to be divorced from reality—and on ever-rising housing prices. When that bubble burst, the complexity bubble also burst: the securities almost no one understood, backed by mortgages no lender would have signed twenty years earlier, were the first dominos to fall in the financial sector.

A basic understanding of these four developments will bring the reader up to speed to where matters stood with the financial system in the year 2000, at the dawn of a decade of promise and peril.

Part I, Chapter 1. The Shadow Banking System

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In the traditional system of borrowing and lending that had been in place in the United States for most of the twentieth century, banks and S&Ls accepted deposits from retail and corporate customers and loaned that money to people who wanted to buy homes or operate businesses. Prior to the Depression, these institutions had historically been subject to “runs”. In those episodes, reports or mere rumors that a bank was in trouble spurred depositors to demand their cash. If enough depositors made such demands at the same time, a bank might not have the funds on hand to meet those demands, even if it had the necessary assets on its books. Such events happened not just during the Great Depression, but also in the decades earlier. Since the Civil War, U.S. banks experienced depositor runs in 1873, 1884, 1890, 1893, 1896, and 1907.¹²¹ Then, in 1913, the Federal Reserve was created to bring stability to financial markets, in part by acting as the lender of last resort to the banks.

This change was not enough to prevent panic in financial markets in the 1920s and 1930s. To prevent a recurrence of such a crisis, the Glass-Steagall Act of 1933 established the Federal Deposit Insurance Corporation, insuring bank deposits up to \$2,500 -- the vast majority of deposits in that era - a number that would eventually rise to \$100,000 in 1980. With this

¹²¹ Prior to the end of the Civil War, banks issued notes instead of deposits. Runs on that system occurred in 1814, 1819, 1837, 1839, 1857, and 1861. See Charles Calomiris and Gary Gorton, “The Origins of Banking Panics: Models, Facts, and Bank Regulation,” in Calomiris, *Bank Deregulation in Historical Perspective* (New York: Cambridge University Press, 2000), 99.

safeguard in place, depositors didn't need to worry about being the first in line at a troubled bank's door when it opened for business. And, if banks were short of funds, they could borrow from the Federal Reserve, even when they could borrow from no one else. As lender of last resort, the Federal Reserve would make sure that a bank would not fail simply due to a lack of liquidity.

At the same time, to discourage banks from taking excessive risks now that deposits were federally insured, Congress had put in place new restrictions on the activities banks could undertake, limited the number of institutions that could operate in a single area, prohibited them from operating across state lines, and in some cases prevented them from opening branches. Restrictions on activities, more regulation, and less competition, policymakers thought, would discourage risky behavior and help to prevent failures.¹²² Congress also gave the Federal Reserve the authority to cap the interest rates that banks and thrifts – also known as savings and loans, or S&Ls —were allowed to pay depositors. Again, the idea of this Regulation Q was to restrict overly zealous competition for deposits that could get an institution in trouble.

The system was stable as long as interest rates remained relatively steady, which was the case for the first two decades after World War II. In the 1970s, however, inflation increased sharply, which caused interest rates to increase sharply. The rate that banks paid other banks for overnight loans had rarely breached 5% in the preceding decades; in [197xx], it pushed 20%. Meanwhile, thanks to the Fed's Regulation Q, banks and thrifts were stuck with offering [roughly 5%]¹²³ on

¹²² See R. Alton Gilbert, "Requiem for Regulation Q: What It Did and Why It Passed Away," *Federal Reserve Bank of St. Louis Review* (Feb. 1986): 22-37.

¹²³ The 19 percent figure is the fed funds rate from March 28 (just before DIDMCA went into effect), and I got it from the FRB St. Louis's database. The five percent figure I eyeballed from an article by R. Alton Gilbert, "Requiem for Regulation Q: What It Did and Why It Passed Away," *Federal Reserve Bank of St. Louis Review* 68 (Feb. 1986): 23-37 at .

their deposits.¹²⁴ This was almost [XXX%] *below* the rate paid on a one-year Treasury bill.

Clearly, this was an untenable bind for the depository institutions, which could not compete on the most basic level of the interest rate offered on a deposit.

Compete with whom? With firms such as Merrill Lynch, Fidelity, and Vanguard, who had seen their opening and persuaded consumers and businesses to abandon traditional banking and thrift services in order to obtain higher returns. These firms, happy to find new business lines, particularly after the SEC abolished fixed commissions on retail and institutional trades in 1975,¹²⁵ created money-market mutual funds (MMMFs) that took the depositors' money and invested it in short-term, safe securities, such as government bonds and highly-rated corporate debt, which paid a higher interest rate than the banks and thrifts were allowed to offer. The new financial products were functionally similar to bank accounts, although they were set up with a mechanism that sold shares that customers could redeem on a daily basis at a stable value never less than one dollar for every dollar originally invested.¹²⁶ In 1977, Merrill Lynch introduced a product even more similar to the standard bank account: With its "cash management accounts," customers could write checks.¹²⁷ The other MMMF sponsors quickly followed suit.

These funds were different from bank and thrift deposits in one important respect: they were not protected by the FDIC's deposit insurance. Nevertheless, consumers were enticed by the higher

¹²⁴ The Federal Reserve and FDIC did allow banks to pay higher rates on some types of deposits, such as certificates of deposit worth \$100,000 or more.

¹²⁵ cite

¹²⁶ Financial Crisis Inquiry Commission, *Preliminary Staff Report*, "Shadow Banking and the Financial Crisis" (May 4, 2010), at 18-25 [hereinafter FCIC PSR on Shadow Banking], available at <http://www.fcic.gov/reports/pdfs/2010-0505-Shadow-Banking.pdf>.

¹²⁷ Donald Regan, who was then Merrill's chairman, later said that "I wanted to get into banking, and CMA was the way to do it." Quoted in Eric J. Weiner, *What Goes Up* (New York: Little Brown, 2005), at 176.

interest rates and by the stature of the sponsors. Merrill Lynch, for one, was a brand-name American institution. It and the other established sponsors implicitly promised that the full \$1 net asset value (NAV) of a share in the fund would be maintained. They would not allow their funds to “break the buck,” as the phrase goes. Even without the FDIC insurance, therefore, these funds were widely considered as safe as a bank or thrift deposit. Business boomed; a key player in the shadow banking industry was born. Total assets held in the lightly-regulated money-market mutual funds grew rapidly, from \$3 billion in 1977 to more than \$740 billion in 1995 and \$1.8 trillion by 2000.¹²⁸

Commercial paper and repos: “A lot of pressure on their regulators”

In order to maintain their competitive edge over the insured depository firms, the new money market funds needed safe, high-quality assets in which to invest, and they quickly developed an appetite for two booming markets that will figure prominently in our story: the “commercial paper” and “repo” markets. These were the conduits through which Merrill Lynch, Morgan Stanley, and other Wall Street securities firms were able to broker and provide, for a fee of course, short-term financing to large, established corporations. Commercial paper was simply short-term unsecured corporate debt – meaning that it was backed by the corporation’s promise to pay, rather than any specific collateral. These loans were of less than nine months in duration – sometimes as short as two weeks and then eventually as short as just one day – and they were usually “rolled over” by the lenders when they came due, and then rolled over again, and then again. Because only financially stable corporations could attract such financing, it was considered a very safe investment; companies such as General Electric and IBM, investors believed, would always be good for their interest payments and for repayment if the paper wasn’t

¹²⁸ Wilmarth (2002), at 239-40.

rolled over. Investors bought and sold this commercial paper like bonds. Corporations had been issuing such “paper” to raise money since the beginning of the century, but it became much more popular in the 1970s.

The newly popular market had suffered an early crisis that amply demonstrated that these capital markets, like bank deposits had been before the introduction of backstops such as deposit insurance, could be vulnerable to investor runs. Yet, the outcome of that crisis had actually strengthened the market. In 1970, when the Penn Central Railway Company, the sixth largest industrial corporation at the time, filed for bankruptcy, it had \$200 million in short-term, unsecured commercial paper outstanding, on which it defaulted.¹²⁹ The holders of that paper—the lenders—now worried about this market in general and refused to roll over their loans to *other* corporate borrowers. The commercial paper market virtually shut down. In response, the Federal Reserve supported the commercial banks with almost \$600 million in emergency loans and by cutting interest rates. These measures allowed the banks, in turn, to lend funds to corporate borrowers to pay off their commercial paper. From that time, it became standard practice for the issuers of commercial paper—the borrowers—to set up standby lines of credit with major banks so that they would have the funds to pay off their debts if the market experienced another shock. This strategy and the Fed’s use of the traditional banking system to support the market reassured commercial paper investors that their money was safe.

Given this very liquid market through which they could borrow at rates lower than the banks could offer, corporations did not hesitate to turn their backs on the banks and instead issue their

¹²⁹ Frederic S. Mishkin, “Asymmetric Information and Financial Crises: A Historical Perspective,” in R. Glenn Hubbard, ed., *Financial Markets and Financial Crises* (Univ. of Chicago Press, 1991), at 69, 99. Andrew F. Brimmer, “Distinguished Lecture on Economics in Government: Central Banking and Systemic Risks in Capital Markets,” Vol. 3, *Journal of Economic Perspectives*, Spring 1999, at 3, and 6.

own commercial paper in order to obtain short-term financing. In the 1960s, outstanding commercial paper showed a more than seven-fold increase. Then, in the 1970s, it increased almost four-fold again. And among the best customers for this commercial paper were the money-market mutual funds—created, in some cases, by Wall Street firms that also brokered the paper for the corporations. It was deemed a win-win-win deal: the mutual funds could earn a solid rate of return, the stable companies could borrow at lower rates, and Wall Street could earn fees on putting the deals together. Corporations could also use the same Wall Street securities firms for less expensive medium-term loans (from nine months to several years). By the year 2000, the total amount of outstanding commercial paper and medium-term notes in the domestic U.S. market had risen from less than \$125 billion in 1980 to \$1.6 trillion.¹³⁰

The second major shadow banking market that grew significantly in the 1970s was the repo market. “Repo” is short for “repurchase agreement.” Like commercial paper, these transactions have a long history, but they grew rapidly in the 1970s.¹³¹ As the U.S. debt also grew during that decade, the Treasury issued hundreds of billions of dollars of securities that were purchased by institutions such as financial corporations and local and state government agencies. Rather than hold them on their balance sheets and earn relatively low Treasury returns, these institutions would sell them to conservative investors in return for cash, which they could then invest in higher-interest securities or use for other purchases. These institutions would agree to buy back,

¹³⁰ Securities Industry Association, *2002 Securities Industry Fact Book*, at 14 (2002); Arthur E. Wilmarth, Jr., “The Transformation of the U.S. Financial Services Industry, 1975-2000: Competition, Consolidation, and Increased Risks,” *2002 University of Illinois Law Review* 215, 231.

¹³¹ In 1969, the Fed amended its Regulation D to allow banks to borrow in the repo market against government and agency securities without posting reserves against them at the Fed. In 1974, the Treasury shifted the bulk of its deposits from accounts at commercial banks to accounts at the Fed. This freed up billions of dollars of government and agency securities for use as collateral in the repo market. Marcia L. Stigum and Anthony Crescenzi, *Stigum’s money market*, Fourth Edition, 2007, page 536.

or repurchase, the securities in the future –often within one day. Repos provided these financial firms and government agencies with a low cost and convenient way to borrow. Lenders took comfort in the fact that the lending was collateralized, generally demanding only a small margin or “haircut” so that the loans would be for nearly the full value of the collateral. Similar to commercial paper, repo would be “rolled over” many times over—that is, if the investors were willing. These sources of very short-term financing would get the nickname “hot money”.

The repo market, too, had vulnerabilities, but it, too, had emerged from an early crisis stronger than ever. In 1982, two securities firms that were major borrowers in this market failed, creating large losses for lenders, some of whom were commercial banks. Again, the Federal Reserve announced that it would act as a lender of last resort to support a shadow banking market. The Fed lent to commercial banks through their normal emergency lending programs to meet credit demands created by the disruptions and loosened the terms on which it lent Treasuries to securities firms.^{132,133} Participants in the repo market and the Fed subsequently persuaded Congress to provide special protection for repos in bankruptcy, which allowed repo lenders to seize collateral rather than be caught up in bankruptcy proceedings. And, in the wake of this incident, most repo participants switched to a three-party arrangement that used a large bank as an intermediary to act as a go-between between the borrower and the lender, essentially escrowing the collateral and the funds.¹³⁴ As we will see, this mechanism would have profound

¹³² Kenneth Garbade, “The Evolution of Repo Contracting Conventions in the 1980s,” *Federal Reserve Bank of New York Economic Policy Review* 12 (May 2006): 27-42, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=918498.

¹³³ To implement monetary policy, the Federal Reserve Bank of New York sets interest rates by borrowing and lending Treasuries in the repo market from securities firms, many of which are units of commercial banks.

¹³⁴ Ibid.

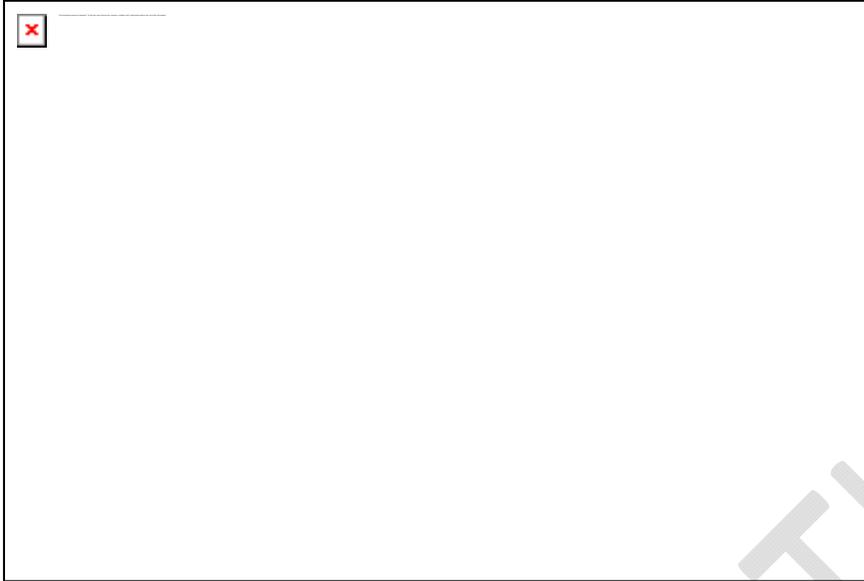
consequences in 2007 and 2008. In the 1980s, however, these new procedures stabilized the market.

The new parallel banking system – with commercial paper and repo providing cheaper financing for corporations and money market funds providing more profitable investment opportunities for consumers and institutional investors – had a crucial catch: this popularity came at the direct expense of the banks and the thrifts. Some regulators viewed the impact of this parallel banking system on the commercial banking system with growing alarm. According to Alan Blinder, Vice Chairman of Federal Reserve from 1994 to 1996:

We were concerned as bank regulators with the eroding competitive position of banks, which of course would threaten ultimately their safety and soundness, due to the competition they were getting from variety of nonbanks—and these were mainly Wall Street firms, that were taking deposits from them, and getting into the loan business to some extent. So, yeah, it was a concern; you could see a downward trend in the share of banking assets to financial assets....¹³⁵

As shown in the figure below, in the 1980s and the 1990s, the shadow banking system was threatening to overtake the traditional banking sector, something that occurred for a time in the 2000s.

¹³⁵ Alan Blinder interview.



Banks and thrifts argued that their problems competing with the shadowing banking institutions stemmed from the regulations issued by the Federal Reserve and the Office of the Comptroller of the Currency, pursuant to the Glass-Steagall Act of 1933. As noted, that landmark Depression-era legislation was prompted by the theory that bank runs and financial crisis had resulted from too much risk-taking, which had in part stemmed from unbridled competition. Congress had restricted the activities of banks and thrifts and toughened their regulation. These restrictions included strict limitations on commercial banks' involvement in the securities markets, in part meant to put an end to the practices of the 1920s when banks sold highly speculative securities to their depositors.¹³⁶ In 1956, regulators had permitted the commercial banks and S&Ls to amalgamate into bank holding companies and engage in some securities activities, but they had to implement protections against transactions that might endanger any depository institution under the umbrella. A bank holding company was allowed to establish subsidiaries that

¹³⁶ Commercial banks became heavily involved in the securities markets during the 1920s, and many observers argued that banks helped to promote the speculative boom that burst in 1929 and led to the Great Depression. 145 Cong. Rec. S13871-74 (daily ed. Nov. 4, 1999) (remarks of Sen. Wellstone); id. S13896-97 (remarks of Sen. Dorgan); id. 145 Cong. Rec. H11530-31, H11542 (daily ed. Nov. 4, 1999) (remarks of Rep. Dingell).

underwrote or dealt in “bank-ineligible” securities as long as the subsidiaries were “not principally engaged” –in fact only minimally engaged - in these activities. Strict “firewalls” restricted the bank’s ability to lend to its securities subsidiaries.

Bank supervisors also monitored banks’ leverage – the amount of borrowing relative to their assets – inasmuch as excessive leverage endangered a bank’s safety and soundness. In 1981, bank supervisors put in place the first formal minimum capital standards.¹³⁷ Relative to these regulated institutions, Wall Street firms enjoyed the advantage of greater leverage in their investments, unhindered by capital requirements or oversight of their safety and soundness. In essence, leverage—employed by virtually all financial institutions and indeed a necessary element of banking—is the use of borrowed money to conduct their business and amplify their returns. To understand how it works, consider the following back-of-the-envelope example. If an investor, such as an investment bank, uses \$100 of its own money to purchase a security that increases in value by 10%, the firm earns \$10. However, if it borrows an additional \$900 and therefore invests ten times as much (\$1,000), the same 10% increase in value yields a profit of \$100, *ten times* the return on its out-of-pocket investment (minus the cost of the loan). If the investment goes sour, on the other hand, leverage magnifies the loss to the same degree. A decline of 10% costs the unleveraged investor \$10, leaving it with \$90, but it wipes out the leveraged investor’s \$100 (with the cost of the loan on top of that). An investor borrowing that much money is said to have a leverage ratio of 10:1, with the numbers representing the total money invested relative to the value of its own assets that the investor has committed to the deal.

¹³⁷ R. Alton Gilbert, Courtenay C. Stone, and Michael E. Trebing, “The New Bank Capital Adequacy Standards,” May 1985, Federal Reserve Bank of St. Louis.

In contrast, the main participants in the shadow banking industry – the money market funds and the securities firms that sponsored them – were not subject to the same safety-and-soundness supervision as were banks and thrifts. The funds in this parallel banking industry came not from insured depositors but principally from investors (in the case of money market funds) or commercial paper and repo markets (in the case of securities firms). They were therefore regulated by the Securities and Exchange Commission (SEC). But the mission of the SEC, created in 1934, was to supervise the securities markets in order to protect stock and bond investors against misrepresentations and fraud. It was charged with ensuring that issuers of securities provide disclosures sufficient to enable investors to make informed decisions, and it required firms that bought, sold, and brokered transactions in such securities to comply with a variety of restrictions, such as keeping their customers’ funds in separate accounts and maintaining proper records. Historically, the SEC did *not* focus on the safety and soundness of individual firms. Deposit insurance did not cover any of the money-market mutual funds, for example, so the government was not on the hook. There was little concern about a “run” on any of these funds or institutions. In theory, the investors had knowingly put their money at risk. If a given investment lost value, it lost value. If a firm failed, it failed.

As a result, money market funds faced no capital or leverage standards whatsoever. “There was no capital requirement and there was no regulation,” former Federal Reserve Chairman Paul Volcker told the Commission. “It was kind of a free ride.”¹³⁸ The funds did have to abide by regulations restricting the type of securities in which they could invest, the duration of those

¹³⁸ Audio of FCIC interview of Paul Volcker, ca. 0:23:30.

securities, and the diversification of their portfolios.¹³⁹ In combination, these requirements were supposed to ensure that the investors' money would not lose value and would be available for redemption when their investors wanted it—important reassurance, but *not* the same as FDIC insurance. The only protection against losses was provided by the implicit guarantee of sponsors like Merrill Lynch that had reputations to protect.

Quite simply, on an increasing number of fronts, the traditional world of the Main Street banks and thrifts were ill-equipped to keep up with the new parallel world of the Wall Street firms. The new shadow banks had few constraints on how they raised and invested money, bolstering their profitability. The iconic old institutions suffered a competitive disadvantage for raising funds *and* for lending, and they therefore were in danger of losing their dominant position as intermediaries between depositors and borrowers. The bind was labeled “disintermediation,” and many critics of the system concluded that policy makers, going all the way back to the Depression, had trapped the depository institutions into this unprofitable straitjacket not only by capping the interest rates they could pay depositors and later imposing capital requirements, but also by preventing the institutions from competing against the securities firms (and their money market mutual funds). Moreover, critics broadly argued that the regulatory constraints imposed on industries across the economy discouraged competition and restricted innovation. The financial sector was cited as a prime example of the problems the critics decried.

As Federal Reserve Chairman Greenspan would describe the argument years later, “Those of us who support market capitalism in its more-competitive forms might argue that unfettered

¹³⁹ Under Rule 2a-7 of the Investment Company Act of 1940, money market funds cannot buy debts that mature in more than 13 months, and they must keep the average maturity of their debts within 60 days or less. (This average is weighted according to the amounts of money invested in each security.)

markets create a degree of wealth that fosters a more civilized existence. I have always found that insight compelling.”¹⁴⁰

The banks and the S&Ls went to Congress for redress of their grievances. In 1980, the Depository Institutions Deregulation and Monetary Control Act repealed the limits on the interest rates that the depository institutions could offer their customers. This legislation did relieve the banks and thrifts of an important regulatory constraint, but it could *not* restore their competitive advantage. Depositors wanted a higher rate of return, which the banks and thrifts were now free to pay, but the interest they earned was largely fixed and could not fully match their new costs. While their deposit base increased, they now faced an interest rate squeeze. In 1979, the advantage in interest earned from the safest investments (one-year Treasury notes) versus interest paid on deposits was almost 5.5%; by 1994, it was only 2.6%. Thus the institutions lost almost 3 percentage points of the funding advantage they had enjoyed when the rates they could pay out were capped.¹⁴¹ This had not been the idea at all. The 1980 legislation wasn't to blame, but had it not solved all the competitive pressures facing the banks and thrifts.

That legislation was followed in 1982 by the Garn-St. Germain Act, which significantly broadened the types of loans and investments that thrifts could make. The act also gave banks and thrifts needed relief in the mortgage market. They had tended to rely on 30-year, fixed-rate mortgages as the mainstays of their business. But the interest from these previously-issued mortgages on the books could not compete as the inflation surge of the mid 1970's and early 1980's had eroded the value of the dollars they had loaned. Another grievance, another piece of

¹⁴⁰ “International Financial Risk Management.” Remarks by Fed Chairman Alan Greenspan before the Council on Foreign Relations, Nov. 19, 2002, available at <http://www.federalreserve.gov/boarddocs/speeches/2002/20021119/default.htm>.

¹⁴¹ *Id.* at 239-41.

legislation. In the 1982 act, Congress acted to permit banks and thrifts to issue interest-only, balloon-payment, and adjustable-rate mortgages (“ARMs”), even where state laws forbade them.¹⁴² For consumers, interest-only and balloon-mortgages had the advantage of making homeownership more affordable, but only in the short term. ARMs would lower borrowers’ rates when interest rates decreased, but had the disadvantage of raising their rates when interest rates rose. For the banks, ARMs had the advantage of an interest rate that would float in relationship to the rates they were paying to attract money from depositors. The floating mortgage would protect the banks and S&Ls from yet another squeeze on their funding, but they transferred the risk of interest rate movements to borrowers. Two decades later, the consequences of this shift would be profound.

Still, traditional financial institutions continued to chafe against the regulations still in place. The playing field wasn’t level, a fact of life that “put a lot of pressure on institutions to get higher rate performing assets,” as former SEC Chairman Richard Breeden told the FCIC. “[A]nd they put a lot of pressure on their regulators to allow this to happen.”¹⁴³

Beginning in 1986, the Federal Reserve accommodated a series of requests from the banks to undertake activities previously forbidden to them under the dictates of the Glass-Steagall Act and subsequent modifications. They permitted subsidiaries of bank holding companies to engage in “bank-ineligible” activities, including selling or holding certain kinds of securities, as long as such activities did not exceed 5% of the total assets or total revenue of any subsidiary. Over time, however, the Fed relaxed these restrictions. By 1997, “bank-ineligible securities” could comprise

¹⁴² Garn-St Germain Depository Institutions Act of 1982, available at FDIC Law, Regulations, Related Acts, Codified to 12 U.S.C. 226 note, available at <http://www.fdic.gov/regulations/laws/rules/8000-4100.html>

¹⁴³ Transcript of FCIC interview with Richard Breeden, 5.

as much as 25% of the total assets or revenues while the Fed also weakened or eliminated various other firewalls between traditional banking and securities activities.¹⁴⁴

Meanwhile, the Office of the Comptroller of the Currency (OCC), the regulator of banks with national charters, was expanding the scope of permissible activities for those banks to include any activity that was “functionally equivalent to, or a logical outgrowth of, recognized bank functions.”¹⁴⁵ Among the previously prohibited but now authorized activities was the brokering and trading of bets and hedges on the prices of certain assets, known as derivatives. We discuss this subject in depth below, but note here that between 1983 and 1994, the OCC permitted banks to deal in derivatives related to debt securities (1983), interest and currency exchange rates (1988), stock indices (1988), precious metals such as gold and silver (1991), and stocks (1994).¹⁴⁶ The OCC’s permissive orders blurred the boundaries between the banks and the securities firms because derivatives could reproduce the same risk-and-reward elements of conventional securities.

Greenspan and many other regulators and officeholders supported and encouraged this policy direction. They argued that financial institutions, operating under strong incentives to protect the interests of their shareholders, would exercise self-regulation through improved risk management. Likewise, financial markets would exert strong and effective discipline over

¹⁴⁴ Thereafter, banks were only required to lend on collateral and set terms based upon what the market was offering. They also could not lend more than 10 percent of their capital to one subsidiary or more than 20 percent to all subsidiaries.

¹⁴⁵ Julie L. Williams and Mark P. Jacobsen, “The Business of Banking: Looking to the Future,” *Business Lawyer* 50 (May 1995), 783.

¹⁴⁶ Saule T. Omarova, “The Quiet Metamorphosis: How Derivatives Changed the ‘Business of Banking’,” 63 *University of Miami Law Review* 1041 (2009), available at <http://ssrn.com/abstract=1491767>. See especially OCC Interpretive Letter No. 892 (Sept. 13, 2000), www.occ.gov/static/interpretations-and-precedents/sep00/int892.pdf.

financial institutions through the activities of market analysts and investors. Greenspan proposed that the urgent question regarding *government regulation* was whether it strengthened or weakened *private regulation*. Speaking some years later, he would frame the issue this way: financial “modernization” was needed to “remove outdated restrictions that serve no useful purpose, that decrease economic efficiency, and that . . . limit choices and options for the consumer of financial services.” Removing the barriers “would permit banking organizations to compete more effectively in their natural markets. The result would be a more efficient financial system providing better services to the public.”¹⁴⁷

Over the course of the 1980s, banks and thrifts sought out loans that would generate higher interest payments. They loaned money to oil-and-gas producers, they financed leveraged buyouts of corporations, and they funded developers of residential and commercial real estate projects. The largest of the commercial banks advanced money to companies and governments in “emerging markets”—countries in Asia and Latin America that had only recently started to develop high-powered economies. All of those lending categories offered the potential for higher profits for banks and thrifts, but these new loans were inherently riskier—much riskier—than their traditional lending. The results started coming in almost immediately, especially in the real estate markets, which had seen a price bubble and massive overbuilding in both residential and commercial sectors in certain regions. For example, house prices rose 7% per year in Texas from 1980 to 1985. In California, prices rose 13% annually from 1985 to 1990. The bubble burst first in Texas in 1985 and 1986, surged across the Southeast to the Middle Atlantic States and New England, then swept back across the country to California and Arizona. Before it was over,

¹⁴⁷ *H.R. 10, the Financial Services Competitiveness Act of 1997*: Testimony of Fed chairman Alan Greenspan before the House Committee on Banking and Financial Services (May 22, 1997), available at <http://www.federalreserve.gov/boarddocs/testimony/1997/19970522.htm>.

national house prices declined 2.5% from July 1990 to February 1992 – the first drop in national house prices since the Depression - driven by the steep drops in a number of regional markets.¹⁴⁸

Spiraling defaults on their residential and commercial real estate loans shattered the thrift industry. The banks also suffered heavy real estate losses, along with others on many of those energy-related, leveraged-buyout, and overseas loans.¹⁴⁹

In all, almost 3,000 commercial banks and thrifts failed in what became known—somewhat unfairly for the thrifts—as the “S&L Crisis” of the 1980s and early 90s.¹⁵⁰ By 1994, one out of six federally insured depository institutions had either closed or required financial assistance, affecting 20 percent of the banking system’s assets. Over 1000 bank and S&L executives were convicted on felony charges stemming from the crisis [ck] . When the government cleanup was complete, banks and thrifts failures had cost American taxpayers more than \$130 billion, (\$xx in today’s dollars). The deposit insurance funds for the banks and thrifts picked up another \$66 billion.¹⁵¹

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¹⁴⁸ This data series is relatively new. Until [2009], available data series on house prices showed no national house price decline. First American/CoreLogic, National HPI Single-Family Combined (SFC)

¹⁴⁹ For a general overview of the banking and thrift crisis of the 1980s, see Federal Deposit Insurance Corp., *History of the Eighties: Lessons for the Future* (1997), Volume I.

¹⁵⁰ Specifically, between 1980 and 1994, 1,617 federally insured banks with \$302.6 billion in assets and 1,295 savings and loans with \$621 billion in assets either closed or received FDIC or FSLIC assistance. See Federal Deposit Insurance Corp., *Managing the Crisis: The FDIC and RTC Experience, 1980-1994* (Aug. 1998) [hereinafter FDIC (1998)], at 5.

¹⁵¹ FDIC (1997), 186-87; FDIC (1998), 4, 28-29, 98, 807-08. For a more thorough discussion of government rescues of banks and savings and loan companies, see Financial Crisis Inquiry Commission, *Preliminary Staff Report, “Governmental Rescues of ‘Too-Big-to-Fail’ Financial Institutions”* (Aug. 31, 2010), at 9 [hereinafter FCIC PSR on TBTF], available at <http://www.fcic.gov/reports/pdfs/2010-0831-Governmental-Rescues.pdf>. For data on bank and thrift failures between 1980 and 1994, see Federal FDIC (1998), at 4-5, 28-29, 49, 289-91, 794-99 (Charts C.1-C.6), 807-09 (Charts C.16-C.18), 860 (Table C.13), 862 (Table C.15).

Despite the S & L crisis and the passage of legislation to subject thrifts to bank like supervision, the impulse toward deregulation continued apace, focusing on dismantling the existing regulatory framework to allow regulated depository institutions to engage in more activities in the capital markets –. In 1991, the Treasury Department issued an extensive study that called for the complete dismantling of the old regulatory framework for banks, including the repeal of the Glass-Steagall Act. The study urged Congress to repeal all restrictions on interstate banking, under the belief that large nationwide banks closely tied to the capital markets would be more profitable and more competitive with the largest banks from the United Kingdom, Europe and Japan. The Treasury report contended that its proposed reforms would allow banks to embrace “market innovation” and would produce a “stronger, more diversified financial system that will provide important benefits to the consumer and important protections to the taxpayer.”¹⁵²

The biggest banks pushed hard for Congress to enact the Treasury’s proposals, but in opposition were insurance agents, real estate brokers, and smaller banks who believed that their businesses would be threatened if the largest banks and their virtually bottomless pool of money were turned loose to compete. These interests persuaded the House of Representatives to reject Treasury’s proposal.[cite]

Also on the congressional mind were a spate of recent high-profile bailouts. In 1984, federal regulators rescued Continental Illinois, the nation’s seventh-largest bank; in 1988, First Republic, number 14; in 1989, MCorp, number 36; in 1991, Bank of New England, number 33.¹⁵³ Prior to their rescues, these banks had relied heavily upon uninsured deposits and other short-term

¹⁵² U.S. Treasury Dept., *Modernizing the Financial System: Recommendations for Safer, More Competitive Banks* 55 (Feb. 1991).

¹⁵³ FDIC (1998), at 546, 596, 618, 636, 810; Timothy L. O’Brien, “Worries About Loans Revive Ghost of 1980’s Bank Debacle,” *New York Times*, July 16, 1998, at A1.

financing to pursue aggressive expansions, leaving them vulnerable to precipitous withdrawals once confidence in their solvency evaporated. Deposits covered by the Federal Deposit Insurance Corporation were protected from loss, but regulators felt obliged to protect the *uninsured* depositors to prevent runs on even the even larger banks like Citicorp, Bank of America and Chase Manhattan that reportedly lacked sufficient assets to satisfy their obligations.¹⁵⁴

During a hearing concerning the rescue of Continental Illinois, Comptroller of the Currency C. Todd Conover stated that that federal regulators would not allow any of the eleven largest “money center banks” to fail.¹⁵⁵ This was new regulatory principle, and within moments it had a catchy name.¹⁵⁶ Representative Stewart McKinney of Connecticut responded, “We have a new kind of bank. . . . It is called ‘too big to fail’—TBTF—and it is a wonderful bank.”¹⁵⁷

In 1990, during this era of federal rescues of large commercial banks, Drexel Burnham Lambert – once the fifth largest investment bank – failed. Crippled by legal troubles and with losses in its junk bond portfolio, it became the largest bankruptcy filing in US history to date when the firm was unable to borrow in the commercial paper [ck] and repo markets. While creditors, including other investment banks, were rattled and absorbed heavy losses, the government did not step in, and Drexel’s failure did not cause a crisis. So far, it seemed that among all financial firms only commercial banks were deemed too big to fail.

¹⁵⁴ See Wilmarth (2002), 304-05 and 315, including footnotes.

¹⁵⁵ Kaufman, Too Big to Fail in US Banking: Quo Vadis? Page 163

¹⁵⁶ FCIC PSR on TBTF (2010), at 6-9.

¹⁵⁷ *Id.* at 7 (quoting from transcript of hearing before the House Committee on Banking, Housing, and Urban Affairs).

In 1991, Congress tried to restrict this “too big to fail” principle, passing the Federal Deposit Insurance Corporation Improvement Act (FDICIA) to curb the use of taxpayer funds in rescuing failing depository institutions. FDICIA mandated that the FDIC intervene early when a bank or thrift got into trouble; if an institution *did* fail, the FDIC was required to resolve the matter with the lowest-cost method to the FDIC insurance fund. However, the legislation undercut these restrictions by opening two important loopholes. One exempted the FDIC from the least-cost restrictions if it, the Treasury, and the Federal Reserve determined that the failure of a particular institution posed a “systemic risk” to financial markets. The other loophole addressed a concern raised by some Wall Street firms, Goldman Sachs in particular, that commercial banks had been reluctant to provide help during previous market disruptions, such as Drexel’s failure.¹⁵⁸ They successfully lobbied for an amendment to FDICIA, to authorize the Fed – for the first time ever [ck] - to serve as a lender of last resort to investment banks by extending loans collateralized by the investment banks’ securities.¹⁵⁹

In the end, the legislation was a mixed message: you are *not* too big to fail—until and unless you *are* too big to fail. As a result, the possibility of bailouts for the biggest, most centrally placed institutions would remain an open question until the next financial crisis arrived 16 years later.¹⁶⁰

¹⁵⁸ Appelbaum & Irwin (2009). See also Wessel (2009), at 160-61.

¹⁵⁹ *Id* at 10 (quoting 12 U.S.C. § 1823(c)(4)(G)(i)).

¹⁶⁰ *Id.* at 10-11.

Part I, Chapter 2. Growth of the GSEs and securitization: “the whole army of lobbyists”

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The crisis in the thrift industry created an opening for Fannie Mae and Freddie Mac, the two massive government-sponsored enterprises (GSEs) created by Congress to provide financing for the home mortgage market.¹⁶¹ Explaining their central role in the mortgage market requires a quick history lesson.

Fannie Mae (officially, the Federal National Mortgage Association) was chartered by the Reconstruction Finance Corporation during the Depression—1938, specifically—to provide a secondary market for mortgages insured by the Federal Housing Administration or FHA. The new agency would purchase mortgages that adhered to FHA’s underwriting standards, thus virtually guaranteeing the supply of mortgage credit that lenders could extend to homebuyers. Fannie Mae either held the mortgages or, less often, resold them to savings and loans (S&Ls), insurance companies, or other investors. After World War II, it was authorized to provide the same service for home loans guaranteed by the Veterans Administration (VA).

This system worked well. But, the agency funded its growing mortgage holdings by issuing increasing amounts of debt. By 1968, Fannie’s mortgage portfolio had grown to \$7.2 billion and

¹⁶¹ Fannie Mae is short for the Federal National Mortgage Association, established by Congress as a GSE in 1968. Freddie Mac is short for the Federal Home Loan Mortgage Corporation, established by Congress in 1970.

the debt to finance its portfolio was weighing on the federal government's balance sheet. To address this issue, Congress reconstituted Fannie and created the new Ginnie Mae (officially the Government National Mortgage Association). Ginnie Mae took over responsibility for the old Fannie's subsidized mortgage programs and the government's loan portfolio and shortly after its creation began guaranteeing pools of FHA and VA mortgages. The new Fannie was now a "government-sponsored enterprise" (GSE) - a publicly traded corporation that still purchased federally insured mortgages.

Two years later, in 1970, at the request of the savings and loan industry, Congress chartered a second GSE, Freddie Mac (officially, the Federal Home Loan Mortgage Corporation), to help serve thrifts wanting to sell their mortgages. This legislation also authorized Fannie and Freddie to expand their purchases to include "conventional" mortgages—that is, mortgages not backed by either the FHA or the VA – up to a specified mortgage size. These conventional mortgages were stiff competition to FHA mortgages as they could be issued more quickly and had lower fees. Still, the conventional mortgages did have to conform to the GSEs' loan size limits and existing underwriting guidelines, such as debt-to-income and loan-to-value ratios. The GSEs could only purchase these "conforming" mortgages.

Before 1968, Fannie had bought mortgages, and generally held them. Fannie Mae made money from the difference – or spread - between its cost of funds and the interest rates on the mortgages it held. The 1968 and 1970 laws gave Ginnie, Fannie Mae, and Freddie Mac a new option: securitization. In 1970, Ginnie began doing just that: a lender would assemble a "pool" of mortgages and Ginnie would issue a guarantee of timely payment of principal and interest on that security backed by the full faith and credit of the U.S. government. For providing this

guarantee, Ginnie charged a fee. In 1971, Freddie adopted this same basic model, with some differences. Unlike Ginnie, which could not purchase mortgages, Freddie would purchase mortgages, pool them, and then sell mortgage-backed securities to investors. It would guarantee to those investors timely payment of principal and interest from the pool of mortgages. Like Ginnie, Freddie made money by collecting guarantee fees from investors in their mortgage-backed securities. In 1981, after interest rates had spiked leading to large losses on its portfolio of mortgages, Fannie finally followed suit. During the 1980s and 1990s, the conventional mortgage market expanded, the GSEs grew in importance, and the market share of FHA and VA mortgages declined. By 2000, the GSEs guaranteed or purchased 39% of originated mortgages and FHA insured 11%.¹⁶²

Fannie and Freddie had a dual mission: the “public” one of supporting the mortgage market and the “private” one of seeking maximum returns for shareholders. They did not originate mortgages, they purchased them – from banks, thrifts, and mortgage companies, and either held them in their portfolios or securitized and guaranteed them. Congress granted both enterprises special privileges, such as exemptions from state and local taxes (not property taxes) and a \$2.25 billion line of credit each from the Treasury. The Federal Reserve Banks provided various services for them such as electronically clearing payments for GSE debt and securities as if they were Treasury bonds. Taken together, the two GSEs’ charters, mandate, and federal perks created the perception among investors and creditors that their mortgage-backed securities and their debt enjoyed the *implicit* guarantee of the U.S. government. Investors believed their securities were almost as safe as Treasury bills. This is why Fannie and Freddie could borrow

¹⁶² Taking dollar volume of mortgages originated in 2000, FHA mortgages were 11% of the total and GSEs were 39% of the total. [Source: IMF Mortgage market Statistical Annual, vol1, for FHA and totals; and FHFA report to congress for Fannie/Freddie mortgage purchases]

money at rates almost as low as the Treasury paid. Under the law, banks, thrifts, and investment funds were allowed to invest in GSE securities with favorable capital requirements and without limits, and they just about did. By contrast, banking laws and regulations strictly limited the amount of loans a bank could extend to any one borrower and restricted a bank's authority to invest in debt obligations of other firms. And, the GSEs had to hold very little capital – investors' money at risk – in contrast with banks and thrifts.

Mortgages are long-term assets typically funded by short-term borrowings. For thrifts, these “short-term borrowings” were generally deposits. Fannie funded its mortgage portfolio with short and medium-term debt. In 1979, when the Fed hiked short-term interest rates to quell inflation, Fannie, like the thrifts, found that its cost of funding rose while its income on mortgages did not. As a result, in the mid-1980s, the Department of Housing and Urban Development (HUD) estimated that Fannie had a negative net worth of \$10 billion on a market-value basis.¹⁶³ Freddie emerged from this episode unscathed because of the GSE's early adoption of securitization—unlike Fannie at the time, its primary business was guaranteeing mortgage-backed securities, not holding mortgages in their portfolio.

To help Fannie, in 1982, Congress stepped in with tax relief and its supervisor, HUD, stepped in with regulatory forbearance and relaxed capital requirements. Failure was averted.¹⁶⁴ These efforts were consistent with lawmakers' repeated proclamations that a vibrant market for home mortgages served the best interests of the country. However, they also served to reinforce the

¹⁶³ Department of Housing and Urban Development, 1986 *Report to Congress on the Federal National Mortgage Association*, 1986, p. 100.

¹⁶⁴ The government also supported the Farm Credit System (in the form of emergency funding through the Farm Credit System Financial Assistance Corp.) after that GSE failed in 1985, and bailed out the Funding Corporation in 1996.

markets' impression that the government would not abandon Fannie and Freddie, no matter what might happen. Investors were willing to accept very low returns on GSE-issued debt obligations and GSE-guaranteed mortgage-backed securities because they believed there was almost no risk. Fannie and Freddie would soon buy and either hold or securitize mortgages worth hundreds of billions of dollars, then *trillions*. Among the investors were US banks, thrifts, investment funds, and pension funds as well as central banks and funds around the world. This systemic commitment would put even more pressure on regulators to protect the value of those securities. Fannie and Freddie were too big to fail. That's what everyone in the markets assumed.

Even after the government aided Fannie, it further boosted Fannie's and Freddie's competitive position in the mortgage market. For one, measures to toughen regulation of the thrifts following the savings and loan crisis had the effect of strengthening the GSEs. Thrifts had previously dominated the mortgage business as large holders of conforming mortgages. In the Financial Institutions Reform Recovery and Enforcement Act of 1989 (FIRREA), Congress subjected the thrifts to much tougher bank-style capital requirements and safety and soundness regulations. By contrast, in the Federal Housing Enterprises Financial Safety and Soundness Act of 1992, Congress subjected the GSEs to a *weaker* form of regulation and created a weak supervisor, the Office of Federal Housing Enterprise Oversight (OFHEO), which lacked the legal powers of bank and thrift supervisors in enforcement, capital requirements, funding, and receivership authority. These decisions – cracking down on the thrifts while providing a comparatively easier regime for the GSEs – were no accident. The GSEs had marshaled immense political power, which they applied during the writing of the 1992 Act. Their efforts paid off, at least in the short

term.¹⁶⁵ Outside the GSEs, critics worried that the GSEs' structure - a publicly traded company with the implicit backing of the government - was not sustainable. Moreover, "OFHEO was structurally weak and almost designed to fail," Armando Falcon, a former director of the agency, told the FCIC.¹⁶⁶

Fannie and Freddie thus enjoyed substantial competitive advantages: lower capital standards, weaker financial oversight, tax and regulatory advantages, and cheaper access to the capital markets. In effect, they enjoyed a generous subsidy. One 2005 study put the value of that subsidy—calculating its current and future benefits—at a total of \$122 billion or more and estimated that over half of the benefits of the subsidy went to shareholders of the two companies, not to homebuyers.¹⁶⁷

Given these circumstances, regulatory arbitrage worked as it always does: the markets shifted activities and attendant risks to the least-cost, least-regulated havens. After the imposition of tougher capital requirements on thrifts in the wake of the S&L crisis, it became increasingly profitable for them to securitize with or sell their conforming loans to Fannie and Freddie. The stampede was on. The dollar value of Fannie's and Freddie's total debt obligations and mortgage-backed securities outstanding grew from \$768 billion in 1990 to \$1.3 trillion in 1995 and \$2.4 trillion in 2000.¹⁶⁸ The annual share of newly originated mortgages that the GSEs purchased or guaranteed in those years rose hit a high of 52%.

* *

¹⁶⁵ See, e.g., Kenneth H. Bacon, "Privileged Position: Fannie Mae Expected to Escape Attempt at Tighter Regulation," *Wall Street Journal*, June 19, 1992, p. A1, and Stephen Labaton, "Power of the Mortgage Twins: Fannie and Freddie Guard Autonomy," *New York Times*, November 12, 1991, p. D1.

¹⁶⁶ Testimony of Armando Falcon Submitted to the Financial Crisis Inquiry Commission, April 9, 2010.

¹⁶⁷ Wayne Passmore, *The GSE Implicit Subsidy and the Value of Government Ambiguity*, Federal Reserve Board Staff Working Paper 2005-05, See also Congressional Budget Office, *Updated Estimates of the Subsidies to the Housing GSEs* (April 8, 2004).

¹⁶⁸ Source: Federal Housing Finance Agency, *Annual Report 2010*; Inside Mortgage Finance.

The legislation that rechartered Fannie in 1968 also authorized the Department of Housing and Urban Development (HUD) to prescribe affordable housing goals: “The [HUD] Secretary may require that a reasonable portion of the corporation’s mortgage purchases be related to the national goal of providing adequate housing for low and moderate income families, but with reasonable economic return to the corporation.”¹⁶⁹ In 1978, HUD tried to implement the law and, after a barrage of criticism from the GSEs and the mortgage and real estate industries, issued a weak affordable housing goal regulation.¹⁷⁰ The 1992 legislation extended HUD’s authority to set affordable housing goals for Freddie as well, and Congress also refined the language used in the 1968 act.¹⁷¹ Now, in the instance of affordable housing, “a reasonable economic return... may be less than the return earned on other activities.”¹⁷² The law required that, in establishing goals for the GSEs, the HUD Secretary should consider “the need to maintain the sound financial condition of the enterprises.”¹⁷³ The act specified that the HUD Secretary establish goals for low- and moderate-income housing; special affordable housing; and housing in central cities, rural areas, and other underserved areas. HUD would periodically set as the goal for each category a percentage of the GSEs’ total mortgage purchases.

In 1995, President Clinton announced an initiative aimed at boosting homeownership to 67.5% of families by 2000 – it stood at 65.1% in 1995. One component of the initiative was increased

¹⁶⁹ Fannie Mae Charter Act, Sec. 309(h), codified at 12 U.S.C. Sec. 1723a(h). The 1992 Act repealed this provision and replaced it with more elaborate provisions.

¹⁷⁰ Department of Housing and Urban Development, "Regulations Implementing the Authority of the Secretary of the Department of Housing and Urban Development over the conduct of the Secondary market Operations of the Federal National Mortgage Association (FNMA)," 43 Federal Register No. 158, pp. 36199-36226, August 15, 1978.

¹⁷¹ Federal Housing Enterprises Financial Safety and Soundness Act.

¹⁷² Fannie Mae charter act, Sec. 301 (3) and Freddie Mac charter act, Sec. 301(b)(3), as applied by the 1992 Act, Section 1331(a), codified at 12 U.S.C. Sec. 4561(a).

¹⁷³ 1992 Act, Secs. 1332 (b), 1333(a)(1), and 1334(b).

affordable housing goals at the GSEs. Since 1993, close to 2.8 million households had become new homeowners, nearly twice as many as in the previous two years. “But we have to do a lot better,” Clinton said. “This is the new way home for the American middle class. We have got to raise incomes in this country. We have got to increase security for people who are doing the right thing, and we have got to make people believe that they can have some permanence and stability in their lives even as they deal with all the changing forces that are out there in this global economy.”¹⁷⁴ The push to expand homeownership would continue in the years ahead under President Bush.

Fannie and Freddie were mainstays of the nation’s housing market, but their dual mission—promoting mortgage lending while maintaining their duty to shareholders—was always problematic. Former Fannie CEO Daniel Mudd suggested to the FCIC that the GSE model might work well enough in good times but would be unworkable in the financial crisis of 2007 and 2008: “The GSE structure required the companies to maintain a fine balance between financial goals and what we call the mission goals....the root cause of the GSEs' troubles lies with their business model.”¹⁷⁵ Former Freddie CEO Richard Syron concurred, “I don’t think it’s a good business model.”¹⁷⁶

Because the entities were highly dependent on subsidies and the implicit government guarantee, and were also subject to regulation, affordable housing goals, and legislatively constrained capital standards, they were politically active. From 1998 to 2008, the two GSEs together reported spending \$163 million on lobbying.[cite] [add information about political

¹⁷⁴ President William J. Clinton, “Remarks on the National Homeownership Strategy,” June 5, 1995.

¹⁷⁵ Daniel Mudd, statement to the FCIC, April 9, 2010, transcript at pp. 18-19

¹⁷⁶ Richard Syron interview transcript, August 31, 2010, p. 29.

contributions] Falcon, OFHEO's director from 1999 to 2005, testified that the "Fannie and Freddie political machine resisted any meaningful regulation using highly improper tactics" and that "OFHEO was constantly subjected to malicious political attacks and efforts of intimidation."¹⁷⁷ James Lockhart, the director of OFHEO and its successor FHFA from 2006 through 2009, testified that he sought GSE reform legislation from the moment he became director and that the "companies were so politically strong that for many years they resisted the very legislation that might have saved them."¹⁷⁸ Former HUD Secretary Mel Martinez described for the FCIC staff "the whole army of lobbyists that continually paraded in a bipartisan fashion through my offices...It's really amazing the number of people that were in their employ."¹⁷⁹

In 1995, that army helped attain new regulations allowing the GSEs to count toward their mission goals not just their whole loans, but also their mortgage-related securities, whether these securities were issued by the GSEs or securitized in the private market. The GSEs wanted to profit by investing in these so-called "private-label" mortgage securities and, to the extent that the underlying mortgages qualified, could now get credit for meeting their affordable housing goals. Congressional Budget Office Director June O'Neill commented on the ease with which the GSEs met their affordable housing goals in the 1990s: "[T]he goals are not difficult to achieve, and it is not clear how much they have affected the enterprises' actions. In fact

¹⁷⁷ Falcon written testimony at

¹⁷⁸ Lockhart written testimony at 4-8, 16-17.

¹⁷⁹ Senator Mel Martinez interview, September 28, 2010, at 10:00

...depository institutions as well as the Federal Housing Administration devote a larger proportion of their mortgage lending to targeted borrowers and areas than do the GSEs.”¹⁸⁰

Something else was clear: Fannie Mae and Freddie Mac were immensely profitable throughout the 1990s, thanks in large part to their low borrowing costs and their lax capital requirements. In 2000, Fannie Mae had a return on equity of 26%; Freddie Mac, 39%. That year, Fannie Mae and Freddie Mac stood astride the mortgage market. Together they held or guaranteed over \$2 trillion of mortgages.

Structured Finance: “it wasn’t reducing the risk”

While Fannie and Freddie enjoyed a virtual monopoly on the securitization of conforming mortgages, by the 1980s, the markets began to securitize a wide array of other types of loans, including mortgages *not* eligible for purchase by the GSEs – the so-called private-label or non-agency mortgage securities. The basic mechanism worked the same in all cases: a securities firm, such as Lehman Brothers or Morgan Stanley (or a securities affiliate of a bank) helped to bundle a collection of loans from a bank or other lender into securities and then sell these securities to investors, who would receive the principal and interest payments from the pool of loans. Investors could then hold or trade these securities in the marketplace. Many of these new securities would be more complicated than the GSE’s basic mortgage-backed securities; the bundled assets included not just mortgages but also equipment leases, credit card debt, auto loans, and manufactured housing. Over time, banks and securities firms used securitization to replicate the activities of the banking system outside of the regulatory framework set up for banks. For example, whereas banks used to take money from deposits to make loans to

¹⁸⁰ Remarks of June E. O’Neill Director, Congressional Budget Office before the Conference on Appraising Fannie Mae and Freddie Mac, May 14, 1998.

businesses and hold those loans to maturity, securities firms now would use money from the capital markets -- often provided by money market mutual funds -- to arrange loans to businesses, packaging those loans into securities held by investors.

For the commercial banks, the benefits of securitization were large. It moved assets off their books. Holding fewer loans, the banks could then hold less capital as protection against losses, improving the return for their investors. Securitization also enabled banks to reduce their reliance on deposits for cash, because the sale of securities raised cash that could be used to make additional loans. Or, banks could keep a portion of the securities on their books; using them as collateral for borrowing. Fees on the securitization business became an important source of revenues.

Larry Lindsey, former Federal Reserve Governor and Director of the National Economic Council under President George W. Bush, told the FCIC that because of previous housing downturns that affected banks, regulators did not like banks to hold whole loans on their books. He said, “If you had a regional...real estate downturn it took down the banks in that region along with it, which exacerbated the downturn. So we said to ourselves, ‘How on earth do we get around this problem?’ And the answer was, ‘Let’s have a national securities market so we don’t have regional concentration.’ ... It was intentional.”¹⁸¹

Structured finance securities had two key features designed to benefit investors: *pooling* and *tranching*. A large number of loans pooled into one security would cushion the losses from a few defaults; the vast majority of the payments would come through on schedule. Structured finance securities also could be sold in tranches, which allowed payments for a given

¹⁸¹ Lindsey audio

securitization to be customized to suit individual buyers' preferences. Risk-averse investors would buy tranches that would be paid first, but receive lower yields. Return-oriented investors would buy tranches that were paid higher yields but ran a greater risk of losing their investment should too many borrowers defaulted.¹⁸² Bankers often used the analogy of a waterfall, with the holders of the more senior tranches – at the top of the waterfall – being paid before the more junior tranches. And if payments came in below expectations, then those at the bottom of the waterfall could be left dry.

Securitization was designed to provide benefits to both parties to the transaction. The issuers of these bonds received a better price for securities composed of bundled loans than they would have received for selling those loans individually, because the securities were customized to investors' needs, more diversified, and could be easily traded. The purchasers of the safer tranches got a higher rate of return than they could have achieved with ultra-safe Treasury notes, with not much extra risk—at least in theory. However, the financial engineering behind these investments made them harder to understand and to price than individual loans. To determine their probable returns, investors had to calculate statistical probabilities of particular proportions of the loans defaulting, and the revenues lost due to these defaults. Then they had to examine the priority of the payment streams to determine the effect of these losses on the returns.

This complexity turned the three leading credit rating agencies—Moody's, Standard & Poor's or S&P, and Fitch—into key players in the securitization process, sitting between the issuers and the ultimate investors. Prior to the increased use of securitization, these agencies had primarily helped investors make decisions about whether to buy municipal and corporate bonds and

¹⁸² Audio of FCIC interview of Vincent Reinhart, ca. 0:7:00.

commercial paper by issuing ratings that succinctly summarized the safety of those obligations. They did this by analyzing the financial condition of corporations or government agencies issuing that debt. Securitization was a perfect opportunity to expand their business and increase their revenues. The ratings agencies would evaluate the new securities and publicize their ratings, and investors would rely upon these ratings in making their investment decisions. While evaluating probabilities was their stock in trade, ratings these securities would require more complex analysis than they had previous undertaken. “The rating agencies were important tools to do that because you know the people that we were selling these bonds to had no history in the mortgage business...They were looking for an independent party to develop an opinion,” Jim Callahan, CEO of PentAlpha, which provides services to the securitization industry and who worked on some of the earliest securitizations, told the FCIC.¹⁸³

With the pieces in place – banks that wanted to shed assets and transfer risk, investors ready to put money to work, securities firms poised to make fees, rating agencies ready to expand, and information technology ready to handle the job -- the securitization market grew by leaps and bounds. By 1999—at which point the market was all of 16 years old—about \$900 billion of securitizations, beyond those done by Fannie, Freddie and Ginnie, were outstanding, including \$114 billion of automobile loans, \$250 billion of credit card debt, and \$70 billion of other types of assets, such as manufactured housing loans and student loans. Over half a trillion dollars were mortgages that were ineligible for securitization by Fannie and Freddie. Many of these were subprime, a subject we will return to shortly.

¹⁸³ Audio of FCIC interview with Jim Callahan, 0:18:18.



Securitization was a boon for the commercial banks and it also provided a lucrative new line of business for the Wall Street establishment, with which the commercial banks worked to create the new securities. (Soon enough, as we will see, the banks set up their own securitization operations, and the Wall Street firms bought their own mortgage lenders.) The Wall Street firms such as Salomon Brothers and Morgan Stanley became major players in the securitization market. They were set up perfectly for the business of using the fastest computers to create complex new investments and then finding investors to buy them. They adjusted their business practices to accommodate the new markets. As early as the 1970s, Wall Street executives had hired “quants”—such as mathematicians—to develop models that would represent how various markets or securities behaved and predict how they might change over time. Securitization only increased the importance of this expertise. Scott Patterson, author of the *The Quants*, told the FCIC that the trend toward models dramatically changed finance. “Wall Street now floats on a

sea of mathematics and computer power,” Patterson said.¹⁸⁴

The increasing reliance upon mathematics allowed the quants to create more complex products and their managers to say, and maybe even believe, that they could better manage the risks associated with those products. JP Morgan developed the first “Value at Risk” model, with different versions and copycats soon adopted throughout the industry. These models purported to pin down how much a firm could lose with at least 95% certainty, but it would turn out that the unaccounted-for fraction was where the real risk lay. The modeling assumptions relied on limited historical data; for mortgage-backed securities, they would turn out to be woefully inadequate in a crunch. And, modeling human behavior was different from the problems the quants had addressed in graduate school. “It isn’t like trying to shoot a rocket to the moon where you know the law of gravity,” Emanuel Derman, a Columbia University finance professor who worked at Goldman Sachs for 17 years, told the Commission. “The way people feel about gravity on a given day isn’t going to affect how the rocket behaves.”¹⁸⁵

The rapid rise of securitization raised concerns. Paul Volcker, Fed Chairman from 1979 to 1987, said regulators were concerned as early as the late 1980s that once banks securitized the loans they were making, “they’re not going to pay any attention to the credit.” Yet, as these instruments became increasingly complex, regulators relied more and more on the firms themselves to police their own risks. After all, risk management models such as Value at Risk suggested that firms had matters well in hand. “It was all tied up in the hubris of financial

¹⁸⁴ FCIC interview of Scott Patterson, taken from MFR of interview at p1, 8/12/2010, available on NetDocs <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4820-7084-4167&open=Y>

¹⁸⁵ FCIC interview of Emmanuel Derman, May 12, 2010, available at net docs at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4831-0115-7127&open=Y>

engineers, but the greater hubris let markets take care of themselves,” Volcker told the FCIC.¹⁸⁶ Vincent Reinhart, former Director of the Fed’s Division of Monetary Affairs, told the Commission that he thought that he and his fellow regulators had failed to appreciate the complexity and the difficulties complexity posed for all the market participants--financial firms, investors, and creditors—in assessing risk.¹⁸⁷

Lindsey saw the failures of securitization in hindsight. “It was diversifying the risk. But it wasn’t reducing the risk. And that was one of the big confusions at the time... You as an individual can diversify your risk. The system as a whole though cannot reduce the risk. And that’s where the confusion lies.”

Of course, the complexity was also a problem for the credit rating agencies. What chance did they have of truly understanding the new products? And what motive?

Growth of derivatives “Essentially fighting the last war”

During the financial crisis, the issues of leverage and complexity became closely identified with one element of the story: derivatives. In essence, a derivative is simply a financial contract whose price is determined, or “derived,” from the value of some underlying asset, rate, index or event. They are not used for capital formation or investment, but rather they are instruments for hedging business risk or speculation on changes in prices, interest rates, and the like. They come in many forms, the most common being exchange-traded futures and options and over-the-counter swaps.¹⁸⁸ They may be based on commodities (including agricultural products, metals

¹⁸⁶ FCIC interview with Paul Volcker.

¹⁸⁷ Audio of FCIC interview with Vincent Reinhart, Sept. 10, 2010, at 0:34:24.

¹⁸⁸ Definition of futures, options and swaps

and energy products), interest rates, currency rates, equity securities, and credit risk. They can even be tied to events such as hurricanes or announcements of government data. One example is a futures contract that provides a farmer with the opportunity to effectively lock in a price on his crop prior to harvest and sale. Another type is an interest rate swap, in which two parties agree to exchange a floating interest rate payment for a fixed-rate payment. Many financial and commercial firms use derivatives. For example, pension funds, which are generally risk-averse, sometimes use such swaps to reduce the inflation risk and interest-rate risk of their investment portfolios by transferring them to risk-taking entities, such as hedge funds. In addition to hedging, derivatives can also be used for the purpose of speculating, which is when a firm or individual takes a derivatives position in hopes of profiting on the rise or fall of a price or rate.

There are two basic ways the derivatives markets are organized, as exchanges or over-the-counter markets, although some recent electronic trading facilities blur the traditional distinctions. The oldest U.S. exchange is the Chicago Board of Trade, where futures and options are traded. Such exchanges are regulated by federal law and play a useful role in price discovery – meaning the views of market participants’ views on prices - relating to the underlying commodities or rates. Over-the-counter (OTC) derivatives are traded by large financial institutions, traditionally bank holding companies and investment banks, which act as derivatives dealers, buying and selling contract with their customers. Unlike the futures and options exchanges, the OTC market is not centralized or regulated. Nor is it transparent, limiting its benefits for price discovery. No matter the measurement used—trading volume, dollar volume, risk exposure— derivatives represent a very significant sector of the U.S. financial system.

The principal legislation governing these markets is the Commodity Exchange Act, first passed in 1936 and originally applied only to domestic agricultural futures.¹⁸⁹ In 1974 the Act was amended to require that futures contracts on all commodities including financial instruments must be traded on a regulated exchange and to create a new federal independent agency, the Commodity Futures Trading Commission (CFTC), to regulate and supervise the market.

Outside of this regulated market, an over-the-counter market in derivatives began to develop and grow rapidly in the 1980s. The large financial institutions that were acting as over-the-counter derivatives dealers were concerned that the exchange-trading requirement of the Commodity Exchange Act might be applied to the products they were buying and selling. In 1993, the CFTC sought to address these concerns by exempting certain non-standardized OTC derivatives from the exchange-trading requirement and from certain other provisions of the Act, except for prohibitions against fraud and manipulation.

As the OTC market grew in the wake of the CFTC's 1993 action, there was a wave of spectacular losses and scandals in the market. Among the many examples, in 1994, Proctor and Gamble reported the largest derivatives losses ever by a non-financial firm, stemming from OTC interest and foreign exchange rate derivatives sold to them by Bankers Trust. Proctor and Gamble sued Bankers Trust for fraud – a suit Bankers Trust settled by forgiving most of the money P and G owed the bank. That same year, the CFTC and the Securities and Exchange Commission (SEC) fined Bankers Trust \$10 million for misleading Gibson Greeting Cards on interest rate swaps that resulted in losses to the company, which were more than double its prior year profits. In late 1994, Orange County in California announced it had lost \$1.5 billion on its

¹⁸⁹ The Black-Scholes model is named for the two economists who developed it, Fischer Black and Myron Scholes.

speculation in OTC derivatives. As a result, the county filed for bankruptcy – the largest filing of a municipality in U.S. history.¹⁹⁰ Its derivatives dealer, Merrill Lynch, paid \$400 million to the county to settle claims related to the losses.¹⁹¹

Then, in 1996, Sumitomo Corporation lost \$2.6 billion on copper derivatives traded on a London exchange. The CFTC charged the company with using derivatives to manipulate copper prices, including the use of OTC derivatives contracts to disguise the speculative nature of its transactions. The company settled the matter, paying \$150 million in penalties and restitution.¹⁹² The CFTC also charged Merrill Lynch with knowingly and intentionally aiding, abetting, and assisting the manipulation of copper prices; it settled for a fine of \$15 million.

Debate over the regulation of over-the-counter derivatives intensified during the spring of 1998. In May, the CFTC under the leadership of Chairperson Brooksley Born issued a formal “concept release” that announced that it would be reexamining its regulatory approach to the OTC derivatives market given the rapid evolution of the market and the recent string of major losses tied to derivatives since 1993. The CFTC requested comments and it got them.

Other financial regulators took the unusual step of publicly criticizing these efforts of the CFTC. Treasury Secretary Robert Rubin, Federal Reserve Chairman Alan Greenspan, and SEC Chairman Arthur Levitt issued a joint statement denouncing the concept release the day it was issued. The statement read, “We have grave concerns about this action and its possible consequences... We are very concerned about reports that the CFTC's action may increase the

¹⁹⁰ <http://www.pbs.org/wgbh/pages/frontline/warning/etc/warnings.html>,
http://money.cnn.com/magazines/fortune/fortune_archive/1995/03/20/201945/index.htm

¹⁹¹ <http://www.cftc.gov/opa/speeches/opaborn-33.htm>

¹⁹² <http://www.financialpolicy.org/DSCSPB3.htm>

legal uncertainty concerning certain types of OTC derivatives.”¹⁹³ They proposed a statutory moratorium prohibiting the agency from regulating over-the-counter derivatives.

For months, the three co-signers of the joint statement, joined by Deputy Treasury Secretary Larry Summers, actively opposed the CFTC’s efforts through testimony in Congress and public pronouncements. In October, Congress would pass the moratorium just a few weeks after the Federal Reserve Bank of New York had orchestrated a \$3.6 billion bailout of Long Term Capital Management by the major OTC derivatives dealers. LTCM had managed to amass \$1.25 trillion in OTC derivatives on \$4 billion of capital without the knowledge of its major derivatives counterparties or any federal regulator.¹⁹⁴ Afterward, Greenspan noted that it was the New York Fed’s judgment that allowing a forced liquidation of LTCM “would not only have a significant distorting impact on market prices but also in the process could produce large losses, or worse, for a number of creditors and counterparties, and for other market participants who were not directly involved with LTCM.”¹⁹⁵

In 2000, in the wake of these events, Congress passed and President Clinton signed the Commodity Futures Modernization Act of 2000 (CFMA), which effectively deregulated the OTC derivatives market and eliminated market oversight by both the CFTC *and* the SEC. The CFMA also preempted the application of state laws on gaming and bucket shops that could have

¹⁹³ <http://www.ustreas.gov/press/releases/rr2426.htm>

¹⁹⁴ Define notional amount of a derivative contract.

¹⁹⁵ Hedge Fund Operations: Hearing Before the House Comm. On Agriculture, Nutrition, and Forestry, 105th Cong. 5 (1998).

made OTC derivatives transactions illegal.¹⁹⁶ The SEC did retain anti-fraud authority over securities based OTC derivatives such as stock options.

The law effectively shielded derivatives from virtually all government regulation or oversight. Subsequently, other laws were adopted that encouraged the expansion of this market. For example, under a 2005 amendment to the bankruptcy laws, derivatives counterparties were given advantages over other creditors because they can immediately terminate their contracts at the time of bankruptcy.

The over-the-counter derivatives market boomed. As of year-end 2000 when the CFMA was passed, the notional amount of OTC derivatives outstanding globally was \$95.2 trillion, and the gross market value was \$3.2 trillion. In the more than seven years from that time until June 2008, outstanding OTC derivatives had increased more than seven fold to \$683.8 trillion in notional amount; their gross market value was \$20.4 trillion. Subsequently, other laws were adopted that encouraged the expansion of this market.

[Quotes from Rubin, Greenspan, and Summers re their reflections on CFMA]

As discussed above, financial firms may use derivatives to hedge or manage their risks. Such use of derivatives can lower a firm's "Value at Risk" in the computer models introduced above. In addition to this risk management advantage, such hedges can lower the amount of capital banks are required to hold thanks to a 1996 amendment to the regulatory regime known as the Basel International Capital Accord or "Basel I." Meeting in Basel, Switzerland, in 1988, the world's central banks and bank supervisors adopted a set of principles to guide banks' capital standards, and US banking regulators adopted the Basel I capital rules to implement them.

¹⁹⁶A bucket shop is a fraudulent stock-selling operation..

Among the most important principles was the requirement for banks to hold more capital against riskier assets. Fatefully, the Basel rules would loosen capital requirements for mortgages and mortgage-backed securities relative to all other assets related to corporate and consumer loans. Indeed, capital requirements for banks' holdings of Fannie and Freddie securities were less than all other assets except those explicitly backed by the full faith and credit of the US government. As it turned out, these international capital standards accommodated the shift to *increased* leverage. In 1996, large banks sought more favorable capital treatment for their trading activity, and the Basel Committee on Banking Supervision adopted the Market Risk Amendment to Basel I. This amendment provided that if these banks were hedged, they would not have to hold as much capital against their exposures stemming from trading and other activities.

However, the use of OTC derivatives carried a great deal of risk itself. It enabled derivatives traders, including the large banks and investment banks, to increase their leverage, which proved dangerous during the financial crisis, as we will see. The increase in leverage could work like this: Entering into an equity swap that mimicked the same returns as owning the actual stock may have had some upfront costs, but the amount of collateral posted when initiating such a derivatives transaction was always much smaller than the upfront cost of purchasing the stock directly. Often there was no collateral required at all. Thus traders could use derivatives to receive the same gains - or losses - while making only a fraction of the financial commitment.^[4] That's leverage, with its upside and its downside.

A key OTC derivative in the financial crisis was the credit default swap (CDS), which offered the seller the potential for a little upside at the relatively small risk of a potential large downside,

^[4] For more on derivatives, see Financial Crisis Inquiry Commission, *Preliminary Staff Report*, "Overview on Derivatives" (Jun. 29, 2010), available at <http://fcic.gov/reports/pdfs/2010-0630-psr-derivative-overview.pdf>.

which is exactly what would happen during the housing boom. In a credit default swap, one party transfers to another party the default risk associated with an underlying debt. The referenced debt security can be any kind of bond or loan obligation. The buyer of the CDS protection makes periodic payments to the seller during the life of the swap. In return, the CDS seller provides protection in the event of a default or specified “credit event” (which could be a partial default or a ratings downgrade) related to the debt. Should a “credit event” occur, the CDS seller typically pays the buyer the face value of the bond.

The credit default swap is often compared to insurance, with the seller insuring against a default in the underlying asset. But these derivatives are very different from insurance in two important respects. First, only a person with an insurable interest can obtain an insurance policy. A car owner can only insure the car she owns—not her neighbor’s -- but a purchaser of a CDS can use it to speculate on the default of an asset the purchaser does not own. Second, when an insurance company sells a policy, regulations require that it put aside some reserves in case of a loss. In the housing boom, credit default swaps were sold—that is, protection was offered--without putting up any reserves or any initial collateral or hedging the seller’s exposure. In the run-up to the crisis, American Insurance Group (AIG) would accumulate a *one-half trillion dollar position* in credit risk through the OTC credit derivatives market without initially posting one dollar’s worth of collateral or making any other provision for loss. And AIG was not alone in selling CDS. The value of the underlying assets for outstanding credit default swaps worldwide grew from \$6.4 trillion at the end of 2004 to a peak of \$58.2 trillion at the end of 2007.

Much of the risk associated with credit default swaps and other derivatives were also concentrated among a few very of the largest banks and investment banks, which- along with AIG, the largest U.S. insurance company - dominated the business of dealing in OTC

derivatives. Among bank holding companies, 97% of the notional amount of OTC derivatives—millions of contracts—were traded by just *five* large institutions (in 2006 for example, JPMorgan Chase, Citigroup, Bank of America, Wachovia, and HSBC) – some of the same financial firms that would find themselves in trouble during the financial crisis.¹⁹⁷ The country’s five largest investment banks were also among the world’s largest OTC derivatives dealers. When the nation’s biggest financial institutions were teetering on the edge of failure in 2008, all eyes—market participants’ and regulators’--turned to the derivatives markets. What were their holdings? Who were their counterparties? How would they fare? Before the crisis, regulators had concentrated their attention elsewhere. Responding to the near-failure of the Long Term Capital Management hedge fund, which we will discuss below, they focused their derivatives oversight efforts on other hedge funds, not on the largest dealers of these instruments.

[Chanos quote]

“There was a lot of focus, essentially fighting the last war, about worrying about exposures to hedge funds and not so much about exposures to other entities who might be large and highly leveraged,” Fed official Patrick Parkinson explained to the Commission.^[i]

When that next war did come in the form of the financial crisis of 2007 and 2008, market participants and the regulators would find themselves straining to understand the new battlefield of unknown exposures and interconnections as they fought to keep the financial system from collapse.

¹⁹⁷ Include list for 2007

^[i] Patrick Parkinson Interview, at 23.

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Part I, Chapter 3. Deregulation redux: “Shatterer of Glass-Steagall”

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By the mid-1990s, parallel banking was booming, the traditional commercial banks were looking more and more like the shadow banks, and all of them were becoming larger, more complex, and more active in securitization. Some made the case that technological advances in data processing, telecommunications, and information services created economies of scale in finance and encouraged and justified the growth of larger financial institutions. The argument was that bigger would be safer, and it would also be more diversified, more innovative, more efficient, and better able to serve the needs of an expanding U.S. economy.¹⁹⁸ This view was not universal by any means, and others argued that the largest banks were not necessarily more efficient but were rewarded simply by virtue of their market power and the perception that they were too big to fail.¹⁹⁹ Nonetheless, the large banks and their supporters urged regulators, state legislatures

¹⁹⁸Examples of research making similar arguments include Calomiris & Karceski (2000); Danielson (1999); Hughes & Mester (1998, and Wheelock & Wilson (2009).

¹⁹⁹ Amel et al. (2004); Hanweck & Shull (1999), at 259-63, 273-77; Stern & Feldman (2004), at 66. Similarly, a recent study concluded that banks larger than \$30 billion in twelve European nations did not produce favorable economies of scale and operated with inferior levels of efficiency between 1998 and 2004. The study’s results indicated that the advantages accruing to the largest banks from technological changes were not sufficient to create favorable economies of scale or superior levels of efficiency for those banks. Papadopoulos (2010), at 288-92. Boyd & Gertler (1994); Hanweck & Shull (1999), at 273-77; Stern & Feldman (2004), at 18-19, 60-79.

and Congress to remove virtually all remaining barriers to growth and competition, and they had a great deal of success. Already successfully targeted were the obstacles to interstate branching and interstate bank mergers. In 1994 Congress had authorized nationwide banking by passing the Riegle-Neal Interstate Banking and Branching Efficiency Act. This legislation allowed bank holding companies to acquire banks in every state, and it also removed most restrictions on interstate branching.²⁰⁰ It preempted any state law that restricted the ability of out-of-state banks to compete within the state's borders.²⁰¹

This removal of legal barriers to expansion contributed to a far-reaching consolidation of the U.S. banking industry. Between 1990 and 2005, there were 74 “megamergers,” in which both the acquiring and acquired banks held more than \$10 billion of assets. During the same period, the 10 largest U.S. banks increased their share of total industry assets from 25% to 55%. From 1998 to 2007, the combined assets of the five largest U.S. banks – in 2007, Bank of America, Citigroup, JP Morgan, Wachovia and Wells Fargo – would more than triple, growing from \$2.2 trillion to \$6.8 trillion.²⁰² Meanwhile, securities firms were growing bigger as well. Smith Barney acquired Shearson in 1993 and Salomon Brothers in 1997, while Paine Webber purchased Kidder, Peabody in 1995. Two years later, Morgan Stanley merged with Dean Witter, and Bankers Trust purchased Alex. Brown & Sons. The assets held by the five largest investment banks – Goldman Sachs, Morgan Stanley, Merrill Lynch, Lehman Brothers, and Bear Stearns – increased from \$1 trillion in 1998 to \$4 trillion in 2007.

²⁰⁰ For instance, banks could hold no more than 30 percent of the deposits of a single state and no more than 10 percent of all deposits nationwide.

²⁰¹ Some states prior to 1994 had voluntarily opened themselves up to out-of-state banks.

²⁰² FCIC PSR on TBTF (2010), at p 14.

In 1996, the Economic Growth and Regulatory Paperwork Reduction Act required all regulators, including financial regulators to review their rules every 10 years to solicit public comments to identify rules that were “outdated, unnecessary, or unduly burdensome.”²⁰³ Some agencies took up this challenge with gusto. In 2003, for instance, the FDIC’s annual report would include a photograph of the agency’s vice chairman, John Reich; Office of Thrift Supervision Director James Gilleran; and three banking lobbyists using a chainsaw to cut the “red tape” that bound together a large stack of documents.²⁰⁴

For the less enthusiastic agencies, there were less formal methods. Former SEC Chairman Arthur Levitt told the FCIC that once word of a proposed new regulation got out, industry lobbyists would rush to the members of the congressional committee with jurisdiction. According to Levitt, these members would then “harass” the SEC with frequent letters demanding answers to complex questions and requests for Congressional appearances. These requests would consume a lot of the SEC’s time and discourage the agency from further attempts at regulation. Levitt characterized the relationship between Congress and some regulatory agencies as “kind of a bloodsport to make the particular agency look stupid or inept or venal.”²⁰⁵

However, other regulators said that they found interference to be modest, at least from the executive branch. For instance, John D. Hawke, former director of the Office of the Comptroller of the currency, told the FCIC that he found the Treasury Department to be “exceedingly sensitive” about his agency’s independence. Similarly, his successor, John Dugan, said that the

²⁰³ *Congressional Register* (Sept. 28, 1996), 11754.

²⁰⁴ Available at http://www.fdic.gov/about/strategic/report/2003annualreport/intro_insurance.html

²⁰⁵ Audio of interview with Arthur Levitt, 0:09:15.

“statutory firewalls” prevented interference from the executive branch during his tenure at the OCC.

In practice, the governing model that became known as deregulation was not just about dismantling regulations that had previously been in place but also about a disinclination to challenge the financial services industry on the potential risks of new innovations and practices. Federal Reserve officials argued that financial institutions, operating under strong incentives to protect the interests of their shareholders, would exercise self-regulation through improved risk management. Fed Vice Chairman Roger Ferguson noted “the truly impressive improvement in methods of risk measurement and management and the growing adoption of those technologies by mostly large banks and other financial intermediaries...”²⁰⁶ Likewise, financial markets would exert strong and effective “private regulation” over financial institutions through the activities of market analysts and investors. “[I]t is critically important to recognize that no market is ever truly unregulated,” Greenspan explained in 1997. “Rather, the real question is whether government intervention strengthens or weakens private regulation.”²⁰⁷

Richard Spillenkothen, the Fed’s Director of Banking Supervision and Regulation from 1991 to 2006, would provide the following explanation in a memorandum to the Commission:

Supervisors understood that forceful and proactive supervision, especially early intervention before management weaknesses were reflected in poor financial performance, might be viewed as i) overly-intrusive, burdensome, and heavy-

²⁰⁶ 10/8/2003 Ferguson speech.

²⁰⁷ Alan Greenspan, “Government Regulation and Derivative Contracts,” speech at the Financial Markets Conference of the Federal Reserve Bank of Atlanta, Coral Gables, FL (Feb. 21, 1997),

handed, ii) an undesirable constraint on credit availability, or iii) inconsistent with the Fed's public posture.²⁰⁸

Senior policymakers expressed concerns that regulators would too aggressively use their authority. As a method of creating “checks and balances,” they spoke out in favor of retaining multiple regulators as a restraint against any agency becoming arbitrary or inflexible.²⁰⁹ In 1994 Federal Reserve Chairman Alan Greenspan testified against proposals to consolidate bank regulation:

The current structure provides banks with a method...of shifting their regulator, an effective test that provides a limit on the arbitrary position or excessively rigid posture of any one regulator. The pressure of a potential loss of institutions has inhibited excessive regulation and acted as a countervailing force to the bias of a regulatory agency to overregulate...²¹⁰

Emboldened by their successes and encouraged by the tenor of the times, the largest banks, their regulators, and Congress continued their push for an integrated financial system under which institutions would be free to engage in an unrestricted set of activities and to grow to whatever size was most profitable. The legal and regulatory barriers separating banks and securities firms had been crumbling, little by little, and now the time seemed ripe for removing the last remnants of the New Deal restrictions that had once hemmed in the banks—that is, killing the Glass-Steagall Act, once and for all.

²⁰⁸ Richard Spillenkothen, *Notes on the performance of prudential supervision in the years preceding the financial crisis by a former director of banking supervision and regulation at the Federal Reserve Board (1991 to 2006)*, May 2010

²⁰⁹ See U.S. Department of the Treasury, *Modernizing the Financial System*, February 1991, page XIX-6 "the existence of fewer agencies would concentrate regulatory power in the remaining ones, raising the danger of arbitrary or inflexible behavior. . . . Agency pluralism, on the other hand, may be useful, since it can bring to bear on general bank supervision the different perspectives and experiences of each regulator, and it subjects each one, where consultation and coordination are required, to the checks and balances of the others' opinion."

²¹⁰ Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, March 2, 1994, reprinted in the Federal Reserve Bulletin, May 1, 1994

In the spring of 1996, after years of opposing the repeal of Glass Steagall, the Securities Industry Association – the trade organization of Wall Street firms such as Goldman Sachs and Merrill Lynch – changed course.²¹¹ Restrictions on banks had been slowly dismantled for years, allowing them to make inroads into the securities and insurance industries. Securities firms famously sued the Fed in 1987 after it allowed bank holding companies to enter into the commercial paper and other securities-related markets. The association now saw that repeal would enable U.S. securities firms to better compete in foreign markets.²¹² The chief lobbyist for the American Bankers Association, Edward Yingling, said “Because we had knocked so many holes in the walls separating commercial and investment banking and insurance, we were able to aggressively enter their businesses -- in some cases more aggressively than they could enter ours. So first the securities industry, then the insurance companies, and finally the agents came over and said let's negotiate a deal and work together.”²¹³

In 1998, Citicorp forced the issue of finally repealing the Act by merging with the insurance giant Travelers to form Citigroup.²¹⁴ The Fed approved the Citigroup merger based on a technical exemption to Glass-Steagall. Citigroup would be required to divest itself of many of Travelers’ assets within two to five years--unless the old law was repealed once and for all, and the Bank Holding Company Act was also amended. Congress now had to make a decision: Would it finally repeal Glass-Steagall, or was it prepared to force a break-up of the largest financial firm in the nation?

²¹¹ Securities Industry Press Release, December 6, 1987

²¹² Kathleen Day, “Reinventing the Bank; With Depression-Era Law About to Be Rewritten, the Future Remains Unclear,” *Washington Post*, October 31, 1999.

²¹³ “The making of a law,” *ABA Banking Journal*, December 1999.

²¹⁴ The two-year exemption is contained in Section 4(a)(2) of the BHC Act. The Fed could have granted up to three one-year extensions of that exemption.

When Congress went to work fashioning a new bill, banking representatives were close at hand. In 1999, the financial sector²¹⁵ spent \$186 million on lobbying at the federal level, and individuals and political action committees (PACs) in that sector donated \$202 million to federal election campaigns in the 2000 election cycle.²¹⁶ Over the ten year period from 1999 through 2008 federal lobbying by the financial sector would reach \$2.7 billion and total campaign donations from individuals and PACs would top \$1 billion.

In November of 1999, Congress passed and President Clinton signed the Gramm-Leach-Bliley Act (GLBA),²¹⁷ which lifted [many] remaining Glass Steagall-era restrictions. The new law embodied many of the proposals that Federal Reserve Chairman Greenspan had been advocating for at least two decades, and many of the measures the Treasury had advocated in 1991. A news story reported that Citigroup CEO Sandy Weill hung in his office “a hunk of wood — at least 4 feet wide — etched with his portrait and the words ‘The Shatterer of Glass-Steagall.’”²¹⁸

Under GLBA, as long as holding companies satisfied certain safety and soundness conditions, they were free to underwrite and sell a full spectrum of banking, securities and insurance products and services. Their securities affiliates were no longer bound by the Fed’s 25% limit on bank-ineligible activities – from now on, their primary regulator, the SEC, would set the only bounds on what they could do. Supporters of the new legislation argued that the new bank

²¹⁵ “Financial Sector” Here Includes Insurance Companies; Commercial Banks; Securities & Investment Firms; Finance & Credit Companies; Accountants; Savings & Loan Institutions; Credit Unions; And Mortgage Bankers & Brokers.

²¹⁶ Data from the Center for Responsive Politics at www.opensecrets.org. “Finance” is defined using the CRP’s numbers for commercial banks, insurance, finance/credit companies, and securities and investments.

²¹⁷ Public Law 106-102, 113 Stat. 1338 (Nov. 12, 1999).

²¹⁸ <http://www.nytimes.com/2010/01/03/business/economy/03weill.html?pagewanted=all>

holding companies – designated formally by the Fed as “financial holding companies” – would be more profitable (due to favorable economies of scale and scope); safer (due to a broader diversification of risks); more useful to consumers (due to the convenience of “one-stop shopping” for financial services); and more competitive with large foreign banks, which already offered loans, securities and insurance products.²¹⁹ The legislation’s opponents warned that this final push allowing banks to combine with securities firms would promote excessive speculation in the capital markets and could ultimately trigger a financial crisis akin to the crash of 1929.²²⁰ Indeed, in retrospect, John Reed, the former co-CEO of Citigroup, testified to the Commission that “the compartmentalization that was created by Glass-Steagall would be a positive factor,” [ck quote context]

To achieve the support of the securities industry for the legislation, GLBA reaffirmed two exceptions in the law that allowed securities firms to own industrial loan companies and thrifts and thereby access FDIC-insured deposits without being supervised by the Fed. Some of the firms immediately expanded their industrial loan company and thrift subsidiary activities. Merrill’s industrial loan company grew its assets from under \$1 billion in 1998 to \$4 billion in 1999, and eventually to \$78 billion in 2007. Lehman’s thrift grew from \$88 million in 1998 to \$3 billion in 1999, rising as high as \$24 billion in 2005.

For institutions regulated by the Fed, the new law also established a hybrid regulatory structure known colloquially as “Fed-Lite.” The Federal Reserve would supervise each financial holding

²¹⁹ Senate Report No. 106-44, at 4-6 (1999); 145 Cong. Rec. S13783-84 (daily ed. Nov. 4, 1999) remarks of Sen. Gramm); *id.* S13880-81 (remarks of Sen. Schumer); *id.* H11527-28 (daily ed. Nov. 4, 1999) (remarks of Rep. Leach).

²²⁰ Cong. Rec. S13871-74 (daily ed. Nov. 4, 1999) (remarks of Sen. Wellstone); *id.* S13896-97 (remarks of Sen. Dorgan); *id.* 145 Cong. Rec. H11530-31, H11542 (daily ed. Nov. 4, 1999) (remarks of Rep. Dingell).]

company as a whole, looking for risks that cut across the component firms. To prevent duplicating other regulators' work, the Fed was to rely "to the fullest extent possible" on the examinations and reports of those agencies regarding the many subsidiaries of the holding company, including securities broker-dealers. The Fed's authority to impose capital requirements on those subsidiaries was restricted.

The expressed intent of Fed-Lite was to eliminate excessive or duplicative regulation.²²¹

However, current Fed chairman Ben Bernanke would argue to the FCIC that Fed-Lite created a "statutory gap" that "made it difficult for any single regulator to reliably see the whole picture of activities and risks of large, complex banking institutions."²²² Indeed, the various regulators, including the Fed, would fail to identify excessive risks and unsound practices that were building up in nonbank subsidiaries of financial holding companies, such as Citigroup or Wachovia.[need cite for nonbank subsidiaries]

In addition, the convergence of banks and securities firms confirmed by the legislation undermined the mutually supportive relationship between the banking and securities sectors that Fed Chairman Alan Greenspan had considered a source of financial market stability. He had often invoked the image of the "spare tire" to explain this relationship: If large commercial banks ran into trouble, he argued, their large customers could borrow from securities firms and other credit providers in the capital markets; if the capital markets froze up, banks could provide the necessary credit by drawing on their deposits to make loans. And after 1990, the emergence of

²²¹ *The Implications of Financial Modernization Legislation for Bank Supervision*. Remarks by Fed Governor Laurence H. Meyer presented at the Symposium on Financial Modernization Legislation, sponsored by Women in Housing and Finance (December 15, 1999), available at <http://www.federalreserve.gov/boarddocs/speeches/1999/19991215.htm>.

²²² Statement by Fed Chairman Ben S. Bernanke before the Financial Crisis Inquiry Commission (Sept. 2, 2010), at 14, available at www.fcic.gov/hearings/pdfs/2010-0902-Bernanke.pdf.

securitized mortgage lending had provided an alternative source of credit to home buyers and other borrowers that softened the impact of the steep decline in lending by thrifts and banks. The system's resilience following a crisis in Asian financial markets in the late 1990s had further proven his point, Greenspan said.²²³

The new regime encouraged growth and consolidation within and across the banking, securities and insurance sectors. It was finally official—the new bank-centered financial holding companies such as Citigroup, JP Morgan and Bank of America had free rein to compete head-to-head with the “big five” securities firms – Goldman Sachs, Morgan Stanley, Merrill Lynch, Lehman Brothers and Bear Stearns – in markets for securitization, stock and bond underwriting, and trading in over-the-counter derivatives. The biggest financial holding companies became major players in the investment banking business. The business strategies of the largest commercial banks and their bank holding companies converged with the strategies of investment banks. Each had their own advantages: the commercial banks had greater access to insured deposits, and the investment banks had less regulation. Both prospered. Greenspan's “spare tire” that had helped make the system less vulnerable would not last, however - all the wheels of the financial system were beginning to spin on the same axle.

The late 1990s saw a spectacular growth in the issuance of corporate securities . Annual public underwritings and private placements of corporate securities in U.S. financial markets almost quadrupled, rising from \$600 billion in 1994 to \$2.2 trillion in 2001. Annual initial public offerings of stocks (IPOs) soared from \$28 billion in 1994 to \$76 billion in 2000, as banks and securities firms promoted IPOs for newly-established Internet and telecommunications

²²³ Alan Greenspan, *Lessons from the Global Crises*, September 27, 1999.

companies, more widely known as dotcoms and telecoms. This onrush of new securities contributed to a stock market boom comparable to the great bull market of the 1920s. The total value of publicly traded U.S. stocks rose from \$5.8 trillion in December 1994 to \$17.8 trillion in March 2000.²²⁴ This boom was heavily concentrated in recently issued dotcom and telecom stocks listed on the NASDAQ stock exchange. In the same time period, this particular index skyrocketed from 752 to 5,132.[cite]

Long-Term Capital Management: “A lot of firms that would have been irrevocably harmed”

In August 1998, Russia defaulted on part of its national debt. Investors had always assumed that neither the U.S. government nor the International Monetary Fund—an international organization that was supposed to help maintain stability in global financial markets—would allow a nation with large stockpiles of nuclear weapons to experience a credit crisis. When the cavalry did not arrive—when Russia announced that it would be restructuring its national debt and postponing some payments—spooked investors panicked and dumped all types of higher-risk securities, including those that had nothing to do with Russia, and fled to the safety of U.S. Treasury bills and FDIC-insured certificates of deposit.²²⁵ In response, the Federal Reserve cut short-term interest rates three times in a seven-week period. With the commercial paper market in turmoil following the Russian default, the Fed turned to the commercial banking sector to take up the slack from capital markets by providing lines of credit to corporations that could not roll over

²²⁴ Board of Governors of Federal Reserve System, *Federal Reserve Statistical Release Z.1.: Flow of Funds Accounts of the United States*, 4th Qtr. 1996, at 88 (Table L.213, line 19) (reporting that domestic corporations had a total market value of \$5.8 trillion at the end of 1994); Board of Governors of Federal Reserve System, *Federal Reserve Statistical Release Z.1.: Flow of Funds Accounts of the United States*, 4th Qtr. 2001, at 90 (Table L.213, line 20) [hereinafter *2001 Flow of Funds Report*] (reporting that domestic corporations had a total market value of \$17.8 trillion as of March 31, 2000).

²²⁵ http://www.chicagofed.org/digital_assets/publications/economic_perspectives/2001/1qepart1.pdf

their short-term borrowing needs. U.S. banks extended \$30 billion of commercial loans in September and October of 1998—about 2½ times greater than typical lending levels,²²⁶ and helped prevent a serious disruption in the capital markets from becoming much worse. The U.S. economy avoided a slump.²²⁷

The same could not be said for Long Term Capital Management, a large U.S. hedge fund. LTCM had been devastated by losses on its \$125 billion portfolio of high-risk debt securities, including junk bonds and emerging-market debt, the very “assets” that investors were now fleeing in droves. To buy them, the firm had borrowed \$25 for every \$1 of its investors’ equity; the lenders included Merrill Lynch, JP Morgan, Morgan Stanley, Lehman Brothers, Goldman Sachs, and Chase Manhattan. For the previous four years, LTCM’s leveraging strategy had produced magnificent returns: 19.9%, 42.8%, 40.8 %, and 17.1%—a period when the S&P 500 yielded an average of 21% per year.

But leverage works both ways, as we have noted, and in just one month following Russia’s partial default the high-flying hedge fund lost \$4.4 billion—about 88% of the not-quite \$5 billion

²²⁶ Commercial and Industrial Loans at All Commercial Banks, monthly, seasonally adjusted, from the Federal Reserve Board of Governors H.8 release. St. Louis FRB website, accessed Nov 16, 2010. <http://research.stlouisfed.org/fred2/series/BUSLOANS?cid=100>. FCIC staff calculation of average change in loans outstanding over any two consecutive months in 1997 and 1998.

²²⁷ Many researchers have attributed this growth to corporations’ decisions to use bank credit lines instead of issuing commercial paper into a tight market. Marc Saidenberg and Philip Strahan, *Are Banks Still Important for Financing Large Businesses?* Current Issues in Economics and Finance: Federal Reserve Bank of New York. August, 1999. Lowenstein (2000), at 28-130; Wilmarth (2002), at 236-37, 346-50, 370-71.

in capital held at the beginning of the year. Debts were on the order of \$120 billion. The firm was on the brink of insolvency.²²⁸

If it were only a matter of \$5 billion, LTCM's failure might have been manageable, but it had further leveraged itself by taking \$1.25 trillion in derivatives positions—mostly interest rate and equity derivatives.²²⁹ LTCM's suffered large losses after the Russia default, and with very little capital in reserve, threatened to default on its obligations to its derivatives counterparties—including large banks and securities firms. Because LTCM had negotiated its derivatives transactions in the opaque over-the-counter market, financial market participants had little way of knowing the size of LTCM's positions. If all of the fund's counterparties tried to liquidate their positions simultaneously, then asset prices across the market may have dropped “sharply” which would have created “exaggerated” losses.²³⁰ This was a classic set-up for a run: losses were likely, but nobody knew who was going to get burned. The Federal Reserve feared that with financial markets already fragile, these exaggerated losses would spill over to investors with no prior relationship with LTCM and credit and derivatives markets might have “cease[d] to function for one or more days or even longer.”²³¹

²²⁸ Franklin R. Edwards, “Hedge Funds and the Collapse of Long-Term Capital Management,” 13 *Journal of Economic Perspectives* 189, 197-205 (1999); Roger Lowenstein, *When Genius Failed: The Rise and Fall of Long-Term Capital Management* 36-54, 77-84, 94-105, 123-30 (New York: Random House, Inc., 2000).

²²⁹ One of the architects of LTCM's strategy was Myron Scholes, one of the names behind the Black-Scholes formula, and a Nobel Prize winner. Another was Robert Merton, who shared the Nobel Prize in part for improving on the formula.

²³⁰ Statement by William J. McDonough, president of the Federal Reserve Bank of New York, before the Committee on Banking and Financial Services, US House of Representatives” (Oct. 1, 1998), available at www.newyorkfed.org/newsevents/speeches/1998/mcd981001.html.

²³¹ Statement by William J. McDonough, president of the Federal Reserve Bank of New York, before the Committee on Banking and Financial Services, US House of Representatives” (Oct. 1, 1998), available at www.newyorkfed.org/newsevents/speeches/1998/mcd981001.html.

So the Fed assembled an emergency meeting of major banks and securities firms with large exposures to LTCM. On September 23, after considerable urging, 14 institutions agreed to organize a consortium that would inject \$3.6 billion of capital into LTCM in exchange for 90% of its stock. The firms injected between \$100 million and \$300 million each. Famously, Bear Stearns declined to participate. An orderly liquidation of LTCM's portfolio of securities and derivatives followed.

William McDonough, the president of the New York Fed at the time, insisted that "no Federal Reserve official pressured anyone, and no promises were made."²³² The rescue involved no government funds. Nevertheless, the Fed's orchestration of this rescue raised a question: How far would it go to forestall what it saw as a systemic event?

Its aggressive response to the 1998 crisis seemed of a piece with several interventions in the previous two decades. For example, in 1970, the Fed had intervened to support the commercial paper market; in 1980, to support dealers in commodities futures; in 1982, to support the repo market; in 1987, to support the stock market itself, after the Dow Jones Industrial Average had fallen by 26% percent within three days.²³³ All of these actions had followed a similar pattern and provided a template for future interventions, including the 2008 crisis. Each time, the Fed cut short-term interest rates and encouraged financial firms in the parallel banking and the traditional banking sector to help the ailing market. In some cases, it organized a consortium of banks to rescue ailing firms.²³⁴

²³² McDonough (1998).

²³³ Bloomberg.

²³⁴ Andrew F. Brimmer, "Distinguished Lecture on Economics in Government: Central Banking and Systemic Risks in Capital Markets," *Journal of Economic Perspectives* (Spring, 1989), at 3, 3-16 (lecture by a former Fed

In that same period, as we have seen, federal regulators rescued several large banks believed to be “too big to fail” so that all creditors, including uninsured depositors, were protected. That rationale was based on the idea that major banks were crucial players in the financial markets and the broader economy, and regulators therefore couldn’t allow the collapse of one large bank to trigger a panic among uninsured depositors that might lead to a cascade of failures among other major banks. Regulators also pointed out that banks at least paid premiums for the insurance on their insured depositors.[cite]

But it was a completely different proposition to argue that large nonbanking firms should be considered too big to fail because their collapse might destabilize the capital markets. Did LTCM’s orchestrated rescue mean that the Fed was now prepared to protect creditors of any firm, if its disorderly collapse might threaten the stability of the capital markets? Harvey Miller, who would be bankruptcy counsel for Lehman Brothers when it failed in 2008, told the FCIC that, “all of the hedge funds” expected the Fed to intervene to save Lehman from failing, based on the Fed’s involvement in LTCM’s rescue. In Miller’s view, “That’s what history proved to them.”

The resolution of the 1998 and prior crises had convinced many market participants and federal regulators of the safety of the dual system of traditional and parallel banking that had emerged during that decade. Even institutions that lost money understood that these events could have turned into a full-blown crisis. Merrill Lynch, which suffered almost \$1 billion of trading losses as a result of the Russian debt crisis, was one of them.²³⁵ For Stanley O’Neal, then Merrill’s

Governor, analyzing the Fed’s market interventions in 1970, 1980 and 1987, and concluding that the Fed had consciously assumed a “strategic role as the ultimate source of liquidity in the economy at large”); Kaufman (2000), at 208-16, 226-28, 238-40, 310-12.

²³⁵ Joseph Kahn, “The Merrill Steamroller Encounters Potholes,” *New York Times*, Mar. 20, 1999, at C1.

CFO, the experience was “indelible.” He remarked to the FCIC, “I took away from it that had the market seizure and panic lasted longer, there would have been a lot of firms that would have been irrevocably harmed. Merrill would have been one of them”²³⁶ - words that would ring true in 2008.

Now, Greenspan stated, the successful resolution of the 1998 crisis showed that “diversity within the financial sector provides insurance against a financial problem turning into economy-wide distress.”²³⁷ This was the so-called “spare tire” theory. The other recent crises had buttressed his point.

The President’s Working Group on Financial Markets, a committee composed of the heads of the Treasury, Federal Reserve, SEC, and the Commodity Futures Trading Commission charged with keeping tabs on the financial system, came to a less definitive conclusion than Greenspan. In a report issued the following year, 1999, the group pointed out that LTCM and its counterparties had “underestimated the likelihood that liquidity, credit, and volatility spreads would move in a similar fashion in markets across the world at the same time.” Many financial firms would make exactly the same mistake a decade later. For the Working Group, this miscalculation brought up an important issue:

[A]s new technology has fostered a major expansion in the volume and, in some cases, the leverage of transactions, some existing risk models have underestimated the probability of severe losses. This shows the need for insuring that decisions about the appropriate level of capital for risky positions become an issue that is explicitly considered; when outlier events are omitted from risk models, such decisions are made by default.

²³⁶ Stanley O’Neal FCIC interview.

²³⁷ *Do efficient financial markets mitigate financial crises?* Remarks by Fed chairman Alan Greenspan before the 1999 Financial Markets Conference of the Federal Reserve Bank of Atlanta (Oct. 19, 1999), available at <http://www.federalreserve.gov/boarddocs/speeches/1999/19991019.htm>.

That statement would pertain verbatim ten years later. That Working Group was already concerned that neither the markets nor their regulators were prepared for the possibility of so-called “tail risk”—an unanticipated event that would cause catastrophic damage to financial institutions and the economy. Nevertheless, the Working Group cautioned against taking such warnings too far: “[P]olicy initiatives that are aimed at simply reducing default likelihoods to extremely low levels might be counterproductive if they unnecessarily disrupt trading activity and the intermediation of risks that support the financing of real economic activity.”²³⁸ It concluded that benefits of reducing risk were not worth the costs, because an overreaction to threats that firms such as LTCM posed to the system would diminish the dynamism of the financial sector and, with it, the real economy.

Markets were relatively calm after 1998, Glass-Steagall would be deemed unnecessary, over-the-counter derivatives would be unregulated, and the stock market and the economy continued to prosper. Like all of the others (with the exception of the Depression), this crisis soon faded into memory. In February 1999, Rubin, Summers, and Greenspan were featured on the cover of Time Magazine with the title, “The Committee to Save the World”. Federal Reserve Chairman Alan Greenspan became a cult hero – the “Maestro” – who could handle every emergency.²³⁹

Dotcom crash: “And how should any rational investor respond to a less risky world? They should lay on more risk.”

In the spring of 2000, the tech bubble burst. Revenue and earnings from the “new economy” dotcoms and telecoms had failed to match the lofty expectations of investors, who had relied on

²³⁸ President's Working Group on Financial Markets, Hedge Funds, Leverage, and the Lessons of Long-Term Capital Management (Washington, DC, April 1999), 16, available at <http://www.ustreas.gov/press/releases/reports/hedgfund.pdf>.

²³⁹ Bob Woodward, *Maestro: Greenspan's Fed and the American Boom* (New York: Simon & Schuster, 2000).

bullish, and as it turned out, often deceptive research reports issued by the very banks and securities firms that had underwritten the IPOs for these firms; the pervasive euphoria about these sectors' business prospects was not grounded in reality. Between March 2000 and March 2001, the NASDAQ index fell by more than half.²⁴⁰ After a temporary lull in mid-2001, this slump resumed and accelerated in response to the terrorist attacks on September 11. The nation was in recession.²⁴¹ Nor did the accounting fraud and other scandals at certain prominent firms help. Investment banks settled charges with regulators over practices in the allocation of shares through initial public offerings (IPOs) during the bubble – for example, spinning (doling out shares in “hot” IPOs in return for favorable business treatment) –and laddering (doling out shares to investors who agreed to buy more shares later at higher prices).²⁴² The regulators also found that investment banks' public research reports were plagued by conflicts of interest. In the end, the SEC, the New York State Attorney General, the National Association of Securities Dealers (now known as FINRA), and other state regulators settled enforcement actions against 10 firms for \$875 million, explicitly forbade certain practices, and instituted a number of reforms.²⁴³

The sudden collapses of Enron and WorldCom were especially shocking to investors. With assets of \$63 billion and \$104 billion, respectively, they represented the largest U.S. corporate bankruptcies prior to the default of Lehman Brothers in 2008.²⁴⁴

²⁴⁰ Bloomberg

²⁴¹ Lowenstein (2004), at 192, 211.

²⁴² <http://www.sec.gov/news/testimony/ts050703whd.htm>

²⁴³ SEC Fact Sheet on Global Analyst Research Settlements, 2003; <http://www.finra.org/Newsroom/NewsReleases/2004/P011463>

²⁴⁴ Lowenstein (2004), at 166-212; Wilmarth (2009), at 998-99.

Legal proceedings and investigations of the Enron debacle revealed that Citigroup, JPMorgan Chase, Merrill Lynch and other Wall Street banks had helped the firm hide its debt from investors until just before its collapse.[will cite] Enron and their bankers had created special purpose entities to engage in complex transactions that generated fictitious earnings, disguised debt as sales and derivative transactions, and understated the firm's leverage. Executives at these banks had pressured their analysts to write glowing evaluations of Enron to the public; Merrill Lynch, Citigroup, UBS, and BNP Paribas fired analysts who conveyed contrary opinions. The scandal cost Citigroup, JPMorgan Chase, CIBC, Merrill Lynch, and others over \$400 million in settlements with the SEC; Citigroup, Chase, CIBC, Lehman Brothers, and Bank of America paid \$6.9 billion to the investors to settle a class-action lawsuit.²⁴⁵ In the wake of the terrorist attacks, the 2001 and 2002 failures of Enron and WorldCom, and the dot-com bust, investors fled the stock market. From December 1994 to March 2000, the total value of publicly traded U.S. stocks had risen from \$5.8 trillion to \$17.8 trillion. Then, one year after the attacks, the value had fallen by almost half, to \$9.4 trillion.²⁴⁶ Some of the financial institutions that had lent to companies that failed during the bust successfully hedged themselves by purchasing credit default swaps (CDSs) on these firms. Invented about five years earlier by JP Morgan, these swaps enabled a lender to lay off the risk of default or any other specified "credit event"—maybe missed payments or a downgrade by a credit rating agency—by purchasing protection from a counterparty.

²⁴⁵ Arthur E. Wilmarth, Jr., "Conflicts of Interest and Corporate Governance Failures at Universal Banks During the Stock Market Boom of the 1990s: The Cases of Enron and WorldCom," George Washington University Public Law and Legal Theory Working Paper 234 (2007), available at <http://ssrn.com/abstract=952486>.

²⁴⁶ *2001 Flow of Funds Report*, at 90 (Table L.213, line 20) (providing March 2000 figure); Board of Governors of Federal Reserve System, *Federal Reserve Statistical Release Z.1.: Flow of Funds Accounts of the United States*, 4th Qtr. 2003, at 90 (Table L.213, line 21) (providing September 2002 figure).

Speaking in November 2002, Fed Chairman Alan Greenspan said that credit derivatives “appear to have effectively spread losses from defaults by Enron [and other large corporations] . . . from banks . . . to insurance firms, pension funds, or others.” Although he conceded that the market was “still too new to have been tested” thoroughly, he noted that “to date, it appears to have functioned well.”²⁴⁷ The following year, Fed Vice Chairman Roger Ferguson noted the adverse impact of the recession, from which recovery had been unusually slow, but declared that “the most remarkable fact regarding the banking industry during this period is its resilience and retention of fundamental strength.”²⁴⁸

This resilience during the upheavals of 2000-2002 led many executives and regulators to believe that the U.S. financial system had achieved an unprecedented level of stability and excellence in risk management. The banks’ pivotal role in the Enron debacle did not seem to trouble senior Fed officials. In a memorandum sent to the FCIC, former Director of the Federal Reserve Division of Banking Supervision and Regulation Rich Spillenkothen described a presentation to the Board of Governors. According to Spillenkothen’s account, some Fed directors received the details of the banks’ complicity “coolly” and were “clearly unimpressed” by its findings. “The message to some supervisory staff was neither ambiguous nor subtle,” Spillenkothen wrote.

Later in the decade, when supervisors were developing policies to govern certain derivatives transactions, senior economists at the Board would point to Enron as an example of a derivatives

²⁴⁷ *International Financial Risk Management*. Remarks by Fed Chairman Alan Greenspan before the Council on Foreign Relations (Nov. 19, 2002), available at <http://www.federalreserve.gov/boarddocs/speeches/2002/20021119/default.htm>. See also Wilmarth (2009), at 1000 (noting that banks that provided loans to Enron and WorldCom “quietly entered into CDS and other transactions to reduce their credit exposure” to both companies).

²⁴⁸ *The Future of Financial Services – Revisited*. Remarks by Fed Vice Chairman Roger W. Ferguson, Jr. at the Future of Financial Services Conference (Oct. 8, 2003), available at <http://www.federalreserve.gov/boarddocs/speeches/2003/200310082/default.htm>.

counterparty that had been successfully regulated by market discipline, without the aid of government oversight.²⁴⁹

Another factor in the resilience of major financial institutions was the Fed's aggressive intervention to contain the damage from the dotcom-telecom bust, the terrorist attacks, and the financial market scandals by cutting interest rates. In January 2001, the overnight bank-to-bank rate was 6.5%. By mid-2003, it was just 1%, the lowest level in half a century. It would stay right there for another year. In addition, the Fed flooded the financial markets with money by purchasing more than \$150 billion of government securities and extending \$45 billion of discount window loans to banks. It also suspended the legal restrictions on affiliate transactions within bank holding companies so that the banks could make large loans to securities affiliates. These emergency actions prevented a protracted liquidity crunch in the financial markets during the fall of 2001, just as equivalent actions had accomplished during the 1987 stock market crash and the 1998 Russian crisis.²⁵⁰

Now the list of episodes in which the Fed's market stabilization efforts had proved decisive was even more impressive: 1970, 1980, 1982, 1987, 1998, and 2001. Why wouldn't the markets be convinced that the central bank would act likewise in the future--and that such measures would again save the day? Two weeks before the Fed had cut the short-term rates in January 2001, *The Economist* anticipated the move by reporting, "[T]he 'Greenspan put' is once again the talk of

²⁴⁹ Rich Spillenkothen, "Notes on the performance of prudential supervision in the years preceding the financial crisis by a former director of banking supervision and regulation at the Federal Reserve Board (1991 to 2006)," memorandum to the Financial Crisis Inquiry Commission (May 31, 2010), 28.

[explain market discipline]

²⁵⁰ Wilmarth (2002), *supra*, at 471-73; Wilmarth (2009), at 998-99, 1005; Anita Raghavan et al., "Team Effort: Banks and Regulators Drew Together to Calm Markets After Attack, *Wall Street Journal*, Oct. 18, 2001, at A1.

Wall Street. . . . The idea is that the Federal Reserve can be relied upon in times of crisis to come to the rescue, cutting interest rates and pumping in liquidity, thus providing a floor for equity prices.”²⁵¹ Analysts used “Greenspan put” as a short-hand description for investors’ faith that the Fed’s commitment to stability would keep the capital markets functioning no matter what befell the system, including the bursting of an asset bubble.

The Fed’s policy was clear: it would only take limited steps to restrain the growth of the asset bubble in the first place—such as warning investors that some asset prices might fall, but it would use all of its available tools to stabilize the markets after the bubble burst.²⁵² Fed Chairman Greenspan argued that intentionally bursting a bubble would cause too much damage to the general economy. Let it burst of its own accord, then act. “Instead of trying to contain a putative bubble by drastic actions with largely unpredictable consequences,” he explained in 2004, by which time the housing boom was in full swing, “we chose . . . to focus on policies to mitigate the fallout when it occurs and, hopefully, ease the transition to the next expansion.”²⁵³

²⁵¹ “First the Put, Then the Cut?” *Economist*, Dec. 16, 2000, at 81.

²⁵² See Edward Chancellor, “Inefficient market: Ponzi Nation,” *Breakingviews* (Sept. 25, 2007), available on LexisNexis (“Under then-chairman Alan Greenspan, the [Fed’s] official policy was that speculative bubbles could not be accurately identified before they popped and, therefore, the authorities should do nothing to hinder their growth. It is enough . . . for the central bank to deal with the bubble’s aftermath”)’ W. Max Corden, “The World Credit Crisis: Understanding It, and What to Do” (Melbourne Institute Working Paper No. 25/08, Dec. 2008), at 13 (“[T]he Greenspan policy seems to involve no monetary policy concern with the bubble when an asset market bubble starts, or no intervention to prevent the start of such a bubble, but it does call for intervention when the bubble ends if this ending reduces spending and thus aggregate demand”), available at <http://www.melbourneinstitute.com/wp/wp2008n25.pdf>

²⁵³ “Risk and Uncertainty in Monetary Policy.” Remarks of Fed Chairman Alan Greenspan at the Meetings of the American Economic Ass’n (Jan. 3, 2004), available at www.federalreserve.gov/boarddocs/speeches/2004/20040103/default.htm. See also “Asset-Price ‘Bubbles’ and Monetary Policy.” Remarks by Fed Governor Ben S. Bernanke before the N.Y. Chapter of the Nat’l Ass’n of Business Economics (Oct. 15, 2002), available at www.federalreserve.gov/boarddocs/speeches/2002/20021015/default.htm.

Of course, this asymmetric policy—allowing unrestrained growth of the bubble, then working hard to cushion the impact of a bust—raised the question of “moral hazard.” Did the policy skew the risk analyses of both investors and financial institutions by encouraging them to take speculative gambles on the assumption that their upside was unlimited while their downside was protected (at least against catastrophic losses) by no less than the Federal Reserve Board?²⁵⁴

Greenspan would warn about this in a speech in the summer of 2005, saying that higher asset prices were “in part the indirect result of investors accepting lower compensation for risk.”

While he saw that the higher values, to some extent, reflected the assessment that markets were more resilient, he worried that market participants would view the increase in value as permanent. He cautioned that “newly abundant liquidity can readily disappear.”²⁵⁵ But, the only real action he would take would be to continue the upward march of the federal funds rate that had begun in the summer of 2004. As he pointed out in that summer 2005 speech, these actions had little effect.

The markets were undeterred. “We had convinced ourselves that we were in a less risky world,” former National Economic Council Director Lawrence Lindsey told the Commission. “And how should any rational investor respond to a less risky world? They should lay on more risk.”²⁵⁶

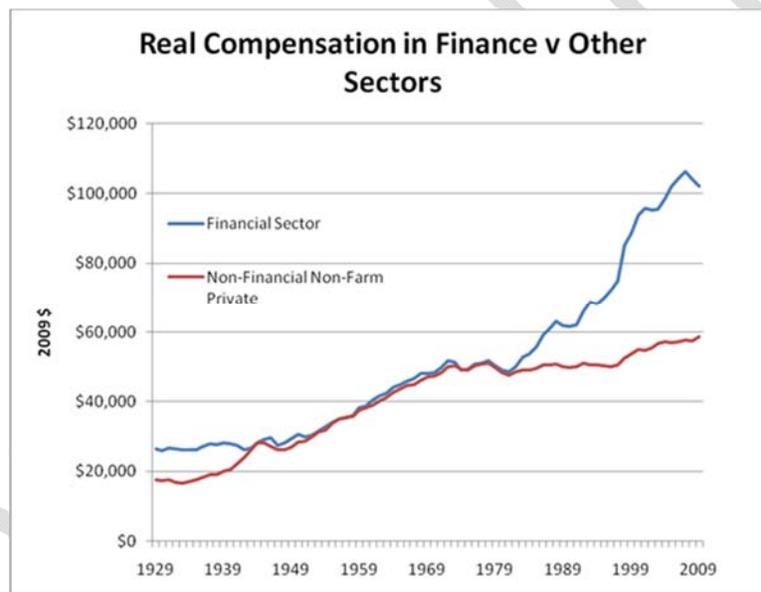
²⁵⁴ Chancellor (2007) (“Greenspan’s policy fostered an appetite for risk-taking in the financial markets. . . . Wall Street learned that panics were likely to be short and relatively painless”). See also Hu (2000), at 865-73, 883-84; Kaufman (2000), at 208-16, 219-21, 310-12; Wilmarth (2002), *supra*, at 470-73. .

²⁵⁵ <http://www.federalreserve.gov/boarddocs/speeches/2005/20050826/default.htm>

²⁵⁶ Lindsey interview, ca. 34:00.

The wages of finance: “Well, this one’s doing it, so how can I not do it...”

While financial institutions accepted lower compensation for risk, compensation at the firms rose dramatically. As the graph below demonstrates, for almost half a century after the Great Depression, compensation in the financial sector had been virtually the same as in the private sector. Beginning in 1980, compensation diverged. To be sure, jobs in the financial system got more complicated and demanded new skills, such as computer programming and risk modeling. By 2007, financial sector compensation was around 50% greater than in the private sector, the same relationship in the years leading up to the Great Depression.



Until 1970, the rules of the New York Stock Exchange, a private organization, effectively mandated that the member firms (not the companies whose stocks were traded on that exchange, but the firms that ran it) operate as partnerships.²⁵⁷ Among these member firms were the investment banks, key players in the shadow banking industry. Former Lehman Brothers partner

²⁵⁷ “The Demise of the Professional Partnership? The emergence and diffusion of publicly-traded professional service firms” Andrew von Nordenflycht, September 2006.

Peter J. Solomon testified before the FCIC that this organizational arrangement had a profound impact on the operations of the firm. In the old days, Solomon said, he and the other Lehman partners would sit in a single room at the firm's headquarters not because they wanted to be sociable, but so that they could "overhear, interact, and monitor" each others' activities. They did this because they were all on the hook together. Solomon said, "Since they were personally liable as partners, they took risk very seriously."²⁵⁸ Brian Leach, a former executive at Morgan Stanley, told FCIC staff about how compensation practices worked before his firm went public, "When I first started in Morgan's family, it was a private company. When you're a private company, you don't get paid until you retire. I mean, you get a good, you know, year-to-year compensation. But in terms of the retained earnings that's multiplying inside the company, the exit is retained -- is when you retire."²⁵⁹

When the investment banks, one by one, went public in the 1980s and 1990s, the close relationship between the bankers' decisions and their own financial fates was dramatically altered.²⁶⁰ They were now trading with shareholders' money, and compensation practices generally became more focused on the short term. At the investment banks, talented traders and managers who had historically been tethered to their firms were now free agents who could play companies against each other regarding their compensation packages. In order to keep these free agents from going to competitors, firms began providing aggressive incentives, often tied to the

²⁵⁸ Peter Solomon testimony to the FCIC (Jan. 13, 2010), 2, <http://fcic.gov/hearings/pdfs/2010-0113-Solomon.pdf>.

²⁵⁹ FCIC Interview of Brian R. Leach, March 4, 2010, p. 22.

²⁶⁰ The NYSE decided to allow members to be publicly traded in 1970. "The Demise of the Professional Partnership? The emergence and diffusion of publicly-traded professional service firms" Andrew von Nordenflycht, September 2006. Page 25.

price of publicly traded shares, and often with accelerated payout timetables.²⁶¹ Commercial banks adopted the same practices to keep up. Many compensation packages included “clawback” provisions providing for the return of compensation in some circumstances, including certain losses. Yet, the employees at firms that the FCIC investigated were never subjected to these provisions.

As we will see, executives and managers made decisions that would cost shareholders, first, and then American taxpayers tens of billions of dollars, but the millions in salary and bonuses they received was often theirs for good.

One study shows that the real value of executive pay across the economy grew at a sluggish rate of 0.8% per year during the 30 years after World War II, not keeping pace with the increasing size of firms. The rate of increase in the level of pay began to pick up during the 1970s and rose at a faster rate in each subsequent decade, reaching an average growth rate of more than 10% per year from 1995 to 1999.²⁶² Much of this growth reflected higher earnings in the banking and finance industries. By 2005, executives in banking and finance earned the highest pay, totaling \$3.4 million per executive. The next highest was the transportation and utility sector at \$2.6 million. It was not base salaries that differed much across sectors. Banking and finance paid significantly higher bonuses and awarded more stock. Within banking and finance, brokers and dealers did the best by far, making over \$7 million in compensation on average.²⁶³

²⁶¹ See Jensen and Murphy, “Compensation,” 24-25, especially Figure 1.

²⁶² Carola Frydman and Raven E. Saks, *Historical Trends in Executive Compensation 1936-2005*

²⁶³ <http://www.clevelandfed.org/research/commentary/2010/2010-13.cfm>

Even before going public, investment banks typically allocated about half of their revenues to compensation. For example, Goldman Sachs paid out between 44% and 49% of net revenues in any given year between 2005 and 2008. Morgan Stanley allotted between 46% and 59% in those same years. Merrill paid out similar percentages in 2005 and 2006, but gave out 141% of net revenues in 2007 when they suffered dramatic losses.

As the scale, revenue, and profitability of the firms grew, the compensation packages soared. In 1986, John Gutfreund the CEO of Salomon Brothers, reported to be the highest paid executive on Wall Street in the late 1980s, received \$3.2 million in 1986.²⁶⁴ Stanley O'Neal received a compensation package worth more than \$91 million in 2006, the last full year he was CEO of Merrill Lynch.²⁶⁵ In 2007, Lloyd Blankfein, CEO of Goldman Sachs, received \$70 million. Richard Fuld, CEO of Lehman Brothers and Jamie Dimon, CEO of JPMorgan Chase, each received approximately \$34 million in the same year. In 2007, the Wall Street firms doled out roughly \$33 billion in bonuses alone.²⁶⁶

Stock options became especially popular as a form of compensation. Stock options allow employees to buy the company's stock in the future at some predetermined price, most importantly when the stock price is higher than this predetermined price. In fact, the option would have no value when the stock price was below the predetermined price. Part of the

²⁶⁴ <http://www.nytimes.com/1987/12/23/business/gutfreund-s-pay-is-cut.html>

²⁶⁵ Merrill Lynch 2007 Proxy Statement at 38,
<http://www.ml.com/annualmeetingmaterials/2007/ar/pdfs/2008Proxy.pdf>

²⁶⁶ 2/23/2010 New York State Comptroller Report available online
http://www.osc.state.ny.us/press/releases/feb10/bonus_chart_2009.pdf (last retrieved 11/22/2010).

motivation for this shift was to align pay with performance.²⁶⁷ Indeed, typically, these options could not be used unless employees were at the firm for a given period of time.

Other factors that made options more common included 1993 legislation making compensation in excess of \$1 million taxable to the corporation unless it was performance-based. Stock options had the potential for unlimited upside while the downside was effectively capped. Compensation structures tying pay to stock price had the unintended consequence at financial firms of creating an incentive to increase leverage. That leverage would magnify the movement of the stock's price in both directions, but the options meant executives would win more than they could lose.

At the same time, that compensation gave financial firms the motive to lever up, the evolution of the financial system gave them the means. As we have seen, shadow banking institutions operated with few regulatory constraints on leverage and in the traditional banking sector, changes in regulations had allowed leverage to increase. And, as we will see, risk management practices, which were thought to be keeping ahead of these developments, would be ineffective in counteracting these motives and lack of oversight.

The dangers of the evolving compensation structures on Wall Street were self-evident and well-understood, but senior executives at these firms believed they were powerless to do anything about it. Former Citigroup CEO Sandy Weill told the Commission, "I think if you look at the results of what happened on Wall Street, it became, 'Well, this one's doing it, so how can I not do it, if I don't do it, then the people are going to leave my place and go someplace

²⁶⁷ Lucian A. Bebchuck, Fixing Bankers' Pay, The Economists' Voice, www.bepress.com, November 2009.

else.’...[R]isk became less of an important function in a broad base of companies, I would guess.”²⁶⁸

Tying compensation to earnings and other metrics was intended to foster stronger alignment of interests, but in some cases, it created the temptation to manipulate the numbers. For example, former Fannie Mae regulator Armando Falcon Jr. told the FCIC, “Fannie began the last decade with an ambitious goal – double earnings in 5 years to \$6.46. A large part of the executives’ compensation was tied to meeting that goal.”²⁶⁹ By achieving that earnings-per-share goal, Fannie CEO Franklin Raines received \$52 million out of the \$90 million he took home from 1998 to 2003. However, Falcon explained, “[T]he earnings goal turned out to be unachievable without breaking rules and hiding risks. Fannie and Freddie executives worked hard to persuade investors that mortgage-related assets were a riskless investment, while at the same time covering up the volatility and risks of their own mortgage portfolios and balance sheets.”²⁷⁰ Specifically, in 1998, Fannie’s prepayment model showed an unexpected expense of \$400 million at year end, but “if the full \$400 million was properly recognized in 1998, the executives would have received no bonus compensation for that year.”²⁷¹ To solve this problem, Fannie recognized only half of the \$400 million, which allowed CEO Raines and other executives to meet the 1998 earnings target and receive 100% bonus compensation for the

²⁶⁸ Sandy Weill interview, 0:20:50.

²⁶⁹ Testimony of Armando Falcon Jr., Former Director Office of Federal Housing Enterprise Oversight Fannie, before the Financial Crisis Inquiry Commission, date, at pp. 9-10.

²⁷⁰ Testimony of Armando Falcon Jr., Former Director Office of Federal Housing Enterprise Oversight Fannie, before the Financial Crisis Inquiry Commission, date, at pp. 9-10.

²⁷¹ Testimony of Armando Falcon Jr., Former Director Office of Federal Housing Enterprise Oversight Fannie, before the Financial Crisis Inquiry Commission, date, at pp. 9-10.

year.²⁷² Compensation structures were an issue not just for executives and traders, but as we will see, compensation practices were skewed all along the mortgage securitization chain, from mortgage origination to mortgage-related assets being packaged by Wall Street. Along the chain, quantity was directly rewarded and often took precedence over quality. FDIC Chairman Sheila Bair spoke about compensation for mortgage brokers, those often at the first step in the chain, telling the FCIC, the “standard compensation practice of mortgage brokers ... was based on the volume of loans originated rather than the performance and quality of the loans made.”²⁷³ In the middle of the securitization chain, the investment banks made record profits from subprime underwriting by collecting a percentage of the sales proceeds.²⁷⁴

Overall, Bair testified, “The crisis has shown that most financial-institution compensation systems were not properly linked to risk management. Formula-driven compensation allows high short-term profits to be translated into generous bonus payments, without regard to any longer-term risks. Many derivative products are long-dated, while employees’ compensation

²⁷² “[I]n the aggregate, the structure of executive pay affects the incentive to inflate earnings. For example, pay arrangements that enable executives to time the unwinding of equity incentives have been correlated with attempts to increase short-term stock prices by inflating earnings.” Bebchuk, Lucian A. and Fried, Jesse M., Executive Compensation at Fannie Mae: A Case Study of Perverse Incentives, Nonperformance Pay, and Camouflage. *Journal of Corporation Law*, Vol. 30, No. 4, pp. 807-822, 2005; UC Berkeley Public Law Research Paper No. 653125; Harvard Law and Economics Discussion Paper No. 505, February 2005. Available at SSRN: <http://ssrn.com/abstract=653125> or doi:10.2139/ssrn.653125, at 811 (citing Scott L. Summers & John T. Sweeney, *Fraudulently Misstated Financial Statements and Insider Trading: An Empirical Analysis*, 73 *ACCT.. REV.* 131 (1998)).

²⁷³ Sheila C. Bair, FDIC Chairman, Testimony Before Financial Crisis Inquiry Commission, Jan. 14, 2010, available at <http://fcic.gov/hearings/pdfs/2010-0114-Bair.pdf>

²⁷⁴ John M. Quigley, “Compensation and Incentives in the Mortgage Business.” *Economists’ Voices*, www.pepress.come/ev, October, 2008 (“The bond issuer is paid a fee, typically between 0.2 and 1.5 percent, when the bond is issued.”)

was weighted toward near-term results. These short-term incentives magnified risk-taking.”²⁷⁵ SEC Chairman Mary Schapiro told the FCIC, “There can be a direct relationship between compensation arrangements and corporate risk taking. Many major financial institutions created asymmetric compensation packages that paid employees enormous sums for short-term success, even if these same decisions result in significant long-term losses or failure for investors and taxpayers.”²⁷⁶

Financial sector growth “I think we overdid finance versus the real economy”

The financial sector grew faster than the overall economy for about two decades beginning in the early 1980s—rising from about 4% of Gross Domestic Product to about 5½% in the early 2000s. In 1980, financial sector profits comprised about 15% of all corporate profits. In 2003, that percentage hit an all time high of 33% but then fell back a little to 27% in 2006, on the eve of the financial crisis.²⁷⁷ And, the largest financial firms became considerably larger. For example, at JP Morgan Chase, assets increased from \$667 billion in 1999 to \$2.2 trillion at the end of 2008, a compound annual growth rate of 14% a year. Over this same time period, Bank of America and Citigroup grew by 12% a year, with Citigroup reaching \$2.2 trillion in assets and Bank of America \$1.8 trillion. The investment banks grew significantly from 2000 to 2007, at often at a much faster pace than these commercial banks. Goldman’s assets increased from \$251 billion at

²⁷⁵ Sheila C. Bair, FDIC Chairman, Testimony Before Financial Crisis Inquiry Commission, Jan. 14, 2010, available at <http://fcic.gov/hearings/pdfs/2010-0114-Bair.pdf>

²⁷⁶ Mary L. Schapiro, SEC Chairman, Testimony Before Financial Crisis Inquiry Commission, Jan. 14, 2010, available at <http://fcic.gov/hearings/pdfs/2010-0114-Schapiro.pdf>

²⁷⁷ Bureau of economic Analysis

the end of 1999 to \$1.1 trillion by the end of 2007, a growth rate of 20%. At Lehman, assets rose from \$152 billion to \$691 billion, a growth rate of 16%.

Like the commercial and investment banks, Fannie and Freddie enjoyed strong growth. From 2000 to 2008, Fannie's assets and guaranteed mortgages increased from \$1.4 trillion to \$3.2 trillion, a compound annual growth rate of 10%. At Freddie, they increased from \$925 billion to \$2.3 trillion during the same time period, a growth rate of 11%.

As firms grew bigger, they often became more leveraged. Banks, thrifts, investment banks, insurance companies and the GSEs used highly leveraged growth strategies in the years leading up to the financial crisis. Increasing leverage meant higher returns for shareholders – and more money available for compensation - if the company reported profits. Leverage is only one measure of risk, which has to be viewed in the context of other risk metrics, including asset quality, duration of debt, and liquidity. But increasing leverage certainly meant that there was less capital to absorb losses.

Fannie and Freddie were the most levered of them all. The regulations discussed earlier required the GSEs to maintain a minimum capital of 2.5% of total assets plus 0.45% of the mortgage backed securities they guaranteed. That meant they could borrow more than \$200 for each dollar of capital for guaranteeing mortgage backed securities. If they wanted to own the securities they could borrow \$40 for each dollar of capital. Combined, Fannie and Freddie owned or guaranteed \$5.3 trillion of mortgage-related assets at the end of 2007 with just \$70.7 billion of capital. That translated to a leverage ratio of 75:1.

From 2000 to 2007, banks and thrifts generally borrowed \$16 to \$22 for each dollar of capital, meaning the leverage ratio was between 16:1 and 22:1. For some banks, leverage remained

roughly constant over this period. JP Morgan's reported leverage was between 20:1 and 22:1. Wells Fargo's generally ranged from between 16:1 and 17:1 (except for one year when it dipped to 14:1).²⁷⁸

For other banks, leverage increased over this period. Bank of America's reported leverage rose from 18:1 in 2000 to 27:1 in 2007. And Citigroup's reported leverage increased from 18:1 in 2000 to 22:1 in 2006. It then shot up to 32:1 by the end of 2007, when off-balance sheet assets were brought on balance sheet. To a greater extent than other banks, Citigroup held assets off of its balance sheet to – among other reasons – have fewer assets subject to minimum capital requirements. In 2007, even after bringing on balance sheet \$80 billion worth of assets, Citigroup had substantial off-balance sheet assets. Including all of its off-balance sheet assets, leverage in 2007 would have been 51:1 or - about 60% higher than reported. In comparison, including off-balance sheet assets, the 2007 leverage ratios of Wells Fargo and Bank of America would have been 17% and 28% higher, respectively.

Investment banks were not subject to the same capital requirements as the banks. Investment banks were given greater latitude to rely on their internal risk models to determine capital requirements. Not surprisingly, they reported higher leverage. Goldman Sachs' reported that leverage increased from 17:1 in 2000 to 32:1 in 2007. Leverage at Morgan Stanley and Lehman increased about 70% and 20% over these years, respectively, and they both reached a ratio of 40:1 by the end of 2007. Several of the investment banks, as discussed in later chapters, lowered their reported leverage ratios by temporarily selling assets right before the reporting period and subsequently buying them back.

²⁷⁸ All leverage ratios reported are the ratio of tangible common assets to tangible common equity.

As the investment banks grew in size and leverage, their business models transformed. Traditionally, investment banks had provided financial advisory services and equity and debt underwriting services to corporations, financial institutions, investment funds, governments and individuals. As securitization and similar activities became new sources of profit, an increasing amount of the investment banks' revenues and earnings were generated by trading and investments. For example, at Goldman, revenues from these activities increased from 39% of total revenues in 1997 to 68% in 2007. At Lehman, trading and investments generated as much as 80% of pretax earnings in 2006, up from 32% in 1997. At Merrill Lynch, these segments generated 55% of revenue in 2006, up from 42% in 1997. At Bear, trading and investments accounted for more than 100% of pretax earnings in some years after 2002 due to pretax losses reported in other business lines.²⁷⁹

Between 1978 and 2007, the amount of debt held by the financial sector grew from \$3 trillion to \$36 trillion, doubling its share of GDP.²⁸⁰ Reflecting on the role of the financial system in the American economy, former Treasury Secretary John Snow told the FCIC that while the financial sector must always play a “critical” role in allocating capital to its most productive uses, over the last 20 or 30 years it had become too large. He pointed out that financial firms had gotten bigger, largely by simply loaning to each other—not by creating more opportunities for investment.²⁸¹ In 1978, the financial sector borrowed \$13 in the credit markets for every \$100 borrowed by the non-financial sector. By 2007, the financial sector borrowed \$51 for every \$100.²⁸² “We have a

²⁷⁹ Proxies

²⁸⁰ Federal Reserve Flow of Funds. These figures are also cited in *13 Bankers*.

²⁸¹ Audio of FCIC interview with Harvey Pitt, roughly at 1:30:00.

²⁸² Federal Reserve Flow of Funds. These figures are also cited in *13 Bankers*.

lot more debt than we used to have, which means we have a much bigger financial sector. I think we overdid finance versus the real economy and got it a little lopsided as a result.”²⁸³

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²⁸³ Audio of FCIC interview with Harvey Pitt, roughly at 1:30:00.

Part 1, Chapter 4. The Rise of the Subprime Market

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Overview

The total amount of debt outstanding in US credit markets tripled during the 1980s, reaching \$13.7 trillion in 1990, with one-ninth of that debt being securitized mortgages. One decade later, mortgage securities comprised xx% of the debt markets, overtaking government treasuries as the single largest component of those markets, a position they would maintain through the financial crisis. Since the 1970s, Fannie Mae and Freddie Mac had dominated the business, but in the ‘90s the two GSEs faced a growing challenge from mortgage companies, banks, and Wall Street securities firms that had begun securitizing mortgages. And more and more of those mortgages were subprime.

Innovations in technology, new business practices, and regulatory policies played important roles in expanding the subprime market. At the beginning of the decade, mortgage companies, Wall Street securities firms, and even the federal government established a new infrastructure for securitizing non-GSE mortgages, which gave subprime lenders increased access to world capital markets. Then, midway through the 1990s, lenders developed computerized processes that

streamlined the mortgage application process for all borrowers. Meanwhile, a change in the way regulators enforced an eighteen-year-old law, the Community Reinvestment Act, prompted banks to figure out new ways to responsibly lend to borrowers that mortgage markets had previously left behind.

With these changes, the mortgage market evolved, particularly the subprime market. Originally offering second-lien mortgages and lines of credit to borrowers with little or impaired credit histories, the subprime market shifted to offering primarily first-mortgages for purchases and refinancing of homes. Between 1994 and 2000, subprime mortgage originations grew from \$35 billion to \$140 billion [reconcile with chart] annually. By 2000, just over half of the roughly 1.2 million subprime loans made that year were sold by the lenders in the securitization market. The subprime sector grew not only in absolute terms, but relative to the overall mortgage market as well. Its share of total dollar value of mortgage originations rose from 4.5% in 1994 to 12.5% in 1999.²⁸⁴

The early years of subprime: “the private bank for the unbanked”

In the early 1980s, consumer finance companies such as Household Financial Services and S&Ls such as Long Beach Savings and Loan made home equity loans, often second mortgages, to borrowers who had yet to establish credit histories or who had troubled credit histories, sometimes brought on by events such as temporary financial setbacks, unemployment, divorce, or medical emergencies. Banks might have been unwilling to extend credit to these borrowers, but a subprime lender would make a loan if it were paid for the extra risk. “No one can debate

²⁸⁴ Elizabeth Laderman, " Subprime Mortgage Lending and the Capital Markets," *FRBSF Economic Letter* (Dec. 28, 2001), 1, "<http://www.frbsf.org/publications/economics/letter/2001/el2001-38.pdf>

the need for legitimate non-prime lending products,” Gail Burks, the president of the Nevada Fair Housing Commission, told the FCIC.²⁸⁵

The interest rates on subprime mortgages weren’t as high as those for car loans, and were much less than those on credit cards. Often enough, the money from second mortgages went to pay off other debts. The advantages of a mortgage over other forms of debt were solidified in 1986 with the Tax Reform Act, which eliminated the tax deductibility of interest payments on consumer loans but kept the deduction in place for mortgage interest payments.

For the lenders, these loans were riskier than prime mortgages, but given the higher interest rates, higher fees, and the collateral—an actual house—they could be profitable. In the 1980s and into the early 1990s, before computerized “credit scoring” fully allowed risk to be translated into hard numbers, the companies underwrote these subprime loans based on subjective factors. As Tom Putnam, a Sacramento-based mortgage banker, explained to the Commission, the mortgage lending industry as a whole had traditionally made loans based on the “four C’s: credit (quantity, quality and duration of [the borrower’s] credit obligations), capacity (amount and stability of borrower income), capital (sufficient liquid funds to cover down payment, closing costs and reserves) and collateral (value and condition of property).”²⁸⁶ Their final decisions depended upon personal judgments about how well the strength in one area, such as collateral, might offset weaknesses in others, such as credit. Subprime lenders tended to put the most weight on the fourth “C” – collateral [ck fact]. As Mark Adelson, a research analyst at Standard & Poors, explained to the FCIC, “Each placed only secondary emphasis on a borrower's credit history or a

²⁸⁵ Written testimony of Gail Burks at FCIC hearing in Las Vegas (Sept. 8, 2010), 3, <https://vault.netvoyage.com/neWeb2/goID.aspx?id=4826-1195-8024&open=1>.

²⁸⁶ Written testimony of Tom Putnam to FCIC hearing in Sacramento (Sept. 23, 2010), [3], <http://fcic.gov/hearings/pdfs/2010-0923-Putnam.pdf>

borrower's capacity to make monthly loan payments.”²⁸⁷ They underwrote borrowers one at a time, case by case, out of their local offices. CitiFinancial, one subprime lender, referred to its network of formal-style branches as “the private bank for the unbanked.”

In a few cases, such as CitiFinancial, these firms were part of a bank holding company, but most of them were independent consumer finance companies, including Household Financial Services, Beneficial Finance, The Money Store, and Champion Mortgage. These companies—without access to deposits – were generally funded by short-term lines of credit, or “warehouse lines,” from commercial or investment banks. In most cases, these finance companies did not keep the mortgages. The Money Store—for example—securitized over 80% of the mortgages they originated. Some companies sold the loans, often to the same banks extending the warehouse lines. In turn, the banks would securitize and sell off the loans to investors, or, instead, keep them on their balance sheets. In other cases, the finance company packaged and sold them – often partnering with the banks extending the warehouse lines. Major warehouse lenders in the late 1990s supporting the industry included Chase Manhattan Bank, First National in Chicago, and Bank of America. Meanwhile, the S&Ls that originated subprime loans generally financed their own mortgage operations and kept the loans on their balance sheets.

Innovation and Transformation in Subprime: “This stuff is so complicated how is anybody going to know?”

Subprime lenders moved toward greater integration with Wall Street in the late 1980s. Salomon Brothers, Merrill Lynch, and other Wall Street firms began packaging and selling “non-agency” mortgages, that is, loans that did not conform to the standards set by Fannie Mae and Freddie

²⁸⁷ FCIC interview with Mark Adelson [need to check]

Mac. Selling these non-agency securities required adjusting investors' expectations. With Fannie and Freddie securitizations, "it was not will you get the money back, it was when you will you get the money back," former Salomon Brothers trader Jim Callahan told the FCIC. With these new securities, investors had to worry about not getting paid back, and that concern created an opportunity for S&P and Moody's. As Lewis Ranieri, a pioneer in the market, explained to the Commission:

When we wrote the rules on which all securitization rests ... when we were going around to [Capitol] Hill begging people to pay attention to something that didn't exist except in our heads, and they asked us really good questions, like this stuff is so complicated how is anybody going to know? How are the buyers going to buy? That was a really good question. How are you going to sell this stuff to the public? Are they going to become mortgage savants? It's not going to happen. ... It was a legitimate question that Congress asked us. One of the solutions was, it had to have a rating. And that put the rating services in the business.²⁸⁸

Non-agency securitizations were only a few years old when they received a powerful stimulus from an unlikely source—the federal government. The savings and loan crisis had left Uncle Sam with \$402 billion in loans and real estate from failed thrifts and banks.²⁸⁹ Congress established the Resolution Trust Corporation (RTC) in 1989 to offload the mortgages and real estate the government now owned, and sometimes the thrifts themselves. Most of these assets were related to commercial loans and properties, but there was an estimated \$34 billion or more in single-family home mortgages.²⁹⁰ This posed a challenge. While the RTC was able to sell \$6.1 billion of these mortgages to Fannie and Freddie,²⁹¹ the majority did not meet the GSEs' standards. Some were what might be called subprime today, but others had documentation errors

²⁸⁸ Interview with Lewis Ranieri.

²⁸⁹ FDIC, *Managing the Crisis*, 29, available at <http://www.fdic.gov/bank/historical/managing/history1-01.pdf>.

²⁹⁰ FDIC, *Managing the Crisis*, 405, available at <http://www.fdic.gov/bank/historical/managing/history1-16.pdf>.

²⁹¹ FDIC, *Managing the Crisis*, 407-08, available at <http://www.fdic.gov/bank/historical/managing/history1-16.pdf>

or servicing problems, not unlike the low-documentation loans that would later become popular.²⁹²

Soon enough, RTC officials concluded that they had neither the time nor the resources to sell off the assets in their portfolio, one by one and thrift by thrift. They turned to the private sector for help, contracting with real estate and financial professionals to securitize some of the assets in the failed thrifts' portfolios. Thus the RTC ended up effectively subsidizing the expansion of securitization of mortgages ineligible for GSE guarantees. As investors became more familiar with these new types of assets, mortgage specialists and Wall Street bankers got in on the action in the early 1990s. From then on, securitization and subprime originations grew hand in hand. As the chart below shows, total subprime originations increased from \$65 million in 1995 to \$xxx million in 2000. The proportion securitized in the 1990s peaked at 55%.

²⁹² FDIC, *Managing the Crisis*, 38, available at <http://www.fdic.gov/bank/historical/managing/history1-01.pdf>.

| Year | Subprime Originations | Total Originations | Subprime As a Share of All Originations | Securitization Rate |
|------|-----------------------|--------------------|---|---------------------|
| 1995 | \$65 | \$636 | 10.2 percent | 28.4 percent |
| 1996 | \$97 | \$785 | 12.3 percent | 39.5 percent |
| 1997 | \$125 | \$859 | 14.5 percent | 53.0 percent |
| 1998 | \$150 | \$1,430 | 10.5 percent | 55.1 percent |
| 1999 | \$160 | \$1,275 | 12.5 percent | 37.4 percent |
| 2000 | | | | |

Source: HUD-Treasury Report, *Curbing Predatory Home Lending*, June 2000, and Chomsisengphet and Pennington-Cross (2006), using data from *Inside MBS & ABS*. **Staff is still reconciling these numbers using various sources.**

Securitization rate = securities issued divided by originations in dollars. Subprime securities include both MBS and ABS backed by subprime loans.

Securitizations done by the RTC and by Wall Street were similar in many ways to the Fannie and Freddie securitizations we described in Chapter 2, but there were differences. As with GSE securitizations, the first step in the process was for the aggregate principal and interest payments from a group of mortgages to flow into a single pool. But in “private-label” securities (that is, securitizations not put together by Fannie or Freddie), the payments out of the pool were then “tranching.” In contrast to the relatively simple securitization done with GSE mortgages, investors in the different tranches of these deals were entitled to receive different streams of principal and interest in different orders.

Most of the earliest private-label deals, dating to the late 1980s and early 1990's, already used a rudimentary form of tranching, discussed in an earlier chapter. There were typically two tranches in each deal, one more risky and one less risky. The less risky tranche received principal and interest payments first and was usually guaranteed by an insurance company. The more risky tranche received payments next, was not guaranteed, and was usually kept by the company that originated the mortgages.

Within a decade, those non-GSE securitizations had become much more complex, set up with more tranches that carried more varied payments streams and different risks, tailored to investors' demands. The entire mortgage-securitization market—those who created, sold, and bought the investments—would come to depend greatly on this slice-and-dice process, and regulators and market participants alike took it for granted that it efficiently allocated risk to those best able and willing to bear that risk.

To demonstrate how this process ended up working in actual practice, we'll jump forward to 2006, the height of the housing boom, and describe a typical deal with \$947 million in mortgage-backed bonds. In this case, New Century, a California-based lender, originated and then sold about 4,499 subprime mortgage loans to Citigroup, which sold them to a trust that Citi sponsored. The trust purchased the loans with the cash it had raised by selling the securities that would be backed by these loans. The trust had been created as a separate legal structure so that the assets would sit "off balance sheet" from Citigroup, which had tax and regulatory benefits.

The 4,499 mortgage loans carried with them the rights to the 4,499 borrowers' monthly payments, which the Citigroup trust divided into 19 tranches of mortgage-backed securities, each tranche giving its investors a different priority claim on the flow of payments due from the

borrowers, and a different interest rate and repayment schedule. The credit rating agencies would assign ratings to each one of these tranches for investors, who – as securitization became increasingly complicated – relied more and more on these ratings. In this Citigroup deal, the four senior tranches – the safest slices of the deal - were rated AAA by the agencies, their highest grade.

Below the senior tranches and next in line for payments were eleven “mezzanine” tranches - named thus because they sat between the riskiest and the safest tranches. These carried higher credit risk than the senior tranches and, because they were paid off more slowly, a higher risk that an increase in interest rates would make the locked-in interest payments on these tranches less valuable. As a result, they paid a correspondingly higher interest rate. In the Citigroup deal, each mezzanine tranche had between two and five investors. Three of these tranches were rated AA, four were rated A, three were rated BBB, the lowest investment-grade rating, and one was rated BB, or junk.

The last to be paid was the most junior tranche, called the “equity,” “residual,” or “first loss” tranche, which was set up to receive whatever cash flow was left over after all the other investors had been paid. This tranche suffered the first losses from any defaults of the mortgages in the pool. Commensurate with this high risk, it provided the highest yields. In the Citigroup deal, and as was common, this piece of the deal was not rated at all. Citigroup and a hedge fund each held half of the equity tranche.

[INSERT MBS SCHEMATIC HERE]

While investors in the lower-rated tranches received higher interest rates because they knew there was a risk of loss, investors in the AAA senior tranches did not expect losses. They

believed these investments, which paid interest rates roughly xx% higher than Treasury bonds were as safe as AAA-rated corporate bonds, which paid xx% more than Treasury bonds. This expectation of safety was important, so the securitizers focused intently on structuring securities in order to achieve high ratings. In the structure of this Citigroup deal, which was typical in this regard, over 85% of the \$x billion deal – or \$737 million - was rated triple-A. It was magical, nothing less.

Technological change: “a whole infrastructure now built up”

As private-label securitization began to take hold, new technologies were reshaping the mortgage market. In the mid-1990s, standardized data with loan-level information on mortgage performance became more widely available. Furthermore, mortgage providers learned how to adapt credit scores, previously used only for consumer loans, to mortgage underwriting. Of these, the most famous was—and still is – the FICO score, developed by the Fair, Isaac Corporation. With credit risk reduced to a single number, underwriters could use their computers to match an applicant with a pool of similar borrowers with similar collateral, capacity, and capital, look at the mortgage repayment history of that pool, and generate an estimate of the application’s riskiness almost immediately. In 1994, Freddie Mac rolled out Loan Prospector, an automated system for mortgage underwriting for use by lenders, and Fannie Mae released its own system, Desktop Underwriter, two months later.²⁹³ No more laborious, slow, and subjective underwriting of individual mortgages.

This newly-minted underwriting process was based on a set of formalized expectations. Given the borrower, the home, and the mortgage characteristics, what was the probability that payments

²⁹³ John W. Straka, “A Shift in the Mortgage Landscape: The 1990s Move to Automated Credit Evaluations,” *Journal of Housing Research* 11 (2000), 207-32.

would be made on time? What was the probability that borrowers would pre-pay their loans, either because they sold their homes or refinanced with lower interest rates? In the case of subprime mortgages, the lenders did not have a long history of lending on which to base their expectations, so they modeled subprime repayment with extrapolation from *prime* borrowers' behavior and some guesswork.

Technology and data availability also had an effect in the 1990s on the implementation of the Community Reinvestment Act (CRA). Congress had enacted CRA in 1977 to ensure that regulated banks and thrifts served their local communities, in response to concerns that banks had “redlined”--or in other words, refused to lend on a wholesale basis to certain neighborhoods. Federal Reserve Board Chairman Ben Bernanke explained the motivation behind the legislation in a speech years later:

Public and congressional concerns about the deteriorating condition of America's cities, particularly lower-income and minority neighborhoods, led to the enactment of the Community Reinvestment Act. In the view of many, urban decay was partly a consequence of limited credit availability, which encouraged urban flight and inhibited the rehabilitation of declining neighborhoods. Some critics pinned the blame for the lack of credit availability on mainstream financial institutions, which they characterized as willing to accept deposits from households and small businesses in lower-income neighborhoods but unwilling to lend or invest in those same neighborhoods despite the presence of creditworthy borrowers.²⁹⁴

CRA called on banks to make investments, extend loans, and provide banking services in areas where they took deposits, so long as these activities were consistent with the banks' financial safety and soundness. It directed regulators to consider CRA performance whenever a bank

²⁹⁴ Ben Bernanke, “The Community Reinvestment Act: Its Evolution and New Challenges,” speech at the Community Affairs Research Conference, Washington, DC (Mar. 30, 2007), available at <http://www.federalreserve.gov/newsevents/speech/bernanke20070330a.htm>.

applied to merge with another bank, open new branches, or receive regulatory permission to engage in new activities.²⁹⁵

To comply with the law, banks now extended credit to borrowers who had previously been categorically denied. Sometimes these borrowers had a lower credit score than the average borrower. Often they had lower income. Nonetheless, some studies indicated that the performance of loans made under the CRA was consistent with the rest of the banks' portfolios, suggesting that CRA lending was not riskier than lending otherwise done by the banks.[cite] "There is little or no evidence that banks' safety and soundness have been compromised by such lending, and bankers often report sound business opportunities," Federal Reserve Board Chairman Alan Greenspan said of CRA lending in 1998.²⁹⁶

In 19## President Clinton directed the regulators of the banks and thrifts to address criticisms that proving compliance with CRA to the regulators was burdensome and that the process was subjective. In 1995, the Federal Reserve, OTS, OCC, and FDIC finalized new regulations that shifted regulators' focus from the efforts that banks made to the results of those efforts. These changes were intended to decrease the regulatory burden, but also to bolster enforcement of the act.²⁹⁷ In the process, these changes made a lack of adherence to the law easier to uncover.

²⁹⁵ Financial Crisis Inquiry Commission, "The Community Reinvestment Act and the Mortgage Crisis," Preliminary Staff Report (Apr. 7, 2010), http://fcic.gov/reports/pdfs/2010-0407-Preliminary_Staff_Report_-_CRA_and_the_Mortgage_Crisis.pdf.

²⁹⁶ Glenn Canner and Wayne Passmore, "The Community Reinvestment Act and the Profitability of Mortgage-Oriented Banks," Working Paper (Mar. 3, 1997), <http://www.federalreserve.gov/pubs/feds/1997/199707/199707pap.pdf>.

²⁹⁷ Statement of Sandra F. Braunstein, Director, Division of Consumer and Community Affairs Board of Governors of the Federal Reserve System before the Committee on Financial Services U.S. House of Representatives, February 13, 2008. See also, *Federal Register*, May 4, 1995, pp. 22155-22223 ("Specifically, the President asked the agencies to refocus the CRA examination system on more objective, performance-based assessment standards that minimize compliance burden while stimulating improved performance. He also asked the agencies to develop a well-trained corps of examiners who would specialize in CRA

Regulators and community advocates could now point to objective, observable numbers to measure banks' compliance.

Former Comptroller of the Currency John Dugan told FCIC staff that, in his opinion, the Community Reinvestment Act had made a lasting impact on the banks' lending to people that in the past might not have had access to credit:

There's a whole infrastructure now built up in banks and in the agencies and in the advocate's groups and there is a tremendous amount of investment that goes on in inner cities and other places to build things that are quite impressive....And the bankers say this is proven to be a business where we can make some money; not a lot, but when you factor in the good will we get for this, it kind of works.²⁹⁸

Larry Lindsey, a former Federal Reserve Governor who was responsible for the Fed's Consumer and Community Affairs Division, which oversaw CRA enforcement, told the FCIC that improved enforcement had given the banks an incentive to invest in technology that would make lending to lower-income borrowers profitable, such as creating credit scoring models customized to the market. Shadow banks not covered by the CRA would use these same credit scoring models, estimated off of now more substantial historical lending data, to underwrite loans. "We basically got a cycle going which particularly the shadow banking industry could, using recent historic data, show the default rates on this type of lending were very very low," he said. Indeed, default rates were low during the prosperous 1990s, and regulators, bankers and lenders in the shadow banking system took note of this success.²⁹⁹

examinations. The President requested that the agencies promote consistency and even-handedness, improve CRA performance evaluations, and institute more effective sanctions against institutions with consistently poor performance.") [this is actually clearer than our text]

²⁹⁸ John Dugan interview, March 12, 2010; recording starting about 1:04:20.

²⁹⁹ Audio of FCIC interview with Larry Lindsey, ca. 5:00.

Subprime lenders in turmoil: “adverse market conditions”

Among nonbank mortgage originators, the late 1990s was a turning point. We have reported on the market disruption caused by the Russian debt crisis and the collapse of Long Term Capital Management hedge fund. That was in 1998, and it momentarily put a crimp in the subprime market. The markets saw a ‘flight-to-quality’ – in simpler terms, the demand among investors for risky assets plummeted, including for loans originated by subprime lenders. As shown in the chart above, the rate of subprime mortgage securitization dropped from 55.1% in 1998 to 37.4% in 1999. Meanwhile subprime originators saw the interest rate at which they could borrow in credit markets skyrocket. They were caught in a squeeze: increased borrowing costs at the very moment their revenue stream dried up.³⁰⁰ And, some were caught holding tranches of subprime securities that they had valued well above what they turned out to be worth.

Mortgage lenders dependent on liquidity and short-term funding from the capital markets had immediate problems. For example, Southern Pacific Funding (SFC), an Oregon-based subprime lender that securitized its loans, reported relatively positive second quarter figures in August 1998.³⁰¹ Then, in September, SFC notified investors about “recent adverse market conditions” in the securities markets and expressed concern about “the continued viability of securitization in the foreseeable future.”³⁰² A week later, SFC filed for bankruptcy protection.³⁰³ Several other nonbank subprime lenders dependent on the short-term financing from the capital markets also

³⁰⁰ Souphala Comsisengphet and Anthony Pennington-Cross, “The Evolution of the Subprime Mortgage Market,” *Federal Reserve Bank of St. Louis Review* 88 (Jan./Feb. 2006), 40.

³⁰² September 11, 1998, SFC SEC Form 8-K

³⁰³ October 1, 1998, SFC, SEC Form 8-K

filed for bankruptcy in 1998 and 1999, including Citiscape, Criimi Mae, FirstPlus and United Companies Financial. In the two years following the Russian default crisis, eight of the top ten subprime lenders declared bankruptcy, ceased operations, or sold out to stronger firms.³⁰⁴ Even when they sold, their buyers would take big hits.

First Union, a large regional bank headquartered in North Carolina, incurred charges of almost \$5 billion after it bought The Money Store, due in large part to a failed plan to securitize The Money Store's loans. First Union eventually shut down or sold off most of The Money Store's operations--one of the first decisions by newly named First Union CEO Ken Thompson. Despite this experience, at the height of the housing bubble, Thompson, CEO of the merged First Union/Wachovia bank, would champion the purchase of Golden West Financial Corp the [largest] originator of risky, option ARM mortgages that would see a wave of defaults.³⁰⁵

Conseco, a leading insurance company, experienced even more disastrous results after buying Green Tree, another big subprime lender, in 1998. Green Tree was the largest lender for mobile homes and the fourth-largest provider of retailer-issued credit cards. Like The Money Store, Green Tree had pursued an aggressive program for securitizing the subprime loans it created, and disruptions in the securitization markets, as well as unexpected defaults that partly stemmed from the lenders' relaxation of underwriting standards, eventually drove Conseco into bankruptcy in

³⁰⁴ FCIC tabulation from various sources including IMF. "A Short History of Subprime, By White, Brenda Mortgage Banking, March 1 2006 says "6 of the top 10 suffered their demise".

³⁰⁵ PLACEHOLDER FOR FUTURE CITATION.

December 2002. At the time, this was the third-largest bankruptcy in U.S. history (after WorldCom and Enron).³⁰⁶

But the liquidity crunch would not be the only problem for the subprime lending industry – accounting misrepresentations would also bring firms down. Keystone, a small national bank in West Virginia that made home improvement and debt consolidation subprime mortgage loans, failed in 1999. Keystone had pooled its own subprime loans with those purchased from other firms and issued mortgage-backed securities. In the process—this was common practice in the 1990s -- Keystone retained the riskiest “first loss” tranches for its own account. These holdings far exceeded the bank’s capital. But, Keystone assigned them grossly inflated values based on aggressive cash-flow assumptions. The Office of the Comptroller of the Currency closed the bank in September 1999, after discovering that the bank’s executives had fraudulently overstated the value of the residual tranches and other bank assets. [verify fraudulence/prosecution?] That collapse cost the FDIC’s deposit insurance fund more than \$800 million.³⁰⁷

Perhaps the most significant failure occurred at Superior Bank, one of the most aggressive subprime mortgage lenders. Superior originated or purchased more than \$4.5 billion in subprime loans between 1997 and 1999, using mortgage brokers to generate three-quarters of them. Of course, Superior earned originating and securitizing fees. And, like Keystone, it also produced substantial ‘profits’ by keeping and valuing the “first loss” tranches on its balance sheet. In 1999, Superior held first-loss tranches valued at almost \$1 billion, more than three times the

³⁰⁶ Alex Berenson, “Trailer Owners and Conseco Are Haunted by Risky Loans,” New York Times, November 25, 2001, <http://www.nytimes.com/2001/11/25/business/25GARY.html?pagewanted=all>.

³⁰⁷ General Accounting Office, “Bank Regulation: Analysis of the Failure of Superior Bank, FSB, Hinsdale, Illinois,” GAO-02-419T (Feb. 7, 2002), 24, www.gao.gov/new.items/d02419t.pdf.

amount of its capital. In 2000, OTS and FDIC examiners determined that Superior had overstated the value of residual assets by \$150 million.³⁰⁸ Superior failed in July 2001, costing the FDIC's deposit insurance fund more than \$400 million.

Many of the lenders who survived or were bought in the 1990s reemerged in other forms. Long Beach S&L was the ancestor of Ameriquest and Long Beach Mortgage (in turn purchased by Washington Mutual), two of the more aggressive lenders during the 2000s. First Associates sold out to Citigroup, and Household Finance bought Beneficial Mortgage, before itself being acquired by HSBC in 2002.

With all these problems, the total subprime business fell off a little. In 2000, subprime originations totaled \$100 billion, down from \$135 billion two years earlier. Over the next years, subprime lending and securitization would more than rebound.

The regulators: “Oh, I see”

During the 1990s, various federal agencies had taken increasing notice of abusive lending practices in the subprime mortgage market. But the regulatory system was not well equipped to respond consistently—and on a national basis—to protect borrowers. State regulators, as well as either the Fed or the FDIC, supervised the mortgage practices of state banks. The OCC supervised the national banks. The Office of Thrift Supervision or state regulators were responsible for the thrifts. State regulators also registered mortgage brokers, a growing portion of the market, but did not supervise them.

³⁰⁸ Material Loss Review of Superior Bank FSB (OIG-02-040)

<http://www.ustreas.gov/inspector-general/audit-reports/2002/oig02040.pdf>.

Amid the diffuse authority, there was nonetheless no question that Congress had authorized one entity to write strong and consistent rules regulating mortgages for all types of lenders: the Federal Reserve, through the Truth In Lending Act, passed by Congress in 1968. The following year, the Fed adopted Regulation Z for the purpose of implementing the Act. However, while Regulation Z applied to all lenders, its enforcement was divided among America's many financial regulators.

The Fed had the legal mandate to supervise bank holding companies, including the authority to supervise nonbank subsidiaries such as subprime lenders. The Federal Trade Commission was given explicit authority by Congress to enforce consumer protections embodied in the Truth in Lending Act with respect to these nonbank lenders. The FTC had a limited budget and staff relative to its mandate to supervise these lenders although it did bring enforcement actions against mortgage companies [follow up with FTC]. "We could have had the FTC oversee mortgage contracts," former HUD Secretary Henry Cisneros told the Commission. "But the FTC is up to their neck in work today with what they've got. They don't have the staff to go out and search out mortgage problems."³⁰⁹

Glenn Loney, Deputy Director of the Fed's Consumer Division from 1992 to 2010, told the FCIC that Fed officials had been debating whether they—in addition to the FTC—should enforce rules for nonbank lenders since he had joined the agency in 1975.³¹⁰ But they worried about whether the Fed would be stepping on Congressional prerogatives by assuming

³⁰⁹ Audio of FCIC interview with Henry Cisneros (Oct. 13, 2010), 1:32:59.

³¹⁰ Transcript of FCIC interview with Glenn Loney (Apr. 1, 2010), 5, 21 . [p. 5 is his bio, p. 21 is his comment on authority

enforcement responsibilities it had delegated to the FTC.³¹¹ “A number of governors came in and said, ‘You mean to say we don’t look at these?’” Loney said. “And then we tried to explain it to them, and they’d say, ‘Oh, I see.’”³¹² The Federal Reserve would not exert its authority in this area, nor others it would receive in 1994, with any real force until after the housing bubble burst.

That 1994 legislation was the Home Ownership and Equity Protection Act, passed by Congress and signed by President Clinton to address the growing problem of abusive and predatory mortgage lending practices, especially with low-income borrowers. HOEPA specifically noted that certain communities were “being victimized ... by second mortgage lenders, home improvement contractors, and finance companies who peddle high-rate, high-fee home equity loans to cash-poor homeowners.”³¹³ For example, a Senate report highlighted hearing testimony from a 72-year-old homeowner who paid more than \$23,000 in upfront finance charges on a \$150,000 second mortgage. The monthly payments exceeded her income.³¹⁴

HOEPA curbed abusive practices relating to certain high-cost refinance mortgage loans, including prepayment penalties, negative amortization, and balloon payments with a term of less than five years. The legislation also prohibited lenders from making high-cost loans based on collateral value of the property alone (a common practice, as noted above) and “without regard to

³¹¹ Transcript of FCIC interview with Glenn Loney (Apr. 1, 2010), 15.

³¹² Transcript of FCIC interview with Glenn Loney (Apr. 1, 2010), 28.

³¹³ Senate Report 103-169 (Oct. 28, 1993), 23.

³¹⁴ Senate Report 103-169 (Oct. 28, 1993), 24.

the consumers' repayment ability, including the consumers' current and expected income, current obligations, and employment.”³¹⁵

Only a certain small set of mortgages were initially subject to the HOEPA restrictions.³¹⁶ Yet, HOEPA specifically directed the Fed more broadly to “prohibit acts or practices in connection with mortgage loans that the Board finds to be unfair, deceptive or designed to evade the provisions of the [act].”

In June 1997, two years after HOEPA took effect, the Fed held the first set of public hearings required under the act. The venues were Los Angeles, Atlanta, and Washington, D.C. Consumer advocates reported abuses by home equity lenders. Mortgage lenders acknowledged that some abuses existed, blamed some of these on mortgage brokers, and suggested that increasing securitization of subprime mortgages had limited the opportunity for widespread abuses. Lenders noted that “[c]reditors that package and securitize their home equity loans must comply with a series of representations and warranties. These include creditors' representations that they have complied with strict underwriting guidelines concerning the borrower's ability to repay the loan.”³¹⁷ But, these representations and warranties proved to be inaccurate in the years to come.

The Fed continued *not* to press its prerogatives. In January 1998, it formalized its longstanding policy of “not routinely conduct[ing] consumer compliance examinations of nonbank

³¹⁵ 15 U.S.C. Sec. 1639(h)

³¹⁶ Loans were only subject to HOEPA if they hit the interest rate trigger or fee trigger, namely if the annual percentage rate for the loan was more than 10 percentage points above the yield on Treasury securities having a comparable maturity or if the total charges paid by the borrower at or before closing exceeded \$400 or 8% of the loan amount, whichever was greater..

³¹⁷ Board HUD Report at 56

subsidiaries of bank holding companies,”³¹⁸ an action that would be criticized as creating a “lack of regulatory oversight” by a November 1999 Government Accountability Office report. In July 1998, the Federal Reserve jointly issued a report with the Department of Housing and Urban Development (HUD) which, among other things, summarized its findings from its HOEPA hearings and made recommendations on mortgage reform. While preparing draft recommendations for the report, Fed staff wrote to the Fed’s Committee on Consumer and Community Affairs that “Given the Board’s traditional reluctance to support substantive limitations on market behavior, the draft report discusses various options but does not advocate any particular approach to addressing these problems”³¹⁹

In the end, the two agencies did not agree on the full set of recommendations addressing predatory lending. But, recommendations that were supported by both the Fed and HUD included instituting legislative bans on balloon payments and advance collection of lump-sum insurance premiums, stronger enforcement of current laws, and non-regulatory strategies such as community outreach efforts and consumer education and counseling.³²⁰

A year later, the Gramm-Leach-Bliley Act overturned the Depression-era Glass-Steagall restrictions on banks and, as noted, set forth the so-called “Fed-Lite” provisions that limited the Fed’s authority to examine, impose capital requirements on, or obtain reports from banking, securities or insurance subsidiaries of bank holding companies. While Fed-Lite did not specifically address consumer compliance examinations [check] or deal with mortgage lending

³¹⁸ Board of Governors of the Federal Reserve System, Division of Consumer and Community Affairs, Letter CA 98-1, dated Jan. 20, 1998.

³¹⁹ Memo to the Committee on Consumer and Community Affairs, Apr. 8, 1998 (FRB-FCIC-114038-114094, at 114080).

³²⁰ HUD-Board report, 57-85. See also Chapter 2 at page 17, Chapter 7 at page 76, and Appendix D.

subsidiaries of bank holding companies, it was consistent with the Fed's hands-off approach to mortgage lending at the time.

Even so, the shakeup in the subprime industry in the late 1990s had drawn regulators' attention to at least some of the risks associated with this lending. The failures of many non-bank subprime lenders led officials at the Federal Reserve System, FDIC, Office of the Comptroller of the Currency, and Office of Thrift Supervision to anticipate that the banks, no doubt believing they could do a better, safer job, would rush to fill the vacuum.

Focusing on the effect of subprime defaults on the safety and soundness of depository institutions, the four federal banking agencies jointly issued subprime lending guidance on March 1, 1999.³²¹ This guidance would only apply to regulated banks and, even then, it would not be binding—only laying out the criteria underlying regulators' bank examinations. It explained that “recent turmoil in the equity and asset-backed securities market has caused some non-bank subprime specialists to exit the market, thus creating increased opportunities for financial institutions to enter, or expand their participation in, the subprime lending business.”

The agencies then identified key features of subprime lending programs and the need for increased capital, risk management, and board and senior management oversight. They further noted concerns about various accounting issues, notably the valuation of any residual tranches held by the securitizing firm. The guidance went on to say, “Institutions that originate or purchase subprime loans must take special care to avoid violating fair lending and consumer protection laws and regulations. Higher fees and interest rates combined with compensation incentives can foster predatory pricing...An adequate compliance management program must

³²¹ See March 1, 1999, Interagency Guidance on Subprime Lending Located at <http://www.federalreserve.gov/boarddocs/srletters/1999/sr9906a1.pdf> (accessed on October 14, 2010)

identify, monitor and control the consumer protection hazards associated with subprime lending.”³²² Six months later, Keystone Bank went under.³²³

In April 2000, in response to growing complaints about lending practices, and at the urging of Senator Barbara Mikulski, HUD Secretary Andrew Cuomo and Treasury Secretary Lawrence Summers convened the joint National Predatory Lending Task Force. It included members of consumer advocacy groups, industry trade associations representing mortgage lenders, brokers, and appraisers, local and state officials, and academics. Like the Fed’s hearings three years earlier, this new one took to the field, conducting hearings in Atlanta, Los Angeles, New York, Baltimore and Chicago. The task force found “patterns” of abusive practices, writing that, “throughout the HUD-Treasury forums, there was substantial evidence of too-frequent abuses in the subprime lending market.”³²⁴ Practices included loan flipping (repeated refinancing of borrowers’ loans in a short time); high fees and prepayment penalties that resulted in borrowers losing the equity in their homes; and outright fraud and abuse involving deceptive or high-pressure sales tactics.³²⁵ The report cited a Consumers Union report that identified forgery of signatures, falsification of incomes and appraisals, illegitimate fees, and bait-and-switch tactics.³²⁶ The report confirmed that subprime lenders often preyed on the elderly, minorities, and borrowers with lower incomes and less education, often individuals who had “limited access

³²² See March 1, 1999, Interagency Guidance on Subprime Lending Located at <http://www.federalreserve.gov/boarddocs/srletters/1999/sr9906a1.pdf> (accessed on October 14, 2010)

³²⁴ HUD- Treasury report, pg 2

³²⁵ The National Predatory Lending Task Force, convened by Housing and Urban Development Secretary Andrew Cuomo and Treasury Secretary Lawrence Summers, included consumer advocates, industry representatives, local and state officials, and academics. It held field hearings in Atlanta, Los Angeles, New York, Baltimore and Chicago.

³²⁶ HUD-Board report, 55.

to the mainstream financial sector,” meaning the banks, thrifts, and credit unions which the task force considered subject to more extensive government oversight.³²⁷

Consumer protection groups took the same message to public officials. In interviews and testimony to the FCIC, representatives of the National Consumer Law Center, Nevada Fair Housing Center, and California Reinvestment Coalition each said they had contacted Congress and the four bank regulatory agencies multiple times about their concerns over unfair and deceptive lending practices.³²⁸ “It was apparent on the ground as early as 1996, and clear in 1998, that the market for low-income consumers was being flooded with inappropriate products,” Diane Thompson of the NCLC told the Commission.³²⁹

The HUD-Treasury task force recommended a set of reforms aimed at protecting borrowers from the most egregious practices in the mortgage market, including better disclosure, improved financial literacy, strengthened enforcement, and new legislative protections. However, the report also recognized the downside of restricting lending practices, which created the possibility of homeownership for many borrowers with less-than-prime credit. It was a dilemma. Gary Gensler, then a senior Treasury official who worked on the report, told the FCIC that the report’s

³²⁷ Ibid., pp. 1-2.

³²⁸ Gail Burks: testimony of the FCIC Las Vegas hearing (Sept. 8, 2010), 242, <http://fcic.gov/hearings/pdfs/2010-0908-transcript.pdf>; Kevin Stein: transcript of to the FCIC Sacramento hearing (Sept. 23, 2010), 8, <http://fcic.gov/hearings/pdfs/2010-0923-Stein.pdf>; Audio of FCIC interview with Diane Thompson and Margot Saunders (Sept. 10, 2010), 0:08:22, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4849-1787-5975&open=Y>;

³²⁹ Audio of FCIC interview with Diane Thompson and Margot Saunders (Sept. 10, 2010), 0:12:03, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4849-1787-5975&open=Y>

recommendations “lasted on Capitol Hill a very short time. There wasn’t much appetite or mood to take these recommendations.”³³⁰

But, problems persisted and others would take up the mantle. Through the early years of the decade “the really poorly underwritten loans, the payment shock loans” continued to proliferate outside the traditional banking sector, said FDIC Chairman Sheila Bair, who served at Treasury as the assistant secretary for financial institutions from 2001 to 2002. In testimony to the Commission, she said that these poor-quality loans pulled market share from traditional banks and “created negative competitive pressure for the banks and thrifts to start following suit.”

“It was started and the lion’s share of it occurred in the non-bank sector, but it clearly created competitive pressures on banks,” Bair said. “...I think nipping this in the bud in 2000 and 2001 with some strong consumer rules applying across the board that just simply said you’ve got to document a customer’s income to make sure they can repay the loan, you’ve got to make sure the income is sufficient to pay the loans when the interest rate resets, just simple rules like that....could have done a lot to stop this.”³³¹

When she was nominated to her position at Treasury, and was making the rounds on Capitol Hill, Senator Paul Sarbanes, Chairman of the Committee on Banking, Housing, and Urban Affairs, told her about lending problems in Baltimore, where foreclosures were on the rise. He asked Bair to read the HUD/Treasury report on predatory lending, and she became interested in the issue.

³³⁰ Transcript of FCIC interview with Gary Gensler (May 14, 2010), 7, <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4832-6892-9287&open=Y>.

³³¹ Bair testimony to FCIC, Jan. 13, 2010.

Sarbanes introduced legislation to remedy the problem, but it faced significant resistance from the industry and within Congress, Bair told the Commission.³³² Bair decided to try to get the industry to adopt a set of “best practices” that would include a voluntary ban on mortgages which strip borrowers of their equity, and would offer borrowers the opportunity to avoid prepayment penalties by agreeing to instead pay a higher interest rate. She reached out to Edward Gramlich, a governor at the Fed, to enlist his help in getting companies to abide by these rules. Gramlich, who shared her concern, indicated to her that the Fed, where he was one of seven governors, was unlikely to consider imposing such a rule on lenders. Bair said that Gramlich “didn’t talk out of school,” but that he made it clear to her that “the Fed avenue wasn’t going to happen.”³³³ Similarly, Sandra Braunstein, director of the division of consumer and community affairs at the Fed, said that Gramlich told the staff that Greenspan was not interested in increased regulation.³³⁴

Bair and Gramlich approached a number of lenders about the voluntary program. Some originators, she told the Commission, were sympathetic to the idea and appeared willing to participate. But the Wall Street firms that securitized the loans resisted the effort, saying they were concerned about possible liability if they did not adhere to these best practices, she said. The effort died.³³⁵

Of course, while these initiatives went nowhere, the market did not stand still. Subprime mortgages were becoming mainstream. Originations were increasing, and products were

³³² FCIC interview with Sheila Bair.

³³³ FCIC memorandum for the record, of Sheila Bair interview of March 29, 2010, p.2.

³³⁴ FCIC memorandum for the record, Sandra Braunstein interview of April 1, 2010, p. 4.

³³⁵ FCIC interview with Sheila Bair.

changing. By 1999, three of every four subprime mortgages was a first lien. Of those first lien mortgages, 82 percent were used for refinancing rather than home purchase. Fifty-nine percent of those refinancings were “cash out,”³³⁶ helping to fuel consumer spending while whittling away homeowners’ equity.

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³³⁶ US Treasury and Department of Housing and Urban Development, “Curbing Predatory Home Lending” (Jun. 1, 2000), 31, <http://www.huduser.org/portal/publications/hsgfin/curbing.html>.

Part II: The Mortgage Market

Part II, Chapter 1: Credit Expansion

By the end of 2000, the economy had grown for 39 straight quarters. Federal Reserve Chairman Alan Greenspan seemed to have good reason to argue that the financial system had achieved an unprecedented resilience to financial shocks. Large financial companies were—or appeared to be on paper—profitable, diversified, and, their executives and government regulators agreed, protected from catastrophe by sophisticated new risk management techniques.

The housing market was also strong. Between 1995 and 2000, prices had risen at an annual rate of 5.2%; in the next five, the annual rate would hit 11.6%.³³⁷ These prices were higher in part due to lower interest rates for all mortgage borrowers and increased access to mortgage credit for households who traditionally had been kept out of the market—including subprime borrowers. Indeed, these lower interest rates and broader access to credit applied not just to mortgages, but also to other types of household borrowing, such as credit cards and auto loans.

Increased access to credit meant a more stable, secure life for those who managed their finances prudently. It meant that families could borrow to smooth out temporary drops in their incomes, to pay for unexpected expenses, and to make large purchases such as household appliances and cars. Most of all, it meant a shot at homeownership, with all of the benefits that entailed.

³³⁷ Figures represented the compound average growth rate and are from CoreLogic National Home Price Index, Single-Family Combined (SCF). CoreLogic Loan Performance HPI August 2010. Available at <http://www.corelogic.com/About-Us/ResearchTrends/Home-Price-Index.aspx>, authors' calculations.

As home prices rose, homeowners felt more financially secure and – partly as a result – saved less and less out of their income. The effect was unprecedented debt: between 2000 and 2006, Americans would borrow more money than they had over the previous 200 years.³³⁸ Household debt rose from 80% of personal income in 1993 to 130% by mid-2006.³³⁹ Over [XXX]% of this increase was in higher mortgage debt. Part of the increase in mortgage debt was from new home purchases, part was from more debt placed on homes. Leverage, in a word. But, as the thinking went, housing prices don't go down.

Access to mortgage credit expanded when subprime lending resumed its strong growth after the first round of independent subprime lenders had largely gone out of business in 1998 and 1999. In the wake of these failures, the banks—the biggest banks--moved in. Citigroup, with roughly \$800 billion in assets, paid \$31 billion for Associates First Capital, the second-biggest subprime lender. Still, subprime remained only a small corner of the market, accounting for just 9.5% of new mortgages in 2000.³⁴⁰

Risks associated with subprime lending and questionable lending practices remained a concern. Still, the Federal Reserve was not aggressive about employing the unique authority granted it by the HOEPA legislation. While in 2004 the Fed did fine Citigroup \$70 million for several lending violations, it only instituted minor revisions to the specific rules on mortgage lending practices for a narrow set of high-cost loans. It and other regulators, however, did revise the capital

³⁴⁰ Inside Mortgage Finance, The 2009 Mortgage Market Statistical Annual—Volume 1, Mortgage Originations by Product, p4.

standards for banks following the losses suffered by Keystone, Superior, and other banks involved in subprime securitization.

Fed: “Technology called the printing press”

By the beginning of 2001, the economy was starting to slow, even though unemployment remained at a 30-year low of 4%. For all of 2001, Gross Domestic Product, or GDP – the most commonly used measure of the economy – would inch up only slightly more than 1%. To stimulate borrowing and spending, the Federal Reserve’s Open Market Committee lowered short-term interest rates aggressively. On January 3, 2001, in a rare conference call in between scheduled meetings, it cut the benchmark Fed Funds Rate—the rate at which banks lend to each other overnight—by a half percentage point,³⁴¹ rather than the more typical adjustment of a quarter percentage point. Later that month, the committee cut the rate another half percentage point, and it would continue to cut throughout the year – 11 times, to 1.75%, the lowest level in 40 years.

In response to the slowing economy and the 9/11 attacks, the Federal Reserve flooded the financial system with cash. In the end, the recession of 2001 turned out to be relatively mild, lasting only eight months, from March to November, and GDP dropped by only 0.3%. Some policy-makers came to the conclusion that perhaps, with effective monetary policy, the economy had reached “the end of the business cycle”[cite] which some economists had been predicting since before the tech crash. “[R]ecessions have become less frequent and less severe,” Ben Bernanke, then a Fed Governor, said in an early 2004 speech. “Whether the dominant cause of

³⁴¹ May need to be careful here - there is the argument that they should have cut earlier but the election season created political constraints.

the Great Moderation is structural change, improved monetary policy, or simply good luck is an important question about which no consensus has yet formed.”³⁴²

With the recession officially over and mortgage rates at their lowest levels in XX years, the housing industry kicked into gear—again. In 2002, California would lose 41,700 jobs overall but gain 17,400 in construction. Florida would add 54,000 construction jobs in 2002 and 2003; nationwide, the figure was 189,000.³⁴³ In 2003, more than 1.8 million single-family dwellings were started, a level unseen since the late 1970s. From 2002 to 2005, the total contribution of residential construction to the overall economy was three times larger than its average contribution since 1990.

But other sectors of the economy remained sluggish, and overall employment gains were frustratingly small. Private sector employment continued to fall through the summer of 2003 and did not return to pre-recession levels until 2005. Shortly after the recession ended, experts began talking about a “jobless recovery”—an increase in production without a corresponding increase in employment. For those who did have jobs, wage growth remained stagnant. [insert data]

Faced with these challenges, the Fed shifted its perspective. While normally focused on keeping inflation down, it now considered the possibility that consumer prices could *fall*, a phenomenon that had worsened the impacts of the Great Depression seven decades earlier. But the Fed believed that deflation would be avoided. In a widely quoted 2002 speech, Bernanke said the chances of deflation happening again in the U.S. were “extremely small” for two reasons. First, the economy’s natural resilience: “Despite the adverse shocks of the past year, our banking

³⁴² Ben Bernanke, *The Great Moderation*, Remarks at the meetings of the Eastern Economic Association, February 20, 2004. See also, Blanchard, Olivier, and John Simon (2001). “The Long and Large Decline in U.S. Output Volatility,” *Brookings Papers on Economic Activity*, 1, pp. 135-64.

³⁴³ Author’s calculation, Bureau of Labor Statistics, Current Employment Survey, accessed 10/15/10, <http://data.bls.gov/cgi-bin/surveymost?sm>

system remains healthy and well-regulated, and firm and household balance sheets are for the most part in good shape.” Second, the Fed would not allow it. “I am confident that the Fed would take whatever means necessary to prevent significant deflation in the United States... the U.S. government has a technology, called a printing press (or, today, its electronic equivalent), that allows it to produce as many U.S. dollars as it wishes at essentially no cost.”³⁴⁴

The Fed’s monetary policy kept short-term interest rates low across financial markets. During 2003, the strongest U.S. companies could borrow for 90 days in the commercial paper market at a slim average rate of 1.1%, compared to an average rate of 6.3% just three years earlier; rates on 3-month US Treasury bills dropped below 1% in late 2003, down from 6%.

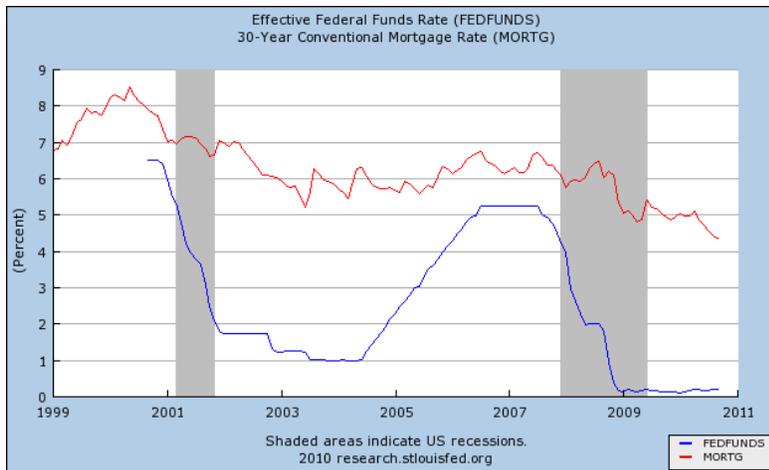
Low rates brought down the cost of home ownership – interest rates for the typical 30-year fixed-rate mortgage traditionally moved with the overnight Fed Funds rate, and over the 2000 to 2003 period, this relationship held. By 2003, creditworthy homebuyers could secure fixed mortgages for 5.2%, a full 3 percentage points lower than three years earlier.³⁴⁵ For homeowners, the savings were immediate and large. For the median home price of \$180,000,³⁴⁶ and assuming a 20% down payment, the monthly mortgage payment would be \$286 cheaper than it had been three years earlier. Or to turn the perspective around—as many people did: for the same monthly

³⁴⁴ Ben Bernanke, “Deflation: Making Sure ‘It’ Doesn’t Happen Here,” speech before the National Economists Club, Washington, DC (Nov. 21, 2002).

³⁴⁵ Freddie Mac, Primary Mortgage Market Survey, Conventional Conforming 30-Year Fixed-Rate, Monthly Average Commitment Rate and Points on 30-Year Fixed-Rate Mortgages since 1971, available at <http://www.freddiemac.com/pmms/pmms30.htm>

³⁴⁶ Existing Home Sales Index, National Association of Realtors, Index Values obtained by FCIC on 8/24/10 From NAR Research

mortgage payment of \$1,077, a homeowner could move up from the home costing \$180,000 to one costing more than \$245,000.³⁴⁷



This is the caption to accompany the chart.

In this low interest rate environment, an adjustable rate mortgage would allow even lower interest payments at first or instead, make a larger house affordable—unless interest rates rose. In 2001, just 5% of prime borrowers chose ARMs; in 2003, nearly 20% did. Among subprime borrowers, who were heavy users of ARMs to begin with, the fraction rose from around 60% to 75%.

As more people jumped into the housing market, prices naturally rose, and in hot markets they really took off. In Florida, average home prices gained 4.1% annually from 1995 to 2000 and then 11.1% annually from 2000 to 2003. In California, the numbers were even higher, 6.1% and 13.6%. In California, a house bought for \$100,000 in 1995 was worth \$227,214 nine years later.³⁴⁸ However, such soaring prices were not necessarily the norm. In Washington State, prices continued to appreciate, but more slowly: 5.9% annually from 1995 to 2000, 5.5%

³⁴⁷ However, the example assumes that the homeowner is able to come up with a larger downpayment to cover 20% of the higher-priced home. The difference in the example would be about \$13,000.

³⁴⁸ Source: CoreLogic. [Need to verify these numbers.]

annually from 2000 to 2003. In Ohio, the numbers were 4.3% (already below the national average) and 3.6%.³⁴⁹ On a national level, home prices rose 9.8% from 2000 to 2003, still a high number historically, but well under the levels in the fastest-growing markets.

The homeownership rate increased steadily, peaking at a record 69.2% in 2004, before it began its decline.³⁵⁰ With so many families benefitting from higher home prices, household wealth rose to nearly six times income, up from five times income a few years earlier. The top 10% of households by net worth, of whom 96% own their homes, saw the value of their primary residences rise from \$372,800 to \$450,000 between 2001 and 2004, adjusted for inflation, an increase of more than \$77,000. Overall, net worth for these households was \$[XXX] in 2004. Homeownership rates for the bottom 25% of households ticked up from 14% to 15% between 2001 and 2004; the median value of their primary residences rose from \$52,700 to \$65,000, an increase of more than \$12,000.³⁵¹ Overall, net worth for these households was \$[XXX] in 2004.

With the increase in household wealth, many homeowners tapped into their growing equity with refinancing and home equity loans, which led directly to an increase in household spending.

Reasonable estimates conclude that every \$1,000 increase in housing wealth boosts consumer

³⁴⁹ Corelogic State Home Price Index, provided to the FCIC by Corelogic. Authors' calculations, all annual growth rates are compound annual growth rates from January to January.

³⁵⁰ US Census Bureau, Housing Vacancies and Homeownership, CPS/HVS, Table 14 Homeownership rates for the US 1965 to Present, <http://www.census.gov/hhes/www/housing/hvs/historic/files/histtab14.xls>

³⁵¹ Brian K. Bucks, Arthur B. Kennickell, and Kevin B. Moore, "Recent Changes in US Family Finances: Evidence from the 2001 and 2004 Survey of Consumer Finances," *Federal Reserve Bulletin* (2006),

This increase in housing wealth helped to narrow the overall wealth distribution to some degree. The percentage gains in wealth were larger for the bottom end of the wealth distribution. The bottom 25% of the wealth distribution had median of \$1,700 in net worth in 2004 (up more than 40% from 2001), the 50% to 75% of the wealth distribution had median of \$170,700 in net worth (up 2% from 2001), and the top 10% of the wealth distribution had median of \$1,430,100 in net worth (up 3% from 2001). Interestingly, as the wealth distribution was narrowing, by some measures the income distribution stayed roughly the same. In both 2001 and 2004 the median income from the top 10% of the distribution was 16.6 times greater than the bottom 20% of the distribution.

spending by roughly \$50 a year.³⁵² Economists debated whether the effect on spending would be larger than historically the case because so many homeowners across the income and wealth distribution were enjoying these increases and because of the ease and low cost of tapping home equity.

With higher home prices and low mortgage rates, the prime mortgage market experienced a wave of refinancing. In 2003 alone, lenders refinanced over 15 million mortgages, more than one in four of all outstanding mortgages – a level without precedent.³⁵³ Many of these were “cash-out” refinances that gave the homeowners lower interest rates and cash, too. From 2001 through 2003, xx million cash-out refinancings netted these households an estimated \$400 billion, or an average of xx per household.³⁵⁴

Homeowners\$[XXX] per household, up from just over \$125 billion from 1998- to 2000.³⁵⁵

From 2000 to 2003, homeowners accessed another \$130 billion by taking out home equity loans. Some of these were typical second liens; others a newer invention, the home equity line of credit. These credit lines operated much like a credit card, allowing the borrower to borrow and repay as needed, often with the convenience of an actual credit card.

According to the 2004 Survey of Consumer Finances, 47.5% of homeowners who tapped their equity used that money for expenses, such as medical bills, taxes, and vacations, or debt

³⁵² Housing Wealth and Consumer Spending, January 2007, Congressional Budget Office Background Paper

³⁵³ Mortgages may have been refinanced more than once in that year.

³⁵⁵ Kennedy and Greenspan paper on cash-outs.

consolidation; another 37% used it for home improvements; the rest purchased other real estate, cars, or other investments.³⁵⁶

Looking back on the extraordinary house price gains, a Congressional Budget Office paper from 2007 stated, “As housing prices surged in the late 1990s and early 2000s, consumers boosted their spending faster than their income rose. That was reflected in a sharp drop in the personal saving rate.”³⁵⁷ Between 1998 and 2003, increased consumer spending accounted for between 77% and 168% of US GDP growth in any given year – as in some years spending growth offset declines in other sectors of the economy.³⁵⁸ Meanwhile, the personal saving rate dropped from 5.3% to 1.4%. Indeed, in every year but one over this period, consumer spending grew faster than the overall economy, and in a number of these years it grew faster than real disposable income, whose growth was kept down by sluggish wages.

The economic situation looked stable regardless. By 2003, the U.S. economy had weathered some of the blow from the dotcom collapse and the brief recession of 2001. With new financial products like the home equity line of credit, households were able to borrow against their homes to compensate for income lost due to unemployment or losses on their investments. Deflation did not materialize. Monetary policy, housing wealth, and new sources of credit had cushioned the economy from the largest loss of wealth in decades stemming from the dotcom bust.

At a Congressional hearing in November 2002, Greenspan acknowledged – at least implicitly – that the Fed had deliberately cut interest rates following the bursting of the dotcom-telecom

³⁵⁶ Housing Wealth and Consumer Spending, January 2007, Congressional Budget Office Background Paper

³⁵⁷ Housing Wealth and Consumer Spending, January 2007, Congressional Budget Office Background Paper

³⁵⁸ Bea.gov

bubble in order to boost the housing sector. Greenspan argued that the Fed's policy of cutting interest rates had stimulated the economy by encouraging home sales and housing starts based on "mortgage interest rates that are at lows not seen in decades." As Greenspan explained to Congress, "[M]ortgage markets have also been a powerful stabilizing force over the past two years of economic distress by facilitating the extraction of some of the equity that homeowners had built up." In February 2004, he reiterated his point, referring to "a large extraction of cash from home equity."³⁵⁹

Subprime: "Buyers will pay a high premium"

The shakeout in the subprime market in the late 1990s did not last long. The dollar value of subprime loans more than doubled from 2001 through 2003 [ck], to \$203 billion. In 2000, 52% of these loans were securitized, in 2003, 63%. [RECONCILE WITH CHART/TABLE IN 1.4] This boom was spurred by low interest rates, of course, but also by the more widespread use of computerized credit scores, the ever-growing statistical history on subprime borrowers, and by the breadth and scale of the firms now entering the market.

The subprime market was dominated by an ever narrower field of ever larger firms; the marginal players from the last decade had either merged or vanished. By 2003, the top 25 subprime lenders were responsible for 90% of all new loans in that sector, up from 40% only a few years earlier.

There were now primarily three kinds of companies in the subprime origination and securitization business-- commercial banks and thrifts, Wall Street investment banks, and independent mortgage lenders. Some of the biggest banks and thrifts—including Citigroup, JP

³⁵⁹ Cite.

Morgan, National City Bank, HSBC, and Washington Mutual—spent billions to boost their ability to generate subprime loans, either with new units, acquisitions or financing for other mortgage originators. In almost all cases, their subprime operations were carefully sequestered within *non-bank* subsidiaries, which left them in a regulatory no man’s land.

When it came to subprime lending, now it was Wall Street investment banks who were concerned about competitive pressures from the largest commercial banks. Former Lehman president Bart McDade told the FCIC, “[T]he banks [had] gained their own securitization skills and didn’t need the investment banks to structure and distribute.” So the investment banks moved into the mortgage origination business to guarantee a supply of loans that they could securitize and sell to the growing legions of investors interested in these securities. For example, Lehman Brothers, the fourth largest, purchased six different US lenders between 1998 and 2004, including BNC and Aurora.³⁶⁰ Bear Stearns, the fifth largest, ramped up operations of its subprime lending arm, eventually acquiring three subprime originators in the United States, including Encore. In 2006, Merrill Lynch would acquire First Franklin and Morgan Stanley would buy Saxon Capital.

At the same time, several independent mortgage companies embarked on rapid growth strategies. New Century and Ameriquest were especially aggressive in pursuing volume and market share. New Century’s “Focus 2000” plan concentrated on “originating loans with characteristics for which whole loan buyers will pay a high premium.”³⁶¹ Those “whole loan buyers” worked on Wall Street, where they bundled loans into mortgage-backed securities. They were eager customers. In 2003, New Century sold \$20.8 billion in whole loans, up from \$3.1 billion three

³⁶⁰ 6/20/07 Lehman board presentation: LBHI - FCIC -0001275

³⁶¹ 1999 New Century 10-K (March 30, 2000), 2.

years before, launching the firm from tenth to second place among subprime originators. Three-quarters of this volume was sold to two securitizing firms --Morgan Stanley and Credit Suisse-- but New Century reassured its investors there were “many more prospective buyers.”³⁶²

Ameriquest, in particular, pursued a volume-driven strategy. According to the company’s public statements, it paid its account executives less per mortgage than the competition did, but it encouraged them to make up the difference in the number of mortgages they underwrote. “Our people make more volume per employee than the rest of the industry,” Aseem Mital, the CEO of Ameriquest’s holding company, said in 2004. The company cut costs in other segments of the origination process as well. The back office for the firm’s retail division operated “in assembly-line fashion,” observed a reporter for *American Banker*, with the work divided into specialized tasks, including data entry, underwriting, customer service, account management, and funding. With these savings, Ameriquest undercut the prices competing originators charged to securitizing firms by as much as 0.55%, according to an estimate by an industry analyst.³⁶³ Between 2000 and 2003, Ameriquest increased its loan originations from an estimated \$4 billion to \$39 billion annually. That increase in volume vaulted the firm from eleventh to first place among subprime originators in just three years. “They are clearly the aggressor,” Countrywide CEO Angelo Mozilo told his investors in 2005.³⁶⁴ By 2005, Countrywide was third on the list.

³⁶² 2000 New Century 10-K (April 2, 2001), 15; 2003 New Century 10-K (March 15, 2004), 13. Rankings from Inside Mortgage Finance, *The 2009 Mortgage Market Statistical Annual* (2009), 221, 223.

³⁶³ Scott Valentin, need document citation

³⁶⁴ Erick Bergquist, “Under Scrutiny, Ameriquest Details Procedures,” *American Banker* 170, no. 125 (Jun. 30, 2005), 1. Volume and rankings from Inside Mortgage Finance, *The 2009 Mortgage Market Statistical Annual* (2009), 221, 223.

The players in the subprime business pursued different business strategies. Lehman Brothers and Countrywide pursued a “vertically integrated” model with stakes in every link of the mortgage chain: funding and originating the loans, packaging them into securities, and finally selling the securities to investors. Others were content with one niche: New Century, for example, primarily originated mortgages for immediate sale to securitizers. But all of them competed hard for the growing business of lending money to subprime borrowers and then selling those mortgages to investors in the form of securities.

For many of these lenders, mortgage brokers were a major source of loans. These independent professionals worked with the borrowers to complete the application process and to get them a loan, with access to a variety of lenders. From a lender’s perspective, using brokers allowed for more rapid expansion, since there was no need to build outlets or branches, possibly a greater geographic reach, and lower costs, since there was no need for fulltime salespeople. [add interview or hearing quote, add available data on use of brokers]

The creation of this subprime mortgage pipeline, over which more than one-half of all mortgages traveled in the years before the crisis, had profound long-term repercussions. When originators of any sort made loans with the intention of holding them through maturity—known in the business as *originate-to-hold*--they had a clear incentive to underwrite carefully and set pricing according to the possible risks. When they originated mortgages with the intention of selling them, for securitization or otherwise--known as *originate-to-distribute*---they did not bear the same risk of loss if the loan went delinquent or defaulted. As long as they made accurate representations and warranties, originate-to-distribute firms only bore some risk to their reputations if a lot of their loans went bad, but during the housing boom, loans weren’t going bad.

For decades, the originate-to-distribute model had helped to produce safe mortgages. Recall that Fannie and Freddie had been buying, guaranteeing, or securitizing prime, conforming, mortgages since the 1970s [ck]. These mortgages was protected by strict underwriting standards.

But, some observers of this market saw that this model now had problems. “If you look at how many people are playing, from the real estate agent all the way through to the guy who is issuing the security and the underwriter and the underwriting group and blah, blah, blah, then nobody in this entire chain is responsible to anybody,” Lewis Ranieri, one of the founders of securitization, told the FCIC. This was not the outcome he and his fellow investment bankers had expected when they developed securitization, he said. “None of us wrote and said, ‘Oh, by the way, you have to be responsible for your actions,’” Ranieri said. “It was pretty self-evident.”

For brokers, compensation often came as up-front fees so that the loan’s eventual performance was of little consequence. These fees were paid, often without the knowledge of the borrower. Indeed, many borrowers mistakenly believed the mortgage brokers were acting in their best interest.³⁶⁵ Within the trade, one common fee paid by the lender was called the “yield spread premium,” for good reason: on higher interest loans, the lending bank would pay the broker a higher premium. The message for the broker was clear: once all the parties had agreed on the size of the mortgage, the incentive was to sign the borrower to the mortgage with the highest possible interest rate. “If the broker decides he’s going to try and make more money on the loan, then he’s going to raise the rate,” Jay Jeffries, a former sales manager for Fremont Investment &

³⁶⁵ HUD study.

Loan, explained to the Commission at its Las Vegas field hearing. “We’ve got a higher rate loan, we’re paying the broker for that yield spread premium.”³⁶⁶

In theory, borrowers are the first line of defense against abusive lending in all its manifestations. Shopping around should have made it clear, for example, if a broker was trying to sell them higher priced loans or to place them into subprime loans, even if they qualified for a less expensive prime loan. But, many borrowers don’t understand the most basic aspects of their mortgage. A study by two Federal Reserve economists estimated that at least 38% of borrowers with adjustable-rate mortgages did not understand how much their interest rates could reset during a single adjustment, and more than half underestimated how high their interest rates could reach over the lives of their mortgages.³⁶⁷ The same lack of awareness extended to other terms of the loan. “Most borrowers didn’t even realize that they were getting a no doc loan,” Michael Calhoun, the President for Residential Lending at the Center for Responsible Lending. “They’d come in with their W-2 and end up with a no doc loan simply because the broker was getting paid more and the lender was paid more and there was extra yield leftover for Wall Street because the loan carried a higher interest rate.”³⁶⁸

And, borrowers with less access to credit are particularly ill-equipped to challenge the expert across the desk. As Annamaria Ludvardi, a Professor of Economics at Dartmouth College, explained to the Commission, “while many [consumers] believe they are pretty good at dealing

³⁶⁶ Transcript of the FCIC field hearing in Las Vegas (Sept. 8, 2010), 177, <http://fcic.gov/hearings/pdfs/2010-0908-transcript.pdf>.

³⁶⁷ Brian Bucks and Karen Pence, “Do Borrowers Know Their Mortgage Terms?” *Journal of Urban Economics* 64 (2008), 218-33 at 223

³⁶⁸ Audio of FCIC interview with Michael Calhoun and Julia Gordon (Sept. 16, 2010) 0:15:25, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4834-0412-9287&open=Y>.

with day-to-day financial matters, in actuality they engage in financial behaviors that generate expenses and fees: overdrawing checking accounts, making late credit card payments, or exceeding limits on credit card charges. Comparing terms of financial contracts and shopping around before making financial decisions are not at all common among the population.”³⁶⁹

To return to the securitization deal discussed in Section I -- the one in which New Century sold 4,499 mortgages to Citigroup, which then sold to its own trust, which then bundled them into the security with 19 tranches. Out of those 4,499 mortgages, 3,466 were originated by brokers on behalf of New Century. For each of those 3,466 mortgages, the broker received an average fee from the borrowers of \$3,756, or 1.81% of the loan amount. On top of the fees paid by the borrower, the brokers also received from New Century yield spread premiums averaging \$2,586 for 1,746 of these loans. In total, the brokers received more than \$17.5 million in fees for the 3,466 loans they originated.

With this much money at stake, critics argued that the mortgage brokers had every incentive to seek “the highest combination of fees and mortgage interest rates the market will bear.”³⁷⁰ Not mincing words, Herb Sandler, founder and CEO of the thrift Golden West Financial Corp., told the FCIC that brokers were the “whores of the world.”³⁷¹ [ck whether Golden West used brokers] Understandably, as the housing and mortgage market boomed, so did the related brokerage business. Wholesale Access, a firm tracking changes in the mortgage industry,

³⁶⁹ Annamaria Lusardi, “Americans’ Financial Capability,” testimony at the FCIC Forum to Explore the Causes of the Financial Crisis (Feb. 26, 2010), [3], <http://fcic.gov/hearings/pdfs/2010-0226-Lusardi.pdf>.

³⁷⁰ William C. Apgar and Allen J. Fishbein, “The Changing Industrial Organization of Housing Finance and the Changing role of Community-Based Organizations,” working paper, Jopint Center for Housing Studies, Harvard University, May 2004, p. 9.

³⁷¹ FCIC interview with Herb Sandler.

reported that from 2000 to 2003, the number of brokers rose from 33,000 to 44,000. [reconcile with Section A].³⁷² In 2000, brokers originated 55% of all loans; in 2003, their production peaked at 68%.³⁷³ JP Morgan CEO Jamie Dimon testified to the FCIC that his firm ended its broker-originated business in 2009 after discovering that such loans had two to three times more losses than the business it originated itself.³⁷⁴

As the housing market was expanding, another problem emerged, in subprime and prime mortgages alike - inflated appraisals. From the perspective of the lender, inflated appraisals meant greater losses if a borrower defaulted. But for the broker or loan officer who hired the appraiser, an inflated value could make the difference between closing and losing the deal. Imagine a home selling for \$200,000, which an appraiser says is actually worth only \$175,000. In this case, a bank won't lend a hopeful borrower, say, \$180,000 to buy the home. The deal dies. Sure enough, appraisers began feeling pressure. One 2003 survey found that 55% of the appraisers had felt pressure to inflate the home's value. Most frequently, this pressure came from the mortgage brokers, but appraisers reported pressure from real estate agents, lenders, and in many cases borrowers themselves. Refusal to raise the appraisal meant, most often, losing the client.³⁷⁵ In Miami, Dennis J. Black, an appraiser with 24 years of experience in real estate, was holding continuing education sessions for the National Association of Independent Fee Appraisers and heard the appraisers in attendance tell him that they had been

³⁷² Wholesale Access, Mortgage Brokers 2006 Survey, August 2007, pg 35, available on NetDocs as <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4817-2746-3173&open=Y>

³⁷³ Wholesale Access, Mortgage Brokers 2006 Survey, August 2007, pg 37, available on NetDocs as <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4817-2746-3173&open=Y>

³⁷⁴ Transcript of FCIC Hearing (Jan. 13, 2010), 13, <http://fcic.gov/hearings/pdfs/2010-0113-Transcript.pdf>.

³⁷⁵ http://www.appraisalinstitute.org/newsadvocacy/downloads/ltrs_tstmny/2007/Ntnl_Apprsl_Srvy.pdf

ordered to ignore missing kitchens, damaged walls, and inoperable mechanical systems. Black told the FCIC, “The story I have heard most often is the client saying he could not use the appraisal because the value was [not] what they needed.”³⁷⁶ The client would move on to somebody else.

Changes in regulations reinforced the trend toward more lax appraisal standards, as explained by Karen Mann [title ck] in testimony to the FCIC. In 1994, the Federal Reserve, OCC, OTS, and FDIC raised the minimum value at which they required an appraisal from a licensed professional from \$100,000 to \$250,000, increasing the number of home mortgages made by lenders they regulated that qualified for the exemption. In addition, Mann cited the lack of oversight of appraisers noting that, “We had a vast increase of licensed appraisers in [California] in spite of the lack of qualified/experienced trainers”³⁷⁷ [insert Crabtree]

In 2005, the four bank regulators issued new guidance intended to strengthen the appraisal process. One of the recommendations was that an originator’s loan production staff should not select appraisers. That led Washington Mutual to use an “appraisal management company,” First American Corporation, to choose its appraisers for the thrift. Despite this change, the New York State Attorney General brought suit in 2007 against First American, relying on internal company documents, alleging that the corporation allowed Washington Mutual’s loan production staff “to hand-pick appraisers who bring in appraisal values high enough to permit WaMu’s

³⁷⁶ Dennis J. Black, prepared testimony to the FCIC, Miami hearing (Sept. 21, 2010), 8.

³⁷⁷ Written testimony of Karen J. Mann to the FCIC field hearing in Sacramento (Sept. 23, 2010), 2, <http://fcic.gov/hearings/pdfs/2010-0923-Mann.pdf>

loans to close, and improperly [permitted] WaMu to pressure ... appraisers to change appraisal values that are too low to permit loans to close.”³⁷⁸

An Ameriquest loan officer, in subsequent litigation, made a declaration about inflated appraisals: “Ameriquest taught and encouraged me and other Account Executives to inflate the stated value of the customer’s property for the purpose of qualifying them for a refinance loan. I recall an Ameriquest area manager indicating that appraisal values should regularly be pushed by at least 10-15%. This area manager oversaw at least several Ameriquest branches in Minnesota...Ameriquest made it clear that they would not continue to give business to appraisers who did not come in with the ‘right’ appraisal values.”³⁷⁹

Citigroup: “Invited scrutiny”

As subprime originations continued to grow, Citigroup decided to expand its presence in the market. Barely a year after the Gramm-Leach-Bliley Act validated its 1998 merger with Travelers, Citigroup made its next big move. In September 2000, it paid \$31 billion for Associates First, then the second largest subprime lender in the country after Household Financial Corp. Because Associates First owned three small banks (in Utah, Delaware, and South Dakota),³⁸⁰ the merger would usually have required approval from the Federal Reserve and the other bank regulators. But because of the specialized nature of these banks, a provision tucked away in Gramm-Leach-Bliley kept the Fed out of the mix. The Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, and the New York State banking

³⁷⁸ *People of the State of New York v. First American Corporation and First American eAppraiseIT*, Complaint, Supreme Court of the State of New York, November 1, 2007, paragraph 8, p. 3; paragraph 20, p. 7; and paragraph 22, p. 8..

³⁷⁹ *Ricci et al. v. Ameriquest Mortgage Co.*, United States District Court for the District of Minnesota, Court File No. 05-1214 JRT/FLN, Declaration of Mark Bomchill, January 2007, paragraph 14, p. 4

³⁸⁰ Associates First SEC Filing 10K1999: <http://www.secinfo.com/dsvrp.52Jk.9.htm>

regulators reviewed the deal. Consumer groups mobilized to stop it, citing a long record of alleged lending abuses by Associates First, including high prepayment penalties, excessive points, and other minimally disclosed fees in loan documents—all targeted at unsophisticated borrowers who typically lacked the ability to evaluate loan documents.³⁸¹ “It’s simply unacceptable to have the largest bank in America take over the icon of predatory lending,” said Martin Eakes, the founder of a nonprofit community lender in North Carolina.^{382,383}

Advocates for the merger argued that a large bank under the eye of a rigorous bank regulator could reform the company. And Citigroup executives promised to act. Regulators okayed the merger in November 2000, and Citigroup did act by the next summer, eventually suspending mortgage purchases from close to two-thirds of the brokers and half of the banks that had sold their loans to Associates First prior to the merger.³⁸⁴ “We were aware that brokers were at the heart of that public discussion and were at the heart of a lot of the [controversial] cases,” said Pam Flaherty, a Citigroup senior vice president with responsibility for community relations and outreach.

The merger exposed Citigroup to enhanced regulatory scrutiny. In 2001, the Federal Trade Commission, which regulates independent mortgage companies’ compliance with consumer protection laws, launched an investigation into Associates First’s pre-merger business and found

³⁸¹ Julia P. Forrester, *Still Mortgaging the American Dream: Predatory Lending, Preemption, and Federally Supported Lenders*, 74 Univ. Cincinnati L. Rev 1303, 1304-06 (2006).

³⁸² Citigroup Buying Trouble, *supra*, at 31. See also *infra* Part V.A (discussing the involvement of bank affiliates in predatory lending). teachlaw.law.uc.edu/current/experiences/publications/.../082906forrester.pdf

³⁸³ Richard A. Cippel, Jr. & Patrick McGeehan, Along With a Lender, Is Citigroup Buying Trouble, Oct. 22, 2000, <http://www.nytimes.com/2000/10/22/business/along-with-a-lender-is-citigroup-buying-trouble.html>.

³⁸⁴ Erick Bergquist, “Citi Takes Ax to Associates’ Network,” *American Banker* (Aug. 31, 2001).

that the company had pressured borrowers to refinance into expensive mortgages and to buy expensive mortgage insurance.³⁸⁵ In 2002, Citigroup settled a record \$215 million civil settlement with the FTC over “systematic and widespread deceptive and abusive lending practices” practiced by Associates.

In 2001, the New York Fed used the occasion of Citigroup’s next proposed acquisition-- European American Bank on Long Island, New York--to launch its own investigation of CitiFinancial[ck], which now contained the unit formerly known as Associates First. “The way [Citigroup] approached that unit invited scrutiny,” former Fed Governor Mark Olson told the FCIC. [Check against audio] “They bought a passel of problems for themselves and it was at least a two-year [issue].” The Fed’s charge centered in part on CitiFinancial’s practice of converting unsecured personal loans (usually for borrowers in financial trouble) into home equity products backed by the home without properly assessing the borrower’s ability to repay, all in an effort to get better security for Citigroup. The Fed also accused this Citigroup unit of selling credit insurance to borrowers without checking if they would qualify for a mortgage without it. For these violations and for impeding the Fed’s investigation, the Fed issued a Cease and Desist Order.³⁸⁶ In 2004, the Fed assessed \$70 million in penalties against Citigroup.³⁸⁷ As the time, the

³⁸⁵ Federal Trade Commission release, “Citigroup Settles FTC Charges Against Associates Record-Setting \$215 million for Subprime Lending Victims,” 9/12/2002, <http://www.ftc.gov/opa/2002/09/associates.shtm>

³⁸⁶ Federal Reserve’s Order to Cease and Desist.
<http://www.federalreserve.gov/boarddocs/press/enforcement/2004/20040527/attachment.pdf>

³⁸⁷<http://www.federalreserve.gov/boarddocs/press/enforcement/2004/20040527/attachment.pdf>

company said it expected to pay another \$30 million in restitution to borrowers in addition to the penalty, but in the end, the company skirted a confession of wrong-doing.³⁸⁸

Fed's HOEPA rules: "Unfair, deceptive, or designed to evade"

Just as Citigroup was buying Associates First in 2000, the Federal Reserve conducted its next round of hearings related to HOEPA, and subsequently the staff offered two reform proposals. The first would have barred lenders from a pattern and practice of making any mortgage -- not just the limited set of high-cost loans defined under HOEPA -- solely on the value of the collateral and without regard to the borrower's ability to make the payments. For the high-cost loans under HOEPA, the lender would have to verify and document the borrower's income and existing debt; for the rest, the documentation standard was weaker as the lender could rely on other information such as knowledge of the customer or the borrower's payment history. The staff memo explained that this change would "affect lenders who make no-documentation loans." The second proposal addressed a wide set of practices, like using deceptive advertisements, misrepresenting loan terms and having consumers sign blank documents -- acts that on their face involve "fraud, deception or misrepresentations." Despite evidence of predatory tactics from their own hearings and from the recently released Treasury-HUD report, Fed officials remained divided on how aggressively to modify borrower protections. They described the same tradeoff that the HUD-Treasury report had noted. "We want to encourage the growth in the subprime lending market," Fed Governor Edward Gramlich told the Financial Services Roundtable in early 2004. "But we also don't want to encourage the abuses; indeed, we want to do what we can to stop these abuses." Fed General Counsel Scott Alvarez told the FCIC, "There

³⁸⁸ Timothy L. O'Brien, "Fed Assesses Citigroup Unit \$70 Million In Loan Abuse," *New York Times* (May 28, 2004), <http://www.nytimes.com/2004/05/28/business/fed-assesses-citigroup-unit-70-million-in-loan-abuse.html>.

was this concern that if you put out a broad rule, you would stop things that were *not* unfair and deceptive because you were trying to get at the bad practices and you just couldn't think of all of the details you would need. And if you did think of all of the details, you'd end up writing a rule that people could get around very easily."³⁸⁹ Greenspan said, "if there is egregious fraud, if there an egregious practice, one doesn't need supervision and regulation, what one needs is law enforcement."³⁹⁰ But, the Federal Reserve would not use the legal system to rein in predatory lenders. From 2000 to the end of Greenspan's tenure in 2006, the Fed only made three mortgage-related fair lending referrals to the Justice Department: First American Bank, in Carpentersville, Illinois, and Desert Community Bank, Victorville, California, and the New York branch of Societe Generale.

Greenspan later argued that prohibiting certain products categorically might have harmful effects. "These products, when made to borrowers meeting appropriate underwriting standards, should not necessarily be regarded as improper," he said, "and on the contrary facilitated the national policy of making homeownership more broadly available."³⁹¹

The staff proposals in 2000 did not carry the day. So, after some wrangling, in December of 2001, the Fed did modify HOEPA, but only on the margins. Explaining its actions, the Board highlighted compromise: "[T]he final rule is intended to curb unfair or abusive lending practices without unduly interfering with the flow of credit, creating unnecessary creditor burden, or narrowing consumers' options in legitimate transactions." All in all, however, the status quo

³⁸⁹ FCIC interview with Scott Alvarez, at 19-20.

³⁹⁰ David Faber. "And the Roof Caved In." at page 53.

³⁹¹ Alan Greenspan, written testimony to FCIC Hearing (Apr. 7, 2010), 13, <http://fcic.gov/hearings/pdfs/2010-0407-Greenspan.pdf>.

would be affected in minor ways only. Fed economists estimated the revised regulations would increase the percentage of subprime loans covered by HOEPA from 9% of all subprime under the current regulations to as much as 38% under the newly adopted regulations.³⁹² But quick-footed lenders eased that impact by changing the terms of mortgages to avoid the revised interest rate and fee triggers under the Fed's rules.³⁹³ In the end, the new regulations would cover only about 1% of subprime loans. Nevertheless, in an FCIC interview, Greenspan contended, "We developed a set of rules that have held up to this day."³⁹⁴

This was a missed opportunity, in the view of FDIC Chairman Sheila Bair, who described for the FCIC the "one bullet" she would have liked to have had that might have prevented the financial crisis: "I absolutely would have been over at the Fed writing rules, prescribing mortgage lending standards across the board for everybody, bank and nonbank, that you cannot make a mortgage unless you have documented income that the borrower can repay the loan."

Writing rules is only part of the supervisor's authority, however. Enforcement and supervision are the others. While discussing the possible HOEPA rule changes in 2000, the staff of the Fed's Consumer Division also proposed a pilot program to investigate predatory lending practices at selected nonbank subsidiaries of the bank holding companies,³⁹⁵ like CitiFinancial and HSBC Finance, which were becoming an increasing presence in the market, along with independent

³⁹² "Truth in Lending," Board of Governors of the Federal Reserve, 66 Federal Register 245 (20 Dec 2001), pp. 65608.

³⁹³ Gramlich, 2007.

³⁹⁴ MFR of FCIC interview with Alan Greenspan (Mar. 31, 2010), 2, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4814-3714-9189&open=Y>.

³⁹⁵ Memo from Dolores Smith and Glenn Loney to Governor Edward Gramlich, dated Aug. 31, 2000, regarding "Compliance Inspections of Nonbank Subsidiaries of Bank Holding Companies." (FRB-FCIC-114823-114833, at 114824)

mortgage companies such as Ameriquest and New Century. The independents and the nonbank subsidiaries were subject to enforcement actions by the Federal Trade Commission, the banks and thrifts were regulated by the Fed, FDIC, OCC, OTS, or their state regulators. But, the Fed had the authority to examine nonbank subsidiaries for “compliance with the [Bank Holding Company Act] or any other Federal law that the Board has specific jurisdiction to enforce,” but the consumer protection laws did not explicitly give the Fed authority in this area.³⁹⁶ But in any event, the Fed had taken a generally hands-off, “Fed-lite” approach to routinely examining these companies.

Despite the support of Fed Governor Gramlich, the initiative stalled. Sandra Braunstein, then a staff member in the Fed’s Consumer Division, now its Director, recalled for the FCIC that Greenspan and other officials were concerned that routinely examining the nonbank subsidiaries could create an unlevel playing field, because the nonbank subsidiaries had to compete with the independents over which the Fed had no supervisory authority.³⁹⁷ In his own testimony before the FCIC, Greenspan went further, arguing that with or without a mandate, the Fed lacked sufficient resources to examine the nonbank subsidiaries. “There is a limited amount of resources that the Fed has in terms of examination capability,” Greenspan said. “We would always be extraordinarily cautious about our budgets.”³⁹⁸ Worse, said the former Chairman, inadequate regulation sends a misleading message to the firms and the market.³⁹⁹ “If you examine an

³⁹⁶ Government Accountability Office, “Consumer Protection: Federal and State Agencies Face Challenges in Combating Predatory Lending “ (2004), 52-53.

³⁹⁷ Braunstein recalls a meeting with Governor Gramlich in which he told staff that he had discussed the idea with Chairman Greenspan but that Chairman Greenspan was not interested.

³⁹⁸ FCIC MFR for Interview of Alan Greenspan, Mar. 31, 2010, at 4-5.

³⁹⁹ Andrews, “Fed and Regulators Shrugged” (2007); Appelbaum, “Fed Held Back” (2009); FCIC PIR on Fed Subprime Lending Regulation, at 2-11.

organization incompletely, they tend to put a sign in their window that they were examined by the Fed. . . . Partial supervision is dangerous because it creates a good housekeeping stamp.”

[include Sheila Bair’s response that she “didn’t buy” the argument]

Of course, arguing for additional resources was entirely within the prerogatives of the Federal Reserve Chairman. The Fed drew its income from interest on the Treasury bonds it owned, so it did not have to ask Congress for appropriations, but it was always mindful that it could be subject to a government audit.

In an FCIC interview, Greenspan recalled that he sat in “countless” meetings on consumer protection, but that he “couldn’t pretend to have the kind of expertise on this subject that the staff had.”⁴⁰⁰ Later, he testified at a Commission hearing that he and his Fed colleagues “always” looked to Gramlich to make decisions about consumer protection policy “because he had the most knowledge.” Gramlich however, “chose not to bring those issues to the board,” Greenspan said.⁴⁰¹

Gramlich, who chaired the Fed’s consumer subcommittee, favored tighter supervision of all subprime lenders – similar to what was proposed in the pilot program – including units of banks, thrifts, bank holding companies, and state-chartered mortgage companies. He acknowledged that because such oversight would extend Fed authority to firms – such as independent mortgage companies – not subject to direct supervision of lending practices, it would require congressional

⁴⁰⁰ MFR of FCIC interview with Alan Greenspan (Mar. 31, 2010), 3, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4814-3714-9189&open=Y>.

⁴⁰¹ FCIC hearing April 7, 2010, transcript at page 28

legislation “and might antagonize the states.”⁴⁰² But without such oversight, it was akin to “a city with a murder law with no cops on the beat.”⁴⁰³ In an interview in 2007, Gramlich told the *Wall Street Journal* that he privately urged Greenspan to direct the Fed to clamp down on predatory lending. Greenspan demurred.^[i] Lacking pivotal support on the Board, Gramlich backed away. Gramlich told the *Journal*, “He was opposed to it, so I did not really pursue it.”⁴⁰⁴ (Gramlich died in 2008 of leukemia, at age 68.)

Banking regulations in the U. S. were a patchwork quilt, with responsibility divvied up among half a dozen federal agencies and each of the 50 states, but there is no doubt that the one agency with the broadest regulatory mandate over the mortgage market was the Federal Reserve Board because it could set rules under HOEPA that applied to all lenders no matter who regulated them. [ck] Its failure to shut down predatory practices infuriated consumer advocates and some members of Congress.⁴⁰⁵ Critics charged that specific accounts of abuses in financial transactions were brushed off as anecdotal.⁴⁰⁶ Patricia McCoy, a law professor at the University of

⁴⁰² Edward M. Gramlich, “Booms and Busts: The Case of Subprime Mortgages,” *Federal Reserve Bank of Kansas City Economic Review* (2007), 109.

⁴⁰³ 2007 Article Federal Reserve Bank of Kansas City Review

[i] “Did Greenspan Add to Subprime Woes? Gramlich Says Ex-Colleague Blocked Crackdown On Predatory Lenders Despite Growing Concerns,” *Wall Street Journal*, by Greg Ip, June 9, 2007

⁴⁰⁴ “Did Greenspan Add to Subprime Woes?,” G. Ip, *Wall Street Journal*, Jun. 9, 2007, at B1. *See also* “Fed Shuffled as Subprime Crisis Spread,” E. Andrews, *N.Y. Times*, Dec. 18, 2007.

⁴⁰⁵ Appelbaum, “Fed Held Back” (2009); McCoy (2009), at 1344-47; Richard Cowden, “Mortgages: Proposal to Curb Subprime Lending Abuses Earns Some Praise; Dodd, Frank Unimpressed,” 89 *Banking Report (BNA)* 1057, 1058 (Dec. 24, 2007) (reporting on “harsh criticisms” of the Fed’s consumer protection record by Senate Banking Committee chairman Christopher Dodd and House Financial Services Committee chairman Barney Frank); Financial Crisis Inquiry Commission, “Preliminary Investigative Report on the Federal Reserve’s Regulation of Subprime Mortgage Lending” (April 2, 2010), at 1 [hereinafter FCIC PIR on Fed Subprime Lending Regulation] (quoting criticism of Fed and Mr. Greenspan by House Committee on Oversight and Government Reform chairman Henry Waxman).

⁴⁰⁶ Appelbaum, “Fed Held Back” (2009).

Connecticut who served on the Fed’s consumer advisory council between 2002 and 2004, recognized a familiar reaction to stories of individual consumers that do not document a macroeconomic effect. “That is classic Fed mindset,” said McCoy. “If you cannot prove that it is a broad-based problem that threatens systemic consequences, you will be dismissed.”⁴⁰⁷

Margot Saunders of the National Consumer Law Center, “I stood up at a Fed meeting in 2005 and said, ‘How many anecdotes makes it real? . . . How many tens of thousands of anecdotes will it take to convince you that this is a trend?’”⁴⁰⁸

As noted, the Fed did file a public enforcement action against Citigroup’s subprime mortgage lending subsidiary in 2004 and levied a \$70 million fine, but that order remained “the Fed’s only public enforcement action against a lending affiliate.”⁴⁰⁹ This reluctance trumped strong recommendations in favor of Fed supervision in the 2000 HUD-Treasury report, and in two reports by the Government Accountability Office, issued in 1999 and 2004. And regarding the mortgage-lending subsidiaries of bank holding companies, the Fed did not change its no-supervision policy until July 2007 when under new Chairman Ben Bernanke it finally began the pilot program to examine subprime lending subsidiaries of several such companies. The Fed did not issue another HOEPA regulation until July 2008, a year after the subprime market had shut down. These new, comprehensive rules banned unfair and deceptive acts and practices with respect to a much broader category of “higher-priced mortgage loans.” Among these were a prohibition against extending those loans without regard to the borrower’s ability to pay,

⁴⁰⁷ Appelbaum, “Fed Held Back” (2009).

⁴⁰⁸ Appelbaum, “Fed Held Back” (2009).

⁴⁰⁹ Binyamin Applebaum, “As Subprime Lending Crisis Unfolded, Watchdog Fed Didn’t Bother Barking,” *Washington Post* (Sept. 27, 2009).⁴⁰⁹ *Id.*

including a requirement to verify related income and assets.⁴¹⁰ They would not take effect until October 1, 2009,⁴¹¹ which was without a doubt “too little too late.”⁴¹²

Looking back, Fed General Counsel Alvarez said his institution was captive to the climate of the times. He explained to the FCIC, “[T]he mindset was that there should be no regulation; that the market should take care of policing, unless there already is an identified problem... We were in that reactive mode because that was the mindset of the nineties and early 2000s.”⁴¹³ The strong housing market had added reason for comfort. Alvarez noted the long history of low default rates in home mortgages and the motive to reach people traditionally outside the banking system with products that could help them become homeowners.⁴¹⁴

States: “long-standing position”

As the Fed balked at expanding the HOEPA regulations regarding banks’ predatory lending and at supervising nonbank subsidiaries of bank holding companies, many of the states proceeded on their own, enacting “mini-HOEPA” laws and undertaking vigorous enforcement actions. In 1999, North Carolina led the way, establishing a fee trigger of 5%; that is, any mortgage for which the total points and fees at origination totaled more than 5% of the face amount of the loan qualified as a “high-cost mortgage” subject to the provisions of the regulations. This fee trigger

⁴¹⁰ “Truth in Lending,” 73 Fed. Reg. 44522-23 (July 30, 2008). “Higher-priced mortgage loans” are defined in the 2008 regulations to include mortgage loans whose annual percentage rate exceeds the “average prime offer rates for a comparable transaction” (as published by the Fed) by at least 1.5% for first-lien loans or 3.5% for subordinate-lien loans.

⁴¹¹ *Id.* at 44523.

⁴¹² Sudeep Reddy, “Currents: Fed Faces Grilling on Consumer-Protection Lapses,” *Wall Street Journal*, Dec. 2, 2009, at A22. *See also* Senate Report No. 111-176, at 16 (2010) (stating that the Fed’s 2008 rules under HOEPA were issued “long after the marketplace had shut down the availability of subprime and exotic mortgage credit”).

⁴¹³ Transcript of FCIC Interview of Scott Alvarez and Kieran Fallon, Mar. 23, 2010, p. 15.

⁴¹⁴ *Id.* at 13.

was considerably lower than the 8% set by the Fed's 2001 HOEPA regulations. For a broader class of loans, provisions also prohibited prepayment penalties for mortgage loans under \$150,000 and repeated refinancing known as loan "flipping."

These rules did not apply to the federally-chartered thrifts. In 1996, the Office of Thrift Supervision had promulgated rules that reasserted the agency's "long-standing position" that its regulations "occupied the entire field of lending regulation for federal savings associations, leaving no room for state regulation." Exempting states from "a hodgepodge of conflicting and overlapping state lending requirements," the OTS said, would allow thrifts "to deliver low-cost credit to the public free from undue regulatory duplication and burden." Meanwhile, "the elaborate network of federal borrower-protection statutes" would protect the interests of consumers.⁴¹⁵

Nevertheless, a number of other states emulated North Carolina's approach. In 2002 Georgia attempted to make the mortgage purchasers—the securitizers on Wall Street—liable for predatory terms in the mortgages they bought, and in 2004 Massachusetts followed suit. This was an unprecedented approach. All in all, by 2007, 29 states and the District of Columbia passed some form of anti-predatory lending legislation.⁴¹⁶ State attorneys general launched thousands of enforcement actions, including 3,694 in 2006 alone. [check for actions in earlier years] In some cases, the states teamed up to produce large settlements: In 2002, a suit initiated by Illinois, Massachusetts, and Minnesota recovered [ck] more than \$50 million from First Alliance Mortgage Company, even though it had filed for bankruptcy. That same year,

⁴¹⁵ "Lending and Investment," Federal Register 61, no. 190 (Sept. 30, 1996), 50965.

⁴¹⁶ Starkman (2010) [CJR article]; "Standard & Poor's Addresses Massachusetts' Predatory Home Loan Practices Act" (Sept. 20, 2004).

Household Finance – later acquired by HSBC, a global U.K.-based banking group – was ordered to pay \$484 million in penalties and restitution to consumers. In 2006, a coalition of 49 states and the District of Columbia settled with Ameriquest for \$325 million and required the company to abide by specific restrictions on its lending practices.⁴¹⁷ As we will see, these efforts would come to an end with respect to national banks when the OCC in 2004 officially joined OTS in forbidding states from taking such actions. ““The federal regulators’ refusal to reform [predatory] practices and products served as an implicit endorsement of their legality,” Illinois Attorney General Lisa Madigan testified to the Commission.

CRA Pledges: “Reaffirming commitments”

While consumer groups were lobbying the Fed for greater protections against predatory lending practices, they also lobbied the banks to provide loans and investments to low- and moderate-income communities. The resulting promises were sometimes labeled “CRA commitments” or “Community Development” commitments. These commitments were voluntary and were not required under any law, including the Community Reinvestment Act of 1977, and were often outside the scope of the CRA. For example, while the CRA does not mention lending to minorities, these commitments often did. One of the most notable lending commitments came when Citigroup, recently merged with Travelers in 1998, announced a \$115 billion lending and investment commitment, including issuing mortgages.

During the early years of the CRA, the Federal Reserve Board had given some weight to commitments made to regulators when considering whether to approve merger applications. This changed in February, 1989, when it denied Continental Bank’s application to merge with

⁴¹⁷ Wilmarth (2004), at 316; Nalder (2008); Eggert (2009); Madigan, FCIC testimony (Jan. 14, 2010).

Continental Illinois [ck], explicitly stating that its commitment to the regulators to improve its community service could not make up for its poor record of lending. In April 1989, the FDIC, OCC, and Federal Home Loan Bank Board (precursor of the OTS) joined the Fed in announcing that commitments to regulators for future lending would only be considered when addressing “specific problems in an otherwise satisfactory record.”⁴¹⁸ [check if still current]

Separate from these commitments to regulators, banks also frequently made pledges to community groups. According to both internal Fed documents and public statements, the Fed never considered these pledges when it evaluated mergers and acquisitions, nor did it enforce them; the Fed recognized these pledges merely as agreements among private parties rather than with the Fed itself.⁴¹⁹ As former Fed official Glenn Loney told Commission staff, “[A]t the very beginning, [we] said we’re not going to be in a posture where the Fed’s going to be sort of coercing banks into making deals with...community groups so that they can get their...applications through. And that was...the conclusion they came to from the very beginning.”⁴²⁰

The rules implementing the 1995 changes to the CRA made it clear that the Federal Reserve would not consider promises of future actions to third parties nor enforce prior agreements with those parties. Under a section labeled, “Compliance with private commitments,” the rules state “an institution’s record of fulfilling these types of agreements [with third parties] is not an

⁴¹⁸ Federal Register 54 FR 13742 April 5, 1989 “Statement of the Federal Financial Supervisory Agencies regarding the Community Reinvestment Act”

⁴¹⁹ MFR, Interview with Glenn Loney, former Deputy Director, Federal Reserve Board, April 1, 2010.

⁴²⁰ Transcript, Interview with Glenn Loney, former Deputy Director, Federal Reserve Board, April 1, 2010.

appropriate CRA performance criterion.”⁴²¹ Still, even without official status, the announcement of a large merger and the requisite public scrutiny offered the banks the chance to highlight a bank’s past acts and to offer assurances for the future. In 1998, for example, when NationsBank announced its intention to merge with BankAmerica, it announced a 10-year, \$350 billion community investment initiative including pledges of \$xxx for lending, \$xxx for small business and \$xxx for community development.

This merger was perhaps the most controversial of its time, because of the size and scale of the two banks. The Fed held four public hearings and received over 1,800 comments. Supporters of the merger touted the community investment commitment while opponents decried its lack of specificity. The Fed’s internal staff memorandum recommending approval reiterated the Board’s long standing policy:⁴²² “The Board considers CRA agreements to be agreements between private parties and has not facilitated, monitored, judged, required, or enforced agreements or specific portions of agreements...NationsBank remains obligated to meet the credit needs of its entire community, including [low- and moderate-income] areas, with or without private agreements...”⁴²³ The merger was approved. In the final order, the Federal Reserve mentioned the commitment and then went on to state that: “an applicant must demonstrate a satisfactory record of performance under the CRA without reliance on plans or commitments for future action. The Board believes that the CRA plan--whether made as a plan or as an enforceable

⁴²¹ Fed, FDIC, OCC, OTS, Community Reinvestment Act Regulations and Home Mortgage Disclosure: Final Rules, Federal Register, May 4, 1995, Volume 60, Number 86.

⁴²² Federal Reserve System Order Approving Merger, p. 65.

⁴²³ Memorandum to Board of Governors from Division of Consumer and Community Affairs, August 10, 1998, FCIC-133121 and 133122

commitment--has no relevance in this case without the demonstrated record of performance of the companies involved.”

This dance was oft-repeated during the merger mania of the late 1990s and early 2000s. At times banks would sign agreements with specific community groups or unilaterally announce a lending and investment pledge. JP Morgan announced commitments of \$xxx and \$800 billion, respectively, in connection with its mergers with xx and Bank One. In addition to the commitment that Citigroup made when it merged with Travelers in 1998, it committed to \$120 billion when it acquired California Federal Bank in 2002. When merging with Fleet in 2004, Bank of America announced its largest commitment to that point: \$750 billion over 10 years.

The National Community Reinvestment Coalition, an advocacy group, eventually tallied over \$7 trillion in commitments from 2002 to 2007, about one-third of which were aimed at mortgage lending. Although banks would tout their fulfillment of these commitments in press releases, the NCRC and other community groups were unable to verify if this lending actually occurred, they told the FCIC.⁴²⁴ And, the language in the Fed’s orders never [ck] wavered. It insisted that these commitments would not affect its decisions about the mergers. So what then was the purpose of these commitments? Were they a meaningful step or only a gesture? For the banks, the idea was to reassure community groups that the increased scale of the merged institution would not undermine community housing and small-business needs. Lloyd Brown of Citigroup explained to the FCIC that, in the end, most of the transactions fulfilling these agreements “would be considered in the normal course of business.” Speaking of a recent Bank of America commitment, Andrew Plepler, head of Global Corporate Social Responsibility at the bank, told

⁴²⁴ MFR of FCIC interview with Josh Silver (Jun. 16, 2010), 15, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4813-9322-6246&open=Y>.

the FCIC: “At the time of mergers, community groups, government officials and media have many concerns that the two institutions will not carry through on all community lending. Institutions address these fears by “reaffirming’ commitments to community lending. The [commitment] figure was arrived at by working closely with business partners who project current levels of business activity which qualifies toward community lending goals into the future to assure the community that past lending and investing practices will continue.”⁴²⁵ Both Citi and BofA told the FCIC that they did not track their adherence to their commitments on a consistent basis.⁴²⁶ [add information from ongoing investigation]

In essence, banks promised to keep doing what they were doing and community groups had the assurance that they would.

Bank capital standards: “Arbitrage”

As we have seen, the first generation of subprime lenders had put themselves at serious risk. As discussed, Keystone Bank in March 1999 and Superior Bank in November 2001 shut down when their subprime securitized assets held on their balance sheets at inflated values proved to be worth much less.

In an effort to prevent this from happening again, the Federal Reserve and other regulators reworked the capital requirements governing securitization activities by banks and thrifts. In October 2001, they introduced the “Recourse Rule” governing how much capital a bank held against different securitized assets. If a bank retained an interest in a residual tranche of a

⁴²⁵ MFR of Interview of Andrew Plepler, Global Corporate Social Responsibility, Bank of America, July 14, 2010. NEED TO CHECK INTERVIEW RECORDING FOR PRECISE WORDING.

⁴²⁶ Responses to FCIC interrogatories from Citigroup (Mar. 18, 2010, from Paul Weiss) and Bank of America (no cite). See FCIC TopIR on CRA, pp. 5, 11, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4811-6134-9639&open=Y>.

mortgage security, as Keystone, Superior and others had, it would have to keep a dollar in capital for every dollar of residual interest. That made sense, since the bank, in this instance, would be the first to take losses suffered by the loans in the pool. Under the old rules, banks held only 8% in capital to protect against losses on residual interests and any other exposures that they retained in securitizations; this had allowed Keystone and others to seriously understate their risks and not hold sufficient capital. The Recourse Rule therefore increased the capital charge on residual interests by 12.5 times. In doing so, it increased banks' incentive to sell the residual interests in securitizations, meaning that they were no longer the first to lose when the loans went bad.

A second element of the Recourse Rule imposed a ratings-based framework for all asset-backed securities, including mortgage-backed securities and their various tranches. The new regime anchored the capital requirement directly to the rating agencies' ratings of the tranches. Those rated AAA or AA required greatly reduced capital charges in comparison to lower-rated investments. For example, \$100 invested in AAA or AA mortgage-backed securities required holding only \$1.60 in capital (the same as for GSE-backed securities), but anything with a BB rating required \$16 in capital, a tenfold increase.

As it turned out, banks could lessen the capital they were required to hold for a pool of mortgages simply by securitizing them, as opposed to holding them on their books as whole loans. For example, if a bank kept \$100 in mortgages on its books, it might have to set aside about \$5, including \$4 in capital against unexpected losses and \$1 in reserves against expected losses. If the bank put the \$100 into a mortgage-backed security, sold that security in tranches,

and bought all of the tranches, the capital requirement would be about \$4.10 in total.⁴²⁷

“Regulatory capital arbitrage does play a role in bank decision making,” David Jones, a Fed economist who wrote an article about the subject in 2000, told the FCIC in an interview, but he added, “It is not the only thing that matters.”⁴²⁸

And a final comparison: under bank regulatory capital standards, a \$100 AAA *corporate bond* required \$8 in capital, five times as much as the AAA mortgage-backed security. Unlike the AAA corporate bond, the AAA tranche of the mortgage-backed security was ultimately backed by real estate. And, in the United States, it was believed, house prices would not fall.

The new requirements also put the rating agencies in the driver’s seat. How much capital a bank held depended in part on the ratings of the securities it held. Tying capital standards to rating agency views would come in for criticism after the crisis began. [Quote from hearing criticizing this.] The Fed’s Jones said it was better than the alternative – “to let the banks rate their own exposures.” That alternative “would be terrible [because] banks were coming to the Fed and arguing rating agencies were too conservative, noting performance of securitization exposures by rating was better than similarly rated corporate debt for example.”⁴²⁹

Meanwhile, banks and their regulators were not prepared for the possibility of significant losses on triple-A mortgage-backed securities, which were, after all, supposed to be among the safest

⁴²⁷ Assuming 75% AAA tranche (\$1.20), 10% AA tranche (\$0.20), 8% A tranche (\$0.30), 5% BBB tranche (\$0.40), and 2% equity tranche (\$2.00). See Goldman Sachs, *Effective Regulation: Part 1, Avoiding Another Meltdown*, March 2009, page 22.

⁴²⁸ FCIC interview with David Jones, October 19, 2010 [3:17]. See David Jones, *Emerging problems with the Basel Capital Accord: Regulatory capital arbitrage and related issues*, *Journal of Banking & Finance*, Volume 24, Issues 1-2, January 2000, Pages 35-58.

⁴²⁹ FCIC interview with David Jones, October 19, 2010 [3:17].

investments. Nor were they prepared for the ratings downgrades due to expected losses, which would then require banks to post more capital. And, were this to occur, at the moment that the banks wanted to sell their securities to raise capital, there would be no buyers. All of which came to pass within a few years.

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CHAPTER CONCLUSIONS HERE

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Part II, Chapter 2: The mortgage machine

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In 2004, Wall Street – commercial banks, thrifts, and investment banks – caught up with Fannie Mae and Freddie Mac in the securitization of residential mortgages. By 2005, they had taken the lead. While the two GSEs maintained their monopoly securitizing prime mortgages below their loan limits, the wave of refinancing by prime borrowers, spurred by a period of very low and steady interest rates, petered out.. Meanwhile, Wall Street focused on the higher-yield loans that the GSEs were unable to purchase and securitize – loans that were too large, called jumbo loans, and the non-prime loans that didn’t meet the GSEs’ underwriting standards. Those non-prime loans soon became the biggest part of the mortgage market. They came in two forms: the notorious “subprime” and also “Alt-A” -- a loan made to a borrower with strong credit but has some characteristics that make it riskier than a prime loan.⁴³⁰

⁴³⁰ For example, an Alt-A loan may have no or limited documentation of the borrower’s income, a high loan-to-value ratio (LTV), or may be for an investor-owned property.

By 2005 and 2006, Wall Street securitized a third more loans than Fannie and Freddie. In just two years, private-label mortgage-backed security issuance grew more than 30% to an annual \$1.15 trillion in volume in 2006; 71% were either subprime or Alt-A.

Many investors preferred or were restricted to buying securities with only the top credit ratings. The credit rating agencies made possible such purchases by giving most mortgage-backed securities the AAA stamp of approval. Meanwhile, yields on other highly-rated assets were at low levels. As a result, investors had a huge appetite for Wall Street's mortgage-backed securities made from higher-yield mortgages – which tended to be those made to subprime borrowers, those with non-traditional features, or those with limited or no documentation, “no-doc loans”, or otherwise weaker underwriting standards. “Securitization could be seen as a factory line,” Citigroup's ex-CEO Chuck Prince told the FCIC. “You needed raw material to put in the front end of that... As more and more and more of these subprime mortgages were created as raw material for the securitization process, not surprisingly in hindsight, more and more of it was of lower and lower quality. And at the end of that process, the raw material going into it was actually bad quality, it was toxic quality, and that is what ended up coming out the other end of the pipeline. Wall Street obviously participated in that flow of activity.”⁴³¹ Perhaps not surprisingly, Wall Street was rewarded handsomely as long as the boom lasted.

The mortgage machine could not have worked without short-term financing provided by the shadow banking system. Starting in the late 1990s, the shadow banking system increasingly took command of the securitization business. Unlike depository institutions with ample cash on hand,

⁴³¹ FCIC interview with Chuck Prince, March 17, 2010.

Wall Street relied more on money market funds and other investors to provide cash to conduct this business, with commercial paper and repo being the main short-term financing mechanisms.

With house prices already up xx% from 1995 to 2003, the flood of money helped to boost prices another 36% from the beginning of 2004 until the market peaked in July 2006—even as homeownership was moving down. From 2004 to mid-2006, the highest gains were concentrated in the “sand states”: in places like the Los Angeles suburbs 54%; Las Vegas 36%; Orlando, 72%.⁴³² Throughout this time, national regulators would constrain the efforts of state regulators to impose mortgage lending rules on nationally-regulated lenders.

Foreign investors: “An irresistible profit opportunity”

From June 2003 through June 2004, the Federal Reserve kept the Federal Funds rate stable at 1% in order to stimulate the economy following the 2001 recession. Over the next two years, as deflation fears waned, the Fed gradually raised interest rates to 6.25% in a series of 17 quarter-point increases.

For some, the Fed had simply acted too late and had kept rates too low for too long. John Taylor, Stanford economist and former Under Secretary of Treasury for International Affairs, told the FCIC that this was the primary cause of the crisis. His “Taylor Rule” describes how the Fed has historically set the federal funds rate. If the Fed had followed its historical pattern, Taylor said, the Fed would have set short-term interest rates much higher, discouraging excessive investment in mortgages and other sectors of the economy. “The boom in housing construction starts would have been much more mild, might not even call it a boom, and the bust

⁴³² CoreLogic CSBA and National Home Price Index, Single Family Combined (SFC) Index. The national market peaks in April 2006; urban area increases are measured over the same period. Los Angeles suburbs are an average of Santa Anna-Anaheim-Irvine and Riverside-San Bernardino-Ontario metro areas, FCIC calculations.

as well would have been mild, you might not even call it a bust,” Taylor said. “The whole thing [would have been] attenuated significantly if interest rates would have been higher.”⁴³³

Fed Chairmen Bernanke and Greenspan tell a different story. Bernanke points out that the Fed was never very far from following the Taylor Rule, but he says that it didn’t work this time – for reasons out of the Fed’s control. Both the current and former Fed chairman argue that the decision to purchase a home is based on long-term interest rates on mortgages, not on the short-term rates that the Fed controls, and that short-term and long-term rates had become de-linked: “Between 1971 and 2002, the Fed Funds rate and the mortgage rate moved in lock-step,” Greenspan said. With that experience, when the Fed started to raise rates in 2004, officials expected mortgages rates to also rise, slowing growth in the housing market. Instead, mortgages rates continued to fall for another full year.⁴³⁴ The construction industry continued to build new houses, then more new houses, peaking at an annualized rate of 2.27 million starts in January 2006, a 30-year high as home prices continued to climb.⁴³⁵

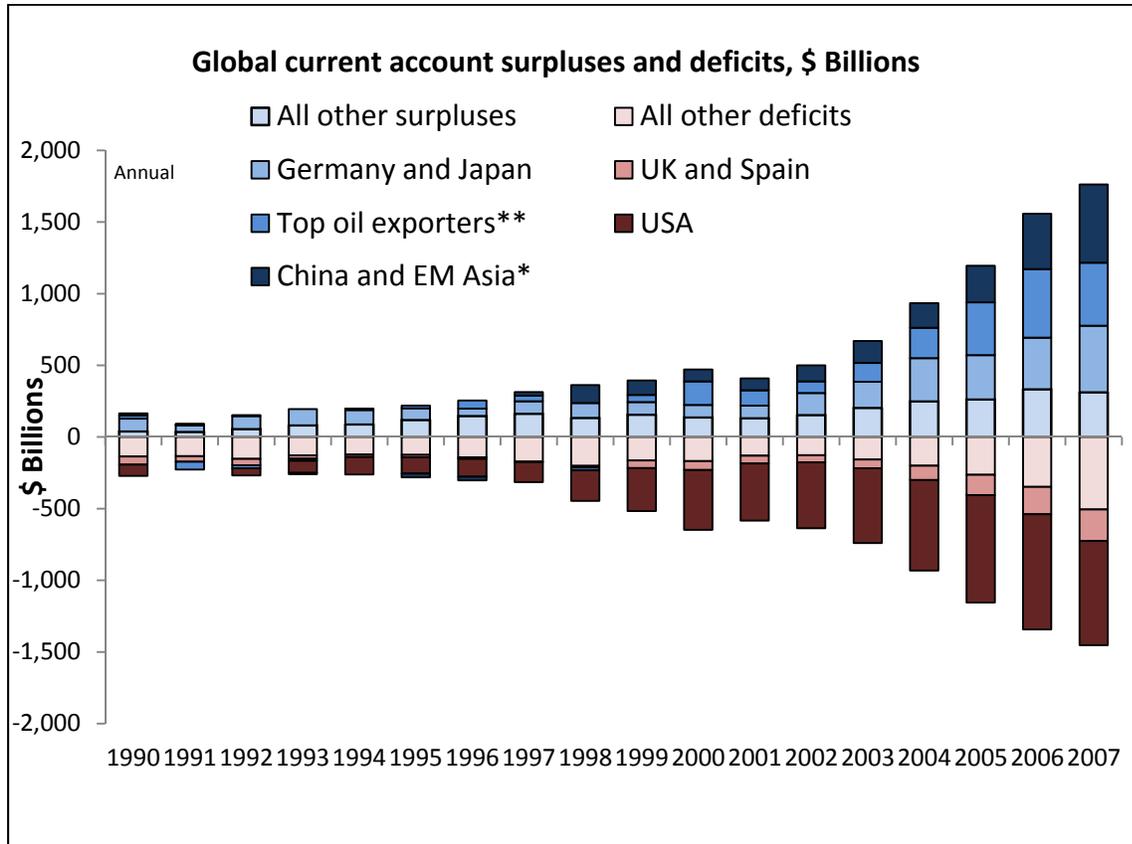
As Chairman, Greenspan told Congress in 2005, it was a “conundrum” that mortgage rates continued to decline despite higher short-term interest rates. One possible explanation was money from abroad. Developing countries were experiencing strong economic growth and – having found themselves vulnerable to financial problems in the past – encouraged their consumers and businesses to save more. With excess cash to invest, investment funds in these countries often found the apparently safe and high-yield investments in the U.S. appealing. Fed

⁴³³ FCIC interview with John Taylor.

⁴³⁴ Federal Reserve Bank of St. Louis, FRED database, 30 Yr Conventional Mortgage Rate (MORTG), available at <http://research.stlouisfed.org/fred2/series/MORTG>

⁴³⁵ Federal Reserve Bank of St. Louis, FRED database, Housing Starts: Total: New Privately Owned Housing Unites Started (HOUST), available at <http://research.stlouisfed.org/fred2/series/HOUST>

Chairman Ben Bernanke called it a “global savings glut.”⁴³⁶ Flows into the U.S., shown in the chart, were unprecedented, and the U.S. ran huge annual current account deficits.⁴³⁷



The share of U.S. Treasury debt held by foreign official entities rose from \$0.6 trillion to \$8.51 trillion,⁴³⁸ representing an increase from 11% of total U.S. debt in 2000 to 15% of total U.S. debt

⁴³⁷ The current account deficit is the trade deficit plus interest payments made to foreigners sent abroad and transfer payments annually. Data from Bureau of Economic Analysis, Trade in Goods and Services, available at <http://www.bea.gov/international/index.htm#bop>

⁴³⁸ US Treasury, Treasury Direct: Historic Debt Outstanding <http://www.treasurydirect.gov/govt/reports/pd/histdebt/histdebt.htm> and US Treasury, Major Foreign Holders of Treasury Securities, <http://www.ustreas.gov/tic/mfh.txt>

in 2006.⁴³⁹ Foreigners also invested in securities backed by Fannie and Freddie, which seemed nearly as safe with their implicit guarantee that the government would back them up in case of trouble. As the Asian financial crisis ended in 1998, foreign holdings of GSE securities were steady with their levels of almost 10 years earlier, about \$186 billion. By 2000 – just two years later – foreigners would own \$348 billion in GSE securities.⁴⁴⁰ By 2004, they would own \$875 billion. “You had a huge inflow of liquidity. A very unique kind of situation where poor countries like China were shipping money to advanced countries because their financial systems were so weak that they [were] better off shipping to countries like the United States rather than keeping it in their own countries,” former Fed Governor Frederic Mishkin told the FCIC.⁴⁴¹ “The system was awash with liquidity, which helped lower long term interest rates.” [Add additional balancing views]

As more and more foreign cash poured into the United States, foreign investors sought other high-grade debt assets that were almost as safe as Treasuries and GSE securities but that offered a slightly higher return. They quickly found an affinity for the AAA assets pouring out of the Wall Street mortgage securitization machine. As demand from overseas drove up the prices for securitized debt, it “created an irresistible profit opportunity for the U.S. financial system: to

⁴³⁹ US Treasury, Treasury Direct: Historic Debt Outstanding <http://www.treasurydirect.gov/govt/reports/pd/histdebt/histdebt.htm> and US Treasury, Major Foreign Holders of Treasury Securities, <http://www.ustreas.gov/tic/mfh.txt>

⁴⁴⁰ Board of Governors of the Federal Reserve System, Table L.107 Rest of the Word

⁴⁴¹ FCIC Interview of Frederic Mishkin, Memorandum for the Record available at on NetDocs at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4823-4002-6375&open=Y> Net Docs ID 4823-4002-6375, Audio is available in the 2010-10-01 FCIC Interview of Frederic Mishkin at 3:40 available on NetDocs at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4847-7705-0375&open=Y> NetDocs ID 4847-7705-0375

engineer ‘quasi’ safe debt instruments by bundling riskier assets and selling the senior tranches,’ University of California-Berkeley economist Pierre-Olivier Gourinchas told the FCIC.⁴⁴²

It was Gordon Gekko’s ocean of money.

Mortgages: “It just kept layering the risks”

In order to ride this wave of money, the mortgage securitization machine worked overtime. And in order to ride *that* wave, the originators worked overtime to sign up eager borrowers for mortgages to sell to the banks. But the refinancing boom was over and housing prices were still rising. To supply the securitization machine, originators needed new products to sell – products that could make expensive homes more affordable even to subprime borrowers. This new activity brought changes to the mortgage market that would result in higher yields for investors but, at the same time, greater risks. “Holding a subprime loan has become something of a high-stakes wager,” the Center for Responsible Lending warned in 2006.⁴⁴³

Subprime mortgages rose from 8% of all mortgages in 2003 to 20% in 2005, continuing the trend that had begun early in the decade. About 70% of subprime borrowers used hybrid adjustable-rate mortgages (ARMs) such as 2/27s and 3/28s – that is, mortgages with a low “teaser” rate for the first two or three years which then adjust periodically thereafter.⁴⁴⁴ As subprime borrowing became more prominent, so did these loans.

⁴⁴² Notes from hearing, February XXX, 2010.

⁴⁴³ Ellen Schloemer, Wei Li, Keith Ernst, and Kathleen Keest, “Losing Ground: Foreclosures in the Subprime Market and Their Cost to Homeowners” (Dec. 2006), <http://www.responsiblelending.org/mortgage-lending/research-analysis/foreclosure-paper-report-2-17.pdf>

⁴⁴⁴ Cite to JEP paper by Lehnert, Pence, and Sherlund??

More and more, prime borrowers also used alternative mortgage products. The dollar volume of Alt-A securitization rose [XXX]% from 2003 to 2005. In general, these products made the borrowers' monthly mortgage payments on ever more expensive homes initially affordable. Popular Alt-A loan products included interest-only mortgages and payment-option ARMs, or option ARMs. Option ARMs, discussed more below, allowed borrowers to vary their monthly payments with their ability to pay, possibly adding to the principal balance of their mortgage over time. When the balance got big enough, the lender would increase the required monthly payment, sometimes dramatically. Option ARMs rose from just 1%[ck] percent of mortgages in 2003 to 8% in 2005.

Among both non-prime and prime mortgages, underwriting standards weakened. Discussed more below, the combined loan-to-value ratios – which reflect the total mortgage debt including first, second, and possibly even third mortgages – rose. Debt-to-income ratios climbed, as did the number of loans made for non-owner-occupied properties.

The mortgage market also saw structural changes. In 2003, Fannie and Freddie purchased or sold mortgage-backed securities on 57% of all mortgages issued that year. By 2004, that percentage was 42% and in 2005 and 2006, 37%.⁴⁴⁵ Taking their place were mortgages sold into the private-label mortgage-backed securities market. To feed this market, originators competed fiercely.

Countrywide Financial Corporation took home the biggest trophy. From 2000 to 2005, its originations grew six-fold. In 2004, it became the number one mortgage originator and maintained that position until the market collapsed in 2007. Even after Countrywide nearly

⁴⁴⁵ FHFA

failed, loaded down with a mortgage portfolio that contained the kinds of loans that co-founder and CEO Angelo Mozilo had once described as “toxic,” Mozilo would describe his 40-year-old company to the Commission as one that had helped 25 million people buy homes – preventing social unrest – by adhering to federal housing policy and extending loans to minorities who had historically been victims of discrimination. As Mozilo would tell the FCIC, “Countrywide was one of the greatest companies in the history of this country and probably made more difference to society, to the integrity of our society, than any company in the history of America.”⁴⁴⁶ Of course, extending mortgages to homebuyers was only part of the business. As Countrywide’s President and COO David Sambol told the commission, “For the most part, we were a seller of securities to Wall Street.”⁴⁴⁷ Plainly stated, Countrywide’s essential business strategy was to “originate what was salable in the secondary market.”⁴⁴⁸ Indeed, the company sold or securitized 86% of the \$1.7 trillion in mortgages it originated between 2002 and 2005.⁴⁴⁹

To achieve its incredibly rapid growth, Mozilo announced in 2004 a “very aggressive” goal to gain 30% of the origination market.⁴⁵⁰ At the time, his company’s market share was 12%.⁴⁵¹ Countrywide was not unique. Ameriquest, New Century, Washington Mutual and others pursued the same aims and as aggressively. These companies gained market share by originating mortgages that had been created years before as niche products with a solid underwriting rationale. Now they were transformed into riskier, mass-market versions with a very different

⁴⁴⁶ Transcript page 16

⁴⁴⁷ Sambol/Clara’s notes p.2

⁴⁴⁸ Sambol.Clara notes p.2

⁴⁴⁹ PIR p 6 figure 3 – figure 2

⁴⁵⁰ PIR p 17 citing investor’s conf footnote 30

⁴⁵¹ IMF annual volume 1, pg 49

rationale. “The definition of a good loan changed from ‘one that pays’ to ‘one that could be sold,’” Patricia Lindsay, formerly a fraud specialist at New Century, told the FCIC.⁴⁵²

2/28s and 3/27s: “Adjust for the affordability”

Historically, 2/28s or 3/27s had been used to provide credit-impaired borrowers an opportunity to repair their blemished credit. During the first two or three years of the loan, a lower interest rate offered borrowers a manageable payment schedule to demonstrate the financial wherewithal to make timely payments. At the end of this period, borrowers would have several alternatives to making the higher payments when the interest rate adjusted. If borrowers had established their creditworthiness, they could refinance into a new, sustainable mortgage, with the same lender; borrowers typically paid a 3.5% to 4% penalty if they refinanced with a different lender.⁴⁵³ If the borrowers were unable to refinance, the home could be sold and the mortgage repaid. If unable to sell or make the higher payments, the borrowers would have to default.

But as house prices rose in the 2000s, the 2/28s and 3/27s became a very useful affordability product to help get people into homes. “As homes got less and less affordable, you would adjust for the affordability in the mortgage because you couldn’t really adjust people’s income,” Andrew Davidson [ck title], a long-time veteran of the mortgage markets, told the FCIC. Borrowers were qualified at the low “teaser rates,” and little attention was paid to what might happen when rates reset. These mortgages became the workhorses of the subprime securitization market.

⁴⁵² Written testimony of Patricia Lindsay to FCIC hearing, p. 3.

⁴⁵³ MFR of FCIC interview with Andrew Davidson, 3.

Consumer protection groups, such as the Leadership Conference on Civil Rights, railed against 2/28s and 3/27s, which, they said, neither rehabilitated credit nor turned renters into owners. As David Berenbaum from the National Community Reinvestment Coalition testified to Congress in the summer of 2007, “The industry has flooded the market with exotic mortgage lending such as... 2/28 and 3/27 ARMs. These exotic subprime mortgages overwhelm borrowers when interest rates shoot up after an introductory time period.”⁴⁵⁴ Consumer groups argued that these mortgages were simply a way for lenders to strip equity from the homes of low-income or otherwise marginalized borrowers. These loans came with big fees that would get rolled into the mortgage, increasing the chances that the mortgage would be larger than the home value at the reset date. [example of typical loan fees and interest rates (teaser and ultimate interest rates)] If the borrower couldn’t refinance, the lender would foreclose—now owning a home in a rising real estate market. Furthermore, the increased risks of default and foreclosure threatened to undermine, not strengthen, the economic stability of families and neighborhoods.

Option ARMs: “Activities that are in the best interest of our Company”

Like the hybrid loans, option ARMs were originally niche products for select buyers, but by 2004 became loans of choice for the same reason: they required lower mortgage payments than other more traditional mortgages. The new twist was that borrowers could pick their payment each month, possibly resulting in an increase in the principal balance of their loan.

The option ARM dated to the high interest-rate environment of the early 1980s, when traditional ARMs became popular. But, an option ARM was typically offered to financially sophisticated borrowers who had fluctuating income, such as the self employed. This mortgage gave

⁴⁵⁴ http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=e012f6c1-08c5-419d-9bcf-d65a22559e12

borrowers the option to make a range of payments each month; any shortfall on the interest would be added to the principal – a situation called negative amortization.⁴⁵⁵ If the principal got large enough, the mortgage would “recast” into a new fixed-rate mortgage with higher monthly payments that would pay down the principal with interest over the remaining life of the loan.⁴⁵⁶ Borrowers who periodically made minimum payments could prevent this recasting by periodically making larger payments. However, during the housing boom, many borrowers systemically made minimum payments, adding to their mortgage balance every month.

One of the early sellers of option ARMs was Golden West Savings, an Oakland, California-based thrift founded in 1929 and acquired in 1963 by the husband-and-wife team of Marion and Herbert Sandler. In 1975, the Sandlers merged Golden West with World Savings; Golden West became the parent company and operated branches under the name World Savings Bank.⁴⁵⁷ The thrift issued [XXXX] in option ARMs between 1981 and 2006. Unlike other mortgage companies, Golden West held all of these loans in portfolio. It did not sell or securitize any of them.⁴⁵⁸

⁴⁵⁵ The option-ARM provides borrowers several monthly payment options such as the traditional payment of principal and interest, interest-only payment and the minimum payment option that is described in the text. The *traditional payment of principal and interest* is based on the term of the loan (15, 30, or 40 year). This option is amortizing because it reduces the amount the borrower owes on the mortgage. Another option is the *interest-only payment*, in which a borrower pays only the interest on the loan. With the *minimum payment* option, the monthly payment may be less than the amount of interest due that month. This is considered a negatively amortizing loan since borrowers end up underpaying their loan and the difference between the minimum payment and the actual interest on the loan that is due each month is added to the principal of the loan, thereby increasing a borrower’s loan balance.

⁴⁵⁶ <http://www.goldenwestworld.com/wpcontent/uploads/historyoptionarmandstructuralfeaturesgwoptionarm.pdf>

⁴⁵⁷ Source: www.worldsavings.com, from <http://web.archive.org>.

⁴⁵⁸ <http://www.goldenwestworld.com/lending-operations/#3>

Sandler told the FCIC that Golden West's option ARMs – marketed under the brand, “Pick-a-Pay” loans – had the lowest losses in the industry for that product.⁴⁵⁹ At the time that Wachovia acquired Golden West, losses were low industry-wide, held down by years of strong house price gains. [cite ck] Sandler attributed Golden West's performance to the fact that the company ran simulations about what would happen to its loans under various scenarios – for example, if interest rates went up or down or if house prices collapsed 5%, even 10%. After 10 years, or in the event that the principal balance grew to 125% of its original size, the Pick-a-Pay mortgage would “recast” into a new fixed-rate mortgage.^{460 461} “For a quarter of a century, it worked exactly as the simulations showed that it would,” Sandler said. “And we have never been able to identify a single loan that was delinquent because of the structure of the loan, much less a loss or foreclosure.” By 2007, after it was acquired by Wachovia Corporation and the housing market turned, Golden West's losses would suddenly jump from under 0.10% of loans to over [XXX%]. And, foreclosures among option ARM borrowers would be rampant.

By the early 2000s, banks and thrifts like Washington Mutual and Countrywide increased their activity in the option ARMs market, with changes that made payment shocks more likely. For example, these option ARMs would recast in as little as 5 years, or when the loan balance hit just

⁴⁵⁹ <http://www.goldenwestworld.com/lending-operations/#5>; “Throughout its history, Golden West originated ARMS with the lowest delinquencies, foreclosures and losses of any major financial company in the country, including fixed-rate lenders. For example, in its final eight years of operation as an independent company (1998-2005), Golden West's losses were zero.” [An OCC review of loan performance through 200# corroborated that claim.]

⁴⁶⁰ <http://www.goldenwestworld.com/wpcontent/uploads/historyoptionarmandstructuralfeaturesgwoptionarm.pdf>

⁴⁶¹ According to Golden West the minimum payment rate ranged 1.95%-2.95% or higher:
<http://www.goldenwestworld.com/wp-content/themes/goldenwest/docs/DifferencesAmongARMs.pdf>

110% of its original size.⁴⁶² These option ARMs also offered low initial “teaser” rates, as low as 1% and loan-to-value ratios as high as 100%.

In 2002, Washington Mutual was the second largest mortgage originator, right behind Wells Fargo, ahead of Countrywide.⁴⁶³ Washington Mutual had offered the option ARM since 1986, and in 2003, it conducted a study “to explore what Washington Mutual could do to increase sales of Option ARMs, our most profitable mortgage loan.” [cite] A focus group made clear that few customers requested a option ARM; instead “they need to be ‘sold’ to customers.”⁴⁶⁴ The study found “the best selling point for the Option Arm” was showing consumers “how much lower their monthly payment would be by choosing the Option Arm versus a fixed-rate loan.”⁴⁶⁵

The study also revealed that many WaMu brokers “felt these loans were ‘bad’ for customers.”⁴⁶⁶ A member of the focus group stated, “A lot of (WaMu Loan) Consultants don’t believe in it ... and don’t think [it’s] good for the customer. You’re going to have to change the mindset for a lot of the consultants that are on board.”⁴⁶⁷

Despite these issues, the volume of option ARM originations at WaMu soared from \$30 billion in 2003 to \$68 billion in 2004, when they comprised more than half of WaMu’s originations and

⁴⁶² Need to cite – examples like countrywide and wamu

⁴⁶³ Inside Mortgage Finance

⁴⁶⁴ a WMI August 14, 2003, market study entitled, “Option Arm Focus Groups – Phase I” a research study to explore ways to increase sales of option ARMs it was

⁴⁶⁵ JPM-WM03241849, April 13, 2010 PSI Hearing Exhibit #35

⁴⁶⁶ a WMI August 14, 2003, market study entitled, “Option Arm Focus Groups – Phase I” a research study to explore ways to increase sales of option ARMs it was

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had become the thrift's "signature" adjustable-rate home loan product.⁴⁶⁸ The average FICO score for these mortgages was around 700, well into the range considered "prime," and about two-thirds were jumbo loans— mortgage loans which exceeded the maximum dollar amount Fannie Mae and Freddie Mac were allowed to guarantee.⁴⁶⁹ More than one-half were in California. In 2006, WaMu estimated that option ARM, home-equity, and subprime mortgages generated returns from 7 to 11.5 times as large as loans that Fannie or Freddie guaranteed.⁴⁷⁰

Countrywide's option ARM business peaked at \$14.5 billion in originations in the second quarter of 2005, about 25% of all the loans that Countrywide originated during that quarter. But it had to relax underwriting standards to get there. In July 2004, Countrywide decided it would lend up to 90% of a home's appraised value, up from 80%. It also reduced the qualifying FICO scores to as low as 620 in 2004.⁴⁷¹ In early 2005, Countrywide loosened its standards again, increasing the allowable combined loan-to-value ratio (including second liens) to 95%.

For option ARMs originated by Countrywide and WaMu, the average loan-to-value ratio had risen from just under [will swap out for percentage above 90% LTV 70% to 73%; the combined loan-to-value ratio had risen from 70% to 75%], and debt-to-income ratios had risen from 34% to 38%, meaning that more of a borrower's income would have to go to mortgage payments. And, 68% of these two originators' option ARMs had low documentation in 2005, up from to 64%

⁴⁶⁸ From a 2006 Board of Directors presentation, PSI docs, p366 (numbers are diff on diff pages).

⁴⁶⁹ As set by the Office of Federal Housing Enterprise Oversight (OFHEO).

⁴⁷⁰ PSI docs, p366 (numbers are diff on diff pages).

⁴⁷¹ Countrywide PIR pg. 26[] "Countrywide loosened underwriting guidelines for payment option ARM loans by increasing allowable CLTV ratios and reducing FICO scores to 660 and 620 ." From table: loan amount \$400,000 from 680 to 620; \$500,000, from 680to 660; \$650,000, from 680 to 660.)

[look for earlier data] in 2003. The percentage of these loans made to investors – that is, borrowers who did not plan to use the home as their primary residence – also rose.

These changes worried lenders even as they continued to make the loans. In August 2005, Countrywide CEO Angelo Mozilo emailed senior management expressing concern that making all these loans could bring “catastrophic consequences.” In particular, Mozilo said, Countrywide should not market the option ARMs to investors. “Pay option loans being used by investors is a pure commercial spec[ulation] loan and not the traditional home loan that we have successfully managed throughout our history,” Mozilo wrote in an email to Countrywide Bank CEO Carlos Garcia. Speculative investors “should go to Chase or Wells not us. It is also important for you and your team to understand from my point of view that there is nothing intrinsically wrong with pay options loans themselves, the problem is the quality of borrowers who are being offered the product and the abuse by third party originators... if you are unable to find sufficient product then slow down the growth of the Bank for the time being.” [cite] However, Countrywide’s growth did not slow. The dollar value of its retained option ARMs increased from \$5 billion in 2004 to \$26 billion in 2005, peaking in 2006 at \$33 billion. In the same period, WaMu also increased the proportion of option ARM mortgages retained on its balance sheet, the bulk from California, followed by Florida. The option ARMs on the books of these thrifts would be a source of significant losses during the crisis.

Citing Countrywide and Wamu as “in our face” as competitors, John Stumpf, CEO, Chairman, and President of Wells Fargo, described his company’s decision not to write option ARMs, even as it originated many other high-risk mortgages. These were “hard decisions to make at the time,” he said further noting that “we did lose revenue, and we did lose volume.”

Across the market, the volume of option ARMs had risen five-fold from 2003 to 2005, from [XXXX] billion to over [XXXX] billion. By then, WaMu and Countrywide already had plenty of evidence that more borrowers were making the minimum payments, and their mortgages were negatively amortizing—so that equity was being eaten away. The percentage of Countrywide’s option ARMs negatively amortizing grew from just 1% in 2004 to 53% in 2005 and then over 90% by 2007. At WaMu, these percentages were 2% in 2003, 30% in 2004, and then 82% in 2007. House price declines added to borrowers’ problems. Any equity left after the negative amortization would be eroded. Increasingly, borrowers would owe more on their mortgage than their home was worth on the market. If the house were to be sold, the borrower would owe the bank money, maybe a lot of money, at closing. If the borrower didn’t have this money, a sale could be impossible. This would create an incentive to walk away from the home and the mortgage.

Consumer advocates testified to the FCIC about the inherent dangers in option ARMs. Mr. Stein from the California Reinvestment Coalition, testified to the FCIC about option ARMs being inappropriately issued to borrowers, stating, “Nowhere was this dynamic more clearly on display than in the summer of 2006 when the Federal Reserve convened HOEPA hearings in San Francisco. At the hearing, consumers testified to being sold option ARM loans in their primary non-English language, only to be pressured to sign English-only documents with significantly worse terms. Some consumers testified to being unable to make even their initial payments because they had been lied to so completely by their brokers.”⁴⁷² Ms. Tawatao, regional counsel with Legal Services of Northern California, described the borrowers she was currently assisting as “people who got steered or defrauded into entering option ARMs with teaser rates or pick-a-

⁴⁷² Sacramento hearing

pay loans forcing them to pay into -- pay loans that they could never pay off. Prevalent among these clients are seniors, people of color, people with disabilities, and limited English speakers and seniors who are African-American and Latino.”⁴⁷³

Changing Underwriting Standards

For decades, the traditional down payment for a prime mortgage had been 20% (in other words, the loan-to-value ratio had been 80%), even for hybrid loans [ck]. As home prices continued to rise, finding the cash for 20% down became harder, and lenders began accepting smaller and smaller down payments over the course of the 2000s.

There had always been a place for lower down payment mortgages. Typically, lenders who allowed customers to make low down payments required borrowers to purchase private mortgage insurance, for which the borrower paid a monthly fee. If a mortgage ended in foreclosure, and the lender took a loss, the mortgage insurance company would pay the lender. Worried about losses from defaults, the GSEs would not buy or guarantee mortgages with down payments below 20% unless the borrower paid for private mortgage insurance. Luckily – or unluckily, as it would turn out for many individual homeowners, for the housing industry, and for financial system as a whole – lenders came up with a way to get rid of these monthly fees that added to the cost of homeownership: lower down payments that didn’t require insurance.

Lenders had latitude in setting down payment requirements. Back in 1991, Congress had directed federal regulators to adopt regulations prescribing standards for real estate lending rules that would have applied to banks and thrifts. The goal was to “curtail abusive real estate lending practices in order to reduce risk to the deposit insurance funds and enhance the safety and

⁴⁷³ Sacramento hearing

soundness of insured depository institutions.” While Congress had itself debated including explicit loan-to-value standards in the statute, it chose not to, leaving that decision to the regulators. In the end, regulators declined to introduce any standards for loan-to-value ratios or documentation for home mortgages.⁴⁷⁴ Discussing the final rule, the regulatory agencies observed: “A significant number of commenters expressed concern that rigid application of a regulation implementing [loan-to-value] ratios would constrict credit, impose additional lending costs, reduce lending flexibility, impede economic growth, and cause other undesirable consequences...[T]he agencies have decided against adopting specific [loan-to-value] ratios or ranges in the final regulation.”⁴⁷⁵

In 1999, the regulatory agencies revisited the issue with new guidance discussing the risks of high loan-to-value mortgages. They noted that high loan-to-value lending was becoming more common and that “[c]onsumers are increasingly using the equity in their homes to refinance and consolidate other debts or finance purchases.” Still, the regulators in the 1999 guidance once again did not impose any requirements, and only reminded the banks and thrifts that they should establish and observe internal guidelines to manage the risk of these loans.⁴⁷⁶

By the 2000s, high LTV lending was made more common by the so-called *piggyback* mortgage. The lender would offer the borrower a first mortgage for 80% of the home’s value and a second

⁴⁷⁴ Congress directed regulators to create these standards in the 1991 FDIC Improvement Act. (3) FDICIA, Codified to 12 U.S.C. 1831p--1(a), formerly 1831s(a)]

⁴⁷⁵ Real Estate Lending Standards, Final Rule, OCC, Fed, FDIC, OTS. Federal Reserve Board of Governors, SR 93-1, January 11, 1993, Real Estate Lending Standards. www.federalreserve.gov/boarddocs/srletters/1993/SR9301.htm

⁴⁷⁶ Interagency Guidance on High LTV Residential Real Estate Lending, October 8, 1999, OCC, Fed, FDIC, OTS www.federalreserve.gov/boarddocs/SRLetters/1999/sr9926a2.pdf

mortgage for the missing 10% (if they had a 10% down payment) or 20% (if not).⁴⁷⁷ Borrowers liked these piggybacks as the monthly payments were often cheaper than mortgage insurance and the interest payments were tax deductible [will add info re costs]. Lenders liked them because the first mortgage – even without mortgage insurance – could potentially be sold to the GSEs.

But, the increasingly common piggybacks added risks. With the higher combined loan-to-value ratio, the borrower had less equity in the home. In a rising market, should payments become unmanageable, the borrower could always sell the home and come out ahead. However, should the payments become unmanageable in a falling market, the borrower could owe more than the home was worth. Piggyback loans – essentially *nothing* down – made it inevitable that many borrowers would end up with negative equity if house prices fell, especially if the appraisal had overstated the initial value.

Nevertheless, piggyback lending helped address a significant challenge for companies like New Century. By [XXX], the firm had a three-month backlog of orders for new mortgages from its securitizing banks. Meeting production goals meant finding new borrowers, and home purchasers who lacked down payments were a relatively untapped source. Yet, among mortgages originated in 2004, those with piggybacks had four times the 60 day plus delinquency of other mortgages. When senior management at New Century was made aware of these numbers, the head of the Secondary Marketing Department asked for "thoughts on what to do with this information ... pretty compelling." The Corporate Credit Officer assessed the analysis as "very compelling." Nonetheless, the number of mortgages originated with piggybacks

⁴⁷⁷ Piggyback mortgages were done with the knowledge of the first-lien lender. [I don't agree with this decrip of silent second – seconds are recorded so first lender knows. I think silent seconds are ones that don't require any payment – they accrue and are paid on sale or some outside date]More nefarious cases, where this second mortgage was not disclosed, were referred to as *silent-seconds*.

increased to 35% of overall loan production at New Century by the end of 2005, up from only 8% a couple years earlier. [check how much held and how much securitized]⁴⁷⁸

They were not alone in taking on the risk of higher loan-to-value ratios. Across all securitized subprime mortgages, the average combined-loan-to-value rose from 78% to 85 [add data re percent above 90%, if available] between 2000 and 2006. Along with the banks and the GSEs, the American consumer was leveraging up. But to buy a home, they were willing to take the risk.

Another way to get people into houses – and quickly – was to ask for less information from the borrower. Again, so-called “stated income” or “low-documentation” (or sometimes “no-documentation”) loans had emerged years before to help people with fluctuating or hard-to-verify incomes, such as the self-employed or for long-time customers with strong credit histories. Or, perhaps the lender would waive information requirements if the loan was deemed safe in other respects. “If I’m making a 65%, 75%, 70% loan-to-value, I’m not going to get all of the documentation,” Herb Sandler of Golden West explained to the FCIC. It was too cumbersome and unnecessary. He already had a good idea how much money teachers, accountants, and engineers were paid in a given area—and if he didn’t, he could easily look it up. All he needed to do was verify that his borrowers worked where they said they did. If he guessed wrong, the loan-to-value ratio still protected his investment.⁴⁷⁹

In the mid-2000s, however, low- and no-documentation loans took on an entirely different character. Non-prime lenders now advertised the fact that they could offer borrowers quicker

⁴⁷⁸ New Century bankruptcy report, pg 128.

⁴⁷⁹ Transcript of FCIC interview with Herb Sandler, 13-14.

decisions about their mortgage applications along with the convenience of not having to provide tons of paperwork.⁴⁸⁰ In return, they charged a higher interest rate, and they had a faster turnaround. The idea caught on: from [200X] to [200X], the percentage of low- and no-doc loans skyrocketed from an estimated [XXX%] to [XXX%]. Within the Alt-A securitizations, 80% of 2006 loans had limited or no documentation. As Bill Black, a veteran supervisor, testified before the FCIC, the mortgage industry's own fraud specialists described stated income loans as "an open 'invitation to fraud' that justified the industry term 'liar's loans.'" Speaking of lending at Citigroup, Richard Bowen said, "A decision was made that 'We're going to have to hold our nose and start buying the stated product if we want to stay in business.'"⁴⁸¹ Jamie Dimon, CEO of JP Morgan testified to the commission, "In mortgage underwriting, somehow we just missed, you know, that home prices don't go up forever and that it's not sufficient to have stated income."

In the end, market participants in subprime and Alt-A mortgages had, in essence, placed all of their chips on black: They were betting that home prices would never stop rising. This was the only scenario that would keep the mortgage machine humming. To see this, we return to our case-study mortgage-backed security, CMLTI 2006-NC2.

On their face, the 4,499 loans bundled in this deal were adjustable-rate and fixed-rate residential mortgage loans originated by New Century. The loans had a 30-year maturity and an average principal balance of \$210,478, just under the median US home price of \$221,900 in

⁴⁸⁰ http://www.jchs.harvard.edu/publications/finance/mm07-1_mortgage_market_behavior.pdf, pg 52

⁴⁸¹ Richard Bowen, MFR

2006.^[1] Nearly 60% of loans in the deal were originated in May and June 2006, just as national home prices were peaking. About 90% of loans in the pool were reportedly for primary residences, with 43% for home purchases and 48% for cash-out refinancings. The loans came from all 50 states and the District of Columbia [ck] and were in 288 different metropolitan areas or counties across the country. But, despite efforts at geographic diversification, nearly a third came from California and over 10% from Florida; this concentration was typical for mortgage-backed securities during the boom.

The loans within this deal also had many of the characteristics described in this chapter. About 75% of these loans were ARMs, and most of these were 2/28s or 3/27s. In a twist, many of these hybrid ARMs had other “affordability features” as well. For example, [XXX%] were interest only – during the first two or three years, not only would borrowers pay a lower fixed rate, they would not have to pay any principal. Another [XXX%] were “2/28 hybrid balloon” loans where the principal would amortize over 40 years to lower the monthly payments even further. Whatever it took to make the loan. Among the roughly 25% of loans that were fixed rate, some had maturities of more than 30 years.

The majority of the mortgage pool was secured by first mortgages and approximately 5% by second mortgages. Of the first mortgages, 32% had a piggyback mortgage on the same property. As reported above, these piggyback loans were a specialty at New Century. As a result, more than one-third of the mortgages in CMLTI 2006-NC2 had a combined loan-to-value ratio between 95% and 100%.

^[1] This particular deal would be described as an excess-spread over-collateralized based credit enhancement structure; *see* “The Panic of 2007,” Gary Gorton, paper prepared for the Federal Reserve Bank of Kansas City’s Jackson Hole Conference, August 2008, p. 23)

And to compound matters a bit more, approximately 42% of the pool were no-doc loans for which income or assets were simply “stated.” The rest were “full-doc” loans, although this full documentation was fuller in some cases than in others.⁴⁸²

The loans in CMLTI 2006-NC2 mirrored the overall market at the time: complex products with high LTVs and little documentation. And, even as many warned that this toxic mix demanded serious attention, the regulators as we will see were not on that page.

OCC and OTS: “Immunity from state law is a significant benefit”

For years, some states had tried to regulate the mortgage business, especially clamping down on the predatory mortgages proliferating in the subprime market. The national thrifts and banks and their federal regulators—the Office of Thrift Supervision and the Office of the Comptroller of the Currency, respectively—resisted. The regulators agreed with these companies that they needed a uniform set of rules that preempted the states or they would wind up with too many different rules to follow across the country. In August 2003, as the market for riskier subprime and Alt-A loans was growing, as lenders were piling on more risk with smaller down-payments, reduced documentation requirements, interest-only loans, and payment-option loans, the OCC, which regulates national banks, fired another salvo in the preemption wars. The rules the OCC proposed were nearly identical to rules the OTS issued in 1996 governing real estate lending by nationally chartered thrifts and their subsidiaries, which empowered the thrifts to disregard state consumer laws in making residential mortgages.⁴⁸³

⁴⁸² For a quarter of these loans, the borrower supplied two years of W-2 tax statements and tax returns; others were backed by only one year’s worth of information, or by business bank statements.

⁴⁸³ Bank Activities and Operations: Real Estate Lending and Appraisals, 69 *Federal Register* 1904 (Jan. 7, 2004). The rules were issued in proposed form at 68 *Federal Register* 46, 119 (Aug. 5, 2003). For a description of the OCC’s 2004 rules and their similarity to the OTS’s rules, see Wilmarth (2004), at 227-36, 298-99.

Asserting its authority, OTS had issued a series of orders declaring that federal law preempted state fair lending laws with regard to federally regulated thrifts. In 2003, for example, referring to these orders the OTS chief counsel issued four opinion letters declaring laws passed by Georgia, New York, New Jersey and New Mexico didn't apply to national thrifts.⁶⁴ In the New Mexico opinion, the regulator declared invalid New Mexico's prohibitions against balloon payments, negative amortization, prepayment penalties, loan flipping, and lending without regard to the borrower's ability to repay.⁶⁵

The Comptroller of the Currency took the same line regarding the national banks it regulated. In a 2002 speech, before the final OCC rules were passed, Comptroller John D. Hawke Jr. said, "national banks' immunity from state law is a significant benefit of the national charter – a benefit that the OCC has fought hard over the years to preserve...The ability of national banks to conduct a multistate business subject to a single, uniform set of federal laws, under the supervision of a single regulator, free from visitorial powers of various state authorities, is a major advantage of the national charter."⁴⁸⁴ In an interview that year, Hawke explained that the potential loss of regulatory market share "was a matter of concern."

With this rationale, in August 2003, the OCC issued its first preemptive order aimed at Georgia's mini-HOEPA statute. In January 2004, the OCC adopted [ck] sweeping preemption rules that would apply to all state laws that interfered with or placed conditions on the ability of national banks to lend. "[S]tate laws that obstruct, impair, or condition a national bank's ability to fully exercise its powers to conduct activities authorized under Federal law do not apply to national banks," the OCC said in the rule. The states challenged the rule but the U.S. Supreme Court

⁴⁸⁴ Remarks by Comptroller of the Currency Hawke before Women in Housing and Finance (Feb. 12, 2002), attached to OCC News Release 2002-10, at 2, available at <http://www.occ.treas.gov/speeches.htm>.

upheld it in 2007. Shortly after the rule change, three large banks with combined assets of more than \$1 trillion announced their intention to convert from state charters to national charters, yielding a 15% increase in the OCC's annual budget.⁴⁸⁵

With OCC and OTS preemption in place, the two federal agencies were the only regulators with the power to prohibit abusive lending practices by national banks and thrifts and their direct subsidiaries. Comptroller Dugan defended preemption noting that “72 percent of all non-prime mortgages were made by lenders that were subject to state law. Well over half were made by mortgage lenders that were exclusively subject to state law.” Lisa Madigan, Attorney General of Illinois, flipped the argument around, noting that national banks and thrifts, and their subsidiaries, were heavily involved in subprime lending. Using different data sources, she noted the fact that “national banks and federal thrifts and... their subsidiaries ... were responsible for almost 32 percent of subprime mortgage loans, 41 percent of the Alt-A loans, and 51 percent of the pay-option and interest-only ARMs that were sold” was evidence of the effects of preemption. And, she noted that national banks were otherwise associated with subprime lending. Referring to warehouse lines of credit issued by banks, she stated “in fact, national banks funded 21 of the 25 largest subprime issuers that were doing business in the lead-up to the crisis.” In addition, fifteen of the 25 largest subprime lenders from 2005 to 2007 were affiliated with national banks or thrifts.⁴⁸⁶

Madigan told the FCIC,

⁴⁸⁵ Bar-Gill & Warren (2008), at 82-83, 92-94, describing conversions of JP Morgan Chase Bank, HSBC Bank USA and Harris Bank from state to national charters and the impact of those conversions on the OCC's budget. Smaller banks switch charters every year.

Even as the Fed was doing little to protect consumers and our financial system from the effects of predatory lending, the OCC and OTS were actively engaged in a campaign to thwart state efforts to avert the coming crisis...In the wake of the federal regulators' push to curtail state authority, many of the largest mortgage-lenders shed their state licenses and sought shelter behind the shield of a national charter. And I think that it is no coincidence that the era of expanded federal preemption gave rise to the worst lending abuses in our nation's history⁴⁸⁷

Comptroller Hawke told the FCIC that he sees it differently: “While some critics have suggested that the OCC’s actions on preemption have been a grab for power, the fact is that the agency has simply responded to increasingly aggressive initiatives at the state level to control the banking activities of federally chartered institutions.” [add info re enforcement actions taken]

MBS players: “Wall Street was very hungry for our product”

The production of subprime and Alt-A mortgage-backed securities depended on a complex supply chain. The shadow banking system provided much of the money, largely through short-term lending in the commercial paper and repo market – a fact that would become critical as the financial crisis began to unfold in 2007. And, much more than in earlier years, these loans were not collateralized by Treasuries and GSE securities but by highly-rated mortgage securities backed by increasingly risky loans. Vertically integrated firms like Lehman, Bear, and Countrywide could take care of every step of the process: originating mortgages, packaging them into securities, and selling those securities to their clients. Independent mortgage originators like Ameriquest and New Century—without access to deposits—typically relied on

⁴⁸⁷ FCIC hearing. Three examples of such mortgage-lenders include JPMC, Harris Bank and HSBC.

financing to originate mortgages from warehouse lines of credit extended by the banks, their own commercial paper programs, or money borrowed in the repo market. These originators put together their own mortgage pools but then relied on securitizers, including investment banks and commercial banks, to create the mortgage-backed securities.

Warehouse lending was a multi-billion dollar business for commercial banks such as Citigroup. From 2000 to 2010, Citigroup made available at any one time as much as \$7 billion in warehouse lines of credit to mortgage originators, including \$950 million to New Century and over \$3.5 billion to Ameriquest. Citigroup CEO Chuck Prince would tell the FCIC that he wouldn't have approved of this business, had he known about it. "I found out at the end of my tenure, I did not know it before, that we had some warehouse lines out to some originators. And I think getting that close to the origination function—being that involved in the origination of some of these products—is something that I wasn't comfortable with and that I did not view as consistent with the prescription I had laid down for the company not to be involved in originating these products."⁴⁸⁸

As early as 1998, Moody's called the new asset-backed commercial paper or ABCP programs "a whole new ball game."⁴⁸⁹ As asset-backed commercial paper became a popular method to fund the mortgage business, it grew from about one-quarter to about one-half of commercial paper sold between 1997 and 2001.⁴⁹⁰ In 2001, only five mortgage companies borrowed a total \$4 billion through asset-backed commercial paper; by 2006, 19 entities borrowed \$43 billion.⁴⁹¹

⁴⁸⁸ Transcript of FCIC interview of Charles O. Prince, former Chairman and CEO of Citigroup, March 17, 2010.

⁴⁸⁹ Moody's Special Report: The ABCP Market in the Third Quarter of 1998.

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⁴⁹¹ Source: Moody's 2007 Review and 2008 Outlook: US Asset-backed Commercial Paper, Feb. 27, 2008.

Companies would use this borrowing to finance their mortgage inventory on its way to being securitized. For example, Countrywide created commercial paper programs Park Granada (launched in 2003) and Park Sienna (launched in 2004). By May, 2007, Countrywide was borrowing \$13 billion through Park Granada, which stored prime mortgages and \$5.3 billion through Park Sienna, which stored subprime and other mortgages until they were sold.^{492,493}

Commercial banks used these commercial paper programs partly for the purpose of regulatory arbitrage. When banks held mortgages on their balance sheets, regulators required them to hold 4% in capital to protect against the possibility of loss. In contrast, when banks put mortgages into off-balance sheet entities such as commercial paper programs, there was no capital charge, at least until 2004. To make the deals work for investors, banks provided liquidity support to these programs, earning a fee for doing so. This liquidity support meant that the bank would have to take the commercial paper, and the mortgages backing the paper, on to their balance sheets or pay up if the commercial paper could not be sold to investors at previously agreed upon prices. These liquidity supports would be triggered during the financial crisis, bringing billions in mortgage assets – all declining in value – on to banks' balance sheets, meaning that the banks would now have to raise capital.

The Enron scandal put these capital rules in jeopardy, when the accounting standards-setting body, the Financial Accounting Standards Board, made it harder for companies to get off-balance sheet treatment for these programs. The asset-backed commercial paper market stalled for more than a year. Meanwhile, banks protested that these programs were different from the off-balance sheet practices at Enron and should be excluded from the new standards. In 2003,

⁴⁹² Moody's ABCP Program Review: Park Granada, July 16, 2007

⁴⁹³ Moody's ABCP Program Review: Park Sienna, July 16, 2007

bank regulators responded with a proposal that would allow banks to remove these assets from their balance sheets for purposes of calculating regulatory capital. The proposal would also introduce, for the first time, a capital charge amounting to, at most, 1.6% of the liquidity support that banks provided to asset backed commercial paper programs.⁴⁹⁴ However, after strong pushback from the industry – the American Securitization Forum, an industry association, called that modest proposed charge “arbitrary;”⁴⁹⁵ State Street Bank complained it was “too conservative”⁴⁹⁶ – regulators in 2004 announced a final rule with a capital charge of up to 0.8% for these liquidity supports – half of their initial proposed charge.^{497,498} With that regulatory decision lifting the regulatory cloud, growth in ABCP markets resumed.

Growth in the repo market was also supported by regulatory changes – in this case, changes in the bankruptcy laws – which helped to transform the types of repo collateral.⁴⁹⁹ Prior to 2005, repo lenders only had clear and immediate rights to their collateral in the event of the bankruptcy of the borrower if they lent using Treasury or GSE securities as collateral. Now, in 2005, Congress expanded that provision to many other assets, including mortgage loans, mortgage-

⁴⁹⁴ Interim Capital Treatment of Consolidated Asset-Backed Commercial Paper Program Assets, 68 Fed. Reg. 56,568, 56,571 (Oct. 1, 2003).

⁴⁹⁵ Letter from the Am. Sec. Forum to Office of Thrift Supervision (Nov. 17, 2003) (*available at* http://www.ots.treas.gov/_files/comments/9d9fb65c-670d-45a4-8616-b629ad4c29bb.pdf).

⁴⁹⁶ Letter from State St. Bank to Office of Thrift Supervision (Nov. 14, 2003) (*available at* http://www.ots.treas.gov/_files/comments/ba249202-7305-427f-9fe8-d2f6ba2445da.pdf).

⁴⁹⁷ ⁴⁹⁷ Consolidation of Asset-Backed Commercial Paper Programs and Other Related Issues, 60 Fed. Reg. 44,908, 44,911 (July 28, 2004).

⁴⁹⁸ Regulators specifically allowed asset-backed commercial paper programs to function with limited capital because the collateral was usually high quality, primarily rated AAA or AAA by the rating agencies; because the commercial paper itself was usually rated A1 or P1; and because of the perceived low probability that investors would fail to roll their investment when the commercial paper matured.

⁴⁹⁹ <http://w4.stern.nyu.edu/blogs/regulatingwallstreet/2010/07/the-doddfrank-wall-street-refo.html#more>

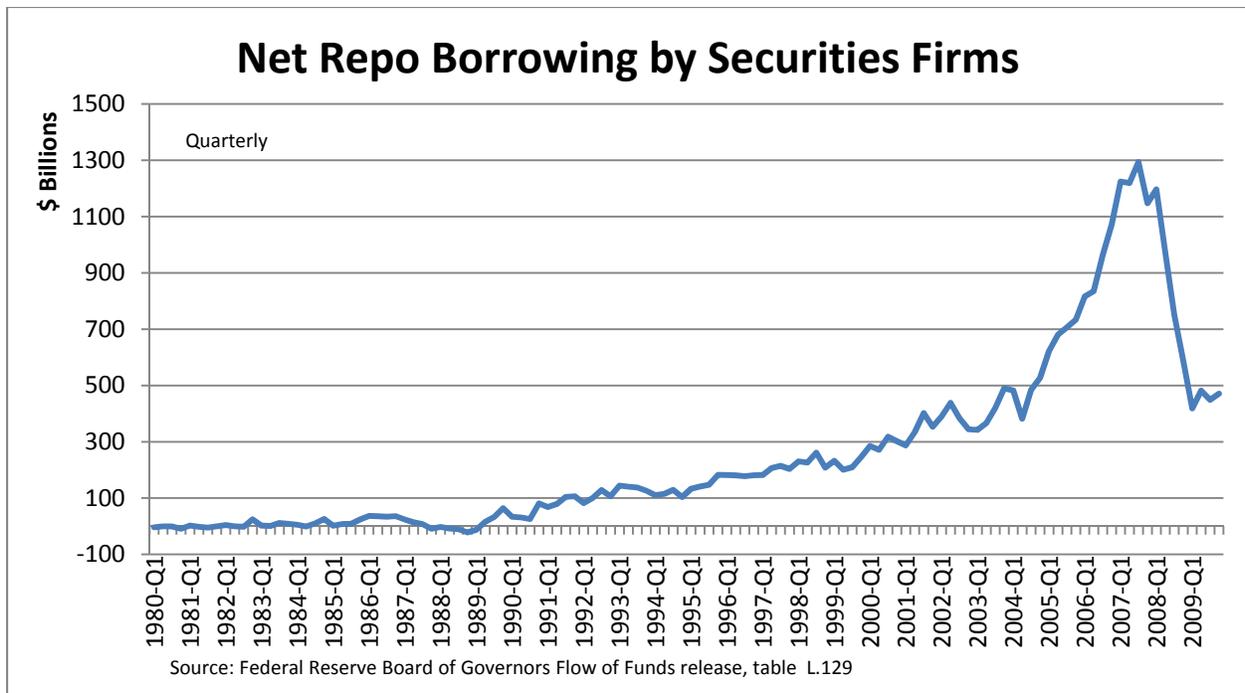
backed securities, and collateralized debt obligations.⁵⁰⁰ There were now, according to an industry expert, “very strong incentives to securitize anything you could get your hands on, including subprime mortgages, so then the big investment banks like Lehman could use it for their overnight borrowing needs.”⁵⁰¹ The short-term repo market, now increasingly relying on risky but highly-rated mortgage-backed securities, would prove an unstable source of funding beginning in mid-2007 when banks and investors became skittish about the mortgage market generally. “There were certainly asset types that were being financed by [repo] that were in retrospect not as liquid as you would want. The illiquid, hard-to-value securities were a greater fear than people would like them to be,” Darryll Hendricks, a UBS executive and chair of a New York Fed task force examining the repo market after the crisis, told the FCIC.^{502,503}

⁵⁰⁰ Bankruptcy Abuse Prevention and Consumer Protection Act of 2005.

⁵⁰¹ <http://rortybomb.wordpress.com/2010/05/06/an-interview-about-the-end-user-exemption-with-stephen-lubben/>

⁵⁰² FCIC Interview with Darryll Hendricks, August 6, 2010.
<https://vault.netvoyage.com/neWeb2/goId.aspx?id=4826-7731-5335&open=Y>

⁵⁰³ FCIC Interview with Darryll Hendricks, August 6, 2010.
<https://vault.netvoyage.com/neWeb2/goId.aspx?id=4826-7731-5335&open=Y>



To see how the mortgage securitization machine worked in practice, look again at our case-study deal from the fall of 2006, CMLTI 2006-NC2. New Century needed money to originate the 4,499 mortgages that it would eventually sell to Citigroup. Eight banks and securities firms provided the bulk of the money, mostly through repo loans – most prominently, Morgan Stanley (\$424 million), Barclays Capital, a division of a U.K.-based bank (\$221 million), Bank of America (\$147 million), and Bear Stearns (\$64 million). The balance was provided by New Century, which borrowed \$3 million through its own commercial paper program and by a unit of Citigroup, Salomon Brothers Realty Corp, which extended less than \$500,000 in a warehouse line of credit. The banks provided this financing as New Century originated these mortgages, mostly in the month or two before the pool was sold to Citigroup on August 29, 2006. As a result, for a time, New Century owed these banks nearly \$1 billion, mostly in the form of repo loans secured by specific mortgages. Citigroup paid New Century \$979 million for the

mortgages, and New Century paid the repo lenders back – but only after keeping a \$24 million (2.5%) fee.

Investors in the case-study deal

Investors for mortgage-backed securities came from all corners of the global economy; as discussed earlier, the key to making securitization work was a structure with tranches that would appeal to the specific requirements of each and every one of them. CMLTI 2006-NC2, for example, had 19 tranches. The investors in these tranches are shown in the table below. Fannie Mae bought the entire \$155 million top AAA rated tranche, which paid a better return than super-safe U.S. Treasuries. The next AAA rated tranches, \$582 million worth, went to 29 institutional investors around the world, globally spreading the risk. Notable among these investors were foreign banks and funds in China, Italy, France, and Germany; the Federal Home Loan Bank of Chicago, a government-sponsored enterprise that provides financing to the mortgage industry; the Kentucky Retirement Systems; a hospital; and JP Morgan, which purchased part of the tranche using cash from its securities lending operation. In other words, JP Morgan lent securities held by its clients to other financial institutions in exchange for cash collateral, and then put that cash collateral to work by investing in the case-study deal. As we will see, securities lending operations were a large, but ultimately unstable, source of cash fueling this market.

| | Tranche | Orig Bal | Orig Rating | Yield | PURCHASER |
|--------------------|----------|-----------|-------------|----------------------------------|--|
| Senior | A1 | \$154,577 | AAA | 0.14% | Fannie Mae |
| | A2-A | \$281,749 | AAA | 0.04% | Chase Security Lendings Asset Management |
| | | | | | 1 Investment fund in China |
| | A2-B | \$282,356 | AAA | 0.06% | 6 Investment funds |
| | | | | | Federal Home Loan Bank of Chicago |
| | | | | | 3 Banks in Germany, Italy and France |
| | A2-C | \$18,266 | AAA | 0.24% | 11 Investment funds |
| 3 Retail investors | | | | | |
| Mezzanine Tranches | M-1 | \$39,285 | AA+ | 0.29% | 2 Banks in the US and Germany |
| | M-1 | | | | 1 Investment fund and 2 banks in Italy |
| | | | | | Cheyne Finance Limited |
| | M-2 | \$44,018 | AA | 0.31% | 3 Asset Managers, including FINCEECF |
| | | | | | Parvest ABS Eurobor |
| | M-2 | | | | 4 Asset managers incl FAH, FINCEECF and KOIL |
| | | | | | 1 Bank in China |
| | M-2 | | | | 1 CDO |
| | M-3 | \$14,199 | AA- | 0.34% | 3 CDOs |
| | M-4 | \$16,093 | A+ | 0.39% | 2 CDOs |
| | M-5 | \$16,566 | A | 0.40% | 2 CDOs |
| | M-6 | \$10,886 | A- | 0.46% | 3 CDOs |
| | M-7 | \$9,940 | A- | 0.70% | 3 CDOs |
| | M-8 | \$8,520 | BBB+ | 0.80% | 3 CDOs |
| M-9 | \$11,833 | BBB | 1.50% | 7 CDOs | |
| M-10 | \$13,726 | BBB- | 2.50% | 3 CDOs and Multistrat Cust Trust | |
| M-11 | \$10,886 | BB | 2.50% | not verified | |
| Residual Tranches | CE | \$13,276 | NR | | Citi and Capmark Financial Group Inc |
| | P | 0* | NR | | Citi and Capmark Financial Group Inc |
| | R | \$0 | NR | | |
| | Rx | \$0 | NR | | |

The yield is the rate on the one-month LIBOR contract plus the rate listed. At the time the deal was issued, Fannie Mae, for example, would have received the LIBOR rate of 5.32% plus 0.14% to give a total yield of 5.46%.

Collateralized debt obligations or CDOs, which will be explained more in the next chapter, bought most of the tranches rated below AAA and nearly all of those rated below AA-, a phenomenon explored more fully in the next chapter. In the case-study deal, these tranches represented about 22% of the total value of the security and presented the real salesmanship challenge, because they bore most of the risk of unexpected loss. If losses rose above 2.6% – wiping out the investors in the residual and BB tranches – the mezzanine investors would start to lose money. Only a couple of the highest-rated mezzanine tranches were not purchased by

CDOs. For example, Cheyne Finance Limited purchased \$7 million of the top mezzanine tranche. Cheyne – technically, a Structured Investment Vehicle or SIV – would be one of the first casualties of the crisis, sparking panic during the summer of 2007. Parvest ABS Euribor also purchased \$20 million of the third mezzanine tranche; it would also be noteworthy as one of the BNP Paribas funds whose problems helped ignite the financial crisis in the summer of 2007.⁵⁰⁴

Citigroup retained part of the equity or “first-loss” tranche of the case-study deal, earning an interest rate of [XXX%]. Typically, investors such as hedge funds, seeking high returns, would buy the equity tranches of mortgage-backed securities; as losses started to come in on the underlying pool of mortgages, these investors would be the first to experience losses. This was the expected loss on the pool. These investors knew they had a risky asset, and in return, expected to receive interest rates of 15%, 20%, even 30%. As we will see later, equity investors often were engaged in trading strategies in which they would benefit if other tranches failed.

Fees: “Pushed as much as we could”

Structuring, selling, and distributing the case-study deal, and the thousands like it, was lucrative for the banks involved. The mortgage originators would make a profit when it sold loans for securitization.⁵⁰⁵ Across originators, some of this profit flowed down to the employees—particularly those who generated significant mortgage volume.

The fees drove the process. Part of the \$24 million that New Century received for the case-study deal went to pay the many employees who participated. “The originators, the loan officers,

⁵⁰⁴ <http://www.marketwatch.com/story/bnp-suspends-fund-valuations-amid-credit-market-turmoil>

⁵⁰⁵ Staff estimates from prospectus and Citigroup production dated 11/4/1010

account executives, basically the salespeople [who] were the reason our loans came in . . . were compensated very well,” New Century’s Patricia Lindsay told the FCIC. “They were commission-driven, the salespeople.” And, volume mattered more than quality. “Wall Street was very hungry for our product. We had our loans sold three months in advance, before they were even made at one point. . . . But basically, I know that, you know, we needed to create more product to get more volume.”⁵⁰⁶

Similarly, an Ameriquest mortgage originator, Mark Bomchill, told FCIC that as the market heated up, compensation at Ameriquest “shot up at a 90 degree angle. . . . By the time I left, the threshold for getting a bonus went from five loans to eight loans to ten loans.”⁵⁰⁷ The incentive was to make the lower-quality loans that had higher fees; Bomchill told the FCIC that he steered borrowers away from prime loans and focused on “subprime and Alt-A and a lot of stated income loans,” saying “we were pushed as much as we could to get the loan as high as we could.” The compensation incentives created an “an environment where we would do anything or say anything to close the loan. [We were] pitching [not to] CPAs and accountants and lawyers. We were pitching more of the blue collar workers – construction workers and janitors.”

At Long Beach Mortgage, the subprime division of Washington Mutual, the 2004 Incentive Plan was organized strictly by mortgage volume. Account executives received bonuses depending on whether they were “gold,” “silver,” or “bronze” in terms of volume rankings among executives.⁵⁰⁸ As WaMu made clear in a 2007 strategic plan titled “Home Loans Product Strategy,” the goals were also product specific namely to “drive growth in higher margin

⁵⁰⁶ FCIC interview

⁵⁰⁷ Mark Bomchill MFR at ___.

⁵⁰⁸ Long Beach Mortgage Production. Incentive Plan 2004

products (Option ARM, Alt A, Home Equity, Subprime), recruit and leverage seasoned Option ARM sales force, and maintain a compensation structure that supports the high margin product strategy.”⁵⁰⁹

After structuring the deal, an underwriter, often an investment bank, would market and sell the securities to investors. For this, it collected a percentage of the proceeds (on average, between 0.2% and 1.5%), either in the form of discounts, concessions, or commissions.⁵¹⁰ For a \$1 billion deal like CMLTI 2006-NC2, a 1% fee would give Citi \$10 million. In this case though, Citi did not receive a commission: instead, it was compensated in a different way – it kept parts of the residual tranches; if the deal did well it stood to capture profits.

Options Group, a company that compiles compensation figures for investment banks, reported that mortgage-related professionals at the five largest investment banks received the lion share of bonuses from 2004 to 2007.⁵¹¹ Options Group examined compensation for employees in the mortgage-backed securities sales and trading desks at 11 banks from 2005 to 2007.⁵¹² It found that associates had average base salaries of \$65,000 to \$90,000 from 2005 through 2007, but received bonuses that at least – on average – matched their salaries. The next up the ladder, vice

⁵⁰⁹ Permanent Subcommittee on Investigations – Exhibit 59a: Long Beach Mortgage Production - Incentive Plan 2004 and Incentive Plan 2007. Page 11 WaMu Home Loans Product Strategy

⁵¹⁰ John M. Quigley, “Compensation and Incentives in the Mortgage Business.” *Economists’ Voices*, www.pepress.com/ev, October, 2008 (“The bond issuer is paid a fee, typically between 0.2 and 1.5 percent, when the bond is issued.”)

⁵¹¹ The Options Group gathers compensation figures for Investment Banks based on their database of 250,000 industry professionals, senior executive interviews and media sources. It is a company which offers executive search, market intelligence and strategic consulting to financial services companies. Their research and intelligence gathering culminates in an annual report which contains market trends and average compensation paid to various financial industry professionals.

⁵¹² Barclays Capital, Bear Stearns, BNP Paribas, Citigroup, Deutsche Bank, Goldman Sachs, HSBC, JPMorgan, Lehman Brothers, Morgan Stanley, and UBS.

presidents had average base salaries and bonuses that ranged from a combined total of \$500,000 to \$1,150,000 in these years. And, further up, directors had total average compensation of \$1,000,000 to \$1,600,000. Then, managing directors had total average compensation of \$3,200,000. At the top of this ladder was the head of the unit. In 2006, the Merrill head of fixed-income and mortgage units, Dow Kim, had a base salary of \$350,000 and got a bonus of \$35 million, on par with Merrill Lynch's CEO.⁵¹³ [will put in additional information on relative compensation]

Moody's: "Given a blank check"

The ratings agencies played an essential role in Wall Street's mortgage-backed securities machine. Issuers needed them to approve the structure of their deals; investors often needed their AAA rating to buy securities; banks needed them to determine the amount of capital they held; repo markets needed them to determine loan terms; and the rating agencies' judgment was baked into any number of collateral agreements and other financial contracts.⁵¹⁴ The eventual mass downgrades by the rating agencies of thousands of mortgage-related securities is a big part of the story of the financial crisis.

While there are three major rating agencies – Fitch, Moody's, and S&P – the Commission focused its case study investigation on Moody's Investors Service, the largest of the three. From 2000 through 2007, Moody's rated nearly 45,000 of those securities AAA, compared to just four companies that Moody's rated AAA across the world as of summer 2010.

⁵¹³ Proxy statement

⁵¹⁴ Securities and Exchange Commission, "Report on the Role and Function of Credit Rating Agencies in the Operation of the Securities Markets" (Jan. 2003), 29.

The rating process involved inherent conflicts. Issuers, rather than investors, had paid for ratings since the early 1970s. In addition, incentives were affected by the increasing profitability of rating securities, and from the fierce competition among the three rating agencies for business – especially in rating structured finance products such as mortgage-backed securities, which comprised more than half of Moody’s revenues in 2005, 2006 and 2007. From 1998 to 2007, Moody’s revenues from rating financial instruments like mortgage securities increased six-fold. When Moody’s Corporation was spun off from Dun & Bradstreet in September 2000 employees noticed a pronounced shift in office culture – described by Eric Kolchinsky, a former managing director, as a change “from one [culture] resembling a university academic department to one which values revenues at all costs,”⁵¹⁵ a subject we will return to in later chapters.

Meanwhile, the models Moody’s used to rate mortgage-backed securities were designed under difficult circumstances with poor data. In designing the models, Moody’s did not adequately account for the deterioration in underwriting standards or sufficiently account for a possible dramatic decline in national home prices. And, Moody’s did not even develop a model to rate subprime securities until late 2006, after Moody’s had already rated nearly 24,000 subprime securities.

Congress “put them in the business forevermore”

Credit ratings have been baked into regulations for three-quarters of century.⁵¹⁶ In 1931, the Office of the Comptroller of the Currency (OCC) permitted banks to report publicly traded bonds

⁵¹⁵ Eric Kolchinsky, testimony to the FCIC, hearing on “The Credibility of Credit Ratings, the Investment Decisions Made Based on those Ratings, and the Financial Crisis,” Session 1: The Ratings Process, June 2, 2010, p. 20-21 (ID# 4818-8776-0390)

⁵¹⁶ The ratings from the three agencies measure slightly different credit risk characteristics. S&P and Fitch base their ratings on the probability that a borrower will default; Moody’s bases its ratings on the *expected loss* to the

with a rating of BBB or better at book value, meaning the price they paid for the bonds. Other bonds had to be reported at potentially lower market prices. In 1951, the National Association of Insurance Commissioners imposed higher capital requirements on lower-rated bonds held by insurers. But, the watershed event in federal regulation occurred in 1975 when the SEC modified its minimum capital requirements for broker-dealers based on credit ratings issued by a “nationally recognized statistical rating organization” (NRSRO) which at the time only included Moody’s, S&P and Fitch. And, ratings are also built into banking capital regulations which, since 2001, have permitted banks to hold less capital for higher rated securities. For example, BBB securities require five times more capital than AAA and AA rated securities and BB securities require ten times more capital.⁵¹⁷ The Basel II international banking regulations included similar requirements.⁵¹⁸

Credit ratings also determined whether certain investments could be held. The SEC restricts investment by money market funds to “securities that have received credit ratings from any two NRSROs... in one of the two highest short-term rating categories or comparable unrated securities.” The Department of Labor restricts pension fund securities investments to those rated A or higher. Credit ratings even affect private transactions. Ratings triggers were included in contracts that required the posting of collateral or immediate repayment if a security or entity was downgraded. Indeed, such triggers played an important role in the financial crisis and contributed to the demise of AIG.

investor. Despite such differences, investors and regulators tend to view the ratings as roughly equivalent. Ratings are divided into two categories – investment grade securities are rated BBB- to AAA while securities rated below BBB- are considered speculative and also referred to as junk (for S&P; similar levels for Moodys are Baa to AAA).

⁵¹⁷ 12 C.F.R. Part 325, Appendix A, *Table II.—Summary of Risk Weights and Risk Categories*.

⁵¹⁸ BIS, Basel Committee on Bank Supervision, No. 3, August 2000, CREDIT RATINGS AND COMPLEMENTARY SOURCES OF CREDIT QUALITY INFORMATION, located at http://www.bis.org/publ/bcbs_wp3.pdf.

Importantly for the mortgage market, the 1984 Secondary Mortgage Market Enhancement Act permitted federal and state chartered financial institutions to invest in mortgage-related securities if they had high ratings from at least one rating agency.⁵¹⁹ “Look at the language of the original bill,” Lewis Ranieri, the securitization pioneer, told the FCIC. “It requires a rating.... It put them in the business forevermore. It became one of the biggest, if not the biggest, business.”⁵²⁰ As Kolchinsky would summarize the situation, “the mandated outsourcing of credit analysis [by the government] without any associated mandated standards of highly complex and flexible structured finance instruments” led to a situation where the rating agencies “were given a blank check.”⁵²¹

The rating agencies themselves were able to avoid regulation for decades. Beginning in 1975, the SEC had to approve a company’s application to become an NRSRO but there was no regulation of the NRSROs after the application was approved.⁵²² Thirty years later, Congress gave the SEC limited authority to oversee the agencies in the Credit Rating Agency Reform Act of 2006.⁵²³ That law became effective in June 2007 and focused on mandatory disclosure of

⁵¹⁹ Secondary Mortgage Market Enhancement Act of 1984 bill summary and status (S. 2040), the Library of Congress THOMAS, <http://thomas.loc.gov/cgi-bin/bdquery/z?d098:SN02040:@@L&summ2=m&>; see also 15 U.S.C. 78c(a)(41), http://www.law.cornell.edu/uscode/15/usc_sec_15_00000078---c000-.html.

⁵²⁰ Lewis Ranieri, interview with the FCIC, July 30, 2010, p. 27 (ID# 4843-7826-6375).

⁵²¹ Eric Kolchinsky, testimony to the FCIC, hearing on “The Credibility of Credit Ratings, the Investment Decisions Made Based on those Ratings, and the Financial Crisis,” Session 1: The Ratings Process, June 2, 2010, p. 19-20 (ID# 4818-8776-0390)

⁵²² Securities and Exchange Commission, “Definition of a Nationally Recognized Statistical Rating Organization,” Proposed Rule 33-8570, April 19, 2005, pp. 5-6, 9, available at <http://www.sec.gov/rules/proposed/33-8570.pdf>.

⁵²³ Credit Rating Agency Reform Act of 2006, P.L. 109-291, 15 U.S.C. 78o-7(c)(1), September 29, 2006, <http://www.sec.gov/divisions/marketreg/ratingagency/cra-reform-act-2006.pdf>.

their methodologies; however, the SEC was expressly prohibited from regulating “the substance of the credit ratings or the procedures and methodologies.”⁵²⁴

Investors across the financial system relied on credit ratings. Many institutional investors such as pension funds and university endowments did by necessity because they did not have access to the same data as the rating agencies, nor did they have the capacity or analytical ability. As Moody’s former managing director Jerome Fons told the FCIC, “subprime RMBS and their offshoots offer little transparency around composition and characteristics of the loan collateral Loan-by-loan data, the highest level of detail, is generally not available to investors.” Large financial institutions also were influenced by ratings. As Lloyd Blankfein, CEO of Goldman Sachs, testified to the FCIC, “I would say I would be more complacent when I saw something had AAA than if it had a AA or a AA then had a single A. So to that extent, I also must have been deferring to a rating agency.”⁵²⁵

Still, some investors were skeptical of these products despite their ratings. Arnold Cattani, Chairman of Mission Bank in Bakersfield, California, described his decision to sell his bank’s holdings of MBS and CDOs: “At one meeting, when things started getting difficult, maybe in 2006, I asked the CFO what the mechanical steps were in an MBS, mortgage-backed securities, if a borrower in Des Moines, Iowa defaulted. I know what it is if a borrower in Bakersfield defaults, and somebody has that mortgage. But as a package security, what happens? And he couldn’t answer the question. And I told him to sell them, sell all of them, then, because we didn’t understand it, and I don’t know that we had the capability to understand the financial complexities; didn’t want any part of it.”

⁵²⁴ See 15 U.S.C.78o-7(c)(2).

⁵²⁵ Hearing 1

Also, rating agencies were not liable for misstatements in securities registrations.⁵²⁶ In court challenges, the agencies were able to avoid culpability by [successfully] invoking the First Amendment protection of journalistic services or by maintaining that ratings are merely opinions.⁵²⁷ Moody's standard disclaimer at the end of its publications emphasized this stance: "The credit ratings... are, and must be construed solely as, statements of opinion and not statements of fact or recommendations to purchase, sell, or hold any securities."⁵²⁸ Gary Witt, a former team managing director at Moody's, told the FCIC, "People expect too much from ratings... investment decisions should always be based on much more than just a rating."⁵²⁹

Rating methodology: "Everything but the elephant sitting on the table"

The ratings were intended to provide a means of comparing risks across asset classes and time. In other words, the risk of a AAA-rated mortgage security was similar to the risk of a AAA-rated corporate bond. As Moody's reported in its "Ratings Symbols and Definitions," "[i]t is Moody's intention that the expected loss rate associated with a given rating symbol and time horizon be the same across obligations and issuers rated."⁵³⁰

⁵²⁶ Rule 436(g)(1) of the Securities Act of 1933

⁵²⁷ See *Jefferson County School District No. R-1 v. Moody's Investor's Services, Inc.*, 175 F.3d 848, 856 (10th Cir. 1999), dismissing claims for tortious interference, injurious falsehood, and antitrust violations because Moody's credit ratings are "protected expressions of opinion". See also, *County of Orange v. McGraw-Hill Cos.*, 245 B.R. 151, 157 (C.D. Cal. 1999): "The First Amendment protects S&P's preparation and publication of its ratings." See also *Quinn v. McGraw-Hill*, 168 F.3d 331 (7th Cir., 1999).

⁵²⁸ See, for example, "Moody's Revisits its Assumptions Regarding Structured Finance Default (and Asset) Correlations for CDOs," June 27, 2005, p. 16, <http://www.fcic.gov/hearings/pdfs/2010-0602-exhibit-finance-default.pdf>.

⁵²⁹ Gary Witt, testimony to the FCIC, hearing on "The Credibility of Credit Ratings, the Investment Decisions Made Based on those Ratings, and the Financial Crisis," Session 1: The Ratings Process, June 2, 2010, p. 41 (ID# 4818-8776-0390)

⁵³⁰ "Moody's Rating Symbols and Definitions," May 2010, p. 4 (ID# 4817-6499-3286).

Since the mid-1990s, Moody's used three different models to rate the various tranches of mortgage-backed securities. The first model, developed in 1996, rated all residential mortgage-backed securities. In 2003, Moody's created a new model, M3 Prime, to rate prime, jumbo, and Alt-A deals.⁵³¹ Moody's did not develop a model for specifically rating subprime deals, called M3 Subprime, until fall 2006 when the housing market had already peaked.⁵³²

To determine the creditworthiness of a given debt security, the models incorporated a number of factors, including firm- and security-specific factors, market factors, regulatory and legal factors, and macroeconomic trends. The M3 Prime model allowed Moody's to automate more of the ratings process.⁵³³ While Moody's did not sample or review individual loans, the company used loan level information provided by the originator [ck]. The model relied on loan-to-value ratios, borrower credit scores, originator quality, loan terms and other information, and simulated the performance of each loan in 1,250 economic scenarios that included variations in interest rates and state-level unemployment and home price changes. On average across the model's scenarios, the national home prices trended upward at approximately 4% per year. The model put little weight on the possibility that prices would fall sharply nationwide.⁵³⁴ Jay Siegel, a former Moody's team managing director involved in the development of the model, told the FCIC that "there may have been [state-level] components of this real-estate drop that the statistics would

⁵³¹ "Moody's Approach to Rating Residential Mortgage Pass-Through Securities," November 8, 1996, MOODYS-FCIC-0013453 – 0013464; "Moody's Mortgage Metrics: A Model Analysis of Residential Mortgage Pools," April 1, 2003, ID#4836-9749-6328.

⁵³² "Introducing Moody's Mortgage Metrics: Subprime Just Became More Transparent," Moody's Investors Service, September 7, 2009, MOODYS-FCIC-0011496 – 0011558 (ID# 4828-5176-7558).

⁵³³ "Moody's Mortgage Metrics: A Model Analysis of Residential Mortgage Pools," April 1, 2003, p.2. ID# 4836-9749-6328.

⁵³⁴ Jay Siegel, interview with the FCIC, May 26, 2010, pp. 66-67 (ID# 4812-9405-9014).

have covered, but the 38 percent national drop, staying down over this short, but multiple-year period, is more stressful than the statistics call for.”⁵³⁵ Even as housing prices rose to unprecedented levels, Moody’s never adjusted the scenarios to put greater weight on the possibility of a national housing price decline.⁵³⁶ “Moody’s position was that there was not a... national housing bubble,” Siegel told the FCIC.⁵³⁷

When the initial quantitative analysis was complete, the lead analyst on the deal convened a rating committee composed of other analysts and managers to assess the analysis and determine the overall ratings for the bonds within the securities.⁵³⁸ Former Moody’s team managing director Jay Siegel, who helped to develop the M3 Prime model, told the FCIC that qualitative analysis was also integral to the ratings process. “One common misperception is that Moody’s credit ratings are derived solely from the application of a mathematical process or model. This is not the case.... The credit rating process involves much more – most importantly, the exercise of independent judgment by members of the rating committee,” Siegel said. “Ultimately, ratings are subjective opinions that reflect the majority view of the committee’s members.”⁵³⁹ As Roger Stein, a Moody’s managing director, noted, “overall, the model has to contemplate events for which there is no data.”⁵⁴⁰

⁵³⁵ Jay Siegel, interview with the FCIC, May 26, 2010, pp. 66-67 (ID# 4812-9405-9014).

⁵³⁶ Jay Siegel, interview with the FCIC, May 26, 2010, pp. 59 (ID# 4812-9405-9014).

⁵³⁷ Jay Siegel, interview with the FCIC, May 26, 2010, pp. 59 (ID# 4812-9405-9014).

⁵³⁹ Jay Siegel, testimony to the FCIC, hearing on “The Credibility of Credit Ratings, the Investment Decisions Made Based on those Ratings, and the Financial Crisis,” Session 1: The Ratings Process, June 2, 2010, p. 29 (ID# 4818-8776-0390)

⁵⁴⁰ Roger Stein, interview with the FCIC, May 26, 2010, p. 19 (ID# 4844-0976-5382).

After rating subprime deals with the 1996-era model for years, Moody's finally introduced a parallel model for the rating of subprime mortgage-backed securities in 2006.⁵⁴¹ Like M3 Prime, the subprime model determined credit enhancement levels by running the underlying subprime mortgages through 1,250 different scenarios involving varying interest rates, unemployment levels, and shifts in home prices.⁵⁴² Moody's officials told the FCIC that they recognized the subprime model did not include sufficiently stressful scenarios and therefore applied additional weight to the most stressful scenario, which reduced the amount of the security rated AAA.⁵⁴³ Stein, who helped to develop the subprime model, said that the output from the model was manually "calibrated" to be more conservative to make sure that predicted losses were consistent with analysts' "expert views."⁵⁴⁴ As one step in the process, Stein explained that Moody's took the "single worst case" from the M3 Subprime model simulations and multiplied it by a factor of greater than two to generate a "stress" scenario.⁵⁴⁵

Moody's did not sufficiently account for the deteriorating quality of the loans being securitized. Former managing director of credit policy, Jerome Fons, described this problem to the FCIC: "I sat on this high-level Structured Credit committee, which you'd think would be dealing with such issues [of declining mortgage underwriting standards], and never once was it raised to this group or put on our agenda that the decline in quality that was going into pools, the impact

⁵⁴¹ "Introducing Moody's Mortgage Metrics: Subprime Just Became More Transparent," Moody's Investors Service, September 7, 2009, MOODYS-FCIC-0011496 – 0011558 (ID# 4828-5176-7558), p. MOODYS-FCIC 0011504, 0011547.

⁵⁴² "Introducing Moody's Mortgage Metrics: Subprime Just Became More Transparent," Moody's Investors Service, September 7, 2009, MOODYS-FCIC-0011496 – 0011558 (ID# 4828-5176-7558), p. MOODYS-FCIC 0011517, MOODYS-FCIC-0011528.

⁵⁴³ Roger Stein, interview with the FCIC, May 26, 2010, p. 18 (ID# 4844-0976-5382).

⁵⁴⁴ Roger Stein, interview with the FCIC, May 26, 2010, p. 9-10 (ID# 4844-0976-5382).

⁵⁴⁵ Roger Stein, interview with the FCIC, May 26, 2010, p. 18 (ID# 4844-0976-5382).

possibly on ratings, other things.... We talked about everything but, you know, the elephant sitting on the table.”⁵⁴⁶

To illustrate how the agencies rated a mortgage-backed security, turn again to our case-study deal, CMLTI 2006-NC2. Moody’s used its model to simulate losses in the mortgage pool. Those loss estimates, in turn, would determine how big the junior tranches of the deal would have to be to protect the senior tranches from losses. In analyzing the deal, the lead analyst noted that the deal was similar to another Citigroup deal of New Century loans that Moody’s had rated earlier: “[T]his collateral is substantially of the same credit risk. I recommend the same levels” of tranche support.⁵⁴⁷ Once the size of the junior tranches was determined, the deal was tweaked based on the presence of certain riskier loan types, including interest-only mortgages. Approximately 78% of the dollar amount [ck] of the deal was rated triple A. For its efforts, Moody’s was paid an estimated \$208,000.⁵⁴⁸ (S&P also rated this deal and received \$135,000.)⁵⁴⁹ As we explain ahead, 3 tranches of CMLTI 2006-NC2 would be downgraded less than a year later – part of Moody’s downgrade of 399 tranches of 2006 RMBS on July 10, 2007.⁵⁵⁰ In October 2007, the M4-M10 tranches were downgraded. By 2008, all of the tranches were downgraded.⁵⁵¹ Indeed, of mortgage assets it rated AAA in 2006, Moody’s downgraded

⁵⁴⁶ Jerome Fons, interview with the FCIC, April 22, 2010, p. 56 (ID# 4842-7212-1862).

⁵⁴⁷ MOODYS-FCIC-0008597 Moody’s Rating Committee Memorandum, August 29, 2006 (ID# 4813-4149-9654).

⁵⁴⁸ MOODYS-FCIC-0394813 – 0394814, Invoice from Moody’s Investors Service to Susan Mills, Citigroup Global Markets Inc., October 12, 2006 [ID# 4812-6493-3640].

⁵⁴⁹ cite

⁵⁵⁰ “Moody’s Downgrades 399 Subprime RMBS Issued in 2006; 32 Additional Securities Placed on Review for Possible Downgrade,” July 10, 2007 [ID# 4812-6205-2872].

⁵⁵¹ “2006 Vintage First-Lien Subprime RMBS Rating Activity,” October 11, 2007, p. 9 [ID# 4825-5422-6184]; “Moody’s Downgrades Certain Citigroup Subprime RMBS,” April 21, 2008, p. 2 [ID# 4835-1065-8568]; “Moody’s Downgrades Certain Citigroup Subprime RMBS,” October 15, 2008, p. 2 [ID# 4835-7776-7432].

86% to junk. In 2007, just shy of 90% became junk. Massive downgrades began in July 2007 when housing prices had declined by only 4%.⁵⁵² The consequences of such downgrades would reverberate throughout the system.

GSEs: “Less competitive in the marketplace”

In 2004, Fannie and Freddie faced problems on multiple fronts. They had violated accounting rules and now faced corrective actions and fines. And, they were losing market share to Wall Street, which was beginning to take over the securitization market. Struggling to remain a dominant presence, they purchased increasing amounts of *non*-GSE, private-label mortgage-backed securities – that is, those mostly backed by subprime and Alt-A loans being bundled and sold by securitizers like Wall Street firms and lenders like Countrywide. Indeed, at one point in 2004, Fannie and Freddie purchased 40% of all subprime mortgage-backed securities that were issued and 27% of all Alt-A mortgage-backed securities. The GSEs almost exclusively purchased the safest, AAA rated tranches of those securities. They also loosened their own underwriting standards, purchasing and guaranteeing riskier loans than they had previously – a subject we will return to later. Their regulator, the Office of Federal Housing Enterprise Oversight (OFHEO), focused more on the accounting and other operational issues, and less on Fannie and Freddie’s growing investments in risky mortgages and securities.⁵⁵³

In 2002, Freddie changed accounting firms. The company had been using Arthur Andersen for many years, but when Andersen got into trouble in the Enron debacle (with both going out of business), Freddie switched to PricewaterhouseCoopers. The new accountant found that the company had understated its earnings by \$5 billion from 2000 through the third quarter of 2002,

⁵⁵² These details are from Chairman’s notes on Moody’s prior to hearing

⁵⁵³ Preliminary Investigative Report on Fannie Mae, p. 58.

in an effort to smooth reported earnings and promote itself as “Steady Freddie,” a company of strong and steady growth.⁵⁵⁴ Bonuses were tied to the reported earnings and OFHEO found that this structure contributed to the accounting manipulations.⁵⁵⁵ Its board ousted most of the top management, including the chairman and chief executive officer Leland Brendsel, President and COO David Glenn and Chief Financial Officer Vaughn Clarke.⁵⁵⁶ In December 2003, Freddie entered into a consent order with OFHEO that required it to pay a \$125 million penalty and to implement numerous corrective actions to the company’s corporate governance, internal controls, accounting, and risk management.⁵⁵⁷ The following month, OFHEO directed Freddie to maintain a capital surplus of 30 percent over its minimum capital requirement to ensure adequate capital until operational risk was reduced and the GSE was able to produce timely, certified financial statements.⁵⁵⁸ Before the dust settled, Freddie Mac would settle shareholder lawsuits for \$410 million and pay \$50 million in penalties to the SEC.

Fannie was next. In September 2004, OFHEO discovered violations of accounting rules calling into question previous company filings. Eventually, in 2006, OFHEO reported that Fannie had overstated earnings from 1998 through 2002 by \$11 billion, and like Freddie, the accounting

⁵⁵⁴ December 2003 OFHEO Special Examination Report at <http://www.fhfa.gov/webfiles/749/specialreport122003.pdf>.

⁵⁵⁵ December 2003 OFHEO Special Examination Report at <http://www.fhfa.gov/webfiles/749/specialreport122003.pdf>

⁵⁵⁶ In December, 2003, OFHEO publicly described the company’s accounting irregularities in a *Report on the Special Examination of Freddie Mac*. It said that the size of the bonus pool for Freddie Mac’s senior executives was tied, in part, to meeting or exceeding annual specified earnings-per-share (EPS) targets. The actions to shift extra earnings to future periods helped ensure achievement of future EPS goals and the related bonuses. OFHEO also said management committed insufficient resources for accounting and internal controls, treating those functions as “second class citizens,” and circumvented prevailing public disclosure standards in order to obfuscate specific capital market and accounting transactions.

⁵⁵⁷ December 10, 2003 OFHEO press release and consent agreement at <http://www.fhfa.gov/webfiles/2268/121003CorrectiveActionsand125MPenalty.pdf>.

⁵⁵⁸ January 29, 2004 OFHEO press release at <http://www.fhfa.gov/webfiles/2158/12904MandatoryTarget.pdf>.

manipulations were motivated by compensation plans tied to reported results [ck consistency with 1.3].⁵⁵⁹ OFHEO would require Fannie to improve accounting controls, maintain the same 30 percent capital surplus imposed on Freddie and implement corrective actions to Fannie's governance and internal controls.^{560, 561} Fannie's board soon ousted CEO Franklin Raines and other top officials, and the SEC required Fannie Mae to restate its financial results for 2002 through mid-2004. Fannie settled related SEC and OFHEO enforcement actions for \$400 million in penalties.⁵⁶² Executives at both Fannie and Freddie told the FCIC that the accounting issues distracted management from their mortgage business.[cites] For example, Donald Bisenius, an executive vice president at Freddie Mac, said, "I believe that the focus we needed to place on the restatement and the remediation took a tremendous amount of management's time and attention and probably led to us being less aggressive or less competitive in the marketplace as we otherwise might have been."⁵⁶³

While the GSE's executives and regulators focused on their accounting woes, they lost market share. From 2000 to 2003, Fannie's and Freddie's combined market share had increased from

⁵⁵⁹ In 2006, OFHEO issued its final *Report of the Special Examination of Fannie Mae*. OFHEO said that management engaged in numerous acts of misconduct, involving well over a dozen different forms of accounting manipulation and violations of generally accepted accounting principles. As in the case of Freddie, OFHEO said Fannie's management sought to hit ambitious earnings-per-share targets that were linked to their own compensation. Fannie CEO Franklin Raines received compensation of \$90 million over 1998-2003; of that amount, over \$52 million was directly linked to achieving EPS targets.

⁵⁶⁰ September 20, 2004 OFHEO press release at <http://www.fhfa.gov/webfiles/1563/92004ltrtoFNMboard.pdf>; September 27, 2004 OFHEO press release at <http://www.fhfa.gov/webfiles/2242/92704FNMDirsAgreetoCorrect.pdf>. March 8, 2005 OFHEP press release and supplemental agreement at <http://www.fhfa.gov/webfiles/2160/030805agreementrelease.pdf>; May 23, 2006 OFHEO press release at <http://www.fhfa.gov/webfiles/2095/52306fjmserelease.pdf>; May 23, 2006 OFHEO press release and consent order at <http://www.fhfa.gov/webfiles/2204/settlementrelease52306.pdf>.

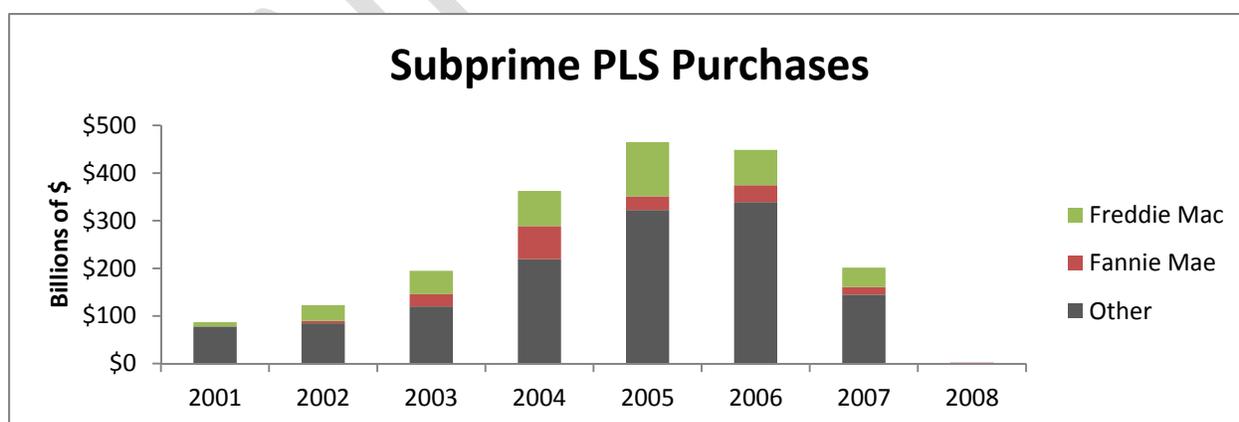
⁵⁶¹ July 17, 2003 Falcon testimony at <http://www.fhfa.gov/webfiles/1481/falcon71703.pdf>

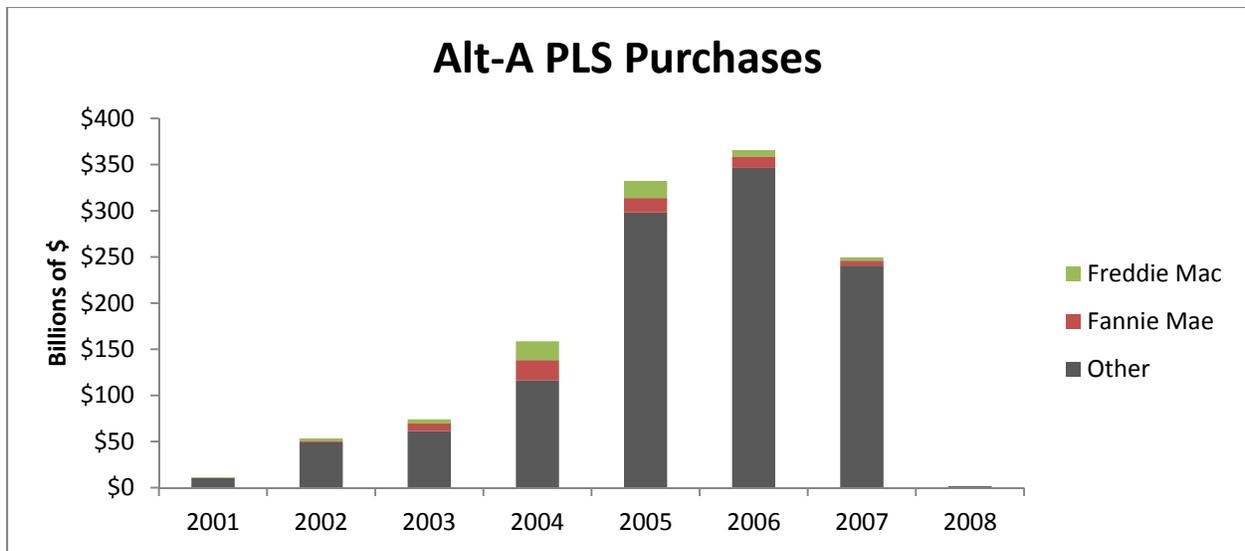
⁵⁶² OFHEO, 2006 Report to Congress, p. 1

⁵⁶³ FCIC interview with Donald Bisenius, Executive Vice President, Freddie Mac, September 29, 2010 (1 hr. 11 min. 30 sec.)

45% of originations in 2000 to 57% in 2003, representing \$2.2 trillion of the \$3.9 trillion of mortgages originated in 2003. But in 2004, total originations declined to \$2.9 trillion and the GSEs share of the market declined to 42% or \$1.2 trillion. The decline continued over the next two years.

The securitization of riskier loans purchased by Wall Street firms increased substantially. As shown in the figures below, subprime mortgage-backed securities increased from \$87 billion in 2001 to \$465 billion in 2005 and Alt-A mortgage-backed securities increased from \$11 billion to \$332 billion. Starting in 2001 for Freddie and 2002 for Fannie, the GSEs – particularly Freddie – became buyers in this market. While private investors always remained the majority of buyers, at their peak the GSEs purchased 40% of the subprime mortgage-backed securities and 27% of Alt-A mortgage-backed securities. As noted, the GSEs’ purchases were limited to only the most highly-rated tranches. From 2005 through 2008, the GSEs combined purchases of these securities declined, both in dollar amount and as a percentage of subprime and Alt-A mortgage-backed securities issued during each year.





These investments were profitable at first, but, as delinquencies increased in 2007 and 2008, both GSEs began to take significant losses on their holdings of private-label mortgage-backed securities—disproportionately from their purchases of Alt-A securities. By the second quarter of 2010, total losses on the securities totaled \$45 billion at the two companies—enough to wipe out nearly 60% of their capital.⁵⁶⁴

OFHEO knew about the GSEs purchases of the subprime and Alt-A mortgage-backed securities. In the 2004 report of examination, the regulator noted Freddie’s purchases of the subprime mortgage-backed securities and that Freddie’s outstanding balance of all mortgage-backed securities increased 60% during the year to \$133 billion.⁵⁶⁵ Additionally, it noted that Freddie was purchasing whole mortgages with “higher risk attributes which exceeded the Enterprise’s modeling and costing capabilities,”⁵⁶⁶ including “No Income/No Asset loans” that introduced

⁵⁶⁴ Fannie Mae had \$56 billion of total capital in mid-2008; Freddie Mac had \$43 billion. Federal Housing Finance Agency, 2008 Annual Report to Congress, revised edition. Pp 121 and 138.

⁵⁶⁵ 2004 exam report at 10.

⁵⁶⁶ 2004 Exam report at 9-10.

“considerable risk.”⁵⁶⁷ Indeed, OFHEO reported that mortgage insurers were already seeing abuses with these loans.⁵⁶⁸ But OFHEO concluded that the purchases of mortgage-backed securities and riskier mortgages were not a “significant supervisory concern,” and the examination was more focused on Freddie’s efforts to address the matters in the consent order.⁵⁶⁹ OFHEO included nothing in Fannie’s report about the GSE’s purchases of subprime and Alt-A mortgage-backed securities and credit risk management was deemed satisfactory.⁵⁷⁰

The reasons for the GSEs’ purchases of subprime and Alt-A mortgage-backed securities have been debated. Some observers, including Fed Chairman Greenspan, have linked the GSEs’ purchases of private mortgage-backed securities to the GSEs’ push to fulfill their rising affordable housing goals. As Greenspan wrote of the GSEs in a working paper, pressed to “expand ‘affordable housing commitments,’ they chose to meet them by investing heavily in subprime securities.”⁵⁷¹ Since 1992, the Department of Housing and Urban Development (HUD) required a certain amount of the GSEs’ loan purchases to be mortgages for low- and moderate-income families and underserved communities. And, a change in 19xx had made purchases of private label securities qualify for the GSEs’ affordable housing goals depending on the characteristics of the securities. Still, prior to 2005, 50 percent or less of the GSEs’ loan

⁵⁶⁷ 2004 Exam report at 10.

⁵⁶⁸ 2004 Exam report at 10.

⁵⁶⁹ 2004 Exam report at 10; Id at 2 (“Our examination activities focused heavily on the Enterprise’s compliance with the extensive requirements of the Consent Order the Board of Directors executed on December 9, 2003.”).

⁵⁷⁰ 2004 Exam report (no page numbers; report in binder in Seefer’s office).

⁵⁷¹ Page 13 of April 7 hearing <http://fcic.gov/hearings/pdfs/2010-0407-Transcript.pdf> (“the search and demand for mortgage-backed securities was heavily driven by Fannie Mae and Freddie Mac, which were pressed by the Department of Housing and Urban Development and the Congress to expand affordable housing commitments.”).

purchases had to satisfy the affordable housing goals, and, according to Fannie CEO Dan Mudd, they were easy to meet in the normal course of business [put in Mudd MFR statement].⁵⁷² In 2005 the goals would be increased above 50%, a subject for a later chapter.

Suggesting that the affordable housing goals were not the driving force behind the GSEs' purchases of mortgage-backed securities, a 2006 consultant survey of Freddie's purchases found that only 34% of its total Wall Street securities purchases qualified for "goals" purposes, and only 23% of Fannie's did.⁵⁷³ [more data to be added]

Robert Levin, former Chief Business Officer of Fannie Mae, told the FCIC that buying private-label mortgage-backed securities "was a money-making activity - it was all positive economics...there was no tradeoff [between making money and hitting goals], it was a very broad-brushed effort" that could be characterized as "win-win-win: money, goals, and share."⁵⁷⁴

Mark Winer, the head of Fannie's Business, Analysis and Development Group stated that the purchase of AAA tranches of mortgage-backed securities backed by subprime was viewed as an attractive business opportunity with good returns. He said the mortgage-backed securities satisfied housing goals but that it was not the reason for acquiring them.⁵⁷⁵ [add in Mudd and others].

⁵⁷² Mudd MFR at ___.

⁵⁷³ BlackRock Solutions, "Fannie Mae's Strategy and Business Model, Supplementary Exhibits," December 2007, FMAC-FCIC 000049050-069, at FMAC-FCIC 000049059.

⁵⁷⁴ Levin MFR

⁵⁷⁵ Winer MFR

Overall, while the mortgages backing the subprime mortgage-backed securities were often to borrowers that could help Fannie and Freddie to fulfill the goals, the mortgages backing the Alt-A securities were not. Alt-A mortgages were not generally extended to lower-income borrowers and the regulations prohibited counting mortgages to borrowers with unstated income levels—a hallmark of Alt-A loans.⁵⁷⁶ Officials told the FCIC that the Alt-A securities actually detracted from the goals—the low- and moderate-income and special affordable housing goals specifically — every year from 2001 to 2007. These purchases “did not have a net positive effect on Fannie Mae's housing goals,” Fannie Executive Vice President Robert Levin told the FCIC.⁵⁷⁷ In order to fulfill the affordable housing goals, purchases of Alt-A mortgage-backed securities had to be offset with increases in purchases of mortgages for low-and moderate-income borrowers.

As we will see, Fannie and Freddie continued to purchase subprime and Alt-A mortgage-backed securities from 2005 to 2008 and also increased their purchase and securitization of riskier mortgages. The results of their efforts would be disastrous for the companies, their shareholders, and the taxpayer.

⁵⁷⁶ FCIC interview with John Weicher, former FHA Commissioner.

CHAPTER CONCLUSIONS HERE

CONFIDENTIAL

Part II, Chapter 3. The CDO machine

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In the 2000s, a previously obscure financial product called the collateralized debt obligation, or CDO, solved a key problem for the mortgage securities market: who would purchase the mortgage-backed securities that few investors seemed to want?

As we have seen, Wall Street in the 1990s had developed a clever way of distributing to investors the monthly payments from borrowers: mortgage-backed securities featuring a waterfall of payouts to investors. Cash would flow first to risk-averse investors at the top of the waterfall at a low interest rate, and last to risk-seeking investors at a high interest rate. If borrowers were delinquent or defaulted, the bottom investors were out of luck.

But who would want to be at the bottom of the waterfall? At the very bottom were the equity investors, often hedge funds (who liked the high interest rates) or mortgage servicers (who would have an interest in collecting if the loans went bad).

The next rungs up from the bottom, the lowest investment-grade tranches, were always the hardest to sell. Wall Street came up with a solution: in the words of one banker, they “created the investor.”⁵⁷⁸ That is, they built new securities that would buy the tranches few wanted to buy. Bankers would take those low investment-grade tranches, largely rated BBB or A, from many mortgage-backed securities and re-package them into the new securities – the CDOs. Those securities would be sold with their own waterfalls, with the risk-averse investors, again, paid first and the risk-seeking investors paid last. As in the case of mortgage-backed securities, the rating agencies would give their highest, AAA ratings to the securities at the top of the CDO waterfall.

Still, it’s not obvious that you should be able to transform the risky part of a bunch of mortgage-backed securities rated BBB into a new security that is mostly rated AAA. But math made it so. The securities firms argued – and the rating agencies agreed – that if you pooled many BBB rated mortgage-backed securities, you would get additional diversification benefits, because they wouldn’t necessarily all go bad at the same time. The rating agencies believed those diversification benefits were significant – in simple terms, if one security went bad, the second had only a very small chance of going bad at the same time. And, so long as losses were limited, only those investors at the bottom of the waterfall would be wiped out. They would absorb the blow and the other investors would continue to get paid.

[insert CDO chart]

Based on that logic, the CDO machine gobbled up the BBB and other low-rated tranches of mortgage-backed securities, growing from a bit player to a multi-hundred billion dollar industry.

⁵⁷⁸ Joe Donovan, Credit Suisse, quoted in Michael Gregory, *The “What if’s” in ABS CDOs*, Asset Securitization Report, February 18, 2002.

Between 2003 and 2007, as house prices rose xx% nationally and \$xx billion in mortgage-backed securities were created, Wall Street issued nearly \$700 billion in CDOs that included mortgage-backed securities. By 2004, in fact, Wall Street firms such as Citigroup, Merrill Lynch, and Goldman Sachs were packing most of the below-AAA tranches of subprime and Alt-A mortgage-backed securities into CDOs.⁵⁷⁹ Thanks to this seemingly limitless appetite on the part of the CDOs, sellers of mortgage-backed securities now always had ready buyers for their riskiest tranches. As a result, securitizers continued to demand loans for their pools and hundreds of billions of dollars flooded the mortgage world. In effect, the CDO became the engine that powered the mortgage supply chain. “There is a machine going,” Scott Eichel, a senior managing director at Bears Stearns, an investment bank, told a financial journalist in May 2005. “There is a lot of brain power to keep this going.”⁵⁸⁰

Everyone involved in keeping this machine humming – the CDO managers and underwriters who packaged and sold the securities, the rating agencies that gave most of them sterling ratings, and the guarantors who wrote protection against them defaulting – collected fees based on the dollar volume of securities sold. As demand for these securities grew and quality plunged, risk was simply passed down the supply chain. For the traders who had put these deals together, as for the executives of their companies, volume equaled fees equaled bonuses. And those fees were in the billions of dollars, market-wide. Regulators stood aside; banks were earning high

⁵⁷⁹ Industry experts agree the percentage of BBB tranches of residential mortgage-backed securities that were purchased by CDOs was over 90%. The FCIC, in analyzing Moody’s data, was unable to put an exact figure on this phenomenon because the available collateral information about CDOs does not distinguish cash positions (positions in actual securities) from synthetic positions (positions through derivatives).

⁵⁸⁰ Allison Pyburn, *CDO machine? Managers, mortgage companies, happy to keep fuel coming*, Asset Securitization Report, May 23, 2005.

profits, housing markets were booming, and the whole process seemed to be spreading risk among investors the way it was supposed to.

But when the housing market went south, the models proved tragically wrong. One mortgage-backed security turned out to be not so different from another; in other words, they were highly correlated. Mortgages across the country would default at the same time, particularly in regions where subprime and Alt-A mortgages were heavily concentrated. This was not how it was supposed to work. Losses in one region were supposed to be offset by successful loans in another region. In the end, CDOs turned out to be some of the most toxic assets in the financial crisis. The greatest losses would be experienced by big CDO arrangers such as Citigroup, Merrill Lynch, and UBS, and by big guarantors such as AIG. These players had believed their own models and retained what were supposed to be the least risky tranches of the CDOs: those rated AAA or even “super-senior,” better than AAA.

“The whole concept of [mortgage-backed] CDOs had been an abomination,” Pat Parkinson, currently head of banking supervision and regulation at the Federal Reserve Board, told the FCIC. “The point is, the only sort of [economic] environment in which one mortgage-backed security is in trouble is one in which most of them are going to be in trouble. So that you’re not going to get much diversification effect. So maybe that was a financial innovation too far or... a poor implementation of what started out as a reasonably sound idea.”⁵⁸¹

CDOs: “We created the investor”

Michael Milken at Drexel Burnham Lambert assembled the first collateralized debt obligation in 1987 out of different companies’ junk bonds. The strategy made sense – pooling many bonds

⁵⁸¹ FCIC interview with Pat Parkinson, [Transcript of 3-30-10 interview, pp. 70-71], 2010. Netdocs ID: 4826-8172-6727

reduced investors' exposure to the failure of any one bond, and tranching the securities allowed investors to pick their risk and return.

For the CDO managers who created CDOs, the key to profitability was the profit margin or spread – the difference between the interest that the CDO received on the bonds or loans that it held and the interest that the CDO paid to investors. Throughout the 1990s, CDOs managers generally purchased corporate and emerging market bonds and bank loans. When the liquidity crisis of 1998 drove up returns on asset-backed securities, Prudential Securities saw an opportunity and launched a series of “multi-sector CDOs” that combined different kinds of asset-backed securities into one CDO. These securities were backed by mortgages, mobile home loans, airplane leases, mutual fund fees, intellectual property rights, and other asset classes with predictable income streams. The diversity was supposed to provide yet another layer of safety for investors.

Multi-sector CDOs went through a tough patch when some of the asset-backed securities in which they invested started to perform poorly in 2002 – particularly those backed by mobile home loans (after borrowers defaulted in large numbers), airplane leases (after 9/11) and mutual fund fees (after the dot-com bust). The accepted wisdom among many investment banks, investors, and rating agencies was that the diversity among assets had actually contributed to the problem; in that view, the asset managers who selected the portfolios could not be experts in sectors as diverse as airplane leases and mutual funds.

So, the CDO industry turned to nonprime mortgage-backed securities, which CDO managers believed they understood, which they thought had a long record of good performance, and which paid relatively high returns for what was considered a safe investment.

“Everyone looked at the sector and said, the CDO construct works, but we just need to find more stable collateral,” said Wing Chau, who ran two firms, Maxim Advisory and Harding Advisory, that managed CDOs mostly underwritten by Merrill Lynch. “And the industry looked at residential mortgage-backed securities, Alt-A, subprime, and non-agency mortgages, and saw the relative stability.”⁵⁸²

That “relative stability” would not last long, but for the time being these securities could be billed as safe; they also paid higher interest rates than identically rated tranches of mortgage-backed securities. CDOs quickly became ubiquitous in the mortgage business.⁵⁸³ Investors liked the mix of safety and high returns, and investment bankers liked having a way to sell off those problematic lower tranches of their mortgage-backed securities.

“We told you these [BBB rated mortgage-backed securities] were a great deal, and priced at great spreads, but nobody stepped up,” Credit Suisse banker Joe Donovan told a Phoenix conference of securitization bankers in February 2002. “So we created the investor.”⁵⁸⁴

By 2004, CDOs were the biggest buyers of the BBB and other mezzanine tranches of mortgage-backed securities. Just as mortgage-backed securities provided the cash to originate mortgages, now, in the mid-2000s, CDOs would provide the cash to fund mortgage-backed securities. Also by 2004, mortgage-backed securities accounted for more than half of the collateral in CDOs, up from less than one-fifth in 2002.⁵⁸⁵ Sales of mortgage CDOs more than doubled every year,

⁵⁸² FCIC interview with Wing Chau, November 11, 2010. [13:00]

⁵⁸³ CDOs that bought relatively senior tranches of mortgage-backed securities were known as *high-grade*, those that bought the BBB rated and other junior tranches were known as *mezzanine*.

⁵⁸⁴ Michael Gregory, *The “What if’s” in ABS CDOs*, Asset Securitization Report, February 18, 2002.

⁵⁸⁵ JP Morgan, *Structured Finance CDO Handbook*, February 19, 2004, page 9.

jumping from \$22 billion in 2003 to \$217 billion in 2006.⁵⁸⁶ Filling this pipeline would require hundreds of billions of dollars of subprime and Alt-A mortgages.

CDO players: “It was a lot of effort”

Five types of players were involved in the CDO pipeline: securities firms, CDO managers, rating agencies, investors, and financial guarantors. Each took varying degrees of risk and, for a time, profited handsomely.

Securities firms underwrote (that is, created and sold) the CDOs and generally determined how they were tranced. Three firms, Merrill Lynch, Goldman Sachs, and the securities arm of Citigroup, accounted for more than [40%] of CDOs sold from 2004 to 2007. Deutsche Bank and UBS were also major participants. What made these firms so competitive was their extensive network of salespeople. “It was every salesman’s job to sell structured products,” Nestor Dominguez, co-head of Citigroup’s CDO desk, told the FCIC. “We spent a lot of effort to have people in place to educate, to pitch structured products. It was a lot of effort, about 100 people. And I think our competitors did the same.”⁵⁸⁷

The underwriters’ focus was on generating fees and structuring deals that they could sell, and not much else. Underwriting did entail risks, however: the securities firm had to buy the assets, such as the BBB rated tranches of mortgage-backed securities, and hold them during the six to nine months that it took to create a CDO; during that period, the firm took the risk the assets would lose value. “Our business was to make new issue fees, [and to] make sure that if the

⁵⁸⁶ Issuance then dropped in 2007 to \$162 billion and virtually disappeared in 2008. Source: FCIC estimates, based on data provided by Citigroup and Moody’s.

⁵⁸⁷ FCIC interview with Nestor Dominguez, [XXXX], 2010.

market did have a downturn that we were somehow hedged,”⁵⁸⁸ Michael Lamont, co-head for CDOs at Deutsche Bank, told the FCIC. Chris Ricciardi, formerly head of the CDO desk at Merrill Lynch, told the FCIC that he did not track the performance of CDOs after underwriting them. Lamont said it was not his job to decide whether the rating agencies’ models had the correct underlying assumptions. That “was not what we brought to the table,” he said. In many cases, though, underwriters helped CDO managers select collateral, leading to potential conflicts; more on that later.

In marketing their CDOs, underwriters touted the benefit of having a supposedly expert CDO manager select the mortgage-backed securities underlying the CDOs. Managers ranged from small independent investment firms such as Chau’s to units of large asset-management companies such as PIMCO and Blackrock.

CDO managers received annual fees based on the dollar amount of assets in the CDO and on the structure of the tranches. On a percentage basis, these may have looked small—they could be measured in tenths of a percentage point—but the amounts were not trivial. For CDOs that focused on the relatively senior tranches of mortgage-backed securities, annual manager fees tended to be in the range of \$600,000 to a million dollars per year for a \$1 billion dollar deal. For CDOs that focused on the more junior tranches, which were often smaller, fees would be \$750,000 to \$1.5 million per year for a \$500 million deal. As managers did larger deals and subsequent deals, they generated more fees without much additional cost.⁵⁸⁹ “You’d hear statements like, ‘Everyone and his uncle wants to be a CDO manager,’” Mark Adelson, then a CDO analyst at Nomura Securities and currently chief credit risk officer at S&P, told the FCIC.

⁵⁸⁸ FCIC interview with Michael Lamont.

⁵⁸⁹ JP Morgan, *Structured Finance CDO Handbook*, February 19, 2004, page 2.

“That was an observation voiced repeatedly at industry conferences around those times. It was very lucrative.”⁵⁹⁰ Using the bottom range of industry fees, CDO managers industry-wide earned at least \$1.5 billion in management fees between 2003 and 2007, and probably a lot more.⁵⁹¹ The rating agencies blessed the structure of the CDOs – that is, the size and number of tranches – in close consultation with the underwriters. Rating agencies were willing to give their highest AAA ratings to most of the securities that CDOs issued, as they were for mortgage-backed securities, because they believed these CDOs had similar pooling and tranching benefits; according to the rating agencies’ models, discussed below, the below-AAA investors would suffer any losses, protecting the AAA investors in most likely scenarios. The AAA rating made those products market-ready for many investors. Underwriters and CDO managers such as Chau used the ratings to market the securities. Rating agency fees were capped at \$500,000 for the typical CDO. For most deals, there would be two rating agencies each receiving those fees, because investors ostensibly preferred two points of view – although the views tended to be in sync.⁵⁹²

The CDO investors, like investors in mortgage-backed securities, focused on different tranches based on their perceived risks and returns. CDO underwriters such as Citigroup, Merrill Lynch, and UBS often retained the super-senior (better than AAA) tranches. They also sold them to asset-backed commercial paper programs that invested in these CDOs and other highly-rated

⁵⁹⁰ FCIC interview with Mark Adelson.

⁵⁹¹ That assumes an annual management fee of 0.10% of the total value of the deal, based on the mortgage-focused multi-sector CDOs in the FCIC database. It does *not* include other income, such as interest on equity tranches retained by the managers. CDO managers responding to the FCIC survey reported management fees ranging from as low as 0.10% to as high as 0.40%.

⁵⁹² Rating agencies would also receive a small ongoing monitoring fee of [\$XXX] to monitor the performance of CDOs after issuance.

assets, particularly a set of such programs known as structured investment vehicles or SIVs. Hedge funds bought most of the equity tranches.

Eventually, other CDOs became the most important class of investor. By 2005, CDO underwriters sold most of the mezzanine tranches – including those rated A and, especially, those rated BBB, the lowest and riskiest investment grade rating – to other CDO managers, to be packaged into other CDOs.⁵⁹³ It was common for CDOs to invest 10% or 15% of their cash in other CDOs; CDOs that invested 80% to 100% of their cash in other CDOs were known as “CDO-squareds.”

Finally, the financial guarantors, most notably American International Group, or AIG, played a central role by selling CDO investors protection against default, making the deals more attractive but creating huge risks for the guarantors in the event of significant losses. At the time, when few people worried about the amount of risk piling up in the mortgage market, it seemed to be a lucrative and relatively safe business for AIG and others.

Profit from the creation of CDOs, as is customary on Wall Street, was shared with the employees. Bonuses accounted for a large part of compensation for investment bank employees, overshadowing their base salary and longer-term incentives such as employee stock options.

Pretax profit for the five largest investment banks doubled between 2003 and 2006, from [\$20] billion to [\$44] billion; total compensation rose from [\$33] billion to [\$59] billion. A large part of the growth was in mortgage-backed securities, including CDOs, and derivatives, and thus employees in those areas could be expected to be compensated accordingly. “Credit derivatives

⁵⁹³ FCIC estimates based on Moody’s CDO Enhanced Monitoring Service.

traders as well as mortgage and asset backed securities salespeople should especially enjoy bonus season,” the Options Group, which compiles compensation figures for investment banks, reported in 2005. [will update with additional figures]

To see in more detail how the mortgage-backed CDO pipeline worked, we revisit the Citigroup deal, our case-study mortgage-backed security, also known as CMLTI 2006-NC2. Earlier, we described how CDOs bought most of the below-AAA bonds issued in this deal. One example was Kleros Real Estate Funding III, which was underwritten by UBS, the Swiss bank. The CDO manager was Strategos Capital Management, a subsidiary of Cohen & Company, an investment company headed by Chris Ricciardi, who had earlier built Merrill’s CDO business. Kleros III, launched in 2006, purchased and held \$9.6 million in securities from the A rated M5 tranche of CMLTI 2006-NC2, along with 187 junior tranches of other mortgage-backed securities. In total, it owned [\$975 million] of mortgage-related securities, of which 45% were rated A or lower, 16% A-, and the rest higher. According to the rating agencies’ models, Kleros III would achieve diversification benefits because these securities would not be expected to default at the same time.

To fund those purchases, Kleros III sold [\$1 billion][check] of its own bonds to investors. The bonds, as in all CDOs and private-label mortgage-backed securities, were sold in tranches. And, as was typical for CDOs at the time, roughly 88% of the Kleros III bonds were AAA rated — remarkable given that all of the assets backing these bonds were below AAA.

The super-senior and AAA tranches of Kleros were retained by UBS [check]. At least half of the below-AAA tranches issued by Kleros III were purchased by other CDOs.⁵⁹⁴

“Mother’s milk to the CDO market”

The growth of CDOs had important impacts on the mortgage market itself. CDO managers who were eager to expand their assets under management – on which their income was based – were willing to pay high prices to accumulate BBB tranches of mortgage-backed securities. This “CDO bid” pushed up market prices on those tranches, pricing out of the market traditional investors in mortgage-backed securities who had been more knowledgeable about mortgage credit risk.

Informed institutional investors such as insurance companies had purchased the relatively simple private-label mortgage-backed securities issued in the 1990s. These securities were typically protected from losses by bond insurers, who had analyzed the deals as well. Beginning in the late 1990s, the more complex mortgage-backed securities – deals that used six or more tranches and other devices to protect the AAA investors – became more common, replacing the earlier structures that had relied on bond insurance to protect investors. The more complicated structures depended upon CDOs to buy various tranches, particularly the low-investment-grade tranches for which traditional investors had less enthusiasm. By 2004, the earlier forms of mortgage-backed securities had essentially vanished, leaving the market to the multi-tranche structures and their CDO investors.⁵⁹⁵

⁵⁹⁴ For example, Kleros III tranches were in Buckingham CDO, Buckingham CDO II, and Buckingham CDO III, which were all deals underwritten by Barclays.

⁵⁹⁵ The portion of asset-backed securities covered by bond insurers fell from just under 40% in 2002 to just over 10% in 2003. Mark Adelson and David Jacob, *The Sub-prime Problem: Causes and Lessons*, January 8, 2008.

This was a critical development. Unlike the traditional investors who worried about the risk in the deal, CDO managers focused more on whether the mortgage-backed securities they were buying fit the criteria needed to get rating agency endorsement of the CDOs they were building.⁵⁹⁶ “The CDO manager and the CDO investor are not the same kind of folks who just backed away,” Adelson said. “They’re not mortgage professionals; they’re not real estate folks. They’re derivatives folks.”⁵⁹⁷

Indeed, Chau, the CDO manager, described his job as creating structures that rating agencies would approve and investors would buy, and making sure the mortgage-backed securities that he bought “met industry standards.” He said he relied on the rating agencies. “Unfortunately, what lulled a lot of investors, and I’m in that camp as well, what lulled us into that sense of comfort was that the rating stability was so solid and that it was so consistent. I mean, the rating agencies did a very good job of making everything consistent.”⁵⁹⁸ With many CDO managers driven by ratings and structures and not at all focused on the underlying mortgages, CDO production was on autopilot. “Mortgage traders speak lovingly of ‘the CDO bid.’ It is mother’s milk to the...market,” James Grant, a market commentator, wrote in 2006. “Without it, fewer asset-backed securities could be built, and those that were would have to meet a much more conservative standard of design. The resulting pangs of credit withdrawal would certainly be felt in the residential real-estate market.”⁵⁹⁹

⁵⁹⁶ FCIC interview with Michael Lamont, Deutsche Bank, September 21, 2010.

⁵⁹⁷ FCIC interview with Mark Adelson, October 22, 2010.

⁵⁹⁸ FCIC interview with Wing Chau, November 11, 2010. [52:16].

⁵⁹⁹ James Grant, “Up the Capital Structure,” December 15, 2006, from *Mr. Market Miscalculates*.

UBS's Global CDO Group agreed, noting that CDOs "have now become bullies in their respective collateral markets." The bid from CDOs had promoted an increase in both the volume and the price of mortgage-backed securities, and had "an impact on the overall U.S. economy that goes well beyond the CDO market."⁶⁰⁰ Without the demand from CDOs, lenders would have been able to sell fewer mortgages, and thus they wouldn't have pushed so hard to make the loans in the first place.

"Leverage is inherent in CDOs"

The mortgage pipeline also introduced leverage at every step. Most financial institutions thrive on leverage, in other words, investing borrowed money. Leverage increases profits in good times, but also potentially increases losses in bad times. The mortgage itself creates leverage – particularly, in the case of low-down payment, high loan-to-value loans. Mortgage-backed securities and CDOs created further leverage. And the CDOs were often purchased as collateral by other CDOs with yet another round of debt. CDOs using credit default swaps, as described below, were leveraged by design. For that reason, the CDO, backed by securities that were themselves backed by mortgages, created leverage on leverage, Dan Sparks, mortgage department head at Goldman Sachs, told the FCIC.⁶⁰¹ "Lots of folks [were] looking for leverage – leverage as an institution, or leverage in the structure, different leverage methodologies for different investors," Citigroup's Dominguez told the FCIC.⁶⁰²

⁶⁰⁰ UBS Global CDO Group, *Presentation on Product Series (POPS)*, January 2007. UBSSFCIC00063885, UBSSFCIC00063889.

⁶⁰¹ FCIC interview with Dan Sparks, June 15, 2010.

⁶⁰² FCIC interview with Nestor Dominguez, [XXX], 2010.

Even the investor that bought the CDOs could use leverage. Structured investment vehicles – a type of commercial paper programs that invested mostly in AAA rated securities – were leveraged between 12-to-1 to 15-to-1, in other words these structured investment vehicles would hold \$15 in assets for every dollar of capital.⁶⁰³ The assets would be financed with debt. Hedge funds, which were common purchasers, were also often highly leveraged in the repo market, as we will see. But, it would become clear during the crisis that some of the highest leverage was created by companies like Merrill, Citigroup, and AIG when they retained or purchased the AAA super-senior tranches of CDOs with little or no capital backing.

Thus, with the homeownership rate peaking in 2004, and new mortgages being driven more and more by serial refinancings, investors, and second home purchases, the value of trillions of dollars of securities rested on just two things: whether millions of homeowners could make the payments on their subprime and Alt-A mortgages; and whether the market value of homes whose mortgages were the basis of these securities would not fall. Those dangers were understood all along by some market participants. “Leverage is inherent in [mortgage] CDOs,” Mark Klipsch, a banker with Orix Capital Markets, an asset management firm, told a Boca Raton conference of securitization bankers in October 2004.⁶⁰⁴ While that was good for short-term profits, Klipsch said losses could be large later on. “We’ll see some problems down the road.”

BSAM: “We used the CDO as a funding source”

Bear Stearns Asset Management, or BSAM, played a prominent role in the CDO business as both a CDO manager and a hedge fund investor. At BSAM, Ralph Cioffi managed [seven] CDOs with \$18.3 billion in assets and three hedge funds with as much as [\$19 billion] in assets

⁶⁰³ *Moody’s Special Report: Moody’s Update on Structured Investment Vehicles*, 16 January 2008. Page 13.

⁶⁰⁴ *Drought of CDO collateral tops concerns*, Asset Securitization Report, October 18, 2004.

at the end of 2006. Although Bear Stearns owned BSAM⁶⁰⁵, Bear's management exercised little supervision over its business.⁶⁰⁶ The eventual failure of Cioffi's two large mortgage-focused hedge funds would be an important event in 2007, early in the financial crisis.

In 2003, Cioffi launched his first fund at BSAM, the High Grade Structured Credit Strategies Fund, which totaled \$8.6 billion by the end of 2006.⁶⁰⁷ By that time, Cioffi had added the High Grade Structured Credit Strategies Enhanced Leverage Fund, which would total \$[XXX] billion at the end of 2006.

The funds purchased mostly mortgage-backed securities or CDOs, and used leverage (mostly by borrowing in the repo market) to enhance the returns.⁶⁰⁸ The target was for 90% of assets to be rated either AAA or AA.⁶⁰⁹ As Cioffi told the FCIC, "[T]he thesis behind the fund was that the structured credit markets offered yield over and above what their ratings suggested they should offer."⁶¹⁰

Cioffi targeted a leverage ratio of [10] to 1 for the High Grade fund. For Enhanced Leverage, Cioffi upped the ante, with a target leverage ratio of [12] to 1. At the end of 2006, the two funds

⁶⁰⁵ Financial Crisis Inquiry Commission, Hearing on the Shadow Banking System, May 5, 2010, written testimony of James Cayne at 2, <http://fcic.gov/hearings/05-05-2010.php> (checked)

⁶⁰⁶ Warren Spector, interview by FCIC, March 30, 2010, Memorandum for the Record at 2, NetDocuments ID 4844-1109-0695. (checked)

⁶⁰⁷ Bear Stearns Asset Management Collateral Manager Presentation. BSAMFCIC 00000671 - . BSAMFCIC 00000740 at . BSAMFCIC 00000672.

⁶⁰⁸ Bear Stearns Asset Management Collateral Manager Presentation BSAMFCIC 0000671 at BSAMFCIC 0000672.

⁶⁰⁹ Interview of Cioffi. Unofficial transcript at 8.

⁶¹⁰ Interview of Cioffi. Unofficial transcript at 2.

had [\$18 billion] in securities – using [\$2 billion] of his hedge fund investors’ money and [\$16 billion] of borrowed money.

Borrowing in the repo market was typical for hedge funds. A survey conducted by the FCIC identified at least \$275 billion of repo borrowing by the 168 hedge funds that responded, as of June 30, 2008.⁶¹¹ Of that amount, the surveyed hedge funds invested at least \$45 billion in mortgage-backed securities or CDOs. The ability to borrow using the AAA and AA tranches of CDOs as repo collateral was an important driver of the demand for those tranches.

But repo borrowing carried risks for hedge fund investors: it created significant leverage and it had to be renewed frequently. With respect to leverage, repo borrowers such as hedge funds faced no regulatory margin requirements when they bought bonds.⁶¹² An investor buying a stock on margin—meaning with borrowed money—might have to put up 50 cents on the dollar, implying a leverage ratio of 2 to 1: he puts up 50 cents, his stock broker lends him the other 50 cents. In the repo market, these margins were determined by securities firms based on the perceived riskiness of the assets used as collateral and were much looser. To borrow using a Treasury bond as collateral, a securities firm would lend 99.75 cents against a dollar’s worth of Treasuries, allowing the borrower 400 to 1 leverage.⁶¹³ As a result, the borrower has 25 cents in equity. This structure would make sense because Treasuries could be expected to retain their

⁶¹¹ The hedge funds responding to the survey had a total \$1.2 trillion in investments, including leverage.

⁶¹² Under Regulation T and Regulation U, the Federal Reserve is empowered to set margin requirements on traded securities, and it has set a margin requirement of [50%] on purchases of stock. [These regulations date to the Great Depression.] However, in 1996, Congress amended the Securities Exchange Act of 1934 to eliminate the Board’s authority to set margin requirements for credit extended to broker-dealers who maintain a public customer business. This exclusion applies to all lenders. Therefore, broker-dealers may pledge both debt and equity securities in the repo market and the counterparty is not required to apply the margin requirements of Regulation T or Regulation U.

⁶¹³ UK FSA, *The Turner Review*, page 24.

value; in case of a default by the borrower, the lender could always sell the collateral to pay off the loan.

For a mortgage-backed security, a securities firm would lend a hedge fund, say, 95 cents on the dollar, still allowing 20 to 1 leverage, or 100 divided by 5. With this leverage, a 5% change in the value of that mortgage-backed security can double the fund's money – or lose all the initial investment. Again, the structure assumed that the underlying collateral could be sold easily in case of default. But, mortgage-backed securities would prove to be very different from U.S. Treasuries – and proved much more risky than the slight difference in margins would suggest.

The short-term nature of repo money also makes it risky – funding today could be gone tomorrow. To the degree the funding was overnight, Cioffi's funds, for example, took the risk that its repo lenders would decide not to extend, or “roll,” the repo lines another day. So, more and more, repo lenders were loaning money to funds like Cioffi's, rolling the debt nightly, and not worrying very much about the real quality of the collateral.

The firms, mostly investment banks, lending money to hedge fund managers such as Cioffi were often also selling him mortgage-related securities, with the same securities posted as collateral for the loan.⁶¹⁴ If the market value of the collateral fell, the repo lenders could and would demand more collateral from the hedge fund to back the repo loan. This would play a pivotal role in the fate of many hedge funds in 2007 – but most spectacularly in the fate of Cioffi's

⁶¹⁴ A broker, for example, might lend \$95,000 to purchase \$100,000 of residential mortgage-backed securities. The fund would contribute \$5,000 of its own money (the margin or haircut) and then post the \$100,000 of assets as collateral for the loan.

funds. “The repo market, I mean it functioned fine up until one day it just didn’t function,” Cioffi told the FCIC.⁶¹⁵

Cioffi’s hedge funds could buy billions of dollars of CDOs on borrowed money because of the market’s bullishness about mortgage assets, he told the FCIC. “It became... a more and more acceptable asset class, [with] more traders, more repo lenders, more investors obviously. [It had a] much broader footprint domestically as well as internationally. So the market just really exploded.”

BSAM touted its CDO holdings to investors, telling them CDOs were a market opportunity because they were complex and therefore undervalued in the general marketplace.⁶¹⁶ In 2003, this was a promising market with seemingly manageable risks. Cioffi and his team not only bought CDOs, they also created and managed other CDOs. Cioffi would purchase mortgage-backed securities, CDOs, and other securities for his hedge funds. When he had reached his firm’s internal investment limits, he would re-package those securities into CDOs to tranche and sell to other customers.⁶¹⁷ With the proceeds, Cioffi would pay off his repo lenders but in the meantime he would end up with the equity tranche of a new CDO.

For Cioffi, retaining the equity tranches represented the same financial risk as owning the assets that went into the CDO outright – because the equity tranche would be the first to suffer losses if the underlying assets did not perform – but without the additional risk that short-term repo

⁶¹⁵ Unofficial transcript of October 19, 2010 interview of Ralph Cioffi at 29.

⁶¹⁶ Bear Stearns High-Grade Structured Credit Strategies Marketing Presentation, [BSAMFCIC 0000706-37](#) at BSAMFCIC 0000709 NetDocuments ID 4838-7883-0856 (NOT cleared). FCIC Interview of Ralph Cioffi. Unofficial transcript at 3. NetDocuments ID 4852-9362-1512

⁶¹⁷ Interview of Cioffi. Unofficial transcript at 7.

funding posed.⁶¹⁸ Those equity positions would never be a large portion of the hedge funds' total assets.⁶¹⁹ "For ... the hedge funds I managed for BSAM, we used the CDO as a funding source," Cioffi said.⁶²⁰

Because Cioffi managed these newly created CDOs and selected the collateral⁶²¹ from his own hedge funds,⁶²² he was positioned on both sides of the transaction. The structure created a clear conflict of interest between Cioffi's obligation to his hedge fund investors and his obligation to his CDO investors; this was not unique on Wall Street, and BSAM disclosed the structure to potential CDO investors. For example, a critical question was at what price the assets should be transferred between the two types of investor: if the CDO paid above-market prices for a security, for example, that would advantage the hedge fund investors and disadvantage the CDO investors.

BSAM's flagship CDOs – dubbed Klio I, II, and III – were created in rapid succession over 2004 and 2005, with Citigroup as the underwriter. Klio II, issued in October 2004, was a large CDO, with \$5 billion in assets, funded in great part by issuing short-term asset backed commercial paper. All three deals were composed predominantly of mortgage-backed securities, with BSAM retaining the equity position in all three. Typical for the industry at the time, the CDO's expected return on each one – including both the yield on the investment and the CDO

⁶²¹ Interview of Cioffi. Unofficial transcript at 36.

⁶²² Interview of Cioffi. Unofficial transcript at 36.

management fee – was between 15% and 23% annually.⁶²³ Thanks to the combination of mortgage-backed securities, CDOs and leverage, Cioffi’s funds earned healthy returns for a time – the High Grade fund had returns of 17% in 2004, 10% in 2005 and 9% in 2006 after fees.⁶²⁴ But when house prices fell and investors started to question the value of mortgage-backed securities in 2007, the same short-term leverage that had inflated Cioffi’s returns would amplify losses and quickly put his two hedge funds out of business.

Citigroup’s liquidity puts: “A potential conflict of interest”

By the mid-2000s, Citigroup was a market leader in selling CDOs, often using its depositor-based commercial bank to guarantee big parts of the deals. For much of this period, the company was in various types of trouble with its regulators, which then-CEO Chuck Prince told the FCIC took up more than half his time. In addition to the problems with CitiFinancial’s mortgage origination, which resulted in the unprecedented \$70 million fine in 2004, as discussed earlier, Citigroup got into trouble for helping Enron – before that company filed for bankruptcy in 2001 – use structured finance transactions to manipulate its financial statements. In July 2003, Citigroup agreed to pay the SEC \$120 million to settle these allegations and agreed, under formal Fed and OCC enforcement actions, to overhaul its risk management.^{625,626}

⁶²³ Source: Everquest filings.

⁶²⁴ Bear Stearns Asset Management Collateral Manager Presentation. BSAMFCIC 00000671 - . BSAMFCIC 00000740 at . BSAMFCIC 00000675.

⁶²⁵ JP Morgan agreed to pay \$135 million to settle SEC charges that it helped Enron manipulate its financial statements, and signed analogous agreements to revamp its risk management systems. Federal Reserve Board, Press Release, July 28, 2003.

⁶²⁶ Regulators in the Japan and the U.K. also came down on the company in 2004 and 2005. In September 2004, the Financial Services Agency of Japan suspended Citibank’s ability to operate branches in Japan due to the bank’s participation in alleged illegal activity in that country, and in the following year the Financial Services Agency of

By March 2005, the Fed had seen enough and banned Citigroup from making any more acquisitions until it got better control of its empire. Prince had already decided to turn “the company’s focus from an acquisition-driven strategy to more of a balanced strategy involving organic growth.”⁶²⁷ Robert Rubin, a former Treasury Secretary and Goldman Sachs co-chairman who was now chairman of the executive committee of Citigroup’s board of directors, recommended Citigroup increase its risk-taking – assuming, he told the FCIC, that the firm managed the risks properly.⁶²⁸

The investment bank subsidiary was a natural place to grow after the Fed and then Congress had done away with restrictions on activities that investment banks affiliated with commercial banks could pursue. One opportunity among many was the CDO business, which was just then taking off amidst the booming mortgage market.

In 2005, Citi’s CDO desk was a tiny unit in the company’s investment banking arm, accounting for less than 1% of revenues – “eight guys and a Bloomberg” terminal, in the words of Nestor Dominguez, co-head of the desk.⁶²⁹ Nevertheless, over the previous two years, this tiny operation under the command of Tom Maheras, co-CEO of the investment bank, had become a leader in the nascent market for mortgage-backed CDOs, selling more than \$18 billion in 2003 and 2004, close to one-fifth of the market in those years.

the U.K. fined Citigroup \$25 million for engaging in a bond trading scheme labeled “Dr. Evil” by Citigroup bond traders.

⁶²⁷ Transcript of FCIC staff interview of Chuck Prince, March 17, 2010, p. 22.

⁶²⁸ FCIC staff interview of Robert Rubin, March 11, 2010.

⁶²⁹ FCIC interview with Nestor Dominguez, March 2, 2010. The CDO desk earned revenues of \$367 million in 2005. Letter from Brad Karp (Paul, Weiss) on behalf of Citigroup to Bradley J. Bondi in re the FCIC’s second and third supplement requests, March 31, 2010, “Response to Interrogatory No. 21.”

The eight guys had picked up on a novel structure pioneered by Goldman Sachs and WestLB, a German bank. Instead of selling the super-senior tranches of the CDOs as long-term debt, Citigroup sold them as short-term commercial paper. Of course, using commercial paper introduced liquidity risk, which was not present when the tranches were sold as long-term debt, because the CDO manager would have to re-sell the paper to investors regularly – usually at least once every three months – until the CDO was retired.⁶³⁰ But, commercial paper was cheap at the time, thanks to very low short-term interest rates, and it had a large base of potential investors, particularly among money-market mutual funds. To back the commercial paper and to ensure the rating agencies would give it their top ratings, Citibank – Citigroup’s national bank subsidiary – sold liquidity puts, which are contracts guaranteeing investors that a bank would step in and buy the commercial paper if there were no buyers when it matured or if interest rates rose a predetermined amount.

In the 1990s, securitization had driven the growth in commercial paper. For example, credit card issuers would package credit card debt into securities and sell most of the securities in tranches, with the senior tranches taking the form of short-term commercial paper rather than long-term bonds. Issuers tended to keep the most junior or equity tranches, which took the first losses; this aligned their interests with their investors’ interests. Investors would not buy this commercial paper – nor would the rating agencies grant it their top ratings – unless a bank or other financial institution provided a liquidity put.⁶³¹

The CDO team at Citigroup had jumped into the market in July 2003 with a \$1.5 billion CDO, Grenadier Funding, that included a \$1.3 billion super-senior tranche with a liquidity put from

⁶³⁰ Moody’s Investor Service, *Grenadier Funding, Ltd. New Issue Report*, July 14, 2003.

⁶³¹ Banks also sometimes offered credit support to commercial paper programs.

Citibank. Over the next three years, Citi would write \$25 billion of liquidity puts on CDO commercial paper, more than any other company.⁶³² BSAM's three Klio CDOs, which Citigroup had underwritten, accounted for just over \$10 billion of this total,⁶³³ a large number that would not bode well for the bank. But, for the time being – for the fees, the bonuses, the careers – this “strategic initiative,” as Dominguez called it, was very profitable for Citigroup. The CDO desk earned roughly 1% of the total deal value in fees for Citigroup's investment banking arm – about \$10 million for a \$1 billion deal.[cite] In addition, Citigroup would generally charge buyers 0.10% to 0.20% in premiums annually for the liquidity puts. In other words, for a typical \$1 billion deal, Citibank would receive \$1 to \$2 million annually on the liquidity puts alone – practically free money, it seemed, because the trading desk believed that these puts would never be triggered.⁶³⁴

And the liquidity put was yet another highly leveraged bet. Prior to the 2004 change in the capital rules regarding liquidity puts, Citigroup did not have to hold any capital against the possibility of losses. Rather, it was permitted to use its own risk models to determine the appropriate capital charge. Because Citigroup's computer models estimated that the possibility that defaults would trigger the puts was remote, the puts were recorded as zero liability. The regulators concurred. Following the 2004 rule change, Citibank was required to hold 0.16% in capital against the amount of the liquidity put, or \$1.6 million for a \$1 billion liquidity put. Assuming a \$1 to \$2 million annual fee for the put, the annual return on that capital still could be more than 100%. No doubt about it, Dominguez told the FCIC, the AAA or similar

⁶³² Citigroup issued and wrote liquidity puts on \$10.3 billion of deals in 2004 (60% of the market) and \$9.8 billion in 2005 (47%), according to Moody's data. Moody's, *CDOs with Short-Term Tranches: Moody's Approach to Rating Prime-1 CDO Notes*, February 3, 2006.

⁶³³ [1] Everquest Financial Ltd., Form S-1, May 9, 2007, page 93. At <http://www.secinfo.com/dsvr4.u6U3.htm>

⁶³⁴ FCIC interview with Nestor Dominguez, March 2, 2010.

ratings, the multiple fees, and the low capital requirements made the liquidity puts “a much better trade” than the typical CDOs at the time.⁶³⁵ The events of 2007 would reveal the miscalculations in those assumptions and catapult the entire \$25 billion in CDO assets straight onto the bank’s balance sheet, requiring it to come up with \$25 billion in cash and more capital to satisfy bank regulators.

The liquidity puts were reviewed and approved by Citigroup’s Capital Markets Approval Committee, which was charged with reviewing all new financial products. The committee deemed them an income source with very remote risk of being triggered. The company based its opinions on the credit risk of the underlying collateral, but failed to consider the liquidity risk of a general market disruption. The OCC was aware of that Citibank had introduced the liquidity puts, but the regulator only assessed whether Citibank had a process in place to review the new product. The regulator did not assess the risks of the puts to Citibank.

Besides Citigroup, only WestLB of Germany and Société Générale of France wrote significant amounts of liquidity puts on commercial paper issued by CDOs. Bank of America, the biggest commercial bank in the United States, wrote only small deals through 2006 but did \$6 billion worth in 2007, just before the market crashed.⁶³⁶ When asked why few other American financial institutions wrote liquidity puts on CDOs, Dominguez pointed to the size of Citibank’s balance sheet. “It only works if you are a big bank,” he told the FCIC. “It’s a complicated product and it

⁶³⁵ FCIC interview with Nestor Dominguez, March 2, 2010.

⁶³⁶ Moody’s, *CDOs with Short-Term Tranches: Moody’s Approach to Rating Prime-1 CDO Notes*, February 3, 2006.

requires a lot of structuring and expertise. You needed to be a bank with a strong balance sheet, access to collateral, and existing relationships with collateral managers.”⁶³⁷

The CDO desk stopped writing liquidity puts in early 2006 when it reached internal limits. Citibank’s treasury function had set a \$23 billion limit on liquidity puts; it gave one final exception, bringing the total to \$25 billion. Risk management had also set a \$25 billion risk limit on top rated asset-backed securities, which included the liquidity puts. But, in stopping, the firm decided not to hedge its risks on the puts that it had already written. Later, in an October 2006 memo, Citigroup’s Financial Control Group criticized the firm’s pricing of the puts, which failed to consider the risk that all of the commercial paper funding protected by the liquidity puts would not roll at favorable rates all at the same time, creating a \$25 billion cash demand on Citibank. Presciently, the memo found that the liquidity puts were priced solely for credit risk and not liquidity risk. An undated and unattributed internal document (believed to have been drafted in 2006) also suggested that there was a conflict of interest because Citigroup’s investment bank paid traders on its CDO desk for generating the deals without regard to later losses. “There is a potential conflict of interest in pricing the liquidity put cheap so that more CDO equities can be sold and more structuring fee to be generated,” the memo said.⁶³⁸ The resulting losses would help bring the huge financial conglomerate to the brink of failure, as we will see.

⁶³⁷ FCIC interview with Nestor Dominguez, March 2, 2010. Quote needs to be checked

⁶³⁸ CITI 00004244, Citigroup liquidity put discussion.

AIG: “Golden Goose for the Entire Street”

In 2004, American International Group was the largest insurance company in the world by stock market value, a massive conglomerate with \$850 billion in assets, 116,000 employees in 130 countries, and 223 subsidiaries.⁶³⁹

But to Wall Street, AIG’s most valuable asset was its credit rating: Aaa by Moody’s since 1986, AAA by S&P since 1983, both as high as possible, and crucial because these sterling ratings let it borrow cheaply and deploy the money in lucrative investments. Only [XXX] companies in the United States in 2004 carried those ratings, of which only [XXX] were insurance companies.

Starting in 1998, AIG Financial Products, a Connecticut-based unit with major operations in London, figured out a new way to make money off those ratings. Because the solid parent company backed AIG Financial Products’ obligations, the unit could guarantee any number of assets, ostensibly saving banks and other financial institutions billions of dollars in capital, interest, and, potentially, losses should the value of those assets decline. The unit issued these guarantees in the form of credit default swaps. The credit default swap is often compared to insurance, but when an insurance company sells a policy, regulations require that it set aside a reserve in case of a loss. In this case, the unit predicted with 99.85% confidence that there would be no realized loss – as opposed to an unrealized loss, a distinction that would prove fatal to AIG in 2008.

AIG Financial Products had a huge business selling credit default swaps to European banks on a variety of financial assets, including bonds, mortgage-backed securities, CDOs, and other debt securities. For AIG, the fee for selling protection via the swap appeared well worth the risk. For

⁶³⁹ Source: Bloomberg, Lp, Top 500 Global Companies by Market Cap (EQS) Function, Fiscal Year 2004, accessed December 3, 2010; St Denis interview p 3

the banks purchasing protection, the swap allowed them to hold much less capital, freeing up capital for investment. Under the regulatory capital rules instituted in 2001, purchasing credit default swaps from AIG could reduce the amount of regulatory capital that the bank needed to hold against that asset from 8% to 1.6%.⁶⁴⁰ By 2005, AIG had written \$107 billion in credit default swaps for such regulatory capital benefits with mostly European banks for a variety of asset types. That number would rise to \$379 billion by 2007.

In the United States, as we have reported, regulators had introduced similar capital standards for banks' holdings of mortgage-backed securities and other investments in 2001. So, a credit swap with AIG also lowered American banks' capital requirements.

In 2004 and 2005, AIG sold protection on approximately 33% of all super-senior tranches issued by ABS CDOs,⁶⁴¹ with a value of \$54 billion, up from \$2 billion in 2003.⁶⁴² In an interview with the FCIC, one AIG executive described AIG Financial Products' principal swap salesman, Alan Frost, as "the golden goose for the entire Street."⁶⁴³

AIG's biggest customer in guaranteeing CDOs was always Goldman Sachs, consistently a leading CDO underwriter. It also wrote billions of dollars of protection for Merrill Lynch, Société Générale, and others. "[AIG] looked like the perfect customer for this," Craig Broderick, Goldman's chief risk officer, told the FCIC. "They really ticked all the boxes. They were

⁶⁴⁰ AIG 2008 Form 10-K, pg 133; 12 CFR, Part 325 Appendix A, II. Procedures for Computing Risk-Weighted Assets; April 1994 OCC - FRB Interpretive Letter #988. Assets are assigned a "risk weighting" or percentage that is then multiplied by 8% capital requirement to determine the amount of risk based capital.

⁶⁴¹ Based on data provided by Moody's and AIG.

⁶⁴² The total would reach \$78 billion by 2007

⁶⁴³ FCIC interview with Gene Park at page 60. Transcript available here: <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4845-7976-0902&open=Y>

among the highest-rated [corporations] around. They had what appeared to be unquestioned expertise. They had tremendous financial strength. They had huge, appropriate interest in this space, backed by a long history of trading in it.”⁶⁴⁴

AIG also bestowed the imprimatur of its pristine credit rating on asset-backed commercial paper programs by providing liquidity puts, similar to the ones that Citigroup’s bank wrote for many of its own deals, guaranteeing it would buy paper if no one else wanted it.⁶⁴⁵ It started this business in 2002 and by 2005, it had written more than \$6 billion of liquidity puts on CDO commercial paper. AIG also wrote more than \$7 billion in credit default swaps to protect Société Générale against the risks on liquidity puts that the French bank itself wrote on CDO commercial paper.⁶⁴⁶ “What we would always try to do is to structure a transaction where the transaction was virtually riskless, and get paid a small premium,” Gene Park, a managing director at AIG Financial Products, told the FCIC. “And we’re one of the few guys who can do that. Because if you think about it, no one wants to buy disaster protection from someone who is not going to be around...That was AIGFP’s sales pitch to the street or to banks, saying that, you know, ‘We’re one of the largest capitalized AAA companies. We can provide you this protection.’”⁶⁴⁷

⁶⁴⁴ Craig Broderick, FCIC hearing, June 30, 2010.

⁶⁴⁵ For example, for the Putnam Structured Product CDO 2002-1, a \$1.76 billion CDO issued by Goldman in December 2002, AIG Financial Products provided a liquidity put on the \$880 million medium-term notes. Moody’s wrote at the time that the top P-1 rating for those tranches was “based primarily on the rating of the Put Counterparty, AIG Financial Products, Corp., and will change as the short-term rating of the Put Counterparty changes.” Moody’s, *Moody’s assigns ratings to 3 classes of notes issued by Putnam Structured Product CDO 2002-1 Ltd*, January 14, 2003. This was typical language in a Moody’s report on commercial paper.

⁶⁴⁶ Moody’s, *CDOs with Short-Term Tranches: Moody’s Approach to Rating Prime-1 CDO Notes*, February 3, 2006, MOODYS-FCIC-0010418; AIG, *Information Pertaining to the Multi-Sector CDS Portfolio*, AIG-FCIC00336717-9.

⁶⁴⁷ FCIC interview with Gene Park at page 15. Transcript available here: <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4845-7976-0902&open=Y>

In just four years, the business of offering protection on assets of many sorts, including mortgage-backed securities, had grown six-fold and AIG's Financial Services business, which housed Financial Products, generated operating income of \$4.4 billion, or 29% of the parent AIG's consolidated total operating income.⁶⁴⁸ To achieve those results, AIG had sold, circa 2005, protection on all kinds of assets [ck] worth some \$211 billion including all credit default swaps. This would rise to \$533 billion by 2007.

AIG did not post one dollar in collateral upon writing these contracts, but unlike its primary competitors AIG Financial Products usually agreed with the counterparties buying the swap contracts that it would post collateral if the value of the underlying mortgage-backed securities dropped, or if the rating agencies downgraded AIG's long-term debt ratings. Its competitors, the monolines – insurance companies such as MBIA and Ambac that focused on guaranteeing financial contracts – did not agree to post collateral under these conditions. They only had financial obligations in case of default. Unlike the monolines, AIG had to put up more cash and securities to prove it could reimburse the customer if the value of the assets dropped. This would have an enormous impact on the crisis about to unfold.

But during the boom, no matter. The investors got their AAA rated protection, AIG got its fees for providing that insurance – about 0.12% of the amount of the swap per year⁶⁴⁹ – and the managers got their bonuses. In the case of the London subsidiary that ran the operation, the bonus pool was 30% of new earnings. Financial Products CEO Joseph J. Cassano made the allocations at the end of the year. Between 2002 and 2007, the least Cassano paid himself in a

⁶⁴⁸ AIG 2007, Form 10-K pg, 4

⁶⁴⁹ AIG 2007 Form 10-K at 91

year was \$37 million. In the later years, his compensation was sometimes double that of the parent company's CEO.⁶⁵⁰

In the spring of 2005, disaster struck: AIG lost its AAA rating when auditors discovered it had manipulated earnings. By November 2005, the company had reduced its reported earnings over the five-year period by \$3.9 billion.⁶⁵¹ The board forced out [ck] Maurice "Hank" Greenberg, who had been CEO for 38 years. New York Attorney General Eliot Spitzer prepared to bring fraud charges against him.

Greenberg told the FCIC, "When the AAA rating disappeared in spring 2005, it would have been logical for AIG to have exited or reduced its business of writing credit default swaps."⁶⁵² But it didn't happen. Instead, AIG Financial Products wrote another \$36 billion in credit default swaps on super senior tranches of CDOs in 2005. The company wouldn't make the decision to stop writing these contracts until 2006.

Goldman Sachs: "Synthetics mean it has a greater impact"

Henry Paulson, CEO of Goldman Sachs from 1999 until he became Secretary of the Treasury in 2006, testified to the FCIC that when he became Secretary, his "number one concern was the likelihood of a financial crisis," that he was "convinced we were due for another disruption."⁶⁵³ He also testified that many bad loans already had been issued – "most of the toothpaste was out

⁶⁵⁰ PIR p 93-96

⁶⁵¹ Gretchen Morgenson. "A.I.G. to Restate Its Earnings for 3rd Time This Year" The New York Times. 11/10/2005. http://query.nytimes.com/gst/fullpage.html?res=9D0CE6DE123EF933A25752C1A9639C8B63&sec=&spon=&page_wanted=all

⁶⁵² "Fact Sheet on AIGFP" provided by Hank Greenberg, at 4. No bates.

⁶⁵³ 5/6/10 FCIC hearing transcript at 19.

of the tube” – and that “there really wasn’t the proper regulatory apparatus to deal with it.”⁶⁵⁴

Paulson provided examples: “Subprime mortgages went from accounting for 5 percent of total mortgages in 1994 to 20 percent by 2006... Securitization separated originators from the risk of the products they originated.”⁶⁵⁵ The result, Paulson testified, “was a housing bubble that eventually burst in far more spectacular fashion than most previous bubbles.”⁶⁵⁶

Under Paulson’s leadership, Goldman Sachs had played a central role in the creation and sale of mortgage securities. From 2004 through 2006, when Paulson left, the company provided \$34 billion in loans to mortgage lenders, with more than half of this going to subprime lenders Ameriquest, Long Beach, Fremont, New Century and Countrywide through warehouse lines of credit, often in the form of repos.⁶⁵⁷ During the same period, Goldman acquired \$53 billion of loans from these and other subprime loan originators that it securitized and sold to investors.⁶⁵⁸ From 2004 to 2006, Goldman issued 318 mortgage securitizations totaling \$184 billion (about a quarter were subprime), and 63 CDOs totaling \$32 billion; Goldman also issued 22 synthetic or hybrid CDOs with a face value of \$35 billion between 2004 and June 2006.⁶⁵⁹

Goldman pioneered [ck] the synthetic CDO, which, unlike the traditional CDO, would not contain actual tranches of mortgage-backed securities, or even tranches of other CDOs. Instead,

⁶⁵⁴ 5/6/10 FCIC hearing transcript at 22.

⁶⁵⁵ Paulson written testimony at 2.

⁶⁵⁶ Paulson written testimony at 2.

⁶⁵⁷ Appendix 5a to Goldman’s March 8, 2010 letter to the FCIC, GS_FCIC_000000179-173 NATIVE.xlsx. .

⁶⁵⁸ Appendix 5c to Goldman’s March 8, 2010 letter to the FCIC, GS_FCIC_000000174-214 NATIVE.xlsx. .

⁶⁵⁹ March 8, 2010 Letter to the FCIC at 28 (subprime securities); GS-MBS0000027965.xls (synthetic and hybrid CDOs).

they would simply reference these mortgage securities. In a traditional CDO, money came in from monthly mortgage payments and went out to investors. Synthetics were side bets between investors that did not finance a single home purchase. Investors on the “long” side – those who would make money when the securities performed – were paid by the investors on the “short” side when in fact the set of referenced mortgage securities made timely payments. Those payments would be reversed if the referenced mortgage securities failed. In addition to traditional CDOs and synthetic CDOs, a third kind, hybrid CDOs, were a combination of the first two.

Firms like Goldman found synthetic CDOs cheaper and easier to create than traditional CDOs. With no mortgage assets to collect and finance, creating synthetic CDOs took a fraction of the time. They also were easier to customize, because CDO managers and underwriters could reference any mortgage-backed security – they were not limited to the universe of available securities that they could buy.

Synthetic CDOs were complex paper transactions involving credit default swaps. On each side of the bet, there were always two types of investors. Some investors (called funded investors) would put up cash upfront; the CDO manager would invest this cash in highly rated securities, such as Treasuries, that were not related to the referenced securities. If all went well, the funded investors would receive interest, funded by cash flows from the interest on the highly rated securities and by the protection payments from the CDS buyers. If the reference securities began to lose money, the highly rated securities would be liquidated to pay the protection purchaser. Other investors (called unfunded investors) weren't investors at all, in the traditional sense: rather, they were sellers of protection via credit default swaps. These swaps mirrored the performance of tranches of a CDO. These investors would receive regular premiums, similar to

interest payments, as long as the referenced securities successfully made payments. If the referenced securities didn't successfully make payments, the unfunded investors would have to pay up.

[ABACUS 2004-1 Chart]

AIG provided the credit protection for Goldman Sachs's first synthetic CDO deal,⁶⁶⁰ and Goldman Sachs was AIG's biggest business partner in the CDO business. By 2007, AIG would provide \$21 billion in protection on 33 deals with Goldman, including seven of Goldman's 24 Abacus deals.⁶⁶¹ In 2004, Goldman launched the \$1.9 billion Abacus 2004-1 deal, the first major synthetic CDO. For Abacus 2004-1, about one-third of the swaps referenced residential mortgage-backed securities, another third existing CDOs, and the rest commercial mortgage-backed securities (securities made up of bundled commercial real estate loans) and other securities.

Conceptually, it is easier to think of the funded and unfunded tranches as separate parts. For the funded tranches, IKB (a German bank), TCW, and Wachovia (the fourth-largest U.S. commercial bank) put up a total of \$195 million to purchase mezzanine tranches of the deal.^{662,663} These investors were paid off if the referenced assets performed. If the referenced assets defaulted, Goldman received the \$195 million – a wager for which Goldman paid [\$\$ in]

⁶⁶⁰ Goldman was the largest buyer of credit default swaps from AIG Financial Products against super senior tranches of multi-sector CDOs ("SSCDS"), purchasing 33 SSCDS which totaled \$21 billion, or 27% of AIG's \$78 billion portfolio as of 12/31/07. See Exhibit 1.

⁶⁶¹ GS MS 0000027965.

⁶⁶² See GS MBS0000021129-133.

⁶⁶³ Specifically, IKB purchased \$30 million of Class A notes, \$40 million of Class B notes, and \$30 million of Class C notes on June 9, 2004. TCW purchased \$50 million of Class A Notes in January 2005, and Wachovia purchased \$45 million of Class A Notes in March 2005. See GS MBS0000021129-133; Exhibit 1.

premiums. In this sense, IKB, TCW, and Wachovia were “long” investors, betting on the referenced assets performing, and Goldman was a “short” investor, betting that the referenced assets would fail. In addition, TCW and GSC – two asset management firms that managed both hedge funds and CDOs – were unfunded investors, receiving annual premiums from Goldman in return for the promise that they would pay Goldman if the referenced assets failed.⁶⁶⁴ The tranches of Abacus 2004-1 soon found their way into other funds and CDOs; for example, at one point in 2007, TCW purchased tranches of Abacus 2004-1 for three of its own CDOs.

AIG was also an unfunded investor, in the super-senior tranches of the deal. Goldman purchased from AIG Financial Products \$1.8 billion of protection in case the referenced assets failed, in return for an annual payment of \$2.2 million.⁶⁶⁵

All told, investors in Abacus stood to receive millions of dollars if the referenced assets performed, (just as a bond investor makes money when a bond performs). On the other hand, Goldman stood to gain nearly \$2 billion if the assets failed, while only having to pay \$11 million in CDS premiums over five years.⁶⁶⁶

Between July 1, 2004 and May 31, 2007, Goldman packaged and sold 48 synthetic CDOs, with an aggregate face value of \$73 billion. Its underwriting fee was 0.50% to 1.50% of the deal

⁶⁶⁵ In June 2009, Goldman received \$806 million from CDS it purchased from AIG Financial Products on the super senior tranche of Abacus 2004-1. GS-MBS-0000027966 and GS-MBS 0000021129-21133.

⁶⁶⁶ GS-MBS 0000021129-21133.

totals, Goldman's Sparks told the FCIC.⁶⁶⁷ For the first Abacus deal, the fee revenue for Goldman would have been approximately [\$XXX million.]⁶⁶⁸ Goldman would earn profits from shorting these deals, but it would also lose money from selling credit protection to other short investors.⁶⁶⁹

As we will see, these new instruments would yield substantial profits for investors that held a short position in the synthetic CDOs—that is, investors betting that the boom was a bubble about to burst. They also would multiply losses when housing prices collapsed. When borrowers defaulted on their mortgages, the investors expecting cash from the mortgage payments lost. Now, investors betting on these mortgages also lost (while those betting against the mortgages would gain).⁶⁷⁰

To see this, we can return to our case-study deal, CMLTI 2006-NC2. It wasn't a synthetic CDO, but it was inextricably tied to them. There were about \$11 million worth of bonds in the M9 (BBB rated) tranche – one of the “mezzanine” tranches of the security. Synthetic CDOs such as Auriga, Volans, and Neptune CDO IV all contained credit default swaps in which the M9 tranche was referenced. As long as the tranche performed, investors betting the tranche would fail (short investors) would make regular payments into the CDO, and those payments would be paid out to other investors banking on it to succeed (long investors). If the M9 bonds defaulted, then the long investors would make large payments to the short investors. That is the bet – and

⁶⁶⁷ Sparks MFR at ____.

⁶⁶⁸ According to the SEC, Goldman received \$15 million from Paulson for structuring and marketing the Abacus 2007-AC1 deal. See 4/16/10 SEC Press Release, “SEC Charges Goldman Sachs with Fraud in Structuring and Marketing of CDO Tied to Subprime Mortgages.”

⁶⁶⁹ We have asked Goldman to provide information about the profitability of Abacus and other synthetic CDOs.

⁶⁷⁰ Of course, the *net* impact on the financial system is, in theory, not greater, because there is a winner for every loser in the derivatives market.

there were more than \$50 million in such bets in early 2007 on the M9 tranche of the case-study deal. That means more than \$60 million would change hands based on the performance of \$11 million in bonds. Dan Sparks, mortgage salesman for Goldman Sachs, put it succinctly to the FCIC.⁶⁷¹ “If there is a problem with a product, then synthetics mean it has a greater impact.”

The amplification on the M9 tranche was not unique. A \$15 million tranche of the Glacier Funding CDO 2006-4A, rated A, was referenced in \$85 million worth of synthetic CDOs. A \$28 million tranche of the Soundview Home Equity Loan Trust 2006-EQ1, also rated A, was referenced in \$79 million worth of synthetic CDOs. A \$13 million tranche of the Soundview Home Equity Loan Trust 2006-EQ1, rated BBB, was referenced in \$49 million worth of synthetic CDOs.⁶⁷²

In total, synthetic CDOs created by Goldman referenced 3,408 mortgage securities, and some multiple times. For example, 610 securities were referenced twice. Indeed, one single mortgage-related security was referenced in nine different synthetic CDOs created by Goldman Sachs. Because of such deals, when the housing bubble burst, tens of billions of dollars changed hands.

Although Goldman executives agreed that synthetic CDOs were “bets” that magnified overall risk, they also maintained their creation had “social utility” because it added liquidity to the market and allowed investors to customize the exposures they wanted in their portfolios.⁶⁷³ In testimony before the Commission, Goldman’s President and Chief Operating Officer Gary Cohn

⁶⁷¹ FCIC interview with Dan Sparks,

⁶⁷² From Goldman Sachs data provided to the FCIC, quoted in FCIC’s hearing on Derivatives, handout entitled “Amplification.”

⁶⁷³ Blankfein MFR at 2; Egol MFR at ___; Sparks MFR at ___.

argued: “This is no different than the thousands of swaps written every day on the U.S. dollar versus another currency. Or, more importantly, on U.S. Treasuries. It is one reference point that is involved in tens of thousands of securities. This is the way that the financial markets work. People choose a specific security that they want exposure to, whether it’s pooled or un-pooled, and they aggregate it.”⁶⁷⁴

Others, however, criticized these deals. Pat Parkinson, current director of the Division of Banking Supervision and Regulation at the Federal Reserve Board noted that synthetic CDOs “multiplied the effects of the collapse in subprime.” Other observers were even more critical. “I don’t think they have social value,” Michael Greenberger, a professor at the University of Maryland School of Law and former Director of the Division of Trading and Markets at the CFTC, told the FCIC.⁶⁷⁵ He characterized the credit default swap market as a “casino”.

Moodys: “Achieved through some alchemy”

The RMBS and CDO machine would not have worked without the stamp of approval these deals received from the three leading rating agencies, Moody’s, S&P, and Fitch. Many investors could buy only securities rated by at least one of the three agencies – in fact, under securities laws, money market funds and many other investors could not buy securities that did not carry the agencies’ top ratings.⁶⁷⁶ These investors often used the rating agencies’ views rather than

⁶⁷⁴ Testimony of Gary Cohn.

⁶⁷⁵ Michael Greenberger, 6-30-10 FCIC hearing On The Role of Derivatives in the Financial Crisis, p. 109 of transcript.

⁶⁷⁶ AAA is the highest rating for long-term debt securities, and A-1 is the highest rating for short-term debt securities under S&P’s rating scale. Under the Investment Company Act of 1940 (17 CFR § 270.2a-7(c)(3)(i)), “*The money market fund shall limit its portfolio investments to those United States Dollar-Denominated securities that the fund’s board of directors determines present minimal credit risks (which determination must be based on factors pertaining to credit quality in addition to any rating assigned to such securities by an NRSRO) and that are at the time of Acquisition Eligible Securities.*” Eligible Securities include rated securities “with a remaining maturity of 397 calendar days or less that has received a rating from the Requisite NRSROs in one of the two highest short-term

conduct their own credit analysis.⁶⁷⁷ Moody's was paid based on the size of each deal, with caps set at a half million dollars for a "standard" CDO in 2006 and 2007 and as much as \$850,000 for a "complex" CDO.⁶⁷⁸

In rating both synthetic and cash CDOs,⁶⁷⁹ Moody's faced two key challenges: first, estimating the probability of default for the mortgage-backed securities that the CDO purchased (or their synthetic equivalents), and second, the correlation among those defaults – that is, the likelihood that the securities would default at the same time.⁶⁸⁰ Imagine seeing how many coin flips come up heads. Each flip is unrelated to the others; that is, the flips are uncorrelated. Now, imagine a loaf of sliced bread. When there is one moldy slice, there are likely other moldy slices. The freshness of each slice is highly correlated with the other slices. As investors now understand, the mortgage-backed securities that CDOs bought were less like coins and more like slices of bread.

rating categories (within which there may be sub-categories or gradations indicating relative standing)" (17 CFR § 270.2a-7(a)(10)(i)). Rule 2a-7 was modified by the Securities and Exchange Commission on February 23, 2010 (see <http://www.sec.gov/rules/final/2010/ic-29132.pdf> and <http://www.sec.gov/rules/final/2010/rule2a-7amendments.pdf>).

⁶⁷⁷ Investment Company Institute, "Report of the Money Market Working Group," March 17, 2009, p. 81, available at http://www.ici.org/pdf/ppr_09_mmwg.pdf.

⁶⁷⁸ MOODYS-FCIC-0394732, "Summary of Key Provisions for Cash CDOs as of January 2000-2010" [ID# 4836-1988-4039].

⁶⁷⁹ See, for example, "Moody's Approach to Rating Synthetic CDOs," July 29, 2003 [ID# 4816-9805-9528] and "Moody's Modeling Approach to Rating Structured Finance Cash Flow CDO Transactions," September 26, 2005 [ID# 4818-0658-7912].

⁶⁸⁰ Gary Witt, written statement to the Financial Crisis Inquiry Commission, hearing on "Credibility of Credit Ratings, the Investment Decisions Made Based on those Ratings, and the Financial Crisis," June 2, 2010, p. 12, 15, <http://www.fcic.gov/hearings/pdfs/2010-0602-Witt.pdf>.

To estimate the probability of default, Moody's relied almost exclusively on its own ratings of the mortgage-backed securities that the CDOs would purchase.⁶⁸¹ At no time did the agencies "look through" the securities to the underlying subprime mortgages, as Gary Witt, formerly one of Moody's team managing directors for the CDO unit, told the FCIC.⁶⁸² "[W]e took the rating that had already been assigned by the [mortgage-backed securities] group."⁶⁸³ This decision would lead to problems for Moody's – and for investors. Witt testified that the underlying collateral "just completely disintegrated below us and we didn't react and we should have.... [W]e had to be looking for a problem. And we weren't looking."⁶⁸⁴

To determine the likelihood that any given security in the CDO would default, Moody's plugged in assumptions based on those original ratings. This was no simple task. "The rating process for CDOs became the crucible in which the agencies had to confront the fact that similarly rated bonds from different sectors had markedly different track records," one market analyst wrote.⁶⁸⁵ Meanwhile, if the initial ratings turned out to poorly reflect the quality of the mortgages in the bonds, due to poor underwriting, fraud, or other variants, the error was blindly compounded when mortgage-backed securities were packaged into CDOs.

⁶⁸¹ Gary Witt, written statement to the Financial Crisis Inquiry Commission, hearing on "Credibility of Credit Ratings, the Investment Decisions Made Based on those Ratings, and the Financial Crisis," June 2, 2010, p. 12, <http://www.fcic.gov/hearings/pdfs/2010-0602-Witt.pdf>.

⁶⁸² Gary Witt, testimony to the FCIC, hearing on "The Credibility of Credit Ratings, the Investment Decisions Made Based on those Ratings, and the Financial Crisis," Session 1: The Ratings Process, June 2, 2010, p. 168 (ID# 4818-8776-0390)

⁶⁸³ Gary Witt, testimony to the FCIC, hearing on "The Credibility of Credit Ratings, the Investment Decisions Made Based on those Ratings, and the Financial Crisis," Session 1: The Ratings Process, June 2, 2010, p. 168 (ID# 4818-8776-0390)

⁶⁸⁴ Gary Witt, testimony to the FCIC, hearing on "The Credibility of Credit Ratings, the Investment Decisions Made Based on those Ratings, and the Financial Crisis," Session 3: The Credit Rating Agency Business Model, June 2, 2010, p. 436 (ID# 4818-8776-0390)

⁶⁸⁵ Mark Adelson, Nomura Securities, *Bond Rating Confusion*, June 29, 2006.

Even more difficult was the estimation of correlation—always tricky, but particularly so in the case of CDOs full of mortgage-backed securities with only a short performance history. So its approach would explicitly rely on the judgment of its analysts. “In the absence of meaningful default data, it is impossible to develop empirical default correlation measures based on actual observations of defaults. Our default correlation assumptions instead reflect extensive discussions with Moody’s analysts who have expertise with the various types of [asset-backed and mortgage-backed securities], as well as a considerable degree of common sense,” Moody’s acknowledged in one early explanation of its process.⁶⁸⁶

In plainer English, Witt said, Moody’s didn’t have a good model on which to estimate correlations among mortgage-backed securities – so they “made them up.” He said, “They went to the analyst in each of the group and they said, ‘Well, you know, how related do you think these types of [mortgage-backed securities] are?’”⁶⁸⁷ This would become a more serious problem as multi-sector CDOs became increasingly concentrated in mortgage-backed securities in the mid-2000s.^{688,689} Witt felt strongly that Moody’s needed to update its CDO rating model to explicitly address the increasing concentration of risky mortgage related securities in the collateral underlying CDOs.⁶⁹⁰ He undertook two initiatives to address this issue. First, in mid-2004, he developed a new rating methodology that explicitly incorporated correlation into the

⁶⁸⁶ “Moody’s Approach to Rating Multisector CDOs,” Moody’s Investors Service, September 15, 2000, p. 5.

⁶⁸⁷ Gary Witt, interview with the FCIC, April 21, 2010, p. 39 (ID# 4818-7724-2630).

⁶⁹⁰ Gary Witt, written testimony to the FCIC, June 2, 2010, p. 17, <http://www.fcic.gov/hearings/pdfs/2010-0602-Witt.pdf>

model.⁶⁹¹ However, the technique he devised was not incorporated into CDO ratings for another year.⁶⁹² Second, he proposed a research initiative in early 2005 to “look through” a few CDO deals at the underlying mortgage-backed securities and see if “the assumptions that we’re making for [mortgage-backed] AAA CDOs are consistent... with the correlation assumptions that we’re making for AAA [mortgage-backed securities].”⁶⁹³ Although Witt received approval from his superiors to conduct this analysis, he was unable to buy the necessary software product because of contractual disagreements.⁶⁹⁴

In June 2005, Moody’s updated its approach for estimating default correlation⁶⁹⁵ but based the new model on trends from the previous 20 years, a period when housing prices were rising and mortgage delinquencies were very low. Then, Moody’s modified this optimistic set of “empirical” assumptions with ad-hoc adjustments based on factors such as region, year of origination, and institutional factors. For example, if two mortgage-backed securities were issued in the same region—say, southern California—Moody’s boosted the correlation; if they shared a common mortgage servicer, Moody’s boosted it further.⁶⁹⁶ But, on the other hand, they would also make other technical choices that lowered the estimated correlation of default, which would improve the ratings for these securities. Using these methods, Moody’s estimated that

⁶⁹⁵ “Moody’s Revisits its Assumptions Regarding Structured Finance Default (and Asset) Correlations for CDOs,” June 27, 2006, <http://www.fcic.gov/hearings/pdfs/2010-0602-exhibit-finance-default.pdf>.

⁶⁹⁶ “Moody’s Revisits its Assumptions Regarding Structured Finance Default (and Asset) Correlations for CDOs,” June 27, 2006, p. 5 7, 9, <http://www.fcic.gov/hearings/pdfs/2010-0602-exhibit-finance-default.pdf>.

two mortgage-backed securities would be less correlated than two consumer asset-backed securities (containing credit card or auto loans).^{697,698,699}

The other major rating agencies followed a similar approach.⁷⁰⁰ The correlation assumptions were always controversial. One investment bank published a study of the different assumptions and concluded, “The rating agencies will continue to update and improve their correlation assumptions based on more empirical evidence, although we would never know whatever new estimates are “right”.... The truth must lie somewhere in between historical estimates and forward-looking market expectations.”⁷⁰¹

Academics, including some who worked at regulatory agencies, cautioned investors that assumption-heavy CDO credit ratings could be dangerous. “The complexity of structured finance transactions may lead to situations where investors tend to rely more heavily on ratings than for other types of rated securities. On this basis, the transformation of risk involved in structured finance gives rise to a number of questions with important potential implications. One

⁶⁹⁷ “Moody’s Revisits its Assumptions Regarding Structured Finance Default (and Asset) Correlations for CDOs,” June 27, 2006, p. 4, <http://www.fcic.gov/hearings/pdfs/2010-0602-exhibit-finance-default.pdf>.

⁶⁹⁸ For example, Moody’s assumed that borrowers’ with different credit ratings would not default at the same time. The agency split the securities into three subcategories based on the average FICO score of the underlying mortgages: prime (FICO greater than 700), midprime (FICO between 625 and 700), and subprime (FICO under 625). Creating three FICO-based subcategories rather than the traditional two (prime and subprime) resulted in lower correlation assumptions, because mortgage-backed securities in different subcategories were assumed to be less correlated. “Moody’s Revisits its Assumptions Regarding Structured Finance Default (and Asset) Correlations for CDOs,” June 27, 2006, p. 15, <http://www.fcic.gov/hearings/pdfs/2010-0602-exhibit-finance-default.pdf>.

⁶⁹⁹ FCIC interview of Gary Witt, May 6, 2010, p. 2 [ID# 4824-8104-0390].

⁷⁰⁰ “U.S. Subprime RMBS in CDOs,” Hedi Katz, Fitch special report, April 15, 2005, p. 3, [ID# 4848-4562-3048]; “CDO Evaluator Applies Correlation and Monte Carlo Simulation to Determine Portfolio Quality,” Sten Bergman, Standard & Poor’s Global Credit Portal RatingsDirect, November 13, 2001, p. 8 [ID# 4848-2884-5832].

⁷⁰¹ “U.S. Fixed Income 2005 Mid-Year Outlook/Review,” Nomura Fixed Income Research, June 30, 2005, p. 107 [ID# 4828-3451-9816].

such question is whether tranching instruments might result in unanticipated concentrations of risk in institutions' portfolios,"⁷⁰² a report from the Bank for International Settlements, an international financial organization sponsored by the world's regulators and central banks, warned in June 2005.

The ratings were an important marketing tool for CDO managers and underwriters. For each new CDO, they created a "pitch book," which investors used to make their decisions. Each book detailed the types of assets that would make up the portfolio.⁷⁰³ Without exception, every pitch book the FCIC staff examined cited an analysis from either Moody's or S&P that contrasted the historical ratings "stability" of these new products (87-98% had not suffered downgrades) with the stability of corporate bonds (77% had not suffered downgrades) between 1983 and 2004. The pitch books said that CDO collateral had tended to have higher recovery rates relative to corporate bonds. Indeed, underwriters continued to sell CDOs using these statistics in their pitch books during 2006 and 2007, after mortgage defaults had started to rise but before the rating agencies had downgraded large number of mortgage-backed securities. Of course, each pitch book did include the disclaimer that "past performance is not a guarantee of future performance" and encouraged investors to perform their own due diligence.

As Kyle Bass of Hayman Capital Advisors told the FCIC, CDOs that purchased lower-rated tranches of mortgage-backed securities "are arcane structured finance products that were designed specifically to make dangerous, lowly rated tranches of subprime debt deceptively attractive to investors. This was achieved through some alchemy and some negligence in adapting unrealistic correlation assumptions on behalf of the ratings agencies. They convinced

⁷⁰² Fender, I. and J. Mitchell, *Structured Finance: Complexity, Risk and the Use of Ratings*, BIS Quarterly Review at 67, 74-77 (June 2005) (http://www.bis.org/publ/qtrpdf/r_qt0506.pdf).

⁷⁰³ Based on an FCIC survey of [XXX] CDO managers and 11 underwriters about the process of creating and marketing CDOs.

investors that 80% of a collection of toxic subprime tranches were the ratings equivalent of U.S. Government bonds.”⁷⁰⁴

When housing prices started to fall nationwide and defaults increased, it turned out that the mortgage-backed securities were in fact much more correlated than the rating agencies had estimated—that is, they lost value at the same time. This led to massive downgrades in the ratings of the CDOs. In 2007, 20% of U.S. CDO securities would be downgraded.⁷⁰⁵ In 2008, 91% would.⁷⁰⁶ In late 2008, Moody’s would throw out its key CDO assumptions and replace them with an asset correlation assumption two to three times higher than used before the crisis.⁷⁰⁷

In retrospect, it is clear that the agencies’ CDO models made two key mistakes. First, they assumed that securitizers could create safer financial products by diversifying among many mortgage-backed securities, while in fact these securities weren’t that different to begin with. “There were lots of things [the credit rating agencies] did wrong,” Federal Reserve Chairman Ben Bernanke told the FCIC. “Did they use the right models? Clearly they did not. They did not take into account the appropriate correlation between [and] across the categories of mortgages.”⁷⁰⁸

Second, the agencies based their CDO ratings on their own ratings of underlying collateral – in popular parlance, they “ate their own cooking.” “The danger with CDOs is when they are based

⁷⁰⁴ FCIC interview with Kyle Bass, April 26, 2010 [ID# 4829-0222-0038]. This is a paraphrase from an MFR. Quote needs to be checked.

⁷⁰⁵ “Structured Finance Rating Transitions: 1983-2007,” Moody’s Credit Policy Special Comment, February 2008, p. 2 [ID# 4814-6082-3304].

⁷⁰⁶ [2] “Structured Finance Rating Transitions: 1983-2008,” Moody’s Credit Policy Special Comment, March 2009, p. 2 [ID# 4815-7826-3816].

⁷⁰⁷ “Announcement: Moody’s Updates Its Key Assumptions for Rating Structured Finance CDOs,” Moody’s Investors Service, December 11, 2008.

⁷⁰⁸ FCIC interview with Ben Bernanke, November 17, 2009.

on structured finance ratings,” Ann Rutledge, a structured finance expert, told the FCIC.⁷⁰⁹

“Ratings are not predictive of future defaults; they only describe a ratings management process.”

Of course, rating CDOs was a profitable business for the rating agencies. Including all types of CDOs – not just mortgage-related – Moody’s rated more than 200 deals in 2004, 363 in 2005, 749 in 2006, and 717 in 2007; the value of those deals rose from \$90 billion in 2004 to \$162 billion in 2005, \$337 billion in 2006, and \$326 billion in 2007.⁷¹⁰ Moody’s Investors Services reported revenues from structured products – which included mortgage-backed securities and CDOs – grew from \$199 million in 2000, or 33% of Moody’s Corporation’s overall revenues, to \$887 million in 2006 and \$886 million in 2007 – 44% and 39%, respectively, of overall corporation revenue.⁷¹¹ The rating of asset-backed CDOs alone contributed more than 10 percent of the revenue from structured finance.⁷¹² The boom years of structured finance coincided with a company-wide surge in revenue and profits. From 2000 to 2006, Moody’s Corporation’s

⁷⁰⁹ Ann Rutledge is a principal in R&R Consulting, co-author of Oxford University Press’ Elements of Structured Finance (2010) and a former employee of Moody’s Investor Service. She and co-principal Sylvain Raines first spoke to the FCIC on April 12, 2010.

⁷¹⁰ “2004 U.S. CDO Review / 2005 Preview: Record Activity Levels Driven by Resecuritization CDOs and CLOs,” February 1, 2005, p. 1 [ID# 4817-4839-1176]; “2005 U.S. CDO Review; Looking Ahead to 2006: Record Year Follows Record Year,” February 6, 2006, p. 1 [ID# 4817-6516-8392]; . “2008 U.S. CDO Outlook and 2007 Review: Issuance Down in 2007 Triggered by Subprime Mortgages Meltdown; Lower Overall Issuance Expected in 2008,” March 3, 2008 [ID# 4835-7121-5112]

⁷¹¹ Moody’s Corporation 2000 10-K, p. 29, 48 [ID# 4832-7715-6614]; Moody’s Corporation 2006 10-K, p. 39, 66 [ID# 4834-9526-0422]; Moody’s Corporation 2007 10-K, p. 18, 30 [ID# 4835-1203-7638]; for calculations, see Excel spreadsheet [ID# 4823-3933-3128].

⁷¹² Moody’s annual gross revenues for ABS CDO ratings were \$11,730,234 in 2003, \$22,210,695 in 2004, \$40,332,909 in 2005, \$91,285,905 in 2006, and \$94,666,014 in 2007 (Moody’s May 3, 2010 response to FCIC interrogatory #9 [Net Docs ID# 4818-4748-6982]). See also Moody’s Corporation 2006 10-K, p. 66 [ID# 4834-9526-0422]; Moody’s Corporation 2007 10-K [ID# 4835-1203-7638]; for calculations, see Excel spreadsheet [ID# 4823-3933-3128].

revenues grew from \$602 million to \$2 billion and its profit margin climbed from 26% to 37%.⁷¹³

Yet, the increase in the CDO group's workload and revenue was not accompanied by a parallel staffing increase. "[W]e were under-resourced, you know, we were always playing catch-up," Witt said.⁷¹⁴ Moody's "penny-pinching" and "stingy" management was reluctant to pay up for experienced employees.⁷¹⁵ "The problem of recruiting and retaining good staff was insoluble. Investment banks often hired away our best people. As far as I can remember, we were never allocated funds to make counter offers," Witt said. "We had almost no ability to do meaningful research."⁷¹⁶ Eric Kolchinsky, a former team managing director at Moody's, told the FCIC that from 2004 to 2006, the increase in the number of deals rated was "huge... but our personnel did not go up accordingly."⁷¹⁷ By 2006, Kolchinsky recalled, "My role as a team leader was crisis management. Each deal was a crisis."⁷¹⁸ When they worked to create a new methodology, Witt said, "We had to kind of do it in our spare time."⁷¹⁹

⁷¹³ Moody's Corporation 2000 10-K, p. 29 [ID# 4832-7715-6614] and 2006 10-K, p. 17 [ID# 4834-9526-0422]; for calculations, see FCIC staff report, "Moody's Financial Summary," p. 5 [ID# 4830-0644-2758].

⁷¹⁴ Gary Witt, testimony to the FCIC, hearing on "The Credibility of Credit Ratings, the Investment Decisions Made Based on those Ratings, and the Financial Crisis," Session 1: The Ratings Process, June 2, 2010, p. 46 (ID# 4818-8776-0390)

⁷¹⁵ Gary Witt, written testimony to the FCIC, June 2, 2010, p. 11, <http://www.fcic.gov/hearings/pdfs/2010-0602-Witt.pdf>; Gary Witt, interview with the FCIC, April 21, 2010, p. 63 (ID# 4818-7724-2630).

⁷¹⁶ Gary Witt, written testimony to the FCIC, June 2, 2010, p. 11, <http://www.fcic.gov/hearings/pdfs/2010-0602-Witt.pdf>

⁷¹⁷ Eric Kolchinsky, interview with the FCIC, April 27, 2010, p. 64 [ID# 4828-9967-1046].

⁷¹⁸ Eric Kolchinsky, interview with the FCIC, April 27, 2010, p. 64 [ID# 4828-9967-1046].

⁷¹⁹ Gary Witt, interview with the FCIC, April 21, 2010, p. 19 (ID# 4818-7724-2630).

The agencies worked closely with CDO underwriters and managers as they designed each new CDO. And the rating agencies now relied for a substantial amount of their revenues on a small number of players. Citigroup and Merrill alone accounted for \$140 billion of CDO deals between 2005 and 2007.⁷²⁰ Goldman over \$40 billion.⁷²¹ The ratings agencies' correlation assumptions had a direct and critical impact on how CDOs were structured, with lower assumptions allowing for larger easy-to-sell AAA tranches and smaller harder-to-sell BBB tranches. Thus, as is discussed below, underwriters pressured the agencies for more favorable ratings, for example, by increasing the size of the senior tranches. Because issuers could choose which rating agencies to do business with, and because the agencies depended on the issuers for their revenues, rating agencies felt pressured to remain competitive with favorable ratings.

The pressure on raters was also intense as a result of the high turnover – a revolving door that often left raters dealing with their old colleagues, this time as clients. In her interview with FCIC staff, Yuri Yoshizawa, a Moody's team managing director for U.S. derivatives in 2005, was presented with an organization chart from July 2005.⁷²² She identified 13 out of 51 analysts—approximately 25% of the staff—who had left Moody's to work for investment or commercial banks.⁷²³

Brian Clarkson, who oversaw the structured finance group before becoming the president of Moody's Investors Service, explained to FCIC investigators that retaining employees was always

⁷²⁰ Staff calculations (see Sean Flynn).

⁷²¹ Staff calculations (see Sean Flynn).

⁷²² Yuri Yoshizawa, interview with the FCIC, May 17, 2010, pp. 224-228 [ID# 4828-5164-2118]. The July 2005 org chart is MOODYS-FCIC-0005198 Organization chart for Derivatives (America), Moody's Investor Service, p. 2.

⁷²³ Yuri Yoshizawa, interview with the FCIC, May 17, 2010, pp. 224-228 [ID# 4828-5164-2118].

a challenge, for the simple reason that the banks paid more.⁷²⁴ As a precaution, Moody's employees were prohibited from rating deals by a bank or issuer while they were interviewing for a job with that particular institution, but the responsibility for notifying management of the interview rested on the employee.⁷²⁵ After leaving Moody's, former employees were prohibited from interacting with Moody's on the same series of deals they had rated while employed by Moody's, but there were no prohibitions against working on other deals.⁷²⁶

[also ck Stein transcript excerpt in credit hearing record – Phil entered – must be interesting]

SEC: “Voluntary supervision”

The five major U.S. investment banks expanded their involvement in the mortgage and mortgage securities industries in the early 2000s with little formal regulation beyond their broker-dealer subsidiaries. In 2002, the European Union told U.S. financial firms they would need a “consolidated” supervisor by 2004 to continue to do business in Europe, that is, one regulator that had responsibility for the holding company. The U.S. commercial banks already had their consolidated supervisor – the Federal Reserve – so they were okay, and the OTS supervision of AIG would later also meet the Europeans' standards. The SEC was supervising the securities arms of the investment banks, but no one supervisor kept track of these companies on a consolidated basis. All five of the investment banks faced an important decision: Whom would they prefer as their regulator?

By 2004, the combined assets at the five firms totaled \$2.5 trillion, more than half of the \$4.7 trillion of assets held by the five largest bank holding companies. In the next three years that

⁷²⁴ Transcript of FCIC interview with Brian Clarkson, May 20, 2010, pp. 49-50 [ID# 4828-6796-4934].

⁷²⁵ Transcript of FCIC interview with Brian Clarkson, May 20, 2010, pp. 54-55 [ID# 4828-6796-4934].

⁷²⁶ Transcript of FCIC interview with Brian Clarkson, May 20, 2010, pp. 51-52 [ID# 4828-6796-4934].

figure would grow to \$4.2 trillion. Morgan Stanley was the largest, followed by Merrill and Goldman, then Lehman and Bear. These large, diverse international firms had transformed their business models over the years. They relied more and more for their revenues on trading, investments, securitization and similar activities, on top of their traditional investment banking functions. Recall that at Bear Stearns, trading and investments accounted for more than 100% of pretax earnings in some years after 2002.⁷²⁷

The investment banks also owned depository institutions that allowed them to provide FDIC-insured accounts to their brokerage customers; the deposits provided cheap but limited funding. These depositories took the form of a thrift (supervised by the OTS) or an industrial loan company (supervised by the FDIC and a state supervisor).⁷²⁸ Merrill Lynch had the largest of both types among the five large investment banks: at their peak at the end of 2007, Merrill's thrift had \$38 billion in assets and its industrial loan company had \$78 billion. Prior to the crisis, Morgan Stanley's industrial loan company was as big as \$39 billion and Lehman's thrift was as big as \$24 billion. Merrill and Lehman used these subsidiaries to finance their mortgage origination activities.

⁷²⁷ Proxies

⁷²⁸ The OTS supervises thrifts and their holding companies on a consolidated basis. Major financial institutions that owned subsidiaries with thrift charters prior to the crisis included AIG, GE Capital, Merrill Lynch, Lehman Brothers, and Morgan Stanley. The main purpose of thrifts, formerly known as savings and loans, was originally to extend residential mortgages. Several states also allow depository institutions to organize as "industrial loan companies" or ILCs. While ILCs are supervised by their state bank regulator and by the FDIC, ILCs can be owned by financial or nonfinancial firms that are not supervised or regulated on a consolidated basis by the Federal Reserve. Prior to the crisis, large institutions with ILCs included financial firms such as Merrill Lynch, Morgan Stanley, Goldman Sachs, and Discover Financial Services, and nonfinancial firms such as General Motors and Target. These companies used their ILCs for access to the payments system or to provide insured deposit services to their customers. Since the financial crisis, most of the largest ILCs have converted to regular bank charters (including those owned by Morgan Stanley, Discover, GMAC, American Express, and Goldman Sachs) and are now being supervised by the Federal Reserve on a consolidated basis.

Because of those depository subsidiaries, the investment banks had two obvious choices when they were faced with the need for a consolidated supervisor. If they chartered their depository as a commercial bank, the Fed would be their holding company supervisor; if they chartered it as a thrift, the OTS would do the job. But the investment banks came up with a third option. They lobbied the SEC for a system of regulation that would satisfy the terms of the European directive and not subject them to consolidated European oversight⁷²⁹ – and the SEC was willing to step in, although it did not have a history as a safety-and-soundness supervisor. Its focus instead was on investor protection.

In November 2003, almost a year after the announcement from the Europeans, the SEC proposed the creation of the Consolidated Supervised Entity (CSE) program to oversee the holding companies of investment banks and all their subsidiaries. The CSE program was only open to investment banks that had large US broker-dealer subsidiaries already subject to SEC regulation.⁷³⁰ However, this was the SEC's first foray into supervising firms for safety and soundness, beyond protection of customer funds. The SEC did not have express legislative authority to require the investment banks to submit to consolidated regulation, so it proposed that the CSE program be voluntary; the SEC crafted the new program out of its authority to make rules for the broker-dealer subsidiaries of investment banks.⁷³¹ The proposed program would apply to broker-dealers that volunteered to be subject to consolidated supervision under the CSE program, or those that already were subject to supervision by the Fed at the holding company

⁷²⁹ FCIC Interview with Harvey Goldschmid; FCIC Interview with Annette Nazareth.

⁷³⁰ CSE firms had to have a principal US broker dealer with over \$5 billion in tentative net capital (regulatory net capital, less deductions of illiquid assets).

⁷³¹ Following the repeal of the Glass-Steagall Act in 1999, the SEC unsuccessfully asked Congress to empower it to monitor investment bank holding companies.

level, such as JP Morgan and Citigroup.⁷³² The CSE program would introduce a limited form of supervision by SEC examiners. CSE firms were allowed to use a new methodology to calculate the regulatory capital they were holding against their securities portfolios—a methodology, based on the volatility of market prices. This methodology, referred to as the “alternative net capital rule,” would be similar to the standards that large commercial banks and bank holding companies used for their securities portfolios based on the 1996 Market Risk Amendment to the Basel rules.⁷³³

The traditional net capital rule that had governed broker-dealers since 1975 had required straightforward calculations based on asset classes and credit ratings, a bright-line approach that gave firms little discretion in calculating their capital. The new rules would allow the investment banks to create their own proprietary value-at-risk (VaR) models to calculate their regulatory capital, that is, the capital they would have to hold to protect their customers’ assets in the event the firm experienced losses on its securities and derivatives.^{734,735} All in all, the SEC estimated that the proposed new reliance on proprietary value-at-risk models would allow broker-dealers to

⁷³² CSE firms had to have a principal US broker-dealer with over \$5 billion in tentative net capital (regulatory net capital, less deductions of illiquid assets).

⁷³³ Alternative Net Capital Requirements for Broker-Dealers, 68 Fed. Reg. 62872 (Nov. 6, 2003). The minimum regulatory net capital requirement for CSE firms was the higher of: (1) \$1 billion in tentative capital; (2) \$500 million in net capital; or (3) 2% of its aggregate debit items, which generally are obligations of customers to the broker-dealer (*e.g.* margin loans).

⁷³⁴ *Id.* The Alternative net capital rule adopted by the CSE Rules is consistent with International Basel standards

⁷³⁵ Minimum tentative capital requirements and maximum leverage components were unchanged relative to the traditional net capital rule. Tentative net capital is net capital minus deductions for illiquid assets. What changed is how net capital was calculated, *i.e.*, what haircuts were applied to the firms’ assets to compensate for their respective levels of risk. Under the traditional rule, the haircuts were set forth in the SEC regulations. Under the CSE program, firms’ were permitted to develop and use their own models to determine the appropriate risk weighting of their assets.

reduce average capital charges by 40%.⁷³⁶ The firms would be required to give the SEC an early warning notice if their tentative net capital (net capital minus hard-to-sell assets) fell below \$5 billion at any time.

Meanwhile, the Office of Thrift Supervision already supervised the thrifts owned by several securities firms and argued that it therefore was the natural supervisor of their holding companies. The OTS was harshly critical of the SEC proposal,⁷³⁷ which it said had “the potential to duplicate or conflict with OTS’s supervisory responsibilities” over savings and loan holding companies that would also be CSE entities.⁷³⁸ The OTS argued that the SEC was interfering with the intentions of Congress, which, in the Gramm-Leach-Bliley Act, “carefully kept the responsibility for supervision of the holding company itself with the OTS or the Federal Reserve Board, depending upon whether the holding company was a [thrift holding company] or a bank holding company. This was in recognition of the expertise developed over the years by these regulators in evaluating the risks posed to depository institutions and the federal deposit insurance funds by depository institution holding companies and their affiliates.” In a letter to the SEC, the OTS said, “[W]e believe that the SEC’s proposed assertion of authority over [savings and loan holding companies] is unfounded and could pose significant risks to these entities, their insured deposit institution subsidiaries and the federal deposit insurance funds.”⁷³⁹

⁷³⁶ *Id.* The Final Rule release states: “We expect that use of the alternative net capital computation will reduce deductions for market and credit risk substantially for broker-dealers that use that method.” *Id.*

⁷³⁷ Letter from the Office of Thrift Supervision to the SEC, (Feb. 11, 2004) (*available at* <http://www.sec.gov/rules/proposed/s72103/ots021104.htm>).

⁷³⁸ Letter from the Office of Thrift Supervision to the SEC, (Feb. 11, 2004) (*available at* <http://www.sec.gov/rules/proposed/s72103/ots021104.htm>).

⁷³⁹ Letter from the Office of Thrift Supervision to the SEC, (Feb. 11, 2004) (*available at* <http://www.sec.gov/rules/proposed/s72103/ots021104.htm>).

On the other hand, the response from the financial services industry to the SEC proposal, was overwhelmingly positive, particularly with regard to the alternative net capital computation, Lehman Brothers wrote that it “applauds and supports the Commission.”⁷⁴⁰ JP Morgan was supportive of the rule’s content as an improvement over the old net capital rule that still governed securities subsidiaries of the commercial banks: “The existing capital rule overstates the amount of capital a broker-dealer needs,” the company wrote.⁷⁴¹ Deutsche Bank found it to be “a great stride towards consistency with modern comprehensive risk management practices.”⁷⁴² In FCIC interviews, SEC officials and executives at the investment banks stated that the firms preferred the SEC because it was more familiar with their core securities related businesses.

In April, 2004, at a meeting, SEC commissioners voted unanimously to adopt the CSE program and the new net capital calculations that went along with it.⁷⁴³ Over the following year and a half, the five largest investment banks volunteered for this supervision, although Merrill’s and Lehman’s thrifts continued to be supervised by the OTS. Several firms delayed entry to the program in order to develop systems that could measure their exposures to market price movements.

Former SEC Commissioner Harvey Goldschmid told FCIC staff that, prior to the creation of the CSE program, SEC staff were concerned about how little authority they had over the Wall Street

⁷⁴⁰ Letter from Lehman Brothers, Inc. to the SEC, (Mar. 8, 2004) (*available at* <http://www.sec.gov/rules/proposed/s72103/lehmanbrothers03082004.htm>).

⁷⁴¹ J.P. Morgan Chase, *supra* note 12.

⁷⁴² Letter from Deutsche Bank A.G. and Deutsche Bank Secs. to the SEC, (Feb. 18, 2004) (*available at* <http://www.sec.gov/rules/proposed/s72103/deutsche021804.htm>).

⁷⁴³ SEC Press Release, SEC Proposes Thrift Exception from Advisors Act, Comprehensive Disclosure Requirements for Asset Backed Securities; Adopts Supervision Programs for Broker-Dealers and Affiliates (April 28, 2004).

firms, including their hedge funds and overseas subsidiaries. With the CSE program, the SEC “had the authority to look at everything.”⁷⁴⁴ SEC Commissioners discussed at the time the risks they were taking by allowing firms to reduce their capital. “If anything goes wrong it’s going to be an awfully big mess,” Goldschmid said at a 2004 Commissioners meeting. “Do we feel secure if these drops in capital and other things [occur] we really will have investor protection?”⁷⁴⁵ In response, Annette Nazareth, the SEC official who would be in charge of the program, assured the Commission that her division was up for the challenge.

The new program was primarily housed in the SEC’s Office of Prudential Supervision and Risk Analysis, an office with a staff of 12 within the Division of Market Regulation.⁷⁴⁶ In the beginning, it was supported by the SEC’s much larger examination staff; by 2008 the staff dedicated to the CSE program had grown to 24.⁷⁴⁷ Still, only 10 “monitors” were responsible for the five investment banks, with a total of \$4.2 trillion in assets. The monitors doubled up, with three assigned to each firm.⁷⁴⁸

The CSE program was based on the bank supervision model,⁷⁴⁹ but the SEC did not try to do exactly what bank examiners did.⁷⁵⁰ For one thing, unlike supervisors of large banks, the SEC

⁷⁴⁴FCIC Interview of Harvey Goldschmid.⁷⁴⁴ *Id.*

⁷⁴⁵ Closed meeting of the Securities and Exchange Commission, April 28, 2004.

⁷⁴⁶ In 2005, the Division of Market Regulation became the Division of Trading and Markets. To avoid confusion, it is referred to as the Division of Market Regulation throughout this report.

⁷⁴⁷ FCIC Interview with Annette Nazareth. Although there are more than 1,000 SEC examiners, collectively they regulate more than 5,000 broker-dealers, with more than 750,000 registered representatives, as well as other market participants.

⁷⁴⁸ *Id.*

⁷⁴⁹ FCIC Interview Annette Nazareth; FCIC Interview Erik Sirri.

never assigned on-site examiners under the CSE program; for comparison, the OCC alone assigned more than 60 examiners full time at Citibank. According to Erik Sirri, former director of trading and markets, the CSE program was intended to focus primarily on liquidity because, unlike a commercial bank, a securities firm traditionally had no access to a lender of last resort.⁷⁵¹ (Of course, this would change during the crisis.) The investment banks were subject to an annual examinations, during which staff reviewed the firms' systems and records and verified that the firms had control processes.⁷⁵²

The CSE program was troubled from the start. The SEC conducted an exam for each investment bank when it entered the program. The result of Bear Stearns's entrance exam, in 2005, showed several deficiencies. These included a lack of firm-wide value-at-risk limits and a concern that contingency funding plans relied on overly optimistic stress scenarios. In addition, the SEC was aware of the firm's concentration of mortgage securities and its high leverage. Nonetheless, the SEC did not ask Bear to change its asset balance, decrease its leverage, or increase its cash liquidity pool, all well within its prerogative, according to SEC officials. Then, because of a staff reorganization at the CSE program, Bear did not have its next annual exam, where the SEC was supposed to be on-site. The SEC did meet monthly with all CSE firms, including Bear,⁷⁵³ and it did conduct occasional targeted examinations across firms. In 2006, the SEC suggested that Bear was too reliant on unsecured commercial paper funding. In response, Bear reduced its

⁷⁵⁰ The monitors met with senior business and risk managers at each CSE firm every month about general concerns and risks the firms were seeing. Written reports of these meetings were given to the Director of Market Regulation every month. In addition, the CSE monitors met quarterly with the treasury and financial control functions of each CSE firm to discuss liquidity and funding issues.

⁷⁵¹ FCIC Written testimony of Erik Sirri, dated May 10, 2010.

⁷⁵² FCIC interview with SEC Associate Director Michael Macchiaroli.

⁷⁵³ FCIC interview with Michael Macchiaroli, April 13, 2010.

exposure to unsecured commercial paper and increased its reliance on secured repo lending. Unfortunately, tens of billions of that repo lending was overnight funding that could disappear with little warning. Ironically, the second week of March 2008, when the firm went into its four-day death spiral, the SEC was on site conducting its first CSE exam since Bear's entrance exam more than two years earlier.

Leverage at the investment banks increased from 2004 to 2007, which some critics have blamed on the SEC's change in the net capital rules.⁷⁵⁴ Former SEC Commissioner Goldschmid told the FCIC that the increase owed to "a wild capital time and the firms being irresponsible."⁷⁵⁵ In fact, leverage had been higher at the five investment banks in the late 1990s. It had then dropped before increasing over the life of the CSE program. The high level of leverage before the introduction of the CSE program suggests that the program was not solely responsible for the changes.⁷⁵⁶ The SEC also noted that under the CSE program the investment banks' net capital levels, as measured by [XXX], "remained relatively stable and, in some cases, increased significantly" over the program.⁷⁵⁷ Still, Goldschmid, who left the SEC in 2005, argued that the SEC had the power to do more to rein in the investment banks, saying "There was much more than enough moral suasion and kind of practical power that was involved...The SEC has the practical ability to do a lot if it uses its power."

⁷⁵⁴ Lee Pickard, former Director of the SEC's Division of Market Regulation when the 1975 net capital rule was promulgated said: "The SEC modification in 2004 is the primary reason for all of the losses that have occurred." Julie Satow, [Ex-SEC Official Blames Agency for Blow-Up of Broker-Dealers](#), NY Sun, (September 18, 2008).

⁷⁵⁵ FCIC Interview with Harvey Goldschmid. Transcript dated April 8, 2010.

⁷⁵⁶ GAO-09-739, Financial Markets Regulation: Financial Crisis Highlights Need to Improve Oversight of Leverage at Financial Institutions, (July 2009).

⁷⁵⁷ *Id.*

Overall, the CSE program was widely viewed as a failure. From 2004 until the financial crisis, all five investment banks continued their spectacular growth, relying heavily on short-term funding. Former SEC Chairman Christopher Cox called the CSE supervisory program “fundamentally flawed from the beginning.”⁷⁵⁸ Sitting SEC Chairman Mary Schapiro concluded that the program “was not successful in providing prudential supervision.”⁷⁵⁹ And, as we will see in the chapters ahead, the SEC’s Inspector General would be quite critical, too. In September 2008, in the midst of the financial crisis, the CSE program was discontinued after all five of the largest independent investment banks had either closed down (Lehman Brothers), merged into other entities (Bear Stearns and Merrill Lynch), or converted to bank holding companies to be supervised by the Federal Reserve (Goldman Sachs and Morgan Stanley).

For the Fed, there would be a certain irony in that last development with Goldman and Morgan Stanley. Fed officials had seen their agency’s regulatory purview shrinking over the course of the 2000s as JP Morgan switched the charter of its banking subsidiary to the OCC⁷⁶⁰ and as the OTS and SEC promoted their alternatives for consolidated supervision.⁷⁶¹ “The OTS and SEC were very aggressive in trying to promote themselves as a regulator in that environment and wanted to be the consolidated supervisor to meet the requirements in Europe for a consolidated supervisor,” said Mark Olson, a Fed Governor from 2001 to 2006. “There was a lot of competitiveness among the regulators.” In January 2008, Fed staff had prepared an internal

⁷⁵⁸ Press Release “Chairman Cox Announces End of Consolidated Supervised Entities Program,” September 26, 2008 available at <http://www.sec.gov/news/press/2008/2008-230.htm>.

⁷⁵⁹ *First Public Hearing of the Financial Crisis Inquiry Commission* (January 14, 2010) (testimony of Chairman Mary Schapiro) available at <http://fcic.gov/hearings/pdfs/2010-0114-Transcript.pdf>.

⁷⁶⁰ The Fed remained the supervisor of JP Morgan at the holding company level.

⁷⁶¹ FCIC Interview with Mark Olson, October 4, 2010.

study to find out why none of the investment banks had chosen the Fed as its consolidated supervisor.⁷⁶² The staff interviewed five firms that already were supervised by the Fed and four that had chosen the SEC. According to the report, the biggest reason firms opted not to be supervised by the Fed was the “comprehensiveness” of the Fed’s supervisory approach, “particularly when compared to alternatives such as Office of Thrift Supervision (OTS) or Securities & Exchange Commission (SEC) supervision.”⁷⁶³

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⁷⁶² Bank holding companies that meet certain capital, managerial, and other requirements may elect to become financial holding companies and thereby engage in a wider range of financial activities than they could otherwise, including full-scope securities underwriting, merchant banking, and insurance underwriting and sales.

⁷⁶³ Federal Reserve System, *Financial Holding Company Project*, January 25, 2008.

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CHAPTER CONCLUSIONS HERE

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Part II, Chapter 4: “The madness”

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In 2003, Bakersfield, California homebuilder Warren Peterson was paying as little as \$35,000 for a 10,000-square-foot lot, about the size of three tennis courts. The next year the tab had more than tripled to \$120,000 as real estate boomed. And nowhere did it boom more than Bakersfield, a city at the southern end of the state’s agricultural center, the San Joaquin Valley. Over the previous quarter-century, Peterson had built between three and 10 luxury homes a year. For a while, he was building as many as 30.⁷⁶⁴ And then came the crash.

“I have built exactly one new home since late 2005,” he told the FCIC five years later.⁷⁶⁵

In 2003, the average [new] house in Bakersfield cost \$155,000. That would jump by a third in 2004 and by another third in 2005, peaking in June, 2006 at almost \$300,000.⁷⁶⁶“By 2004,

⁷⁶⁴ Lloyd E Plank, broker, written testimony Bakersfield Field Hearing 7 Sept 2010.

⁷⁶⁵ Warren Peterson testimony Bakersfield Field Hearing 7 Sept 2010.

⁷⁶⁶ Crabtree written testimony p 1-2.

money seemed to be coming in very fast and from everywhere,” said a Bakersfield real estate broker. Investors looking to make quick profits inundated the nation’s 58th-largest city. “They would purchase a house in Bakersfield, keep it for a short period and resell it. Sometimes they would flip the house while it was still in escrow, and would still make 20% to 30%.”

Nationally, housing prices jumped 152% between 1997 and the peak in 2006; that’s more than they had in any previous decade going back to at least 1920.⁷⁶⁷ It would all be catastrophically downhill from there – yet the mortgage machine kept churning out product well into 2007, apparently indifferent to the increasingly obvious fact that housing prices were now starting to fall and lending standards had deteriorated, that ubiquitous newspaper stories highlighted the weakness in the housing market – even the possibility that this was a bubble that could burst at any moment.

There were checks in the system, but they were failing. Lending standards collapsed – both for the roughly three-quarters of mortgages that were bound for the securitization pipeline and for the one-quarter bound for banks’ balance sheets. Mortgage originators overruled or ignored their own fraud departments in the name of maintaining volume. Loan purchasers and securitizers ignored their own due diligence about the quality of what they were buying. The Fed and the other regulators increasingly recognized the impending troubles in housing but thought the impacts would be contained. At the same time, the combination of increased securitization, lower underwriting standards, and easier access to credit – all in the face of other rising asset

⁷⁶⁷ Recent data are based on the CoreLogic Single Family Combined (SFC) Home Price Index, available at <http://www.corelogic.com/Products/CoreLogic-HPI.aspx#container-ProductDetails>, Data accessed August 2010. FCIC calculation of change from January 1997 to April 2006, peak. Earlier data are based on the Case-Shiller Home Price Index, which goes back to 1920. As a percentage jump, the increase in home prices at the end of World War II was about as great as the increase that peaked in 2006.

prices – was now common in markets removed from home mortgages. Credit was flowing in commercial real estate markets and in the market for other forms of corporate loans. Companies now had decisions to make. How to react to what appeared more and more to be a broad credit bubble? Many companies, such as Lehman, Fannie Mae, and others, chose to push deeper.

All along the assembly line, from the origination of the mortgages to the creation and marketing of the mortgage-backed securities and CDOs, many players understood and the regulators at least suspected that every cog of the machine was reliant on the mortgages themselves, which would prove not be trusted to perform as advertised.

Lewis Ranieri called the willing suspension of disbelief “the madness.” He told the FCIC, “You had the breakdown of the standards, which first come in the [nonprime mortgage-backed securities], then they spread to the prime and the agencies, because you break down the checks and balances that normally would have stopped them. One of [those breakdowns] is the CDO, which takes away the last of the defenses on who’s protecting the bondholder.” Madness in the CDO market is the subject of our next chapter, but Ranieri’s point was clear: as the securitization market grew riskier, people were in danger of losing their homes. The fates of Wall Street and Main Street had become entwined.⁷⁶⁸

The bubble: “It’s not going to be pretty”

In September 2005 – seven months before the housing market would hit its official peak – thousands of originators, securitizers, and investors met at the ABS East 2005 conference in Boca Raton, Florida, to play golf, do deals, and talk about the market. Business was still good, but even the most committed optimists could read the signs. Panelists expressed three top

⁷⁶⁸ FCIC interview with Lewis Ranieri, July 30, 2010.

concerns: Were housing prices overheated or just driven by “fundamentals” such as mortgage market improvements and increased demand from home buyers? Would rising interest rates halt the market? And was the CDO, because of its ratings-driven investors, distorting the mortgage market?⁷⁶⁹

Without a doubt, the numbers were stark. Nation-wide, house prices had never risen so far, so fast. And prices rose much more dramatically in some markets than others; the national indexes mask this important variation. House prices in the four sand states, and especially California, had dramatically larger spikes – and subsequent declines – than did the nation as a whole.

The variety of price appreciation among the states was also mirrored internationally. Countries such as the UK and Ireland, in particular, experienced dramatic increases in home prices from 1997 to 2007, followed by large declines. Some other countries, however, did not experience a bubble. Canada, for example, experienced steady but moderate increases over the period with housing prices flattening and then only slightly declining in 2009. Researchers at the Cleveland Fed found that Canada’s experience owed to tighter lending standards than in the U.S.⁷⁷⁰

Economists and policy makers everywhere struggled to explain the price increases. The good news was that the economy was growing with low unemployment. A Federal Reserve study in May 2005 presented evidence that it had become much more expensive to own than to rent relative to the historical relationship: home prices had risen from 20 times the annual cost of renting to 25 times.⁷⁷¹ The change was particularly dramatic in some cities. From 1997 to 2006,

⁷⁶⁹ Nomura Securities, *Notes from Boca Raton*, ABS East, September 30, 2005.

⁷⁷⁰ MacGee, James, “Why Didn’t Canada’s Housing Market Go Bust.” 12/2/2009

⁷⁷¹ Morris A. Davis, Andreas Lehnert, and Robert F. Martin, *The Rent-Price Ratio for the Aggregate Stock of Owner-Occupied Housing*, Federal Reserve Board, May, 2005.

the ratio of house prices to rents rose in Los Angeles, New York, and Miami by 150%, 125%, and 80%, respectively. In 2006, the National Association of Realtors' affordability index – which measures whether a typical family could qualify for a traditional mortgage with a 20% down-payment on a typical home – had reached a record low.⁷⁷² But that affordability measure was based on the cost of a traditional mortgage with an obsolete 20% down payment. Perhaps such measures were no longer relevant when Americans could borrow with one of the now more-popular alternative mortgages, such as pay-option ARMs and interest-only mortgages, that had reduced initial mortgage payments. Or perhaps buying a home continued to make financial sense given homeowners' expectations of further price gains.

And if there was a bubble, perhaps, as Fed Chairman Alan Greenspan said, it was isolated to certain regions. He told a Congressional committee in June 2005 that growth in non-prime mortgages was helping to push home prices in some markets to unsustainable levels, “although a ‘bubble’ in home prices for the nation as a whole does not appear likely.”⁷⁷³ While optimistic forecasts held by market participants in 2005 turned out to be inaccurate, for many these forecasts were well considered at the time.⁷⁷⁴ As one recent study argues, many economists, “agnostics” on housing, were unwilling to risk their reputations or spook markets by alleging a bubble without finding support in economic theory. Fed Vice Chairman Donald Kohn was one such agnostic. “Identification [of a bubble] is a tricky proposition because not all the

⁷⁷² National Association of Realtors Home Affordability Index, accessed from Bloomberg as composite Index (AFFDAMOM); US Census Bureau, Household Income, Table H-8 Median Household Income by State: 1984 to 2009, available at <http://www.census.gov/hhes/www/income/data/historical/household/index.html>, FCIC Calculations.

⁷⁷³ Greenspan before Joint Economic Committee of Congress 5 June 2005, reported in Washington Post 6 June 2005

⁷⁷⁴ Gerardi, Kristopher S. Christopher L. Foote, and Paul S. Willen, “Reasonable People Did Disagree: Optimism and Pessimism about the U.S. Housing Market Before the Crash” Federal Reserve Bank of Boston, Public Policy Discussion Paper No 10-5, August 12, 2010

fundamental factors driving asset prices are directly observable,” Kohn said in a 2006 speech. “For this reason, any judgment by a central bank that stocks or homes are overpriced is inherently highly uncertain.”⁷⁷⁵

But not all economists were hesitant to sound a louder alarm. “[T]he situation is beginning to look like a credit-induced boom in housing that could very well result in a systemic bust if credit conditions or economic conditions should deteriorate,”⁷⁷⁶ FDIC Chief Economist Richard Brown told colleagues in a March 2005 report. “During the past five years, the average U.S. home has risen in value by 50 percent, while homes in the fastest-growing markets have approximately doubled in value.” While this increase might have been explained by strong market fundamentals, “the dramatic broadening of the housing boom in 2004 strongly suggests the influence of systemic factors, including the low cost and wide availability of mortgage credit.”

A couple of months later, Fed economists in an internal memo acknowledged the possibility that housing prices were over-valued but downplayed the potential impacts of a downturn. Even in the face of a large price decline, many borrowers would not default, given the large equity many still had in their homes. Structural changes in the mortgage market made a crisis less likely, and the financial system seemed well capitalized. “Even historically large declines in house prices would be small relative to the recent decline in household wealth owing to the stock market,” the

⁷⁷⁵ Donald L. Kohn, *Monetary policy and asset prices*, March 16, 2006.

⁷⁷⁶ Richard A. Brown, “Rising Risks in Housing Markets,” memorandum to the National Risk Committee, March 21, 2005, emphasis omitted. Document produced to the FCIC September 22, 2010.

economists concluded. “From a wealth-effects perspective, this seems unlikely to create substantial macroeconomic problems.”⁷⁷⁷

[add new Fed information re 2005 discussions on housing market]

The Economist in its June 18 to 24, 2005 cover noted that consumer spending and employment would both be hurt by a collapse in house prices, the lead article warned, “[T]he day of reckoning is closer at hand. It is not going to be pretty. How the current housing boom ends could decide the course of the entire world economy over the next few years.”⁷⁷⁸

Monitoring fraud: “” [To Come]

Disclosure and Due Diligence: “A quality control issue in the factory”

In addition to the incidence of fraud and egregious lending practices, there was an overall deterioration of lending standards in the final years of the bubble. Subprime loans grew [XXX%] in 2006. Alt-A loans grew [XXX%] – in particular, option ARMs grew [XXX%] and no-doc or low-doc loans grew [XXX%]. Overall, by 2006 no-doc or low-doc loans comprised xx% of all mortgages originated. Many of these products would only perform if prices continued to rise and the borrower could refinance at a low rate.⁷⁷⁹

In theory, every participant along the pipeline should have had an interest in the quality of every underlying mortgage. In practice, their interests were often not aligned. Two New York Fed

⁷⁷⁷ Board of Governors, memorandum from Josh Gallin and Andreas Lehnert to Vice Chairman Ferguson, “Talking Points on House Prices,” May 5, 2005. Document produced to the FCIC, September 24, 2010.

⁷⁷⁸ *Economist*, June 28-24, 2005.

⁷⁷⁹ Gary Gorton, *The Panic of 2007*, August, 2008.

economists have pointed out the “seven deadly frictions” in mortgage securitization – places along the pipeline where one party knew more than the other, creating opportunities to take advantage.⁷⁸⁰ For example, the lender who originated the mortgage for sale, earning a commission, knew a great deal about the loan and the borrower but had no long-term stake in whether the mortgage paid, beyond the lender’s own business reputation. The securitizer who packaged mortgages into mortgage-backed securities, similarly, was less likely over the years to retain a stake in those securities.

The rating agencies were the most important watchdogs over the securitization process. They described their role as “an umpire in the market.”⁷⁸¹ But, they did not review the quality of individual mortgages in a mortgage-backed security, nor did they check to see that the mortgages were what the securitizers said they were.

So the integrity of the market depended upon two critical checks. First, firms purchasing and securitizing the mortgages would conduct due diligence reviews of the quality of mortgage pools, either using third-party firms or doing the review in-house. Second, following SEC rules, various parties in the securitization process were expected to disclose what they were selling to investors. As we will see, both of these checks did not perform as they should have.

Due diligence firms: “Waived-in”

⁷⁸⁰ The seven are: (1) many mortgage products were complex and subject to misrepresentation by the lender, i.e., predatory lending or fraud; (2) the originator knew more about the pool of mortgages than the securitizer; (3) the securitizer could securitize bad loans at the expense of its lenders or investors; (4) the borrower had an incentive to not stay current on the mortgage if prices had fallen; (5) the servicer and investor’s interests were not necessarily aligned; (6) the CDO manager’s incentives were not necessarily aligned with the CDO investors; and, (7) the credit rating agencies were paid by the securitizers, not the investors. Adam B. Ashcraft and Til Schuermann, *Understanding the Securitization of Subprime Mortgage Credit*, 2008.

⁷⁸¹ Raymond McDaniel, quoted in MD Town Hall Meeting Survey Results and Transcript, September 11, 2007, MOODY’S-COGR-0052080 – 0052160, p. MOODY’S-COGR-0052085 [ID# 4820-7781-2487]

Investors paid due-diligence firms for independent reviews before bidding for mortgages. A decade later, as subprime mortgage securitization took off, securitizers, similarly, were willing to pay for an independent analysis of the mortgage pools that originators were selling them.

The originator and the securitizer negotiated the extent of the due-diligence investigation.⁷⁸²

While the percentage of the pool examined could be as high as 30%, it was often much lower; according to some observers, as the market grew and origination became more concentrated, mortgage originators had more bargaining power over the mortgage purchasers, and samples were sometimes just 5%.⁷⁸³ Some securitizers requested that the due diligence firm analyze a random sample of mortgages from the pool; others requested a sampling of loans that were most likely to be deficient in some way, in an effort to efficiently detect more of the problem loans.

The most commonly used third-party due diligence firm hired by securitizers was Clayton Holdings, based in Connecticut. Clayton handled almost half of the third-party due-diligence market.⁷⁸⁴ As Vicki Beal, Vice President of Clayton, explained to the FCIC, these firms were “not retained by [their] clients to provide an opinion as to whether a loan is a good loan or a bad loan.” Rather, they were hired to identify whether, among other things, the loans met the originator’s stated underwriting guidelines and, to some measure, to “negotiate better prices on pools of loans.”

⁷⁸² Massachusetts Attorney General’s Comment Letter at p. 9; FCIC interview of Frank Fillips.

⁷⁸³ FCIC interview of FINRA Enforcement officers.

⁷⁸⁴ FCIC interview of Frank Fillips.

The actual review fell into three general classifications: credit, compliance, and valuation.⁷⁸⁵ Did the loans meet the underwriting guidelines (generally the originator's standards sometimes with overlays or additional guidelines provided by the financial institutions purchasing the loans), and were the loan characteristics reported by the originator accurate?⁷⁸⁶ Were the loans originated in compliance with federal and state laws, notably laws regarding predatory-lending prohibitions and truth-in-lending requirements?⁷⁸⁷ Were the reported property values accurate?⁷⁸⁸ One last review: To the degree a loan was deficient, did it have any “compensating factors” that made up for these deficiencies? For example, if a loan had a higher loan-to-value ratio than guidelines called for, did another characteristic such as higher borrower’s income serve as a compensating factor? The due diligence firm would then grade the loan sample and forward the data to its bank client. Report in hand, the securitizer would negotiate a price for the pool and could “kick-out” loans that did not meet the stated guidelines.

Because of the volume of loans Clayton examined during the housing boom, the firm had a unique inside view of the underwriting standards that originators were actually applying—and those that the securitizers were willing to accept. At Clayton, loans were classified into three groups: loans that met guidelines (a Grade 1 Event), those that failed to meet guidelines but were approved due to compensating factors (a Grade 2 Event) and those that failed to meet guidelines and were not approved (a Grade 3 Event). Overall, for the 18 months ended June 30, 2007,

⁷⁸⁵ FCIC interview of Vicki Beal; FCIC interview of Kerry O’Neill; FCIC interview of Joe Swartz; see also, Massachusetts Attorney General’s Comment Letter at p. 6.

⁷⁸⁶ FCIC interview of Vicki Beal; FCIC interview of Kerry O’Neill; FCIC interview of Keith Johnson; FCIC interview of Joe Swartz.

⁷⁸⁷ Id.

⁷⁸⁸ Beal testimony from hearing p 117

Clayton rated 54% of the 911,039 loans it analyzed as Grade 1, and another 18% as Grade 2 – for a total of 72% that met the guidelines outright or with or compensating factors. The remaining 28% of the loans were Grade 3. In theory, the banks could have refused to buy a loan pool, or, indeed, they could have used the due diligence firm’s findings to probe more deeply the loans’ quality.⁷⁸⁹ Over the 18-month period, 39% of the loans that Clayton found to be deficient – Grade 3 – were waived in, meaning they were [accepted into the pool]. As a result, 11% of the loans Clayton reviewed were included in mortgage pools despite Clayton finding them unacceptable.

| Clayton Trending Reports on Selected Financial Institutions 1Q2006-2Q2007 | A. Grade 1 Event & Grade 2 Event/Total pool of loans | B. Grade 3 Event/Total pool of loans | C. Financial Institution waives in Grade 3 Event loans waived in | = | D. Final loans rejected (B-C) | Financial Institution Waiver Acceptance Rate (B-D)/B |
|--|---|---|---|----------|--------------------------------------|---|
| Citigroup | 58% | 42% | 13% | | 29% | 31% |
| Credit Suisse | 68% | 32% | 11% | | 21% | 33% |
| Deutsche | 65% | 35% | 17% | | 17% | 50% |
| Goldman | 77% | 23% | 7% | | 16% | 29% |
| JP Morgan | 73% | 27% | 14% | | 13% | 51% |
| Lehman | 74% | 26% | 10% | | 16% | 37% |
| Merrill | 77% | 23% | 7% | | 16% | 32% |
| UBS | 80% | 20% | 6% | | 13% | 33% |
| WaMu | 73% | 27% | 8% | | 19% | 29% |
| Total Bank Sample | 72% | 28% | 11% | | 17% | 39% |

⁷⁸⁹ Angelides q and a with Johnson, Beal at pp xx and pp 146

Referring to the percentage of loans that met guidelines outright, Keith Johnson, president of Clayton from May 2006 to May 2009, told the Commission, “That 54% to me says there [was] a quality control issue in the factory” for mortgage-backed securities.⁷⁹⁰ Clayton executives concluded that their clients’ decisions to waive-in loans were often made to preserve the securitizer’s business relationship with the loan originator.⁷⁹¹ A high number of rejections could lead the originator to sell the loans to a securitization competitor. Simply put, it was a sellers’ market. “Probably the seller had more power than the Wall Street issuer,” Johnson told the FCIC.

The high rate of rejections and subsequent waivers may not itself be evidence of something wrong in the process, Beal testified. She said that as originators’ lending “guidelines were declining” she saw the securitizing firms introduce additional credit overlays. “As -- you know, there was stated income, they were telling us look for reasonableness of that income, things like that.” With tighter overlays, one would expect more rejections, and after the securitizer takes a closer look at the rejected loans, possibly more waivers. As Moody’s explained in a letter to the FCIC, “[a] high rate of waivers from an institution with extremely tight underwriting standards could result in a pool that is less risky than a pool with no waivers from an institution with extremely loose underwriting standards.”⁷⁹² Nonetheless, as we discuss below, many

⁷⁹⁰ P 137 Johnson testimony at line 13-16

⁷⁹¹ Id. See also, Massachusetts Attorney General’s Comment Letter, at p. 7, (“At times, however, a sponsor’s [securitization firm’s] decision to overrule the vendor may be made based on other factors such as the ongoing business relationship between the investment bank [securitization firm] and the originator. In this relationship, a key factor is the so-called “pull-through rate”, if the pull-through rate is too low, the originator may decide not to continue to do business with the investment bank [securitization firm]. In a competitive marketplace, this leads to a dangerous temptation to purchase flawed loans, particularly flaws that are not identifiable on the typical reports provided to investors.”

⁷⁹² Letter to FCIC from Moody’s dated Sept 30, 2010.

prospectuses indicated that the loans in the pools either met guidelines outright or had compensating factors. This, despite the fact that Clayton records show that only a portion of the loans were sampled, and of those that were sampled, a substantial percentage of Grade 3 Event loans were waived in.

Johnson said he approached the rating agencies in 2006 and 2007 to gauge their interest in the exception tracking product that Clayton was developing. Clayton executives said that in 2007 they shared some of the company's results with the agencies, attempting to convince them that the data would benefit the ratings process.⁷⁹³ "We told them that we found 'exceptions' and we said, 'Wouldn't you like to know this before you rate the loans?'" Beal said. The agencies thought the due diligence firms' data was "great" but they didn't want it, Beal said, because the data would presumably produce lower ratings for the proposed securitizations, and such lower ratings would cost the agency business, even in 2007, as the private securitization market was winding down.^{794 795}

When securitizers did kick loans out of the pools, some originators simply put them into new pools presumably in hopes that the loans would not be captured in the next pool's 5% sampling. The examiner's report for New Century Financial's bankruptcy describes such a practice.⁷⁹⁶ As another example, the former Regulatory Compliance & Risk Manager at Fremont, Roger Ehrman, told the FCIC that Fremont had a policy of putting loans into subsequent pools until they were

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⁷⁹⁶ Report of Michael J. Missal, New Century Bankruptcy Court Examiner, dated February 28, 2007, p.67

kicked out three times.⁷⁹⁷ As Johnson described the practice to the FCIC, it was the “three strikes, you’re out rule.”⁷⁹⁸

Some mortgage securitizers did their own due diligence, but seemed to devote only limited resources to the task. At Morgan Stanley, the head of due diligence was not based in New York but rather in Boca Raton, Florida. He had, at any one time, two to five direct reports who were actually employees of a personnel consultant, Equinox, seconded to Morgan Stanley. Deutsche Bank and JP Morgan also had only small due-diligence teams.⁷⁹⁹

Banks did not necessarily have better processes for monitoring mortgages that they purchased. At its hearing on the mortgage business, the FCIC took the testimony of Richard Bowen III, a whistleblower who had been a senior vice president at [CitiMortgage] in charge of a staff of 200-plus professional underwriters. Bowen’s team conducted quality assurance checks on the loans Citigroup bought from a network of lenders, including both subprime mortgages that Citigroup intended to hold and prime mortgages that Citigroup intended to sell to the GSEs.

For subprime purchases, Bowen’s team would thoroughly review the physical credit file of the loans they were purchasing. “During 2006 and 2007, I witnessed many changes to the way the credit risk was being evaluated for these pools during the purchase processes,” Bowen said. For

⁷⁹⁷ Staff interview of Roger Ehrman, September 2, 2010. Mr. Ehrman is now an FDIC Examiner in the greater Los Angeles area.

⁷⁹⁸ FCIC hearing

⁷⁹⁹ See also interview of Joseph Schwartz, Deutsche Bank person in charge of mortgage acquisition due diligence, and interview of William Collins Buell, VI, JP Morgan, head of mortgage acquisition. Third party vendors took similar steps to cut costs. A large majority of its loan underwriters were independent contractors that only worked when the vendor had jobs for them to do.

example, he said, a chief risk officer in Citigroup's Consumer Lending business reversed large numbers of underwriting decisions from "turn down" to "approved."⁸⁰⁰

Part of Bowen's charge was also to supervise the purchase of roughly \$50 billion annually in prime loans pools, a high percentage of which were sold to Fannie Mae and Freddie Mac for securitization. Bowen's staff worked with a quality-control sampling that was supposed to include at least 5% of the total loan pool for a given securitization, but "this corporate mandate was usually ignored." Samples of 2% of total loan pools were more likely. Among these, the loan samples Bowen's group did examine showed extremely high non-compliance rates. "At the time that I became involved, which was early to mid-2006, we identified that 40 to 60 percent of the files either had a 'disagree' decision, or they were missing critical documents."

Bowen repeatedly expressed concerns to his direct supervisor and others regarding the quality and underwriting of mortgages that CitiMortgage purchased and then sold to the GSEs.⁷³ As we will see, the GSEs would later put back [billions] of dollars of loans to Citigroup, finding that the loans Citigroup had sold them did not conform with GSE standards.

SEC: "The elephant in the room is that we didn't review the prospectus supplements"

By the time the financial crisis hit, investors held more than \$2 trillion of non-GSE mortgage-backed securities and close to \$700 billion [ck] of mortgage-related CDOs. These securities were issued with practically no SEC oversight. And only a minority was subject to the SEC's ongoing public reporting requirements. The SEC's mandate is to protect investors – generally not by reviewing the quality of securities, but simply by mandating adequate disclosures so that

⁸⁰⁰ Bowen was Senior Vice President and Chief Underwriter for Correspondent and Acquisitions for Citifinancial Mortgage at Citigroup from 2002 through 2005 and Business Chief Underwriter for Correspondent Lending in the Consumer Lending Group from 2006 until 2007.

investors can make up their own minds. In the case of initial public offerings of a company's shares, the SEC's work has historically involved a lengthy review of the issuer's prospectus and other "offering materials" prior to sale.

However, with the advent of a new process to register securities on an ongoing basis, called a shelf registration, the registration process became much quicker for mortgage-backed securities rated in the highest grades by the rating agencies. The new process allowed issuers to file a base prospectus with the SEC, giving investors notice that the issuer intended to offer securities in the future. The issuer then filed a "supplemental prospectus" describing each offering's terms.

. "The elephant in the room is that we didn't review the prospectus supplements," the SEC's Deputy Director for Disclosure in Corporation Finance, [name] told the FCIC.⁸⁰¹ [Check]

To improve disclosures around mortgage-backed securities, the SEC issued Regulation AB in late 2004. The regulation required that every prospectus include "a description of the solicitation, credit-granting or underwriting criteria used to originate or purchase the pool assets, including, to the extent known, any changes in such criteria and the extent to which such policies and criteria are or could be overridden."⁸⁰²

With essentially no review or oversight, how good were disclosures for mortgage-backed securities? Protected only by the promise of accurate information, how much did investors know about any breakdowns in due diligence? Prospectuses usually included disclaimers to the effect that not all mortgages would comply with the lending policies of the originator: "On a case-by-case basis the originator may determine that, based on compensating factors, a prospective

⁸⁰¹ FCIC interview of Corporation Finance staff at the SEC.

⁸⁰² 17 CFR PARTS 210, 228, 229, 230, 232, 239, 240, 242, 245 and 249

mortgage not strictly qualifying under the underwriting guidelines warrants an underwriting exception.”⁸⁰³ The disclosure then typically has a sentence that “some,” “a substantial number” or perhaps “a significant number... of the mortgage loans included in the loan pool will represent such exceptions.”⁸⁰⁴ This wasn’t enough, argued Citigroup’s Bowen. “There was no disclosure made to the investors with regard to the poor underwriting quality of the files they were purchasing,” he told the FCIC.

Such disclosures would leave investors without sufficient information to know what criteria the mortgages they were buying did meet. As discussed earlier, only a small portion – as little as 5% -- of the loans in any deal were sampled for due diligence purposes. Among those, evidence from Clayton shows that a significant portion of the sampled loans were included in mortgage securities despite not meeting stated guidelines. For the as-much-as 95% of the mortgage pool that was not sampled, Clayton and the securitizers had no information about these loans, but statistically one could expect them to have many of the same deficiencies as the sampled loans. Prospectuses for investors did not contain this information, or information on how few loans were reviewed, raising the question of whether the disclosures had a “material omission” implying a violation of the securities laws.

CDOs were issued under a different regulatory framework from the one that applied to many mortgage-backed securities, and were not subject even to the minimal shelf registration

⁸⁰³ See Part V of complaint filed by Cambridge Place Investment Management Inc., dated July 9,2010, in Suffolk County (Massachusetts) Superior Court (hereafter “Cambridge Complaint”) and Part V of complaint filed by Federal Home Loan Bank of Chicago, dated October 15, 2010, in Circuit Court of Cook County, Illinois (Chancery Division)(hereafter “FHLBC Complaint”)

⁸⁰⁴ See Part V of complaint filed by Cambridge Place Investment Management Inc., dated July 9,2010, in Suffolk County (Massachusetts) Superior Court (hereafter “Cambridge Complaint”) and Part V of complaint filed by Federal Home Loan Bank of Chicago, dated October 15, 2010, in Circuit Court of Cook County, Illinois (Chancery Division)(hereafter “FHLBC Complaint”)

rules. Underwriters typically issued CDOs under the SEC's Rule 144A, which allows the unregistered resale of certain securities to so-called qualified institutional buyers, which included investors as diverse as insurance companies like MetLife, pension funds like the California State Teachers' Retirement System, and investment banking firms like Goldman Sachs.⁸⁰⁵ Publicly traded securities typically have to be registered with the SEC, a time consuming and expensive process, before they can be sold.

The SEC created Rule 144A in 1990 in order to make U.S. securities markets more attractive to borrowers and U.S. investment banks more competitive with their foreign counterparts; at the time, market participants viewed U.S. disclosure requirements as more onerous than those in other countries. The new rule significantly expanded the market for and liquidity of these securities by declaring that distributions which complied with the Rule would no longer be considered "public offerings" and therefore would no longer be subject to the SEC's registration requirements under the Securities Act of 1933. In 1996, Congress reinforced the exemption for private placements with the National Securities Markets Improvements Act, a title Denise Voigt Crawford, Commissioner on the Texas Securities Board, characterized to the FCIC staff as "a misnomer if there ever was one."⁸⁰⁶ Under this legislation, state securities regulators were preempted from overseeing private placements such as CDOs.

⁸⁰⁵ A QIB was defined under Rule 144A to include any "entities, acting for its own account or the accounts of other qualified institutional buyers, that in the aggregate owns and invests on a discretionary basis at least \$100 million in securities of issuers that are not affiliated with the entity."

⁸⁰⁶ Testimony of Denise Voigt Crawford, Commissioner—Texas Securities Board and President of the North American Securities Administrators Association, Inc.

With no registration requirements, a new debt market in the U.S. developed quickly under Rule 144A.⁸⁰⁷ This market was liquid, as qualified investors could freely trade Rule 144A debt securities. But the debt securities available when Rule 144A was enacted were not very complex – they were mostly corporate bonds, very different from the CDOs that came to dominate the private placement market in the 2000s.

As we will see, after the crisis unfolded, investors would argue that disclosure hadn't been adequate and filed numerous lawsuits seeking compensation under federal and state securities laws. They would allege that sellers of both mortgage-backed securities and CDOs had not adequately disclosed the nature of these securities, and in some cases these suits have already resulted in substantial settlements.

Regulators: “Risk-focused”

Where were the regulators? Declining underwriting standards and new mortgage products had been on regulators' radar screens for several years before the crisis, but action was delayed because of regulators' traditional preference for a “lighter hand” and because of disagreements among the agencies.⁸⁰⁸

Supervisors had, since the 1990s, followed a “risk-focused” approach that relied extensively on banks' internal risk-management systems.⁸⁰⁹ “As internal systems improve, the basic thrust of the examination process should shift from largely duplicating many activities already conducted within the bank to providing constructive feedback that the bank can use to enhance further the

⁸⁰⁷ Rule 144A contained provisions which ensured it did not expand to the *equity* markets where retail investors *did* participate.

⁸⁰⁸ FCIC Interview of Eugene Ludwig, 2010-09-02, transcript, p. 6.

⁸⁰⁹ Federal Reserve Board, *SR 9724: Risk-Focused Framework for Supervision of Large Complex Institutions*, October 27, 1997.

quality of its risk-management systems,” Chairman Greenspan had said in 1999. Across agencies, there was a “historic vision, historic approach, that a lighter hand at regulation was the appropriate way to regulate,” former Comptroller of the Currency Eugene Ludwig told the FCIC, referring to the passage of Gramm-Leach-Bliley.⁸¹⁰ The New York Fed, in a “lessons-learned” analysis after the crisis, pointed to the mistaken belief that “Markets will always self-correct”⁸¹¹ “A deference to the self-correcting property of markets inhibited supervisors from imposing prescriptive views on banks,” the report said.⁸¹²

The reliance on banks’ own risk management would extend to capital standards. Banks had complained for years that the original 1988 Basel standards did not allow banks sufficient latitude to set capital based on the riskiness of particular assets, and supervisors had noted the opportunities those standards had created for capital arbitrage. After years of negotiations, international regulators, with strong Fed support, introduced the Basel II capital regime in June 2004, which would allow banks to lower their capital charges if they could illustrate that they had sophisticated internal models for estimating the riskiness of their assets. While [never formally] implemented in the U.S., Basel II reflected and reinforced the supervisors’ risk-focused approach during the 2000s. Rich Spillenkothen, head of bank supervision and regulation at the Fed from 1991 to 2006, said that one of the supervisors’ biggest mistakes was their “acceptance of Basel II premises,” which he described as “an excessive faith in internal bank risk models, an infatuation with the specious accuracy of complex quantitative risk measurement

⁸¹⁰ FCIC Interview of Eugene Ludwig, 2010-09-02, transcript, p. 6.

⁸¹¹ "Federal Reserve Bank of New York: Report on Systemic Risk and Supervision," Draft of August 5, 2009, p. 2. FRBNY-FCIC-General0079954-0079978, at FRBNY-FCIC-General0079955.

⁸¹² Federal Reserve Bank of New York: Report on Systemic Risk and Supervision," Draft of August 5, 2009, p. 2. FRBNY-FCIC-General0079954-0079978, at FRBNY-FCIC-General0079955.

techniques, and a willingness (at least in the early days of Basel II) to tolerate a reduction in regulatory capital in return for the prospect of better risk management and greater risk-sensitivity.”⁸¹³

As for the mortgage market, The issue had been on regulators’ radar screens for several years before the crisis. As early as 2004, they recognized that the nature of mortgage products and borrowers had changed during and following the refinancing boom of the previous year, and they began work on providing guidance to banks and thrifts. But too little was done, and too late, because of interagency discord, industry pushback, and a widely held view that market participants had the situation well in hand.

“Within the Board, people understood that many of these loan types had gotten to an extreme,” Susan Bies, then a Fed Governor and chair of the Federal Reserve Board’s subcommittees on both safety and soundness supervision and consumer protection supervision, told the FCIC. “So the main debate within the Board was how highly [should we] rein in the abuses that we were seeing. So it was more of ‘to a degree.’ ”⁸¹⁴

John Snow, then Treasury Secretary, told the FCIC that he called a meeting in early 2005 to urge regulators to address the proliferation of poor lending practices. He said he was struck that regulators tended not to see a problem at their own institutions. “Nobody had a full 360 degree view. The basic reaction was, ‘Well, there may be a problem. But it’s not in my field of view,’ ” Snow told the FCIC. “Our default rate is very low. Our institutions are very well capitalized.

⁸¹³ Rich Spillenkothen, *Notes on the performance of prudential supervision in the years preceding the financial crisis by a former director of banking supervision and regulation at the Federal Reserve Board (1991 to 2006)*, May 31, 2010.

⁸¹⁴ FCIC interview with Susan Bies, October 11, 2010.

Our institutions [have] very low delinquencies. So we don't see any real big problem.” During the year, he said, the subject came up at meetings of the President's Working Group on Financial Markets on several occasions and participants followed the progress on instituting new guidance..

In May 2005, the banking agencies did issue guidance on the risks of home equity lines of credit and home equity loans. The guidance cautioned financial institutions about credit risk management practices in their home equity lending, particularly interest-only features, limited or no documentation loans, high loan-to-value and debt-to-income ratios, lower credit risk scores, greater use of automated valuation models, and increased transactions generated through a loan broker or other third party.⁸¹⁵ While this guidance identified many of the problematic lending practices engaged in by bank lenders, it was limited in scope to home equity loans and lines. It did not apply to first mortgages, which make up xx% of mortgage lending to households.

In 2005, examiners from the Fed and other agencies conducted a confidential “peer group” study of mortgage practices at six companies that had originated a total of \$1.3 trillion in mortgages in 2005, almost half of the national total. The group included five banks whose holding companies were under the Fed's supervisory purview – Bank of America, Citigroup, Countrywide, National City, and Wells Fargo – as well as the largest thrift, Washington Mutual. The study “showed a very rapid increase in the volume of these irresponsible loans, so very risky loans,” Sabeth Siddique, then head of credit risk at the Federal Reserve Board's Division of Banking Supervision and Regulation, told the FCIC.⁸¹⁶ In addition to turning over a large percentage of

⁸¹⁵ *Credit Risk Management Guidance for Home Equity Lending*, OCC, FRB, FDIC, OTS, and NCUA (May 16, 2005).

⁸¹⁶ FCIC interview with Sabeth Siddique. [Date?]

their origination to subprime and Alt-A mortgages, lenders loan underwriting standards for these products had deteriorated.

Once the Fed and other supervisors had identified the mortgage problems, they agreed to express those concerns to the industry in the form of nonbinding guidance. “There was among the Board of Governors folks, you know, some who felt that if we just put out the guidance, the banks would get the message,” Bies said.”⁸¹⁷ [additional Fed info]

The federal agencies issued draft guidance on nontraditional mortgages such option ARMs for public comment in late 2005.⁸¹⁸ The guidance directed lenders to consider a borrower’s ability to pay based on the rate that they would have to pay when rates adjusted, rather than based on the (typically low) starting rate. It required lenders to consider a borrower’s ability to make the full mortgage payment rather than just the minimum payments.⁸¹⁹ It warned lenders that reduced-documentation loans should be “used with caution.”⁸²⁰

The industry was up in arms. In public comments, the American Bankers Association said the guidance “overstate[d] the risk of non-traditional mortgages;”⁸²¹ mortgage companies said the guidance required them to plan for “a worst case scenario,” that is, the scenario in which borrowers would have to make the full payment when rates adjusted.⁸²² They disputed the

⁸¹⁷ FCIC interview with Susan Bies.

⁸¹⁸ Interagency Guidance on Nontraditional Mortgage Products, 70 Fed. Reg. 77,249 (Dec. 29, 2005).

⁸¹⁹ Interagency Guidance on Nontraditional Mortgage Products, 70 Fed. Reg. at 72,252–53.

⁸²⁰ Interagency Guidance on Nontraditional Mortgage Products, 71 Fed. Reg. at 58,614.

⁸²¹ Letter from the Am. Bankers Ass’n to Office of Thrift Supervision (Mar. 29, 2006) (*available at* http://www.ots.treas.gov/_files/comments/105c90df-b275-4d66-b066-862ad4b72d04.pdf).

⁸²² Letter from Am. Fin. Servs. Ass’n to Office of Thrift Supervision (Mar. 28, 2006) (*available at* http://www.ots.treas.gov/_files/comments/d1e85ce1-07ab-4acf-8db5-8d1747afba0a.pdf).

warning on reduced-documentation loans, maintaining that “almost any form of documentation can be appropriate.”⁸²³ They disputed the need for better disclosures to protect borrowers from the risks of nontraditional mortgages,⁸²⁴ arguing that they were “not aware of any empirical evidence that supports the need for further consumer protection standards.”⁸²⁵ Other comments highlighted the competitive inequity of cracking down on banks and thrifts while leaving alone the unregulated mortgage brokers who provided much of the fodder for the mortgage-backed security and CDO machine.

The need for guidance was controversial within the agencies as well. “We got tremendous pushback from the industry as well as Congress as well as, you know, internally,” the Fed’s Siddique told the FCIC. “Because it was stifling innovation, potentially, and it was denying the American dream to many people.”⁸²⁶

Pressures to weaken and delay the guidance were manifold. Fed Director of Banking Supervision and Regulation Roger Cole told the FCIC that the OTS delayed the mortgage guidance for almost a year.⁸²⁷ Susan Bies said, “There was some real concern that if the Fed tightened down on [banks it regulated] it would create an unlevel playing field [for] stand-alone mortgage

⁸²³ Letter from Indymac Bank to Office of Thrift Supervision (Mar. 29, 2006) (*available at* http://www.ots.treas.gov/_files/comments/20478116-56b7-4810-938b-60b7688f9652.pdf).

⁸²⁴ The agencies issued model language for these disclosures as a proposed guidance so that financial institutions need not go through the expense of developing their own disclosures.

⁸²⁵ Letter from the Hous. Policy Council of the Fin. Servs. Roundtable to Office of Thrift Supervision (Mar. 29, 2006) (*available at* http://www.ots.treas.gov/_files/comments/49524fb0-e29b-423c-9fba-8f2f903082a6.pdf).

⁸²⁶ *Id.*, p. 13

⁸²⁷ Appelbaum & Nakashima (2008); MFR, Interview of Roger Cole, Director of Bank Supervision at the Fed during 2006-2009 (Aug. 2, 2010), at 91-92.

lenders whom the [Fed and other federal bank and thrift regulators] did not regulate.”⁸²⁸ She added that Congress pushed back on stricter regulation, explaining that the earlier rule on home equity loans, to which the agencies had agreed, “had members of Congress saying that we were going to deny the dream of home ownership to Americans if we put this new stronger standard in place.”⁸²⁹

When guidance was put in place in 2006, Governor Bies explained to the FCIC, regulators policed their guidance effectively, through bank examinations and informal measures such as “voluntary agreements” with supervised institutions.⁸³⁰

Leveraged loans and commercial real estate: “You’ve got to get up and dance”

The credit bubble was not confined to the residential mortgage market. The markets for commercial real estate and leveraged loans (typically loans to below-investment grade companies to aid their business or to finance buyouts) also experienced similar bubble and burst dynamics, although the effects were larger and more damaging in residential real estate. From 2000 to 2007, these two markets experienced tremendous growth, spurred by structured finance products – respectively, commercial mortgage-backed securities and collateralized loan obligations (CLOs) – with similar characteristics to mortgage-backed securities and CDOs. Similar to the residential mortgage market, underwriting standards loosened, even as the cost of

⁸²⁸ Bies interview 41 34 onward

⁸²⁹ Bies at 46 32

⁸³⁰ Bies interview at 1 05 06 approx

borrowing decreased,⁸³¹ and trading in these securities was bolstered by the development of new credit derivative products.

Historically, commercial banks made these loans until a market developed for institutional investors in the mid to late 1990s. Usually, an “agent” bank would originate a package of loans to just one company and then sell or syndicate the loans in the package to other banks and large non-bank investors.⁸³² The package usually included loans with different maturities. Some were short-term lines of credit, which would be syndicated to banks; the rest were longer-term loans syndicated to non-bank, institutional investors. Leveraged loan issuance more than doubled from 2000 to 2007, but it was the longer-term loans rather than the short-term lending that grew rapidly. By 2007, leveraged loans rose to \$387 billion, up from \$46 billion in 2000. As the market grew, securities firms began competing with banks in originating and syndicating these loans.

Starting in 1998, leveraged loans were packaged in CLOs and the rating agencies used similar methodologies to rate them as CDOs. Originate-to-distribute was growing—just as it was in the mortgage market. Like CDOs, CLOs had tranches, underwriters, and collateral managers. The market was less than \$5 billion from 1998 to 2003 but then it started growing dramatically.

Annual issuance exceeded [\$40] billion in 2005 and peaked at over [\$80] billion in 2007. From 2000 through the third quarter of 2007, over 60% of leveraged loans were packaged into CLOs.

⁸³¹ The cost of borrowing is reflected by credit spreads, the portion of interest rates that compensate investors for credit risk. Credit spreads are the interest rates that investors require above the so-called “risk-free” interest rate, usually measured in terms of Treasuries or interest rate swaps with similar characteristics. [Note to editors: duration is more precise term than maturity; expected average life is another term that would work but “duration” is a specific term in finance that applies here.]

⁸³² By the end of the 1990s, leveraged (non-investment grade) loans accounted for a third of all syndicated lending, compared with only 7% of such lending in 1993.

As the market for leveraged loans grew, credit not only became looser, but leverage increased as well.⁸³³ The deals got larger, and interest rates declined. Loans that had paid interest of 4 percentage points over a benchmark rate for prime lending in 2003 were refinanced into loans paying just 2 percentage points over that same rate in early 2007. During the peak of the leveraged-buyout boom, leveraged loans were frequently issued with interest-only, “payment-in-kind” and “covenant-lite” terms. Payment-in-kind loans allowed borrowers to defer paying interest by issuing new debt to cover accrued interest. Covenant-lite loans exempted borrowers from standard loan covenants that usually require corporate firms to limit their other debts and to maintain minimum levels of cash. Private equity firms, those that specialized in investing directly in companies, found it easier and cheaper to finance its leveraged buyouts. Just as home prices rose, so too did the prices for the target companies.

One of the largest leveraged-loan deals ever was announced on April 2, 2007, by KKR, a private-equity firm. KKR said it intended to purchase First Data Corporation, a huge processor of electronic data including credit and debit card payments, for about \$29 billion. KKR would issue \$8 billion in junk bonds and borrow another \$15 billion in leveraged loans from a consortium of banks including Citigroup, Deutsche Bank, Goldman Sachs, HSBC Securities, Lehman Brothers, Merrill Lynch and others.

As late as July 2007, Citigroup and others were still increasing their leveraged-loan business. “When the music stops, in terms of liquidity, things will be complicated. But as long as the music is playing, you’ve got to get up and dance. We’re still dancing,” Citigroup CEO Charles

⁸³³ Leverage as measured by large LBO debt/EBITDA was at 4x in 2002 but increased steadily to over 6x by 2007, according to S&P/LCD.

Prince said in reference to Citi's leveraged loan business.⁸³⁴ Prince explained that "...at that point in time, because interest rates had been so low for so long, the private equity firms were driving very hard bargains with the banks. And at that point in time the banks individually had no credibility to stop participating in this lending business. It was not credible for one institution to unilaterally back away from this leveraged lending business. It was in that context that I suggested that all of us, we were all regulated entities, that the regulators had an interest in tightening up lending standards in the leveraged lending area."⁸³⁵

The CLO market would seize up in summer of 2007 during the financial crisis just as the much-larger mortgage-related CDO market seized. The largest originators, such as Citigroup, JP Morgan, Credit Suisse, and Bank of America and others, would have \$[XXX] in outstanding commitments for new loans that would be made and then, as demand in the secondary market had dried up, necessarily put on balance sheet.⁸³⁶

Commercial Real Estate: "Risk Management is at the very core of Lehman's business model"

On October 5, 2007, Lehman Brothers, for which commercial real estate already made up 6.3% of assets acquired a major stake in Archstone Smith, a publicly traded Real Estate Investment

⁸³⁴ Citigroup chief stays bullish on buyouts" *Financial Times*, July 9, 2007 <http://www.ft.com/cms/s/0/80e2987a-2e50-11dc-821c-0000779fd2ac.html>

⁸³⁵ FCIC hearing

⁸³⁶ Bank and securities firm underwriters were left holding nearly \$400 billion of commitments to provide bridge financing for LBOs. Underwriters reduced their LBO commitments to \$200 billion in early 2008, but they were still forced to record more than \$110 billion of losses related to LBOs by the fall of 2008. [footnote from Art W: Perre Paulden & Cecile Gutscher, "Pandit's 'Closer to End' Means No Escaping LBO Loans (Update 3)," *Bloomberg.com*, April 29, 2008; Pierre Paulden, "Lenders Squeeze Companies Amid \$112 Billion of Losses (Update 1)," *Bloomberg.com*, Oct. 7, 2008; Henny Sender, "Debt on Sale: Banks Grease the Leveraged-Loan Machine," *Wall Street Journal*, Oct. 10, 2007.]

Trust, for \$5.4 billion. Archstone owned over 88,000 apartments, including units still under construction, in over 340 communities in the United States. It was the bank's largest commercial real estate investment.⁸³⁷

Lehman initially projected that Archstone would generate over \$1.3 billion in profits over 10 years – optimistic projections based on optimistic assumptions, given the state of the market at that point. Both Lehman and Archstone were highly leveraged: Archstone had little cushion in case its rent receipts went down, and Lehman had little cushion if investments such as Archstone lost value. While Lehman had proclaimed that “Risk Management is at the very core of Lehman’s business model,” the Executive Committee simply left its risk officer, Madelyn Antoncic, out of the loop when it made the investment.⁸³⁸ When Lehman would file for bankruptcy in September 2008, its remaining investment in Archstone was still the largest single asset on the company’s books [verify].

Commercial real estate – multifamily apartment buildings, office buildings, hotels, retail establishments, and industrial properties – went through the same kind of bubble as did the housing market. Investment banks created commercial mortgage-backed securities and even CDOs out of commercial real estate loans, just as they did with residential mortgages. And, just as houses appreciated over the 2000s, so too did commercial real estate values. In nominal terms, office prices rose by nearly 60 percent between 2003 and 2008 on average in the central business

⁸³⁷ *Id.*, at page 356.

⁸³⁸ Madelyn Antoncic, "Lehman Brothers Risk Management," August 7, 2007, LBEX-DOCID 342851, p. 5; and MFR, FCIC interview with Madelyn Antoncic, July 14, 2010, p. 17.

districts of the 32 markets for which data are available.⁸³⁹ The increase was 193% in Phoenix, 153% in Tampa, 147% in Manhattan, and 146% in Los Angeles.⁸⁴⁰

Issuance of commercial mortgage-backed securities rose from \$47 billion in 2000 to \$169 billion in 2005 and peaked at \$230 billion in 2007. When securitization markets contracted, issuance fell to \$122 billion in 2008 and \$3 billion in 2009. This seems small relative to the [\$1.2 trillion] of residential mortgages that were securitized in private markets in 2007, but these loans were also moving from being bank financed to the broader capital markets. At the peak in 2007, after growing for years, about one-fourth of commercial real estate mortgages were securitized.⁸⁴¹ That year, securitizers issued \$41 billion of commercial mortgage CDOs, a number which again dropped precipitously in 2008.⁸⁴²

Leveraged loans and the commercial real estate sector came together July 3, 2007. Blackstone Group announced its plan to buy Hilton – a hotel chain with 2,900 properties – for \$26 billion, a 40% premium to where the shares were trading. Writing about the deal, one author described it as the “apogee of the early-millennial megabuyout frenzy, where cheap and readily available credit, coupled with a relentless one-upmanship, spurred private equity firms to buy out companies at often absurd overvaluations, saddle them with massive debt, and then pay themselves hefty fees for the trouble.” The \$20 billion in financing came from the top five investment banks and large commercial banks such as Bank of America and Deutsche Bank.

⁸³⁹ Gyourko, p. 23.

⁸⁴⁰ Gyourko, p. 38.

⁸⁴¹ CRE Financial Council, *Compendium of Statistics*, November 5, 2010, Exhibits

⁸⁴² CRE Financial Council, *Compendium of Statistics*, November 5, 2010, Exhibit 2.

Bear Stearns led the deal, a big coup. While Bear topped the 2006 market in residential securitizations, it ranked in the bottom half of the commercial space. But Bear was racing to catch up⁸⁴³ and in a 2007 presentation proclaimed, "In 2006, we firmly established Bear Stearns as a global presence in commercial real estate finance."⁸⁴⁴ The firm's commercial real estate mortgage originations more than doubled between 2004 and 2006.

And then the market crashed to a halt. While, the commercial real estate market was much smaller than the residential real estate market—in 2008, commercial real estate was less than \$4 trillion compared to \$12 trillion for residential mortgages⁸⁴⁵-- the declines were even steeper. From the peak, commercial real estate declined roughly 45% in value and prices have remained closer to their lows. Losses on commercial real estate would be an issue across Wall Street and in particular for Lehman and Bear. And, potentially for the taxpayer. When the Federal Reserve would assume \$30 billion of Bear's illiquid assets in 2008, they would also get roughly \$4 billion in loans from the unsold portion of the Hilton financing package. And, the commercial real estate market would continue to [decline] long after the housing market had stabilized.

Lehman: From “moving” to “storage”

Even as the market was close to peaking, Lehman took on more risk. Since the late 1990s it had built a large mortgage origination arm, with Aurora making Alt-A mortgages and BNC making subprime loans, a formidable issuance business, and a powerful underwriting division as well.

⁸⁴³ MFR of interview with Tom Marano, p. 11.

⁸⁴⁴ Jeff Mayer and Tom Marano, "Fixed Income Overview," Bear Stearns, March 29, 2007, p. 18.

⁸⁴⁵ Joseph Gyourko, "Understanding Commercial Real Estate: Just how Different from Housing is it?" NBER Working Paper 14708, National Bureau of Economic Research, February 2009, p. 1.

Then, in its March 2006 “Global Strategy Offsite,” CEO Richard “Dick” Fuld and other executives explained to their colleagues a shift toward an aggressive growth strategy, including greater risk and more leverage.⁸⁴⁶ They described the shift from a “moving” or securitization business to a “storage” business in which Lehman made and held longer-term investments.⁸⁴⁷

By summer 2006, the housing market faced ballooning inventories, sharply reduced sales volumes, and wavering prices. Lehman saw an opportunity. Lehman’s senior management regularly disregarded the firm’s risk policies and limits – and warnings from risk managers – when pursuing its “countercyclical growth strategy.”⁸⁴⁸ This strategy had worked well during prior market dislocations. This time, Lehman’s management assumed that the subprime crisis would not spread to other markets and the economy in general.⁸⁴⁹ Lehman’s BNC continued to originate subprime mortgages and its Aurora continued to originate Alt-A loans after the housing market had begun to show signs of weakening.⁸⁵⁰ Lehman also continued to securitize mortgage assets for sale but was now holding more of them as investments. Across both the commercial and residential real estate sectors, the mortgage-related assets on Lehman’s books increased from

⁸⁴⁶ Valukas Report at 4; Antoncic MFR at 7; Gelband MFR at ____.

⁸⁴⁷ Valukas Report at 43.

⁸⁴⁸ Valukas Report at 46-52. Valukas found that management’s conduct of placing a higher priority on increasing profits and ignoring risk limits and warnings from risk managers was questionable and raised questions about the role of risk management at Lehman but concluded the conduct fell within the business judgment rule and did not give rise to colorable claims for breach of fiduciary duty.

⁸⁴⁹ Valukas Report at 44-45; 79-80.

⁸⁵⁰ “Lehman entered subprime lending in 1999, buying a stake in Finance America and made an investment in BNC Mortgage the next year, before taking full control of those lenders and merging them by 2005, under the BNC name.” Jody Shenn, “Lehman Said to Return to Mortgage Market Through Aurora Unit,” Bloomberg.com, Oct. 21, 2009.

\$62 billion in 2005 to \$67 billion in 2006 and \$111 billion in 2007.⁸⁵¹ This strategic decision would be part of Lehman's undoing that would come to pass in fall of 2008.

Lehman's supervisors did not check its rapid growth. The SEC, Lehman's supervisor, knew of Lehman's disregard of risk management. "We found that the SEC was aware of these excesses and acquiesced," said the Lehman examiner, hired by the company's receiver in bankruptcy.

The SEC knew that Lehman continued to increase its holding of mortgage securities, and that it had increased and exceeded risk limits – facts noted almost monthly in official reports obtained by the FCIC.⁸⁵² Nonetheless, Eric Sirri, who led the SEC's supervision program, told the FCIC that even if the agency had fully recognized the risks associated with commercial real estate, it would not have been able to make much difference on Lehman's strategy at this point. To avoid serious losses, Sirri maintained Lehman would have had to start selling real estate assets in 2006. Instead, it kept buying, well into the first quarter of 2008.

The Office of Thrift Supervision also regulated Lehman through its jurisdiction over Lehman's thrift subsidiary, Aurora. Although "the SEC was regarded as the primary regulator," the OTS examiner told the FCIC, "[w]e in no way just assumed that [the SEC] would do the right thing, so we regulated and supervised the holding company." Still, it would only be in July 2008—just a few months before Lehman failed – that the OTS would issue a report warning that Lehman had made an "outsized bet" on commercial real estate – larger than its peer firms, despite Lehman's smaller size,⁸⁵³ that Lehman was "materially overexposed" to the commercial real

⁸⁵¹ 2006 Form 10-K at 90 (Note 2) and 2007 Form 10-K at 103 (Note 3).

⁸⁵² Footnote all of the monthly reports obtained by FCIC.

⁸⁵³ See Ronald S. Marcus, OTS, Report of Examination Lehman Brothers Holdings Inc. (July 7, 2008), at pp. 1-2 [LBEX-OTS 000392].

estate sector, and that Lehman had “major failings in its risk management process.” [insert OTS rating]

GSEs: “Two stark choices”

While Countrywide, Citigroup, Lehman, and many others in the mortgage and CDO businesses were going into overdrive, executives at the two behemoth GSEs, Fannie and Freddie, worried they were being left behind in the market they had created. One sign of the times: Fannie’s biggest source of mortgages, Countrywide, expanded—meaning loosened—its underwriting criteria, and Fannie wouldn’t buy the new mortgages, Countrywide president and CEO David Sambol told the FCIC.⁸⁵⁴ Typical of the market as a whole, Countrywide sold 72% of its loans to Fannie in 2003 but only 45% in 2004 and 32% in 2005.⁸⁵⁵

“The risk in the environment has accelerated dramatically,” Thomas Lund, Fannie’s head of single-family lending, told fellow senior officers at a strategic planning meeting on June 27, 2005.⁸⁵⁶ The market was seeing the “proliferation of higher risk alternative mortgage products, growing concern about housing bubbles, growing concerns about borrowers taking on increased risks and higher debt, [and] aggressive risk layering.”

“We face two stark choices: stay the course [or] meet the market where the market is,” Lund said.⁸⁵⁷ If Fannie Mae stayed the course, it would, according to the presentation, maintain its

⁸⁵⁴ Transcript of David Sambol Interview at 28. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4821-4224-2567&open=Y>

⁸⁵⁵ FCIC Preliminary Investigative Report on Countrywide.

⁸⁵⁶ “Single Family Guarantee Business: Facing Strategic Crossroads.” June 27, 2005, available at the FCIC website, <http://www.fcic.gov/hearings/pdfs/2010-0409-doc-strategic-crossroads.pdf>, accessed July 15, 2010. Punctuation has been changed from the original.

⁸⁵⁷ *Id.* at FM-COGR00088745.

credit discipline, protect the quality of its book, preserve capital, and intensify the company's public concerns.⁸⁵⁸ However, it would also face lower volumes and revenues, continued market share declines, lower earnings, and a weakening of key customer relationships.⁸⁵⁹ It was simply a matter of relevancy, former CEO Dan Mudd told the FCIC: "If you're not relevant, you're unprofitable, and you're not serving the mission. And there was danger to profitability. I'm speaking more long-term than in any given quarter or any given year. So this was a real strategic rethinking."

Lund saw significant obstacles to meeting the market. He noted Fannie's lack of capability and infrastructure to structure the types of riskier mortgage-backed securities Wall Street offered, its unfamiliarity with the new credit risks, concerns that the price of the mortgages wouldn't be worth the risk, and regulatory concerns surrounding certain products.⁸⁶⁰ At this and other meetings, Lund recommended studying whether the current market changes were cyclical or more permanent, but he also recommended that Fannie "dedicate significant resources to develop capabilities to compete in any mortgage environment." Citibank executives also made a presentation to Fannie's board in July, 2005, warning that Fannie was increasingly at risk of being marginalized, and that the "stay the course" option was actually not an option. Citibank proposed that Fannie expand its guarantee business to cover non-traditional products such as Alt-A and subprime mortgages.⁸⁶¹ Of course, as the second largest seller of mortgages to Fannie,

⁸⁵⁸ *Id.* at FM-COGR00088746.

⁸⁵⁹ *Id.* at FM-COGR00088748.

⁸⁶⁰ *Id.* at FM-COGR00088749.

⁸⁶¹ FM-COGR00143219-238 at 222-223.

Citibank would benefit from such a move.⁸⁶² Over the next two years, it would turn out that Citibank would increase its sales to Fannie by almost a third, to \$56 billion [over that period], while nearly tripling its sales of interest-only mortgages.⁸⁶³

In 2006, Lund told the FCIC that the Board would adopt his recommendation: for now, they would “stay the course,” while developing capabilities to compete with Wall Street in non-prime mortgages later on.⁸⁶⁴ In fact, however, Fannie internal reports show that by September 2005, the company had already begun to increase its acquisitions of riskier loans with the goal to increase market share. By the end of 2005, its Alt-A loans were \$181 billion, up from \$147 billion in 2004 and \$138 billion in 2003; its loans without full documentation were \$278 billion, up from \$200 billion in 2003; and its interest-only mortgage were \$75 billion in 2005, up from \$12 billion in 2003. (Note that these categories can overlap. For example, Alt-A loans may also not have full documentation.) To cover potential losses from all of its business activities,, Fannie had a total of \$40 billion in capital at the end of 2005. “[P]lans to meet market share targets resulted in strategies to increase purchases of higher risk products, creating a conflict between prudent credit risk management and corporate business objectives,” FHFA, OFHEO’s successor would write in September, 2008 on the eve of the government takeover of Fannie Mae. “Since 2005, Fannie Mae has grown its Alt-A portfolio and other higher risk products rapidly without

⁸⁶² FM-FCIC-00030208

⁸⁶³ FM-FCIC-00030218, FM-FCIC-00030867, FM-FCIC-00030221

⁸⁶⁴ Interview with Lund.

adequate controls in place.”⁸⁶⁵ In addition, as noted, by 2005, Fannie had purchased \$45 billion in non-GSE mortgage-backed securities backed by subprime and Alt-A mortgages.⁸⁶⁶

[insert information on how these statistics were reported contemporaneously]

Similarly, Freddie had grown its portfolios quickly with limited capital.⁸⁶⁷ In 2005, CEO Richard Syron fired David Andrukonis, Freddie’s longtime Chief Risk Officer, after he voiced concerns about Freddie’s increasing purchases of Alt-A and other non-traditional mortgages. Syron told the FCIC that “I had a legitimate difference of opinion on how dangerous it was. Now, as it turns out... he was able to foresee the market better than a lot of the rest of us could.”⁸⁶⁸ The new risk officer, Anurag Saksena, told FCIC staff that he repeatedly argued for increasing capital to compensate for the increasing risk,⁸⁶⁹ although Donald Bisenius, Freddie’s Executive Vice President for Single Family Housing, told FCIC staff that he did not recall that.⁸⁷⁰ Syron never made Saksena part of the senior management team.

⁸⁶⁵ 9/6/08 memo at 14.

⁸⁶⁶ FM-FCIC-N_00003-4 (produced by Fannie Mae 3/24/2010, on NetDocuments <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4832-2397-6711&open=Y>).

⁸⁶⁷ OFHEO reported that Freddie’s purchases began in the fourth quarter of 2003. By 2005, with capital of only [\$XXX billion], Freddie held \$173 billion in loans with FICO scores below 660, almost five times its capital; \$80 billion in high loan-to-value loans; and \$93 billion in loans for investment and for vacation homes. OFHEO reported a “dramatic increase in hybrid option ARMs and affordability products with no historical performance data.” Source: 2005 Exam report at 8-9. And Freddie purchased even more non-GSE mortgage backed securities than Fannie – by 2005, a total of \$232 billion. Source: 2006 Freddie Mac Form 10-K at Page 116.

⁸⁶⁸ Syron Interview, August 31, 2010 (transcript) at 130. Doc. ID - 4851-6887-5783, v. 1

⁸⁶⁹ Saaksena interview, MFR June 22, 2010

⁸⁷⁰ Interview with Donald Bisenius, Freddie Mac, [recording at 55 minutes]; see also Syron interview (transcript)

OFHEO, the companies' regulator, noted the GSEs' increasing purchases of riskier loans and securities in every examination report. But OFHEO never told the GSEs to stop. Rather, year after year, the regulator said that both companies had adequate capital, strong asset quality, prudent credit risk management, and qualified and active officers and directors.

In May 2006, at the same time as it paid the \$400 million penalty related to deficiencies in its accounting practices, Fannie agreed to limit its on-balance-sheet mortgage portfolio to \$728 billion, the level on December 31, 2005. Two months later, Freddie agreed to limit the growth of its portfolio to 2% per year. In May, 2006 special examination reports to both companies, OFHEO noted the growth in purchases of risky loans and non-GSE securities but said that the two companies were managing their risks well.

OFHEO pinned many of the GSEs' problems on their corporate cultures. Its May, 2006 examination report on Fannie Mae detailed the "arrogant and unethical corporate culture where Fannie Mae employees had manipulated accounting and earnings to trigger bonuses for senior executives from 1998 to 2004."⁸⁷¹ OFHEO Director James Lockhart (who had assumed that position the month the report was issued) recalled discovering an email during the special examination from Mudd, then Fannie's chief operating officer, to CEO Franklin Raines. Mudd wrote, "The old political reality [at Fannie] was that we always won, we took no prisoners...we used to...be able to write, or have written rules that worked for us."⁸⁷²

Soon after his arrival, Lockhart began advocating for reform. "The need for legislation was obvious. OFHEO was regulating two of the largest and most systematically important US

⁸⁷¹ 5/23/06 press release at <http://www.fhfa.gov/webfiles/2095/52306fmmserelase.pdf>.

⁸⁷² Lockhart written testimony at 2.

financial institutions,” he told the FCIC. But no reform legislation would be passed until July 30, 2008, and by then it would be too late.

2006: “Increasing penetration into subprime”

After several years of purchasing riskier loans and securities, Fannie Mae Chief Financial Officer Robert Levin reported a strategic initiative to “increase penetration into subprime” at Fannie’s January 2006 board meeting. The next month the board gave its approval. Fannie would become more and more aggressive in its purchases. During a summer retreat for Fannie’s senior officers, Stephen Ashley, the Chairman of the Board, introduced Fannie’s new chief risk officer, Enrico Dallavecchia, saying that the new CRO would *not* stand in the way of risk-taking:

“We have to think differently and creatively about risk, about compliance, and about controls. Historically these have not been strong suits of Fannie Mae...Today’s thinking requires that these areas become active partners with the business units and be viewed as tools that enable us to develop product and address market needs. Enrico Dallavecchia was not brought on-board to be a business dampener.”⁸⁷³

In 2006, Fannie acquired \$516 billion of loans; of those, including some overlap, \$65 billion, or 22%, had combined loan-to-value ratios above 95%, 15% were interest-only, and 28% did not have full documentation. Fannie also purchased \$36 billion of subprime and \$12 billion of Alt-A non-GSE mortgage-backed securities. The total amount of riskier loans represented larger multiples of capital than before.

⁸⁷³ Remarks Prepared for Delivery by Stephen B. Ashley, Chairman Fannie Mae, Senior Management Meeting, Cambridge, Maryland, June 27, 2006,” FM-COGR_00051495-00051501.

At least initially, with house prices still increasing, the strategic plan to increase risk and market share appeared to be successful. Fannie reported net income of \$6 billion in 2005 and then \$4 billion in 2006.⁸⁷⁴ In those two years, CEO Mudd's compensation totaled \$24.4 million and CFO Levin received \$15.5 million.

In 2006, Freddie Mac also continued to increase risk, "expand[ing] the purchase and guarantee of higher-risk mortgages ... to increase market share, meet mission goals, stay competitive, and be responsive to sellers' needs."⁸⁷⁵ It lowered its underwriting standards, increasing the use of credit policy waivers and exceptions. Newer, alternative products offered to a broader range of customers than ever before, accounted for approximately 24% of purchases. Freddie Mac's plan also seemed to be successful. The company increased risk and market share and reported net income of \$2 billion in 2005 and \$2 billion in 2006. CEO Richard Syron's compensation totaled \$23.2 million for 2005. Freddie Chief Operating Officer Eugene McQuade received \$13.4 million.⁸⁷⁶

Again, OFHEO was aware. In March 2007, the regulator found "significant control deficiencies" in its annual examination of Fannie. OFHEO noted that Fannie's new initiative to purchase higher risk products included a plan to capture 20% of the subprime market by 2011. And, OFHEO reported that weaknesses in several areas of credit risk management and that credit risk increased "slightly" from growth in subprime and other non-traditional products. But overall asset quality was "strong," and the Board members were "qualified and active." And, of course, Fannie was "adequately capitalized."

⁸⁷⁴ 8/16/07 press release at http://www.fanniemae.com/media/pdf/newsreleases/form10k_newsrelease_081607.pdf.

⁸⁷⁵ 2006 Exam report at 8.

⁸⁷⁶ 2006 Proxy, pg 52, 2005 Proxy, pg. 37.

Similarly, OFHEO told Freddie in [month], 2007, that it had risk-management weaknesses that raised some possibility of failure, but that overall, Freddie's strength and financial capacity made failure unlikely.⁸⁷⁷ Freddie did remain a "significant supervisory concern,"⁸⁷⁸ and OFHEO noted the significant shift toward higher risk mortgages.⁸⁷⁹ But again, as in previous years, the regulator concluded that Freddie was "adequately capitalized," and its asset quality and credit risk management were "strong."⁸⁸⁰

OFHEO was silent about Fannie's practice of undercharging for fees to guarantee securities, relative to the fees their models indicated given the riskiness of the underlying mortgages and effectively overpaying for mortgages they held in portfolio. Recall that the GSEs charged a fee for guaranteeing payments on GSE mortgage-backed securities. Mark Winer, head of Fannie's Business, Analysis and Development Group since May 2006, who was responsible for calculating the fees, raised concerns that Fannie Mae was not appropriately pricing the risk. Winer recalled Levin disregarded this input, "Can you show me why you think you're right and everyone else is wrong..." Levin said, according to Winer.⁸⁸¹ Undercharging for the guarantee fees was intended to increase market share, according to Todd Hempstead, the manager of Fannie's western region. Mudd attributed the difference between the model fee and the fee actually charged to the fact that many of the mortgages Fannie guaranteed had little historical data. That lack of historical data contributed to the model fee being too high.

⁸⁷⁷ 2006 Exam report at 2.

⁸⁷⁸ 2006 Exam report at 2.

⁸⁷⁹ 2006 Exam report at 7-8.

⁸⁸⁰ 2006 Exam report at 3, 7-8.

⁸⁸¹ Memorandum for the Record, Interview with Mark Winer, March 23, 2010.

In the September 6, 2008 memo that would recommend that Fannie be placed into conservatorship, OFHEO would expressly cite this practice as unsafe and unsound: “During 2006 and 2007, modeled loan fees were higher than actual fees charged, due to an emphasis on growing market share and competing with Wall Street and the other GSE.”⁸⁸²

2007: “Moving deeper into the credit pool”

Home prices peaked in the [second quarter] of 2006. By then, delinquencies had started to rise. In fact, during the April, 2007, board meeting, Lund said that dislocation in the housing market was an opportunity for Fannie to reclaim market share. At the same time, Fannie would help support the housing market by increasing liquidity. The next month, Lund reported that Fannie’s market share could increase to 60% from approximately 37% as of 2006. Indeed, in 2007, Fannie Mae forged ahead, purchasing more high-risk loans. Fannie also purchased \$16 billion of subprime non-GSE securities, and \$5 billion of Alt-A.

In June, Fannie prepared its 2007 five-year strategic plan, entitled “Deepen-Segments – Develop Breadth.” The plan mentioned Fannie’s “tough new challenges - a weakening housing market” and “slower-growing mortgage debt market.”⁸⁸³ The plan included taking and managing “more mortgage credit risk, moving deeper into the credit pool to serve a large and growing part of the mortgage market.”⁸⁸⁴ Overall, revenues and earnings were projected to increase each of the following five years.⁸⁸⁵

⁸⁸² 2006 Exam report at 3, 7-8.

⁸⁸³ Fannie Mae Strategic Plan, FMSE 720693-787, at 697.

⁸⁸⁴ Fannie Mae Strategic Plan, FMSE 720693-787, at 699.

⁸⁸⁵ Fannie Mae Strategic Plan, FMSE 720693-787, at 701.

Management told the Board that Fannie’s risk management function “had all the necessary means and budget to act on the plan.” Chief Risk Officer Dallavecchia, did not agree, especially in light of a planned 16% cut in his budget risk management. In a July 16, 2007 email to CEO Mudd, Dallavecchia wrote that he was very upset that he had to hear at the Board meeting that Fannie had the “will and the money to change our culture and support taking more credit risk” given the proposed budget cut for his department in 2008 after a 25% reduction in headcount in 2007.⁸⁸⁶ In this same email, Dallavecchia wrote that Fannie had “one of the weakest control processes” that he “ever witnessed in [his] career, ... was not even close to having proper control processes for credit, market and operational risk” and was “already back to the old days of scraping on controls ... to reduce expenses.” That indicated that “people don’t care about the [risk] function or they don’t get it.”

Mudd responded, “My experience is that email is not a very good venue for conversation, venting or negotiating.” If Dallavecchia felt that he had been dealt with in bad faith, he should “address it man to man” unless he wanted Mudd “to be the one to carry messages for you to your peers.” Mudd concluded, “Please come and see me today face to face.” Dallavecchia told the FCIC that when he wrote this email—a key piece of evidence in several lawsuits—he was tired and upset, and that the email was more extreme than his views at the time. Fannie, after continuing to purchase and guarantee higher risk mortgages in 2007, would report a \$2.1 billion net loss for the year caused by credit losses.

In 2007, Freddie Mac also continued to increase purchases of riskier loans. A strategic plan from March highlighted “pressure on the franchise” and the “risk of falling below our return

⁸⁸⁶ 7/16-17/07 email thread. FM-COGR_00156147.

aspirations.”⁸⁸⁷ The company would try to improve earnings by expanding into adjacent markets: “Freddie Mac has competitive advantages over non-GSE participants in nonprime,” the strategy document explained, “We have an opportunity to expand into markets we have missed – Subprime and Alt-A.”⁸⁸⁸ It did. As OFHEO would note in its 2007 examination report, Freddie purchased and guaranteed loans originated in 2006 and 2007 with higher-risk characteristics, including interest-only loans, loans with FICO scores less than 660, higher loan-to-value loans, loans with high debt-to-income ratios, loans without full documentation and loans with secondary financing.⁸⁸⁹ Financial results in 2007 were poor: a \$3.1 billion net loss driven by credit losses.⁸⁹⁰ The value of the \$152 billion subprime and Alt-A PLS book suffered a \$13 billion market value decline.⁸⁹¹⁸⁹²

Goals: “GSEs cried bloody murder forever”

As discussed in an earlier chapter, beginning in 1992, HUD periodically set goals for the GSEs related to increasing homeownership among low- and moderate-income borrowers and borrowers in underserved areas. Until 2005, these goals were computed based on the GSEs’ actually lending over the [prior year], as well as the fraction of the total mortgage market made up of low and moderate-income families. The goals were only intended to be a modest reach relative to the mortgage the GSEs would purchase in their normal course of business.

⁸⁸⁷ Freddie Mac, “Freddie Mac’s Business Strategy, Board of Directors Meeting,” March 2-3, 2007, pp. 3-4, FMAC0000448-FMAC0000526..

⁸⁸⁸ Ibid., p. 70

⁸⁸⁹ 2007 OFHEO Report of Examination at 8. (no Bates number, available on Epiq, docID FHF_00000058)

⁸⁹⁰ 2007 OFHEO Report of Examination at 9. (no Bates number, available on Epiq, docID FHF_00000058)

⁸⁹¹ 2007 OFHEO Report of Examination at 10. (no Bates number, available on Epiq, docID FHF_00000058)

⁸⁹² 2007 OFHEO Report of Examination at 10. (no Bates number, available on Epiq, docID FHF_00000058)

Using this backward looking approach, under the Clinton administration, HUD steadily increased the percentage of total GSE mortgage purchases that were required to satisfy the affordable housing goals. For example, from 1997 to 2000, 42% of GSE purchases were required to meet goals for low and moderate income borrowers. In 2001, the goal was raised to 50%. Mudd said that loans made in the normal course of business satisfied the goals as long as they remained below half of their lending: “[W]hat comes in the door through the natural course of business will tend to match the market, and therefore will tend to meet the goals.” Levin told the FCIC that “there was a great deal of business that came through normal channels that met goals” and that most of the loans that satisfied the goals “would have been made anyway.”⁸⁹³

In 2004, under President George W. Bush, HUD made the goals more aggressive. The agency announced that starting in 2005, 52% of the GSEs’ purchases would need to satisfy the low and moderate income goals. The targets would reach 55% in 2007 and 56% in 2008. With the dramatic growth in the number of riskier loans originated in the market, the new goals were closer to where the market really was. But, as Mudd noted, “When 50% became 57[%] ultimately, then you have to work harder, pay more attention, and create a preference for those loans.”⁸⁹⁴ Targeted goals loans – loans that were made specifically to meet the targets – while always a small share of the GSEs purchases, rose in importance.

Mudd testified that by 2008, with the housing market in turmoil, Fannie Mae could no longer balance its obligations to shareholders with its affordable housing goals and other mission-related demands: “There may have been no way to satisfy 100% of the myriad demands for Fannie Mae to support all manner of projects [or] housing goals which were set above the

⁸⁹³ Levin MFR at __; 4/9/10 Hearing Transcript at 60-61.

⁸⁹⁴ Mudd MFR at __; 4/9/10 Hearing Transcript at 60-61.

origination levels in the marketplace...” As the combined size of the GSEs rose steadily from \$3.6 trillion in 2003 to \$4.9 trillion in 2007, the number of mortgage borrowers the GSEs needed to serve in order to fulfill the affordable housing goals rose. By 2005, Fannie and Freddie stretched to meet the higher goals, according to a number of GSE executives, OFHEO officials, and market observers.

But, all but two of the dozens of current and former Fannie Mae employees and regulators interviewed on the subject of reaching the goals told the FCIC that reaching the goals was not a primary driver of the GSEs’ purchases riskier mortgages and of subprime and Alt-A non-GSE mortgage-backed securities. Executives from Fannie, including Mudd, pointed to a “mix” of reasons for the purchases including reversing the market share declines, responding to originators’ demands, and responding to shareholder demands to increase market share and profits, in addition to fulfilling the mission of meeting affordable housing goals and providing liquidity to the market.

As an example, Levin told the FCIC that while Fannie did purchase some subprime mortgages and mortgage-backed securities it would not have otherwise purchased in order to meet housing goals, Fannie was driven to “meet the market” and to reverse declining market share. On the other hand, Levin said that Alt-A loans were high-income oriented and would have been negative for goal purposes, so those were purchased solely to increase profits.⁸⁹⁵ Similarly, Lund told the FCIC that market share objectives were the primary driver behind Fannie’s strategy in 2005. Housing goals had been a factor, but not the primary factor. Similarly, Dallavecchia told

⁸⁹⁵ Levin MFR at __; 4/9/10 Hearing Transcript at 68-72 (During the hearing Levin testified that some Alt-A loans contributed to the housing goals).

the FCIC that Fannie increased its purchases of Alt-A loans to regain relevance in the market and meet customer needs.

Todd Hempstead, a senior vice president and Fannie's primary contact with Countrywide, told the FCIC that while housing goals were one reason for Fannie's strategy, the main reason Fannie entered the riskier mortgage market was because those were the types of loans being originated in the primary market. If Fannie wanted to continue purchasing large quantities of loans, the company would need to buy riskier loans. Kenneth Bacon, Fannie's executive vice president of multifamily lending, said much the same thing, and added that shareholders also wanted to see market share and returns rise.⁸⁹⁶ Former Fannie Chairman Ashley told the FCIC that change in strategy in 2005 and 2006 owed to a "mix of reasons" including regaining market share, responding to pressures from originators and pressures from real estate industry advocates to be more engaged in the marketplace.⁸⁹⁷

To ensure a supply of mortgages that would fulfill the goals in case the goals were not met in the normal course of business, Fannie and Freddie instituted outreach programs in underserved geographic areas and conducted educational programs for originators and brokers.⁸⁹⁸ In addition, as explained by Mike Quinn, the Fannie executive responsible for the goals, Fannie set lower fees on loans that met the goals, although it would not purchase mortgages outside of predetermined risk targets.⁸⁹⁹ Ashley also told the FCIC that Fannie did not shift eligibility or underwriting standards to meet goals but instead deployed resources to marketing and

⁸⁹⁶ Bacon MFR at ___.

⁸⁹⁷ Ashley MFR at ___.

⁸⁹⁸ Levin MFR at ___.

⁸⁹⁹ Quinn MFR at ___.

promotional efforts, housing fairs and outreach programs through the company's partnership offices. "The effort was really in the outreach as opposed to reduced or diminished or loosened standards," Ashley told the FCIC.⁹⁰⁰

Regulator Falcon testified that the GSEs invested in subprime and Alt-A mortgages in order to increase profits and regain market share and that any impact on meeting affordable housing goals was a byproduct of the activity.⁹⁰¹ Lockhart, who took over OFHEO from Falcon, said the GSEs' change in strategy came from their drive for profit and market share, as well as meeting housing goals. Noting that the affordable housing goals increased markedly in 2005,⁹⁰² he said the "goals were just one reason, certainly not the exclusive reason" for the change.⁹⁰³ These views were corroborated by numerous other officials from the GSEs' regulator.⁹⁰⁴

Former HUD official Mike Price told the FCIC that while the "GSEs cried bloody murder forever" when it came to the goals, they touted their contribution to increasing homeownership just as they touted their profitability. In addition, Price and other HUD officials told the FCIC that the GSEs never claimed that the meeting the goals would leave them in an unsafe or unsound condition.

Indeed, the law allowed both Fannie Mae and Freddie Mac to fall short of meeting housing goals that were "infeasible" or that would affect the companies' safety and soundness. And, while the GSEs often exceeded the goals, in some cases they were adjusted downward by HUD or simply

⁹⁰⁰ Ashley MFR at ___.

⁹⁰¹ 4/9/10 Hearing Transcript at 155-56; 192-193; Falcon written testimony at ___.

⁹⁰² Lockhart written testimony at 6; 4/9/10 Hearing Transcript at 159-161

⁹⁰³ Lockhart MFR at ___.

⁹⁰⁴ DeMarco MFR at ___. Pollard, Dickerson, Fernandez, Spohn and Newell

missed by the GSEs.⁹⁰⁵ As an example, on December 12, 2007, Mudd wrote to HUD stating, “Fannie Mae believes that achieving the low- and moderate-income and special affordable housing subgoals are infeasible for 2007.”⁹⁰⁶ Fannie Mae’s 2007 strategic plan had already anticipated this need, stating, “In the event we reach a viewpoint that achieving the goals this year is ‘infeasible,’ we will determine how best to address the matter with HUD and will keep the board apprised accordingly.”⁹⁰⁷ In fact, both Fannie and Freddie appealed to HUD to lower two components of the overall affordable housing goals. HUD complied and allowed the GSEs to fall short without any consequences.⁹⁰⁸

Assessing the impact of the goals

At least until HUD set new affordable housing goals for 2005, GSEs only supplemented their routine purchases with a small volume of loans and non-GSE mortgage-backed securities needed to meet the affordable housing goals. The GSEs knew they might not earn as much on these targeted goal loans as they would earn on both goal-qualifying and non-goal-qualifying purchased in the usual course of business; they might even lose money on some of the targeted goal loans. And, the organizations spent money on administrative costs and other efforts related to the housing goals.

In June 2009 Freddie Mac staff made a presentation to the Business and Risk Committee of the Board of Directors on the costs of meeting the goals. From 2000 to 2003, the cost of the targeted

⁹⁰⁵ 11/1/04, HUD

⁹⁰⁶ FM-FCIC_00171915 to 171921.

⁹⁰⁷ Fannie Mae Strategic Plan, FMSE 720693-787, at 707

⁹⁰⁸ Letters from HUD to Fannie and Freddie: HMG_MAC_-_2007_Feasibility_-_April_2008, HMG_MAE_-_2007_Feasibility_-_April_2008

goal loans was effectively zero as the company met the goals through “profitable expansion” of its multi-family business. During the refinance boom, meeting the goals became harder and cost Freddie money in the multi-family business; only after 2004 did the multi-family and single family goals cost the GSE money. Still, only about 4% of all loans Freddie purchased between 2005 and 2008 were bought “specifically because they contribute to the goals” – loans they label as “targeted affordable.” These loans did have higher expected default rates, although Freddie also charged a higher fee to guarantee them. From 2003 through [2008], the cost – defined as the expected losses on the narrow set of loans specifically purchased to achieve the goals, as opposed to goals-qualifying loans purchased in the normal course of business, averaged \$200 million annually. This expected loss figure reflected projected defaults on these loans, projected revenue, as well as the difference between the expected return on these loans versus a benchmark return. [ck] By comparison, net earnings averaged just over \$3 billion per year from xx to xx.

Fannie used a slightly different strategy to achieve its targets, but its experience was roughly the same as Freddie's. In 2004, Fannie Mae retained McKinsey and Citigroup to determine whether it would be worthwhile to give up the company's charter as a GSE, which—while according the company enormous benefits—imposed regulations, put constraints on business practices, and including mission goals for the GSE. The final report to Fannie Mae's top management, called the Phineas Project, found that the explicit cost of compliance with the goals from 2000 to 2003 was close to zero: “it is hard to discern a fundamental marginal cost to meeting the housing goals on the single family business side.” The report found this even though meeting the goals had become somewhat harder for Fannie Mae in the 2003 refinancing boom: with so many homeowners refinancing, in particular middle and upper income homeowners, the percentage of the pool that would qualify for the goals was necessarily smaller.

Fannie Mae calculated a so-called "opportunity cost" for goals-qualifying loans, which reflected the difference between pricing on goals-qualifying loans and computations from Fannie Mae's pricing models. Across Fannie's portfolio, Fannie charged lower fees than its models computed for targeted goals loans as well as even non-goal qualifying loans. As a result, this measure of opportunity cost is not limited to targeted goals loans. In fact, the discount that Fannie charged from the fee determined by its pricing models was actually smaller for many goals-qualifying loans than for the others from 2000 to 2004. With this caveat, by one measure Fannie estimated the opportunity cost of the targeted goals loans in 2006 at \$474 million.⁹⁰⁹ As the markets tightened, in the middle of 2007 the opportunity cost for that year was forecasted to be roughly \$1 billion.

Facing more aggressive goals in 2006 and 2007, Fannie Mae instituted initiatives to purchase loans that specifically met the goals. These included mortgages acquired under the My Community Mortgage program, mortgages underwritten with looser standards, manufactured housing loans and others. For targeted goals loans purchased in 2006, Fannie Mae estimated the so-called 'cash flow cost', or the expected losses less the expected revenue from the loans, to be \$140 million, compared to total returns that year to Fannie of \$4.1 billion—which includes returns on the goals-qualify loans made during the normal course of business. The targeted goals loans amounted to \$18 billion, or 3.4% of Fannie Mae's \$524 billion of single-family mortgage purchases in 2006.

Looking back at the performance of the targeted-affordable portfolio relative to overall losses, the 2009 presentation at Freddie Mac took the analysis of goals costs one step further. While the

⁹⁰⁹ Cite. Other estimates from Fannie Mae are lower.

outstanding \$60 billion of these targeted affordable loans was only 4% of the total portfolio, these were relatively high risk loans and were expected when they were made to account for 19% of total projected losses. In fact, as of late 2008, they had only accounted for 8% of losses – meaning they had performed better than expected relative to the whole portfolio. Major losses for the company came from goal-qualifying loans acquired in the normal course of business. The presentation notes that many of these defaulted loans were Alt-A.

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CHAPTER CONCLUSIONS HERE

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Part II, Chapter 5. CDOs: The real money leaves the table

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The CDO machine could have reached a natural end by the spring of 2006. Housing prices peaked, and AIG – the golden goose of the CDO market – decided it was going to begin winding down its business of insuring subprime CDOs through derivatives. But it turned out that Wall Street didn’t need its golden goose any more. Securities firms were starting to take a disproportionate share of the risks from their own deals, replacing AIG as the ultimate bearer of the risk of losses on super-senior CDO tranches. The machine kept humming throughout 2006 and into 2007. “That just seemed kind of odd, given everything we had seen and what we had concluded,” Gary Gorton, a Yale finance professor who designed AIG’s model for analyzing its CDO positions, told the FCIC.⁹¹⁰

The explanation was simple. Senior executives – particularly at three of the leading promoters of CDOs, Citigroup, Merrill Lynch, and UBS – just did not believe or perhaps even understand the risks inherent in the products they were pushing. They were enchanted by the alchemy of

structured finance, accepted the rating agencies' AAA stamp of approval, and were perhaps making too much money to quit.

The CDO machine was running on its own fuel. More and more, the senior tranches were retained by the arranging securities firms, the mezzanine tranches were bought by other CDOs, and the equity tranches were bought by hedge funds that were hedging their positions with a trading strategy known as correlation trading: they made money when the CDOs performed, but they would make more should the market finally crash. That machine helped keep the mortgage market going long after house prices had begun to fall and created massive exposures on the books of many large financial institutions that would ultimately bring many of them to the brink of failure.

The insatiable demand fueled a boom in synthetic CDOs. Synthetic CDOs provided easier opportunities for bearish investors to bet against the housing boom and the securities that depended on it. They also made it easier for investment banks and CDO managers to create CDOs more quickly. But synthetic CDO managers had two sets of investors with two very different interests. And managers often had help from investors in selecting the collateral – even from investors who were betting against the collateral, as a high-profile SEC case against Goldman Sachs would eventually illustrate.

Regulators reacted weakly. As early as 2005, supervisors recognized that CDOs and credit default swaps could actually concentrate rather than diversify risk but concluded that Wall Street knew what it was doing. Supervisors issued guidance in late 2006 warning banks of the risks of complex structured finance transactions – but excluded mortgage-backed securities and CDOs, because they saw the risks of those products as relatively straightforward and well understood.

Yet the end game was fast approaching.

CDO managers: “We are not a rent-a-manager”

During the “madness,” with everyone wanting a piece of the action, CDO managers faced growing competitive pressures. Managers’ compensation even declined, as demand for mortgage-backed securities drove up prices, squeezing the profit they made on CDOs. And, new CDO managers came in to compete. Wing Chau, a CDO manager who frequently worked with Merrill Lynch, said the fees were cut in half for mezzanine CDOs issued in 2006. For a \$500 million deal, they fell from as much as \$2 million per year to \$1 million, and sometimes as little as \$500,000. A big decline, but still a decent payday. And, overall compensation could be maintained by creating more new product.

More than they had been three or four years earlier, when they picked the collateral, the managers were influenced by the underwriters – the securities firms who created and marketed the deals. An FCIC survey of 40 CDO managers confirmed this point. In some cases, managers were given a portfolio constructed by the securities firm; the managers would then choose the mortgage assets from this portfolio. The equity investors – who often initiated the deal in the first place – also influenced the selection of assets in many cases. Still, some managers said that they acted independently. “We are not a rent-a-manager, we actually select our collateral,” said Lloyd Fass, general counsel at Vertical Capital.⁹¹¹ As we will see, securities firms often had CDO managers with whom they preferred to work. Merrill, the market leader, had a constellation of managers; CDOs underwritten by Merrill frequently bought tranches issued by other CDOs underwritten by Merrill.

Vertical Capital email response to FCIC survey, October 29, 2010.

According to market participants, CDOs stimulated greater demand for mortgage-backed securities, particularly those with high yields, which in turn affected origination standards.⁹¹² As those standards fell, at least one firm opted out: PIMCO, one of the largest investment funds in the country, whose CDO management unit was one of the nation's largest in 2004. Early in 2005, it announced that it would not manage any new deals in part because of the deterioration in the credit quality of mortgage-backed securities. "There is an awful lot of moral hazard in the sector," Scott Simon, a managing director at PIMCO, said at an industry conference in 2005. "You either take the high road or you don't – we're not going to hurt accounts or damage our reputation for fees."⁹¹³ Simon said rating agency methodologies were not sufficiently stringent, particularly because they rated new types of subprime and Alt-A loans with little or no historical performance data. Not everyone agreed with this viewpoint, which seems obvious in retrospect. "Managers who are sticking in this business are doing it right," Armand Pastine, chief operating officer at Maxim Group, said in response, at that same conference. "To suggest that CDO managers would pull out of an economically viable deal for moral reasons – that's a cop-out."⁹¹⁴ Typical of the industry, during the crisis, two of Maxim's eight mortgage-backed CDOs, Maxim High Grade CDO I and Maxim High Grade CDO II, would default on interest payments to investors – including many investors holding tranches that had originally been rated AAA – and

⁹¹² As two market observers would later write, "Starting in 2004, CDOs and CDO investors became the dominant class of agents pricing credit risk on sub-prime mortgage loans. . . . In the absence of restraints, lenders started originating unreasonably risky loans in late 2005 and continued to do so into 2007." Mark Adelson and David Jacob, *The Sub-prime Problem: Causes and Lessons*, January 8, 2008.

⁹¹³ Allison Pyburn, *CDO investors debate morality of spread environment*, Asset Securitization Report, May 9, 2005.

⁹¹⁴ Allison Pyburn, *CDO investors debate morality of spread environment*, Asset Securitization Report, May 9, 2005. According to the FCIC database, PIMCO did manage one more new CDO, Costa Bella CDO, which was issued in December 2006.

the other six would be downgraded to below investment grade, including all of those originally rated AAA.⁹¹⁵

Another development: in 2005 and 2006, CDO managers were less likely to put their own money into their deals. Early in the decade, investors had expected the managers to invest in the equity tranche of the CDOs they managed because they believed that if the managers were sharing the risk of loss, they would have an incentive to pick collateral wisely. But this fail-safe lost force as the amount of managers' investment per transaction declined over time, from 25% to 50% of the equity tranches in the early years to 10% or less by 2006. ACA Management, a unit of ACA Capital, a financial guarantor, is a good example. ACA held 100% of the equity in the CDOs it originated in 2002 and 2003, 52% and 61% of two deals it originated in 2004, between 10% and 25% of deals in 2005, and between 0% and 11% of deals in 2006.⁹¹⁶

And with synthetic CDOs, as we will see, there was no fail-safe at all regarding the managers' incentives. By the very nature of the credit default swaps bundled into these synthetics, half of the investors were betting that the assets failed.

Credit default swaps: “Dumb question”

In June, 2005, derivatives dealers introduced the “pay-as-you-go” credit default swap, a complex instrument that mimicked the timing of the cash flows of real mortgage-backed securities.⁹¹⁷

⁹¹⁵ Source on downgrades: Bloomberg. Source on events on default: Moody's Investors Service, *Moody's downgrades ratings of Notes issued by Maxim High Grade CDO I, Ltd.*, April 18, 2008, and *Moody's downgrades ratings of Notes issued by Maxim High Grade CDO II, Ltd.*, April 18, 2008.

⁹¹⁶ ACA Capital, 2006 10-K.

⁹¹⁷ International Swaps and Derivatives Association, *ISDA publishes template for credit default swaps on asset-backed securities with pay as you go settlement*, June 21, 2005. <http://www.isda.org/press/press062105.html>. Under the terms of the pay-as-you-go swap, if the referenced mortgage-backed security does not receive the full interest and principal payments, the pay-as-you-go protection seller is required to pay the buyer the amount of the shortfall.

This feature made the synthetic CDOs into which these new swaps were bundled much easier to issue and sell.

The pay-as-you-go swap also enabled a second major development, introduced in January 2006: the first index based on the prices of credit default swaps on mortgage-backed securities.⁹¹⁸

Known as the ABX.HE, it was really a series of indices, meant to act as a sort of Dow Jones Industrial Average for the non-prime mortgage market, and it became a popular way to bet on the performance of the market. Every six months, a consortium of securities firms would select 20 credit default swaps on mortgage-backed securities in each of five ratings-based tranches: AAA, AA, A, BBB, and BBB-. Investors who believed that the bonds in any given category would fall behind in their payments could buy protection through credit default swaps. As demand for protection rose, the index would fall. The index was therefore a barometer recording the confidence of the market.

Synthetic CDOs proliferated, partly because it was much quicker and easier for managers to assemble a synthetic portfolio out of pay-as-you-go credit default swaps or one of the ABX indices than to assemble a regular cash CDO out of mortgage-backed securities.⁹¹⁹ “The beauty in a way of the synthetic deals is that you can look at the entire universe, you don’t have to go

For long investors – the protection provider under the swap – the advantage was the leverage embedded in the trade: they did not have to come up with the cash upfront for the principal amount of the bond; they simply agreed to receive quarterly swap fees in return for accepting the risk of loss if the securities experienced a shortfall. The short investors – the purchasers of protection under the swap – also liked the leverage of the trade; they simply agreed to pay quarterly fees in return for the possibility of getting a payment of *up to* the full principal amount.

⁹¹⁸ Markit, *CDS Indexco and Markit Launch Synthetic ABS Index: ABX.HE, an Asset-Backed Credit Derivative Index, Allows Investors to Go Long or Short U.S. Sub-Prime Residential Mortgages*, January 17, 2006.

⁹¹⁹ Note that hybrid CDOs absorbed cash securities composed of subprime and Alt-A mortgages; also ABCDS, which are synthetic positions in such MBS, facilitated the completion of portfolios and thereby the issuance of cash CDOs. In other words, the synthetic market facilitated the cash market and vice versa.

out and buy the cash bonds,” said Laura Schwartz of ACA Capital.⁹²⁰ There were also no warehousing costs, or the associated risks. And, since these deals were cheaper to put together than cash deals, they tended to pay higher returns on the equity tranches – one analyst estimated the equity tranche on a synthetic CDO would typically pay about 21%, rather than 13% for the equity tranche of a typical cash CDO.⁹²¹

Synthetic CDOs were an important source of demand for credit default swaps on mortgage-backed securities. There was growing demand for the “short” side of these credit default swaps from hedge funds and others that wanted to bet against the inflated mortgage market. The “long” side of the bet was increasingly taken by synthetic CDOs. Greg Lippman, a Deutsche Bank mortgage trader, told the FCIC that he often brokered these deals, matching the “shorts” with the “longs” and avoiding taking any risk at all for his own bank. Lippman said that between 2005 and 2007 he brokered deals for at least 50, maybe 100 hedge funds that wanted to short the mezzanine tranches of mortgage-backed securities. Meanwhile, on the *long* side, “Most of our [credit default swap] purchases were from UBS, Merrill and Citibank, because they were the most aggressive underwriters of [synthetic] CDOs.”⁹²² They were buying those positions from Lippman to put them into synthetic CDOs; as it would turn out, those banks would retain much of the risk of those synthetic CDOs by retaining the super-senior and AAA tranches, selling below-AAA tranches largely to other CDOs and equity tranches to hedge funds.

Issuance of synthetic CDOs jumped from \$15 billion in 2005 to \$61 billion just one year later. Even CDOs that were labeled as “cash CDOs” also increasingly held some credit derivatives. A

⁹²⁰ FCIC interview with Laura Schwartz, May 10, 2010.

⁹²¹ *Subprime Mortgage Credit Derivatives*, p. 176.

⁹²² FCIC interview with Greg Lippman, [XXX], 2010.

total of \$225 billion in cash CDOs were issued in 2006; the FCIC estimates that 27% of the collateral was derivatives, compared with 9% in 2005 and 7% in 2004.

With synthetic CDOs, the incentives of CDO managers and hedge fund investors changed. Once “short” investors were involved, the manager had two sets of clients with conflicting interests: those who would benefit if the assets performed, and those who would benefit if some of the mortgage borrowers stopped making payments and the assets did not perform as advertised.

Even the incentives of long investors became conflicted. What had started a few years back as a way to spread the risk of the mortgage market had become an arena in which sophisticated investors could place bets against the housing market or pursue more complex trading strategies. Often, investors, usually hedge funds, used credit default swaps to take offsetting positions in different tranches of the same security; that way, they could make some money as long as the CDOs performed, but they stood to make more money if the market crashed en masse. This was called the correlation trade.⁹²³ An FCIC survey of over 170 hedge funds encompassing over \$1.1 trillion in assets as of early 2010 found that this trade was common among medium-sized hedge funds: of all the mortgage-related CDOs issued in the second half of 2006, more than half of the equity tranches were purchased by hedge funds engaged in the correlation trade.⁹²⁴ The same

⁹²³ In this trade, hedge funds would buy the equity or mezzanine tranche of a mortgage-backed security or CDO, and then buy protection through credit default swaps on the mezzanine or senior tranches of the same mortgage-backed security or CDO. The equity tranche would pay a high return in the short run – 15%, 20%, even more – and those returns would cover the premiums on the credit default swaps. In the long run, the short position in the senior or mezzanine tranches would pay off if, or when, the mortgage bubble came to an end. In effect, this was a bet against the rating agencies’ models. When the market discovered that mortgage-backed securities were in fact highly correlated and subject to severe losses, the correlation trade would pay off.

⁹²⁴[shorten] From July through December 2006, several hedge funds with an [average] assets under management of [\$1-\$4 billion] accumulated positions totaling over \$1.4 billion in mortgage-related CDO equity tranches and almost \$3 billion of short positions in mortgage-related CDO mezzanine tranches. FCIC staff used a Moody’s proprietary CDO database to estimate the total mortgage-related CDO equity tranche issuance. Please see FCIC website for

trade was happening in the mortgage-backed securities market as well. The FCIC's survey found that by June 2007, the largest hedge funds held \$25 billion in equity and other lower-rated tranches of mortgage-backed securities. These were offset by short derivative positions in approximately \$45 billion of mezzanine tranches.⁹²⁵ Importantly, to create this large volume of derivative short positions for their hedge fund clients, dealers – like Lippman at Deutsche Bank – also had to create long positions that they needed to store somewhere, such as a synthetic CDO.

The correlation trade changed the structured finance market. Investors in the equity and most junior tranches of CDOs and mortgage-backed securities had traditionally had the greatest incentive to monitor the credit risk of an underlying portfolio. Once those investors were predominantly hedged through the correlation trade, it was no longer clear who had that incentive, if anyone.

One example in which the correlation trade contributed to an apparent conflict of interest is provided by Merrill Lynch's \$1.5 billion Norma CDO, issued in 2007. The equity investor, Magnetar Capital, a hedge fund, was correlation trading – it bought the equity tranche while shorting other tranches in Norma and other CDOs. Magnetar was also involved in the asset selection for Norma and was paid \$4.5 million out of the proceeds from the deal, even though the selection was officially the job of the CDO manager, NIR Capital Management. NIR was paid a fee of \$75,000 plus additional fees for its management duties. With Merrill's knowledge, NIR allowed Magnetar to assume control over the collateral selection process. When one Merrill employee learned of Magnetar's role, she questioned the propriety of Magnetar taking over

more information about the hedge fund survey. Note: the FCIC did not survey hedge funds that fully liquidated or closed. These funds may have purchased substantial "long only" positions in mortgage-related securities.

⁹²⁵ Please see the FCIC website for more details.

NIR's responsibility, emailing colleagues, "Dumb question. Is Magnetar allowed to trade for NIR?"^{926,927} Merrill failed to disclose either that very pertinent fact, that Magnetar was paid to select collateral, and that it also had a short position that would benefit from losses.

Counsel for Merrill's new owner, Bank of America, told the FCIC in a letter that it was a common industry practice for "the equity investor in a CDO, which had the riskiest investment, to have input during the collateral selection process...however, the collateral manager made the ultimate decisions regarding portfolio composition."⁹²⁸ The letter did not specifically mention the Norma CDO.

Federal regulators have identified abuses when investors influenced the choice of the instruments inside synthetic CDOs, such as credit default swaps on mortgage assets. In April, 2010, the SEC charged Goldman Sachs with fraud in telling investors that an independent CDO manager, ACA Management, had picked the underlying assets in a CDO while in fact, a short investor, the Paulson & Co. hedge fund, founded by the investor John Paulson, had played a "significant role" in the selection.⁹²⁹ The SEC alleged those misrepresentations were in Goldman's marketing materials for Abacus 2007-AC1, one of Goldman's 24 Abacus deals. After ensuring that the underlying loans were especially shaky, Paulson took a short position and bet against the CDO, the SEC alleged.⁹³⁰

⁹²⁶ FCIC has requested document ML01396714 referenced by Rabobank's counsel.

⁹²⁷ BAC-ML-CDO-000079743 Document of Magnetar Investments in Norma; Attachment G-13: BAC-ML-CDO-000059221 Document of Fees Received.

⁹²⁸ Reg Brown Letter to FCIC re Merrill Lynch, November 2, 2010 at 3. CONFIDENTIAL.

⁹²⁹ SEC Release No. 21592 (July 15, 2010). FCIC interview with Laura Schwartz, May 10, 2010. Emphasis added.

⁹³⁰ SEC, *SEC Charges Goldman Sachs With Fraud in Structuring and Marketing of CDO Tied to Subprime Mortgages*, April 16, 2010.

Ira Wagner, the head of Bear Stearns' CDO Group in 2007, told the FCIC that he rejected the deal when approached by Paulson representatives because he believed the deal would present a fundamental conflict of interest. When asked about Goldman's contention that Paulson picking the collateral was immaterial because the collateral was disclosed and because Paulson was not a well-known short at that time, Wagner called the argument "ridiculous." He said the structure created motives to pick the worst assets. While acknowledging the point that every synthetic deal had long and short investors, Wagner saw a serious difference in having the short investors pick the referenced collateral.

ACA executives told the FCIC they were not initially aware that the collateral had been chosen by the short investor. CEO Alan Roseman said that he first heard of Paulson's role when he reviewed the SEC's complaint.⁹³¹ Laura Schwartz, who was responsible for the deal at ACA, said she believed that Paulson's firm was the investor taking the equity tranche and would therefore have an interest in the deal performing well. She said she would not have been surprised that Paulson would have also had a short position because the correlation trade was common in the market but, "To be honest, until the SEC testimony I did not even know that Paulson was solely short."⁹³² Paulson told the FCIC that any synthetic CDO would have to invest in "a pool that both a buyer and seller of protection could agree on." "Every CDO has a buyer and seller of protection. So for anyone to say that they didn't want to structure a CDO because someone was buying protection in that CDO, then you wouldn't do any CDOs."⁹³³

⁹³¹ FCIC interview with Alan Roseman, May 17, 2010.

⁹³² FCIC interview with Laura Schwartz, May 10, 2010.

⁹³³ FCIC interview with John Paulson, October 28, 2010, 32:50.

In July 2010, Goldman Sachs settled the case, paying a record \$550 million fine.⁹³⁴ Goldman “acknowledge[d] that the marketing materials for the ABACUS 2007-AC1 transaction contained incomplete information. In particular, it was a mistake for the Goldman marketing materials to state that the reference portfolio was ‘selected by’ ACA Management LLC without disclosing the role of Paulson & Co. Inc. in the portfolio selection process and that Paulson’s economic interests were adverse to CDO investors.”

The shorts: “A final judgment on housing”

The new derivatives provided a golden opportunity for bearish investors – generally hedge funds – to bet against the housing boom. Home prices in the hottest markets in California and Florida had blasted into the stratosphere; it was hard for skeptics to believe this could continue. And if it didn’t, the landing would not be a soft one. Some spoke out publicly. A handful bet tens of millions of dollars on a bursting bubble. They would reap hundreds of millions in return.

Initially, the naysayers tended to work at small, obscure hedge funds and investment firms, run by people who hadn’t drunk “the Kool-Aid that housing prices would never go down,” as Steven Eisman told the FCIC.⁹³⁵ The outspoken Eisman was the founder of a fund within FrontPoint Partners, a collection of hedge funds. In 2005, he began to believe that something was wrong—and not just with all the companies in the mortgage business, but perhaps with the entire market. People who had bought homes, thanks only to the now ubiquitous adjustable-rate mortgages, wouldn’t be able to afford the new payments when the rate ratcheted up; nor would they be able to

⁹³⁴ SEC, *Goldman Sachs to Pay Record \$550 Million to Settle SEC Charges Related to Subprime Mortgage CDO; Firm Acknowledges CDO Marketing Materials Were Incomplete and Should Have Revealed Paulson’s Role*, July 15, 2010.

⁹³⁵ Steve Eisman, interview with FCIC, April 22, 2010

refinance their way out of the hole, so a crash was likely—and the crash was also likely to bring down these elaborate securities that were only a step or two away from disaster.

Betting against CDOs was also, in some cases, a bet against the rating agencies and their models. Jamie Mai and Ben Hockett, principals at the small investment firm Cornwell Capital, told the FCIC that they had warned the SEC in 2007 that the agencies were dangerously over-optimistic in their assessment of mortgage-backed CDOs. Mai and Hockett saw the rating agencies as “the root of the mess,” because their ratings removed the need for buyers to study prices and perform due diligence, even as “there was a massive amount of gaming going on.”⁹³⁶

“Shorting ABS CDOs was pretty attractive because we thought that the rating agencies gave too much credit for diversification,” Sihan Shu of Paulson & Co told the FCIC. “Each MBS tranche typically would be 30% mortgages in California, 10% in Florida, 10% in New York, and when you aggregate 100 MBS positions you still have the same geographic diversification. To us, there was not much diversification in CDOs.” Shu’s research convinced him that should home prices stop appreciating, BBB and BBB- rated mortgage-backed securities would be at risk for downgrades. Should prices drop 5%, CDO losses would increase 20-fold.

And if a relatively small number of the underlying loans were to go into foreclosure, the losses would mean that virtually all of the riskier BBB rated tranches would be worthless. “The whole system worked fine as long as everyone could refinance,” Eisman told the FCIC. The minute refinancing stopped, “losses would explode. ...By 2006, about half [the mortgages sold] were no-doc or low-doc. You were at max underwriting weakness at max housing prices. And so the

⁹³⁶ Cornwell Capital, FCIC interview, April 22, 2010

system imploded. Everyone was so levered there was no ability to take any pain.”⁹³⁷ James Grant, in Grant’s Interest Rate Observer newsletter, wrote on October 5, 2006, about the “mysterious alchemical processes” in which “Wall Street transforms BBB-minus-rated mortgages into AAA-rated tranches of mortgage securities” by creating CDOs. He estimated that even the AAA tranches of CDOs would experience some losses in the event that national home prices were to fall just 4% or less within two years, and if prices were to fall 10%, investors of tranches rated AA- or below would be completely wiped out.⁹³⁸

In 2005, Eisman and others were already looking for the best way to bet on this disaster by shorting all these shaky mortgages. Shorting credit default swaps was efficient. Eisman realized that he could pick what he considered the most toxic tranches of the mortgage-backed bonds and bet millions of dollars against them, relatively cheaply and with considerable leverage. And that’s what he did.

By the end of 2007, Eisman had put millions of dollars into short positions on credit-default swaps.⁹³⁹ It was, he was sure, just a matter of time. “Everyone really did believe that things were going to be okay,” Eisman said. “[I] thought they were certifiable lunatics.”

Michael Burry, another short who became well-known after the crisis hit, was a doctor-turned-investor whose hedge fund, Scion Capital in Northern California’s Silicon Valley, bet big against mortgage-backed securities—a change of heart, because he had invested in homebuilder stocks in 2002. But the closer he looked, the more he wondered about the financing that supported this

⁹³⁷ Ibid

⁹³⁸ James Grant, *Mister Market Miscalculates*.

⁹³⁹ Eisman interview with FCIC, April 22, 2010

booming market. Burry decided that some of the new-fangled adjustable-rate mortgages were “the most toxic mortgages created.” He told the FCIC, “I watched those with interest as they migrated down the credit spectrum to the subprime market. As [home] prices had increased on the back of virtually no accompanying rise in wages and incomes, I came to the judgment that in two years there will be a final judgment on housing when those two-year [adjustable-rate mortgages] seek refinancing.”⁹⁴⁰

By the middle of 2005, Burry had bought credit default swaps on billions of dollars of mortgage-backed securities and the bonds of financial companies in the housing market, including Fannie Mae, Freddie Mac and AIG. Years later, Burry wrote an op-ed for *The New York Times* headlined “I Saw the Crisis Coming: Why Didn’t the Fed?”⁹⁴¹ “I entered these trades carefully,” Burry wrote in his *New York Times* op-ed. “Suspecting that my Wall Street counterparties might not be able or willing to pay up when the time came, I used six counterparties to minimize my exposure to any one of them. I also specifically avoided using Lehman Brothers and Bear Stearns as counterparties, as I viewed both to be mortally exposed to the crisis I foresaw.”

[insert sentence on the overall extent of shorting in the mortgage market] The concentrated purchases of credit default swaps to bet on the housing market tanking by Paulson & Co., Eisman, Burry and others illustrate the impact of derivatives in introducing new risks and leverage into the system. Although these investors profited spectacularly from the housing crisis, they never made a single subprime loan or bought an actual mortgage. In other words, they were not purchasing insurance against anything they owned. Instead they merely made side

⁹⁴⁰ Michael J. Burry, interview with FCIC, May 18, 2010

⁹⁴¹ The New York Times, April 3, 2010 at <http://www.nytimes.com/2010/04/04/opinion/04burry.html>

bets on the risks undertaken by others. Paulson told the FCIC that he could purchase credit default swap protection on BBB tranches very cheaply but that his research indicated that if home prices remained flat losses would wipe out the BBB tranche. Therefore, he set up a separate credit fund in June 2006 that focused initially exclusively on this particular trade.⁹⁴² By the end of 2007, Paulson & Co.'s Credit Opportunities fund, set up less than a year earlier to bet exclusively against the subprime housing market, without having any direct exposure to it – was up 590% from [XXX] to [XXX].

Across the market, while the “shorts” were up on their housing bets in 2007, the other side of that “zero sum game” – often the major U.S. financial institutions that had risked billions of dollars for credits spreads of less than a quarter of a percent for taking on the risk of super-senior CDO tranches – would be battered. Burry told the FCIC, “There’s an argument that can be made that you shouldn’t allow what I did.” But the problem, he said, was not the short positions he was taking; it was the risks that others were accepting. “When I did the shorts, the whole time I was putting on the positions, there were people on the other side who were eating them up. I think it’s a catastrophe that this was preventable.”⁹⁴³

As noted, credit default swaps greased the CDO machine in several ways. First, they allowed CDO managers to create hybrid CDOs more quickly than they could create cash-only CDOs. Second, they allowed investors (including the originating banks such as Citigroup and Merrill) to provide funding for a security while ostensibly transferring the risk to somebody else (such as AIG and other insurance companies). Third, correlation trading depended on credit default swaps. As the FCIC survey illustrated, most hedge fund purchases of equity and other junior

⁹⁴² <http://www.pionline.com/article/20070709/FACETOFACE/70705017>

⁹⁴³ Burry, FCIC interview, May 18, 2010

tranches of mortgage-backed securities and CDOs were done as part of correlation trades. As a result, credit default swaps were critical to creating demand among hedge funds for the equity or other junior tranches of mortgage-backed securities and CDOs.

On the other hand, there are arguments that credit default swaps helped end the housing and mortgage-backed securities bubble. Because CDO arrangers could more easily buy mortgage exposure for their CDOs through credit default swaps than through actual bonds, demand for credit default swaps may have actually reduced the need to originate high-yield mortgages. In addition, some market participants have argued that the ability to short the housing market via credit default swaps also helped pop the bubble. As we will see, the declines in the ABX index in late 2006 would be one of the first harbingers of market turmoil. “Once [pessimists] can, in effect, sell short via the CDS, prices must reflect their views and not just the views of the leveraged optimists,” John Geanakoplos, a Yale economics professor and a partner in the hedge fund Ellington Capital Management, which both invested in and managed CDOs, told the FCIC.

Citigroup: “Eager to make up for lost time”

While the hedge funds were betting against the housing market in 2005 and 2006, Citigroup’s CDO desk was pushing more money to the center of the table.

But the bank’s treasury department had put a stop to the liquidity puts. To keep doing deals, the CDO desk had to find a market for the super-senior tranches of the CDOs it was writing – or it had to find another way to get the company to support the CDO production line. It did. Starting in early 2006, the CDO desk accumulated another \$18 billion in super-senior exposures by

August 2007—securities it would only be able to sell into the market for a loss.⁹⁴⁴ It was also increasingly financing securities that it was holding in its CDO warehouse – that is, securities that were waiting to be put into new CDOs.

Historically, building huge balance sheet positions was not what securities firms did. The adage “we are in the moving business, not the storage business” suggests that they should be in the business of structuring and supporting financial transactions between sellers and buyers, as opposed to becoming the buyers themselves. As underwriters, these firms had historically limited their exposure to securities that they created and sold into the market.

However, as the biggest commercial banks and investment banks competed in the securities business in the late 1990s and early 2000s, they often touted the “balance sheet” they could make available to support the sale of new deals. In this regard, Citigroup broke new ground. The Citigroup conglomerate retained significant exposure to losses on its CDO business, particularly within *Citibank*, the \$1 trillion commercial bank at the heart of the empire. It did this in four ways. While its competitors did the same, few did so with such abandon, nor ultimately with such losses.

In 2006, Citigroup retained the super-senior and AAA tranches of most of the CDOs it created. In many cases Citigroup would hedge the associated credit risk from these tranches by obtaining credit protection from a monoline insurance company such as Ambac. With these hedges in place, Citigroup presumed that the risk associated with these retained tranches had been neutralized.

⁹⁴⁴ OCC, *Subprime CDO Valuation and Oversight Review – Conclusion Memorandum*, Memorandum from Michael Sullivan, RAD and Ron Frake, NBE, to John Lyons, Examiner-in-Charge, Citibank, NA, January 17, 2008, page 6.

Citigroup held these tranches on its balance sheet valued at the price at which it had failed to obtain in the open market – even though many would say that, by definition, that meant they were overvalued. “As everybody in any business knows, if inventory is growing, that means you’re not pricing it correctly,” Richard Bookstaber, who had been head of risk management at Citigroup in the early 2000s, told the FCIC. But, keeping the tranches on the books at these prices improved the finances of creating the deal. “It was a hidden subsidy of the CDO business by mispricing,” Bookstaber said.⁹⁴⁵ The company would not begin writing the securities down toward the market’s real valuations until the fall of 2007.

Part of the reason for retaining exposures to super-senior positions in CDOs was the favorable capital treatment, regardless of where the bank held them. As we have seen, under the 2001 Recourse Rule, one of the salient qualities of AAA-rated securities was that they required banks to hold relatively less capital against them than lower-rated securities. And if the bank held those assets in their trading account (as opposed to holding it as a long term investment), it could get even better capital treatment under the 1996 Market Risk Amendment. That rule allowed banks to use their own models to determine the amount of capital to hold, based on how much market prices moved. Citigroup judged that the capital requirement for the super-senior tranches of synthetic CDOs it held for trading purposes was effectively zero, because the prices didn’t

⁹⁴⁵ FCIC interview with Richard Bookstaber, [XXX], 2010.

move much.⁹⁴⁶ As a result, Citigroup did not have to hold much regulatory capital against the super-senior tranches.⁹⁴⁷

Citibank, Citigroup's largest commercial bank subsidiary, also held "unfunded" positions in super-senior AAA tranches of some CDOs; that is, they sold protection to the short investors by writing credit default swaps. If the value of the referenced mortgage collateral deteriorated, the CDO investors who were short would begin to get paid. Money to pay them would first come from wiping out long investors who were below-AAA tranches. Then, if the short investors were still owed money, Citibank would have to pay. In aggregate, Citi had amassed [\$XXX billion] in such liabilities between 2004 and 2007. For taking on this risk, Citi typically received about [0.20]% to [0.40]% in annual fees on the credit default swap protection; on a billion dollar transaction they would earn an annual fee of \$2 million to \$4 million.

Citigroup also had exposure to the mortgage-backed and other securities that went into CDOs for the six- to nine-month ramp-up period, during which Citigroup accumulated all this collateral prior to packaging and selling the CDO. Typically, this involved Citigroup's securities unit setting up a warehouse funding line for the CDO manager. During the ramp-up period, the collateral securities would pay interest; depending on the terms of the agreement, that interest

⁹⁴⁶ Citigroup did not disclose to regulators//FED??// until 200x that it failed to set aside xx in 0.8% capital charges for the commercial paper linked to its other CDO tranches. The omission is noteworthy when considering to what extent capital requirements entered into Citigroup's calculations for the different CDO structures it employed.

⁹⁴⁷ The 1996 Market Risk Amendment to the Basel Capital Accord required banks to consider the volatility of a security when determining their capital requirements. Federal Reserve Board of Governors, *Application of the Market Risk Capital Requirements to Credit Derivatives*, June 13, 1997. By the early 2000s, Fed officials had noted that the Market Risk Amendment had the potential to allow insufficient capital charges for CDOs and credit default swaps. "More products related to credit risk, such as credit default swaps and tranches of collateralized debt obligations, are now included in the trading book," Fed Governor Susan Bies said in a May 2006 speech. "These products can give rise to default risks that are not captured well in models" based on market prices. Susan Bies, *Supervisory Perspective on Current Bank Capital, Market Risk, and Loan Product Issues*, Speech at the Bank Administration Institute Treasury Management Conference, Orlando, Florida, May 4, 2006.

would either go exclusively to Citigroup or be split with the manager. For the CDO desk, this often represented a substantial income stream. The securities sitting in the warehouse facility had relatively attractive yields – often 1% to 2.5% more than the typical bank borrowing rate – and it was not uncommon for the CDO desk to earn \$10 to \$15 million on a single transaction. The desk would get credit for those revenues at bonus time. Of course, these revenues came with risks. Citigroup would ultimately be on the hook for any losses incurred on assets stuck in the warehouse. When the financial crisis deepened, many CDO transactions could not be completed; Citigroup and other investment banks were forced to mark down the value, or sell at a loss, securities held in their warehouses. This would result in substantial losses across Wall Street. In many cases, underwriters placed collateral from CDO warehouses into other CDOs to offload assets.

Citigroup did not hedge these exposures within units or across the company. Making firm-wide hedging complicated, different units of Citigroup could have various and offsetting exposures to the same CDO. It was possible, even likely, that the CDO desk would structure a given CDO, a different division would *buy* protection from it, and yet another division would *sell* protection on the super-senior tranches. If the collateral in this CDO ran into trouble, the CDO immediately would have to pay the division that bought credit protection; if the CDO ran out of money to pay, it would have to draw on the division that sold the protection. In November 2007, after Citigroup had reported substantial losses on its CDO portfolio, supervisors would note that the company did not have a good understanding of its firm-wide CDO exposures. “The nature, origin, and size of CDO exposure were surprising to many in senior management and the board.

The liquidity put exposure was not well known. In particular, management did not consider or effectively manage the credit risk inherent in CDO positions.”⁹⁴⁸

Citigroup’s willingness to use its balance sheet to support the CDO business had the desired effect. Its CDO desk created \$11 billion in mortgage-related CDOs in 2005 and \$22 billion in 2006. Among CDO underwriters, including all types of CDOs, Citigroup rose from 13th place in 2003 to second place in 2007. The ranking was a point of pride, because CDOs were lucrative. Citigroup’s investment bank would typically earn an underwriting fee of 1% or more, that is, \$10 million or more for a \$1 billion CDO. In addition, it would earn interest on assets sitting in the warehouse line during the CDO ramp-up period.

What was good for Citigroup’s investment bank was also lucrative for its investment bankers. Thomas Maheras, the co-CEO of the investment bank who said he spent less than 1% of his time thinking about CDOs, was Citigroup’s single highest paid executive and earned more than \$34 million in salary and bonus compensation [in 2006 ck].⁹⁴⁹ Co-Heads of Global Fixed Income Randolph Barker and Geoffrey Coley each made approximately \$21 million [in that same year].⁹⁵⁰ By contrast, Citigroup’s chief risk officer made \$7.4 million.⁹⁵¹

Others were also well compensated. The co-heads of the global CDO business, Nestor Dominguez and Janice Warne, each made approximately \$6 million in total compensation in

⁹⁴⁸ Senior Supervisors Group, *Notes on senior supervisors’ meetings with firms*, November 19, 2007, page 3.

⁹⁴⁹ Letter from Brad Karp of Paul, Weiss, on behalf of Citigroup to the FCIC, regarding the FCIC’s second supplemental request, March 1, 2010, “Response to Interrogatory No. 7.”

⁹⁵⁰ Letter from Brad Karp (Paul, Weiss) on behalf of Citigroup to Bradley J. Bondi in re the FCIC’s second supplemental request, March 1, 2010, “Response to Interrogatory No. 7.”

⁹⁵¹ Letter from Brad Karp of Paul, Weiss, on behalf of Citigroup to the FCIC, regarding the FCIC’s second supplemental request, March 1, 2010, “Response to Interrogatory No. 7.”

2006. Directors on the CDO desk, who were responsible for overseeing the structuring of one to three deals at a time, generally made from \$1 to \$2.5 million a year.⁹⁵² [check.]

Citi did have “clawback” provisions: under narrow circumstances, compensation would have to be returned to the firm. But, despite Citigroup’s eventual large losses, no compensation was ever clawed back under this policy. The Corporate Library, which rates firms’ corporate governance, gave Citigroup a “C.” In early 2007, the Corporate Library would downgrade Citigroup to a “D,” “reflecting a high degree of governance risk.” Among issues cited: executive compensation practices that were poorly aligned with shareholder interests.

“Substantial progress”

Where were Citigroup’s regulators while the company piled up tens of billions of dollars of risk in the CDO business? Citigroup had a complex corporate structure and, as a result, faced a complex field of supervisors. The Federal Reserve supervised the holding company but, as per the Gramm-Leach-Bliley legislation, relied on others to supervise the most important subsidiaries: the Office of the Comptroller of the Currency (OCC) supervised the largest bank subsidiary, Citibank and the SEC supervised Citigroup Global Markets, the securities firm. Moreover, Citigroup did not really organize its various business in accordance with the legal entities. An individual working on the CDO desk on a complex transaction could touch various legal entities in complicated ways.

The SEC examined the securities arm on a three-year examination cycle, although it would also sometimes conduct target examinations on specific concerns. Unlike the Fed and OCC, the SEC

⁹⁵² FCIC staff telephone interview with John Ruddy, former Citigroup Global Structured Credit Products Director, March 18, 2010. [XXX]% in Citigroup compensation was in the form of shares.

had no risk-management or safety and soundness rules for securities firms, but rather looked for general risk management weaknesses during these exams. Unlike safety and soundness supervisors, the SEC's focus was always on protecting investors rather than preventing firms from failing. When the crisis came, the SEC had most recently performed exam work at Citigroup's securities arm in 2005, completing the exam report in June 2006. In that exam, they told the FCIC, they saw nothing "earth shattering," but they did note key weaknesses in risk management practices that would prove relevant – weaknesses in internal pricing and valuation controls, for example, and a willingness to allow traders to exceed their risk limits. [ck cite and FN]

Unlike the SEC, the Fed and OCC did maintain a continuous onsite presence. From [20xx] to [20xx], the OCC team criticized the company for risk-management weaknesses on a regular basis, including specific problems in the CDO business. "Earnings and profitability growth have taken precedence over risk management and internal controls," the OCC told the company in January 2005.⁹⁵³ Another document from that time stated, "The findings of this examination are disappointing, in that the business grew far in excess of management's underlying infrastructure and control processes."⁹⁵⁴ But despite these concerns, the OCC continued to rate Citibank management as "satisfactory" from [XXX] to [XXX].

The New York Fed, then headed by now-Treasury Secretary Timothy Geithner, received a critical review in May 2005 for its oversight of Citigroup from peers at the other Federal Reserve banks. The review concluded that the Fed's on-site Citigroup team appeared to have "insufficient resources to conduct continuous supervisory activities in a consistent manner. At

⁹⁵³ OCC, Citigroup Risk Management, January 13, 2005.

⁹⁵⁴ OCC, cover letter to credit derivatives examination findings memo, December 22, 2005.

Citi, much of the limited team's energy is absorbed by topical supervisory issues that detract from the team's continuous supervision objectives...the level of the staffing within the Citi team has not kept pace with the magnitude of supervisory issues that the institution has realized."⁹⁵⁵ Perhaps illustrative of these problems, in the Fed's 2005 examination of Citigroup, the regulator did not raise the concerns expressed by the OCC that same year. [Will add comment on Fed's view on liquidity puts.] Four years later, the next peer review would again find substantial weaknesses in the oversight of Citigroup.

Then, in April 2006, the Fed raised the holding company's supervisory rating from the previous year's "unsatisfactory" to "satisfactory." It lifted the ban on new mergers imposed the previous year in reaction to Citigroup's many regulatory problems. The Fed and OCC examiners concurred that the company had made "substantial progress" implementing CEO Chuck Prince's plan to overhaul risk management. The Fed stated, "The company has . . . completed improvements necessary to bring the company into substantial compliance with two existing Federal Reserve enforcement actions related to the execution of highly structured transactions and controls."⁹⁵⁶ The following year, Citigroup's board would allude to Prince's successful resolution of its regulatory compliance problems in justifying a 20% pay and bonus increase.⁹⁵⁷

The OCC noted in retrospect that the lifting of supervisory constraints in 2006 had been a key turning point. "Eager to make up for lost time, and to match the financial metrics of its competitors, Citigroup starting in 2006, and continuing into 2007, aggressively increased its risk

⁹⁵⁵ 2009 New York Operations Review, Internal Scope Memorandum, Nov 16, 2009, p.10.

⁹⁵⁶ Federal Reserve Board, memo to Governor Susan Bies, February 17, 2006.

⁹⁵⁷ The Board reversed a 15% reduction that had been implemented when the issues began and then added a 5% raise. Citigroup 2006 Proxy Statement, p. 37 of Proxy Statement (p. 40 of PDF) <http://www.citigroup.com/citi/fin/data/ar06cp.pdf>

profile as it reached for additional profits,” the OCC wrote to Vikram Pandit, Prince’s replacement, in early 2008. “Enterprise risk management granted exceptions to limits, and increased exposure limits (instead of keeping business units in check as they had told the regulators).”⁹⁵⁸ Well after Citigroup sustained large losses on its CDOs, the Fed would criticize Citigroup for using its commercial bank to support its investment bank. “Senior management allowed business lines largely unchallenged access to the balance sheet to pursue revenue growth,” the Fed wrote in a April 2008 letter to Pandit. “Citigroup attained significant market share across numerous products, including leveraged finance and structured credit trading, utilizing balance sheet for its ‘originate to distribute’ strategy. Senior management did not appropriately consider the potential balance sheet implications of this strategy in the case of market disruptions. Further, they did not adequately assess the potential negative impact of earnings volatility of these businesses on the firm’s capital position.”⁹⁵⁹

AIG: “I’m not getting paid enough to stand on these tracks”

Unlike their peers at Citigroup, some senior executives at AIG’s Financial Products subsidiary had figured out that the company was taking too much risk. Nonetheless, they did not do enough about it. Doubts about all the credit default swaps they were originating emerged in 2005 among AIG Financial Products executives, including Andrew Forster and Gene Park. Park witnessed Financial Products CEO Joe Cassano berating a salesman over the large volume of credit default swaps AIG Financial Products was writing, suggesting there was already some high-level disagreement about these deals. Told by another executive, Adam Budnick, that the “multi-sector” ABS CDOs on which AIG was selling credit default swaps primarily invested in

⁹⁵⁸ OCC, letter to Citigroup CEO Vikram Pandit, February 14, 2008.

⁹⁵⁹ PIR p 60 [Need reference.]

mortgage-backed securities with less than 10% subprime and Alt-A mortgages, Park asked for verification. Budnick returned and said, according to Park, “I can’t believe it. You know it’s like 80 or 90%.”⁹⁶⁰

Reviewing the portfolio – and thinking about a friend who had received 100% financing for his new home after losing his job – Park said, “My God, we should shut this down.”

In July 2005, Park’s colleague Andrew Forster sent an email to Alan Frost, the AIG salesman primarily responsible for the company’s booming credit default swap business, and Professor Gary Gorton, the consultant who engineered the formula to determine how much risk AIG was taking on in each CDS it wrote. Forster wrote, “[W]e are taking on a huge amount of sub-prime mortgage exposure here Everyone we have talked to says they are worried about deals with huge amounts [of high-risk mortgage] exposure yet I regularly see deals with 80% [high-risk mortgage] concentrations currently. Are these really the same risks as other deals?”

Park and others studied the issue for weeks, talked to bank analysts and other experts, and considered whether it made sense for AIG to continue to write protection on the subprime and Alt-A mortgage markets. The general view was that some of the underlying mortgages “were structured to fail, [but] that all the borrowers would basically be bailed out as long as real estate prices went up.”^[cite] In other words, as long as prices rose and borrowers could make money by selling their houses, they would be able to repay their mortgages.

AIG executives said one bullish Bear Stearns analyst they met was “out of his mind” and “must be on drugs or something.”⁹⁶¹ Another analyst, from Goldman Sachs, took Park aside after AIG

⁹⁶⁰ Gene Park Transcript at --.

⁹⁶¹ Gary Gorton Interview Transcript at __

had indicated the firm was considering no longer writing credit default swaps on subprime-backed CDOs and said he agreed with Park's pessimism. Park and some of his colleagues had come to the conclusion, as Park related to the FCIC, "We weren't getting paid enough money to take that risk...I'm not going to opine on whether there's a train on its way. I just know that I'm not getting paid enough to stand on these tracks."⁹⁶²

By February 2006, Park and others persuaded Cassano and Frost to stop writing CDS protection on subprime mortgage-backed securities. In an email to Cassano, Park wrote on February 28:

Joe,

Below summarizes the message we plan on delivering to dealers later this week with regard to our approach to the CDO of ABS super senior business going forward. We feel that the CDO of ABS market has increasingly become less diverse over the last year or so and is currently at a state where deals are almost totally reliant on subprime/non prime residential mortgage collateral. Given current trends in the housing market, our perception of deteriorating underwriting standards, and the potential for higher rates we are no longer as comfortable taking such concentrated exposure to certain parts of the non prime mortgage securitizations.

On the deals that we participate on we would like to see significant change in the composition of these deals going forward – i.e. more diversification into the non-correlated asset classes.

As a result of our ongoing due diligence we are not as comfortable with the mezzanine layers (namely BBB and single A tranches) of this asset class... We realize that this is likely to take us out of the CDO of ABS market for the time being given the arbitrage in subprime collateral.

However, we remain committed to working with underwriters and managers in developing the

⁹⁶² Park interview p. 96

*CDO of ABS market to hopefully become more diversified from a collateral perspective. With that in mind, we will be open to including new asset classes to these structures or increasing allocations to others such as [collateralized loan obligations] and [emerging market] CDOs.*⁹⁶³

AIG's counterparties responded with indifference. "The day that you drop out, we're going to have 10 other people who are going to replace you," Park says he was told.⁹⁶⁴ In any event, counterparties had some time to find new takers, because AIG Financial Products continued to write the credit default swaps. While the bearish executives were researching the issue from the summer of 2005 onward, the team continued to complete the deals in the pipeline, even after February 2006. Overall, they did 24 deals between September 2005 and July 2006 – one of them on a CDO backed by 93% subprime assets.⁹⁶⁵

By June of 2007, AIG had written swaps on approximately \$80 billion in CDOs, five times the \$16 billion held at the end of 2005.⁹⁶⁶ Park asserted that neither he nor most others at AIG knew at the time that the swaps demanded collateral calls on AIG if the market value of the referenced securities declined. Park said their concern was simply that AIG would be on the hook if subprime and Alt-A borrowers defaulted in large numbers. Cassano, however, told the FCIC he did know about the possible calls, but only the risk of collateral calls if AIG was downgraded is noted in AIG's SEC filings to investors for 2005.⁹⁶⁷

⁹⁶³ Gene Park email to Joseph Cassano dated February 28, 2006, AIG-FCIC00109490.

⁹⁶⁴Park p.97.

⁹⁶⁵PIR p.36.

⁹⁶⁶ AIG, Residential Mortgage Presentation, p.28

⁹⁶⁷ PIR p.

Still, AIG never hedged more than \$150 million of its total subprime exposure.⁹⁶⁸ Some of AIG's counterparties not only used AIG's swaps to hedge other positions, but they also hedged AIG's ability to make good on its contracts. As we will see later, Goldman Sachs hedged aggressively by buying CDS protection on AIG and by shorting other securities and indexes to counterbalance the risk that AIG would fail to pay up on its swaps, or that the subprime market would pull down mortgage-backed securities.

Merrill: “Aggressive build-out CDO business strategy”

When Dow Kim became head of Merrill Lynch's Fixed Income, Currencies, and Commodities group in July 2003, he had been instructed to boost revenue, especially in businesses where Merrill lagged competitors.⁹⁶⁹ Kim focused on the CDO business; clients saw CDOs as an integral part of their trading strategy, he told the FCIC.⁹⁷⁰ He hired Chris Ricciardi from Credit Suisse, where Ricciardi's group had sold more CDOs than anyone in 2001 and 2002.⁹⁷¹

Ricciardi came through, lifting Merrill's CDO business from fifteenth place in 2002 to second place behind only Citigroup in 2004 and Goldman in 2005. Then, in February 2006, he left the bank to become CEO of Cohen & Company, an asset management business; at Cohen he would manage several CDOs, often deals underwritten by Merrill.

After Ricciardi left, Kim instructed the rest of the team to do “whatever it takes” not just to maintain market share, but also to take over the number one ranking, former employees said in a

⁹⁶⁸ Park interview p 134-135.

⁹⁶⁹ Kim MFR at 4.

⁹⁷⁰ O'Neal MFR at 9-10.

⁹⁷¹ Kim MFR at 4.

complaint filed against Merrill Lynch.⁹⁷² Kim told FCIC staff that he couldn't recall specific conversations but that after Ricciardi left, Merrill was still trying to expand the CDO business on a global basis and that he, Kim, wanted people to know that Merrill was committed in terms of people, resources and balance sheet.⁹⁷³

It was indeed committed. Despite the loss of its rainmaker, Merrill swamped the competition, originating a total \$55.3 billion in CDOs [ck whether just mortgage CDOs] in 2006 while the number two ranked firm did only \$22 billion, plus another first place ranking in 2007, on the strength of the CDO machine Ricciardi had built—a machine that brought in more than \$1 billion in fees between 2003 and 2006.^{974,975}

Manufacturing demand

With all the investment banks churning out CDOs, the market was starting to top out—definitely a problem, but not something Merrill considered insurmountable. Merrill pursued three strategies in response, all of which involved repackaging riskier mortgages more attractively or buying its own toxic products when no one else would. Like Citigroup, Merrill increasingly retained for its own portfolio substantial portions of the CDOs it was creating, mainly the super-senior tranches; it increasingly repackaged the hard-to-sell, BBB and other low-rated tranches of its CDOs into its other CDOs; and it used the cash sitting in its synthetic CDOs to purchase other CDO tranches.

⁹⁷² “Subprime Suspect,” *The New Yorker* (3/31/08) at 85; Complaint at Paragraph 147.

⁹⁷³ Kim MFR at 8.

⁹⁷⁴ Merrill document, BAC-ML-CDO-000077073

⁹⁷⁵ 10/21/07 Presentation to the ML Board of Directors – Leveraged Finance and Mortgage/CDO Review; BAC-ML-CDO-000077035-073 at 073.

It had been standard practice for CDO underwriters to sell some mezzanine tranches to other CDO managers. Even in the early days of asset-backed CDOs, these assets often contained a nominal percentage of mezzanine tranches of other CDOs; the rating agencies signed off on this practice when rating each deal. But the practice became more common as the demand waned from traditional investors, as it had for the riskier mortgage-backed securities tranches. The market came to call traditional investors the “real money” to distinguish them from CDO managers who were buying tranches just to put them into their CDOs. Between 2005 and 2007, the typical amount a CDO could buy of the tranches of other CDOs and still maintain its ratings grew from 5% to 30%, according to CDO manager Wing Chau.⁹⁷⁶ According to data compiled by the FCIC, tranches from CDOs rose from an average of 7% of the collateral in mortgage-backed CDOs in 2003 to 14% by 2007.⁹⁷⁷ CDO-squared deals – those engineered primarily from the tranches of other CDOs – grew from 36 market-wide in 2005, to 48 in 2006 and 41 in 2007. Merrill created and sold 11.

Still, there are clear signs that few “real money” investors remained in the CDO market by late 2006. Consider Merrill: for the 44 ABS CDOs that Merrill created and sold from the fourth quarter of 2006 through August 2007, [XXX%] of the mezzanine tranches were purchased by CDO managers.⁹⁷⁸ Same for Chau: An FCIC analysis found [XXX%] of the mezzanine tranches sold by the [XXX] CDOs Chau managed were sold for inclusion into other CDOs. For example, an estimated 10 different CDO managers purchased tranches in Merrill’s Norma CDO. In the

⁹⁷⁶ FCIC interview with Wing Chau.

⁹⁷⁷ Data based on FCIC staff analysis of Moody’s Enhanced CDO Monitoring Database.

⁹⁷⁸ BAC-ML-CDO-000079709-710; BAC-ML-CDO-000079726-752. Relevant information not yet provided for Robeco High Grade CDO I. BAC-ML-CDO-000079745-46.

most extreme case the FCIC found, CDO managers were the only purchasers of Merrill's Neo CDO.⁹⁷⁹

Market wide, in 2003, CDOs bought approximately 13% of the A tranches, 23% of the Aa (the Moody's version of xxx) tranches, and 43% of the Baa tranches issued by other CDOs (Baa is the Moody's version of BBB). In 2007, those numbers were approximately 87%, 81%, and 89%, respectively.⁹⁸⁰ It came down to this: Merrill and other investment banks simply created demand for CDOs by manufacturing new ones to buy the harder-to-sell portions of the old ones.

As SEC attorneys told the FCIC that heading into 2007 there was a street-wide club: you buy my BBB tranche and I'll buy yours.⁹⁸¹

Merrill and its CDO managers were the biggest buyers of their own products. Merrill created and sold 142 CDOs from 2003 to 2007. All but eight of these – 134 CDOs – sold at least one tranche into another Merrill CDO, and 86 bought at least one tranche from another Merrill CDO. In Merrill's deals, on average, 10% of the collateral packed into the CDOs consisted of tranches of other CDOs that Merrill itself had created and sold.⁹⁸² This was a relatively high percentage,

⁹⁷⁹ BAC-ML-CDO-000079726-752 (listing of CDO tranche purchasers); BAC-ML-CDO-79752 (listing of collateral managers).

⁹⁸⁰ Total Baa tranches issued by CDOs in the FCIC data base were \$684 million in 2003 and \$3.9 billion in 2007. Aa tranches were \$1.4 billion in 2003 and \$8.3 billion in 2007. A tranches were \$522 million in 2003 and \$4.3 billion in 2007. The FCIC selected CDOs with at least 10% of their collateral invested in mortgage-backed securities or other characteristics that identified them as ABS CDOs.

⁹⁸¹ September 1, 2010 Notes of Phone Conversation between SEC and FCIC staff; Netdocs ID: 4821-8692-1735.

⁹⁸² Data based on FCIC staff analysis of Moody's Enhanced CDO Monitoring Database.

but not the highest: For Citigroup, another big player in this market, it was a somewhat higher 13%. For UBS, it was just 3%.⁹⁸³

And Merrill continued to push its CDO business despite signals that the market was weakening. It did not even reconsider its strategy in the spring of 2006, when AIG stopped insuring even the very safest, super-senior CDO tranches for Merrill and others. Without AIG, which had already insured \$8 billion of CDO bonds for Merrill – Merrill was AIG’s third largest counterparty, after Goldman and SocGen – Merrill switched to the monoline insurance companies for protection. In the summer of 2006, Merrill management noticed that Citigroup, its biggest competitor in ABS CDO underwriting, was taking more super-senior tranches of CDOs onto its own balance sheet at razor-thin margins, effectively subsidizing returns for investors in the BBB and equity tranches. In response, Merrill continued to ramp up its CDO warehouses and inventory and, in an effort to compete and get deals done, it increasingly took on super-senior positions without insurance from AIG or the monolines.⁹⁸⁴

Why didn’t anyone in the banks question the fact that, to keep the machine humming, the banks had to swallow more and more of their own product because nobody else would buy? In fact, managers defended the practice. Chau, who managed [XXX] CDOs created and sold by Merrill at Maxim Advisory and later Harding Advisory and had worked with Ricciardi at Prudential Securities in the early days of multi-sector CDOs, told the FCIC that plain mortgage-backed securities had become expensive relative to their returns, even as the real estate market sagged.

⁹⁸³ Data based on FCIC staff analysis of Moody’s Enhanced CDO Monitoring Database.

⁹⁸⁴ 10/21/07 Presentation to the ML Board of Directors – Leveraged Finance and Mortgage/CDO Review; BAC-ML-CDO-000077035-073 at 061.

Because CDOs paid better returns than similarly rated mortgage-backed securities, they were in demand, and that is why CDO managers packed their securities with other CDOs.⁹⁸⁵

This would not be the end of Merrill's all-in wager on the mortgage and CDO businesses. Even though it did grab the first-place trophy in the CDO business in 2006, it had come late to the "vertical integration" mortgage model that Lehman Brothers and Bear Stearns had pioneered, with a stake in every step of the mortgage business--originating mortgages, bundling these loans into securities, bundling these securities into other securities, selling all of them on Wall Street. In September 2006, months *after* the housing bubble had started to deflate and delinquencies began to rise, Merrill announced it would acquire a subprime lender, First Franklin Financial Corp., from National City Corp. for \$1.3 billion. This move "puzzled analysts because the market for subprime loans was souring in a hurry...."⁹⁸⁶ And, Merrill already had a \$100 million ownership position in Ownit Mortgage Solutions Inc., for which it also provided a warehouse line of credit, and it provided another line of credit to Mortgage Lenders Network. Both of these companies would cease operations soon after the First Franklin purchase, requiring Merrill to seize \$2.7 billion of subprime mortgage product that was collateral for these lines of credit.⁹⁸⁷

Nor did Merrill cut back in September 2006, when one of its own analysts, Kenneth Bruce, issued a report warning that this subprime exposure could suddenly cut earnings, because demand for these mortgages assets could dry up quickly.⁹⁸⁸ That assessment was not in line with

⁹⁸⁵ FCIC interview with Wing Chau, November 11, 2010.

⁹⁸⁶ "Merrill's Own Subprime Warnings Unheeded," Reuters (10/30/07).

⁹⁸⁷ 1/4/07 SEC OPSRA Memo, SEC_TM_FCIC_002442-2446; 2/2/07 SEC OPSRA Memo, SEC_TM_FCIC_002447-51

⁹⁸⁸ "Merrill's Own Subprime Warnings Unheeded," Reuters (10/30/07).

the corporate strategy, and Merrill did nothing. Finally, at the end of 2006, Kim finally instructed his people to reduce credit risk across the board.⁹⁸⁹ As it would turn out, this was too late. The pipeline was too large.

Regulators: “Are undue concentrations of risk developing?”

As in the case of nontraditional mortgage guidance, the regulators failed to act on a timely basis to the rapidly changing structured finance market. They had an opportunity. On January 2, 2003, one year after the collapse of Enron, the U.S. Senate Permanent Subcommittee on Investigations called upon the Fed, OCC, and SEC “to immediately initiate a one-time, joint review of banks and securities firms participating in complex structured finance products with U.S. public companies to identify those structured finance products, transactions, or practices which facilitate a U.S. company’s use of deceptive accounting in its financial statements or reports.”⁹⁹⁰ Congress [be specific] gave the agencies a June 2003 deadline to issue joint guidance [ck nature of request or requirement].⁹⁹¹ Four years later, the banking agencies and the SEC issued their “Interagency Statement on Sound Practices Concerning Elevated Risk Complex Structured Finance Activities,”⁹⁹² a document that was all of nine pages long.

In the intervening years, 2003 to 2007, the banking agencies and SEC issued two draft statements for public comment. The 2004 draft, issued the year after the OCC, Fed, and SEC

⁹⁸⁹ Kim MFR at 9.

⁹⁹⁰ U.S. Senate Permanent Subcommittee on Investigations, “*Fishtail, Bacchus, Sundance, and Slapshot: Four Enron Transactions Funded and Facilitated by U.S. Financial Institutions*” (January 2, 2003), pg. 36, available at: www.gpo.gov/fdsys/pkg/CPRT.../pdf/CPRT-107SPRT83559.pdf

⁹⁹¹ Fishtail Report at pg. 37.

⁹⁹² Interagency Statement on Sound Practices Concerning Elevated Risk Complex Structured Finance Activities issued by OCC, OTS, FRB, FDIC, and SEC (January 5, 2007).

brought enforcement actions against Citigroup and JP Morgan for helping Enron manipulate its financial statements, focused upon the policies and procedures that financial institutions should have for managing the structured finance business.⁹⁹³ The focus was to avoid another Enron – and for that reason, it encouraged financial institutions to look out for customers that, like Enron, were trying to use structured transactions to circumvent regulatory or financial reporting requirements, evade tax liabilities, or engage in other illegal or improper behavior.

Meanwhile, industry groups criticized the draft guidance as too broad, prescriptive, and burdensome. Several said it would encompass many structured finance products that did not pose significant legal or reputational risks. Another said that it “would disrupt the market for legitimate structured finance products and place U.S. financial institutions at a competitive disadvantage in the market for [complex structured finance transactions] in the United States and abroad.”⁹⁹⁴

Two years later, in May 2006, the agencies issued an abbreviated draft based on a more “principles-based” approach, and again requested comments. Most of the requirements were very similar to those that the OCC and Fed had imposed on Citigroup and JP Morgan in the 2003 enforcement actions.⁹⁹⁵

⁹⁹³ Interagency Statement on Sound Practices Concerning Complex Structured Finance Activities issued by OCC, OTS, FRB, FDIC, and SEC (Notice of Interagency statement with request for public comments) (May 13, 2004).

⁹⁹⁴ Interagency Statement on Sound Practices Concerning Elevated Risk Complex Structured Finance Activities issued by OCC, OTS, FRB, FDIC, and SEC (Notice of Interagency statement with request for public comments) (May 9, 2006), at pp 7-8.

⁹⁹⁵ Statement of John C. Dugan, Comptroller of the Currency, before the FCIC (April 8, 2010), Appendix E: OCC Supervision of Citibank, N.A., pg. 10. [Document available on FCIC website.]

When the regulators issued the final guidance in January 2007, the industry was more supportive. One reason: it specifically excluded mortgage-backed securities and CDOs. “Most structured finance transactions, such as standard public mortgage-backed securities and hedging-type transactions involving ‘plain vanilla’ derivatives or collateralized debt obligations, are familiar to participants in the financial markets, have well-established track records, and typically would not be considered [complex structured finance transactions] for purposes of the Final Statement.”⁹⁹⁶ Those exclusions had been added after the regulators received comments on the 2004 draft.

Supervisors did take note of the potential risks of CDOs and credit default swaps. In 2005, the Basel Committee on Banking Supervision’s Joint Forum, which includes banking, securities, and insurance regulators across the world, issued a comprehensive report on these products. The report focused on whether banks and other firms involved in the CDO and credit default swap business understood the credit risk they were taking.⁹⁹⁷ It advised banks and other firms to make sure they understood the nature of the rating agencies’ models, especially for CDOs. And it advised them to make sure that counterparties from whom they bought credit protection – namely, AIG and the financial guarantors – would be good for that protection if they were needed.⁹⁹⁸

The supervisors also said they had researched in some depth the question, “Are undue concentrations of risk developing?” in the CDO and derivatives market. Their answer: probably

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⁹⁹⁷ Interagency Statement on Sound Practices Concerning Elevated Risk Complex Structured Finance Activities issued by OCC, OTS, FRB, FDIC, and SEC, January 5, 2007.

⁹⁹⁷ *Credit Risk Transfer*, Joint Forum, Basel Committee on Banking Supervision, Bank for International Settlements (March 2005).

⁹⁹⁸ *Credit Risk Transfer* at pp. 5-10.

not. The credit risk was “quite modest,” the supervisors concluded, and the monoline financial guarantors appeared to know what they were doing. “The [Joint Forum’s Working Group on Risk Assessment and Capital] has not found evidence of ‘hidden concentrations’ of credit risk. There are some non-bank firms whose primary business model focuses on taking on credit risk. Most important among these firms are the monoline financial guarantors. Other market participants seem to be fully aware of the nature of these firms. In the case of the monolines, credit risk has always been a primary business activity and they have invested heavily in obtaining the relevant expertise. While obviously this does not rule out the potential for one of these firms to experience unanticipated problems or to misjudge the risks, their risks are primarily at the catastrophic or macroeconomic level. It is also clear that such firms are subjected to regulatory, rating agency, and market scrutiny.”

The supervisors noted that industry participants appeared to have learned from earlier flare-ups in the CDO sector. “The Working Group believes that it is important for investors in CDOs to seek to develop a sound understanding of the credit risks involved and not to rely solely on rating agency assessments. In many respects, the losses and downgrades experienced on some of the early generation of CDOs have probably been salutary in highlighting the potential risks involved.”⁹⁹⁹

Moody’s: “It was all about revenue”

Like other market participants, Moody’s Investors Service, one of the three dominant rating agencies, was swept up in the frenzy of the structured products market. Mortgage-backed securities and CDOs were standardized according to guidelines set by the agencies; without their

⁹⁹⁹ Credit Risk Transfer, page 3-4.

models and their generous allotment of AAA ratings, there would have been little investor interest and most deals just wouldn't have gotten done. Between 2002 and 2006, the volume of Moody's business for rating residential mortgage-backed securities more than doubled; the dollar value of that business increased from \$62 million to \$169 million;¹⁰⁰⁰ staffing levels for rating these deals doubled.¹⁰⁰¹ However, over the same period, volume for rating CDOs increased seven-fold, but staffing increased only 24%.¹⁰⁰² From 2003 to 2006, annual CDO revenue grew from \$12 million to \$91 million.

When Moody's Corporation went public in 2000, investor Warren Buffett's Berkshire Hathaway held 15% of the company through affiliates and as much as 20% by [20xx].¹⁰⁰³ As of 200xx, Berkshire Hathaway and three other investors owned a combined 50.5% of Moody's. When asked whether he was satisfied with the internal controls at Moody's, Buffett responded to the FCIC that he knew nothing about the management of Moody's. "I had no idea. I'd never been at Moody's, I don't know where they are located." Buffett said he invested in the company because the rating agency business was "a natural duopoly" which gave it "incredible" pricing power – "the single-most important decision in evaluating a business is pricing power."¹⁰⁰⁴

Many employees said the company culture changed after the public listing. They also identified a new focus on market share during the 2000s under the direction of Brian Clarkson. Clarkson

¹⁰⁰⁰ SEC_OCIE_FCIC_000496 - Examination Report to Moody's Investor Services, Inc, p. 4 (ID# 4835-0383-5144).

¹⁰⁰¹ SEC_OCIE_FCIC_000496 - Examination Report to Moody's Investor Services, Inc, p. 4 (ID# 4835-0383-5144).

¹⁰⁰² SEC_OCIE_FCIC_000496 - Examination Report to Moody's Investor Services, Inc, p. 4 (ID# 4835-0383-5144).

¹⁰⁰³ Buffett and three other institutional investors own a combined 50.5% of Moody's: Capital Group (18.4%), Fidelity Investments (10.6%), and Davis Selected Advisers (8.1%). Moody's 2009 proxy.

¹⁰⁰⁴ Warren Buffett, interview with the FCIC, May 26, 2010, p. 4, 8 [ID# 4823-5102-3622]; Warren Buffett, testimony to the FCIC, hearing on "Credibility of Credit Ratings, the Investment Decisions Made Based on those Ratings, and the Financial Crisis," June 3, 2010, p. 302, ID# 4849-3039-7959.

had joined Moody's in 1991 as a senior analyst in the residential mortgage group, and after successive promotions became co-chief operating officer of the rating agency in 2004, and then president in August 2007.¹⁰⁰⁵ Gary Witt, a former team managing director covering U.S. derivatives, described culture transformation under Clarkson: "[M]y kind of working hypothesis was that [former Chairman and CEO] John Rutherford was thinking, 'I want to remake the culture of this company to increase profitability dramatically [after Moody's became an independent corporation],' and that he made personnel decisions to make that happen, and he was successful in that regard. And that was why Brian Clarkson's rise was so meteoric...he was the enforcer who could change the culture to have more focus on market share."¹⁰⁰⁶ Former managing director Jerome Fons, who was responsible for assembling an internal history of Moody's, agreed:¹⁰⁰⁷ "[T]he main problem was... that the firm became so focused, particularly the structured area, on revenues, on market share, and the ambitions of Brian Clarkson, that they willingly looked the other way, traded the term's reputation for short-term profits."¹⁰⁰⁸ Clarkson and Chairman and CEO Raymond McDaniel adamantly disagreed with the perception that market share concerns trumped rating quality. He cited unforeseen market conditions as the reason the models did not accurately predict the credit quality.¹⁰⁰⁹ McDaniel testified to the FCIC, "We believed that our ratings were our best opinion at the time that we assigned them. As

¹⁰⁰⁶ Transcript of FCIC interview with Gary Witt, April 21, 2010. John Rutherford was the president and CEO of Moody's Corporation from its spin-off from Dun & Bradstreet in 2000 until he retired from the firm in 2005.

¹⁰⁰⁷ Jerome Fons, interview with the FCIC, April 22, 2010, p. 27-28 (ID# 4842-7212-1862).

¹⁰⁰⁸ Jerome Fons, interview with the FCIC, April 22, 2010, p. 60 (ID# 4842-7212-1862).

¹⁰⁰⁹ [Transcript of FCIC interview with Raymond McDaniel, May 21, 2010] [ck]; transcript of FCIC interview with Brian Clarkson, May 20, 2010.

we obtained new information and were able to update our judgments based on the new information and the trends we were seeing in the housing market, we made what I think are appropriate changes to our ratings.”¹⁰¹⁰

Nonetheless, Moody’s President, Clarkson, did not seem to have the same enthusiasm for compliance as he did for market share and profit, said those who worked with him. Scott McCleskey, a former chief compliance officer at Moody’s, recounted a story to the FCIC about an evening when he and Clarkson were dining with the board of directors after the company announced strong earnings, particularly in the business of rating mortgage-backed securities and CDOs. “So Brian Clarkson comes up to me, in front of everybody at the table, including board members, and says literally, ‘How much revenue did Compliance bring in this quarter? Nothing. Nothing.’[F]or him to say that in front of the board, that’s just so telling of how he felt that he was bulletproof.... For him, it was all about revenue.”¹⁰¹¹

Clarkson’s management style left little room for discussion or dissent. Witt referred to Clarkson as the “dictator” of Moody’s and said that, if he asked an employee to do something, “either you comply with his request or you start looking for another job.”¹⁰¹² “When I joined Moody’s in late 1997, an analyst’s worst fear was that we would contribute to the assignment of a rating that was wrong,” Mark Froeba, former senior vice president, testified to the FCIC. “When I left

¹⁰¹⁰ FCIC hearing

¹⁰¹¹ Scott McCleskey, interview with the FCIC, April 16, 2010, p. 39 (ID# 4842-3856-7430).

¹⁰¹² Gary Witt, interview with the FCIC, April 21, 2010, p. 18, 76 (ID# 4818-7724-2630)

Moody's, an analyst's worst fear was that he would do something, or she, that would allow him or her to be singled out for jeopardizing Moody's market share."¹⁰¹³

Former team managing director Gary Witt recalled that he received a monthly email from Clarkson "that outlined basically my market share in the areas that I was in charge of.... I believe it listed the deals that we did, and then it would list the deals like S&P and/or Fitch did that we didn't do that was in my area. And at times, I would have to comment on that verbally or even write a written report about—you know, look into what was it about that deal, why did we not rate it. So, you know, it was clear that market share was important to him."¹⁰¹⁴ Witt acknowledged the pressures that he felt as a manager: "When I was an analyst, I just thought about getting the deals right.... Once I [was promoted to managing director and] had a budget to meet, I had salaries to pay, I started thinking bigger picture. I started realizing, yes, we do have shareholders and, yes, they deserved to make some money. We need to get the ratings right first, that's the most important thing; but you do have to think about market share."¹⁰¹⁵

Even as far back as 2001, a strong emphasis on market share was evident in employee performance evaluations. In July 2001, Clarkson circulated a spreadsheet to subordinates that listed 49 analysts and the number and dollar volume of deals each had "rated" or "NOT rated."¹⁰¹⁶ Clarkson's instructions: "You should be using this in PE's [performance evaluations]

¹⁰¹³ Mark Froeba, testimony to the FCIC, hearing on "The Credibility of Credit Ratings, the Investment Decisions Made Based on those Ratings, and the Financial Crisis," Session 3: The Credit Rating Agency Business Model, June 2, 2010, p. 347 (ID# 4818-8776-0390)

¹⁰¹⁴ Gary Witt, interview with the FCIC, April 21, 2010, p. 25 (ID# 4818-7724-2630)

¹⁰¹⁵ Gary Witt, testimony to the FCIC, hearing on "The Credibility of Credit Ratings, the Investment Decisions Made Based on those Ratings, and the Financial Crisis," Session 3: The Credit Rating Agency Business Model, June 2, 2010, p. 394 (ID# 4818-8776-0390)

¹⁰¹⁶ MOODYS-FCIC-0035796, "1st Half 2001 AFG" (emphasis in original document).

and to give people a heads up on where they stand relative to their peers.”¹⁰¹⁷ Team managing directors, who oversaw the analysts rating the deals, received a base salary, cash bonus and stock options. Performance goals for team managing directors generally fell into the following categories: market coverage, revenue, market outreach (such as speeches and publications), ratings quality, and development of analytical tools. Only one of these categories couldn’t be measured in real time as compensation was being awarded: ratings quality. It might take years for the poor quality of rating to become clear as the rated asset failed to perform as expected.

In January 2006, a derivatives manager listed his top achievements in a 2005 performance evaluation. At the top of the list: “Protected our market share in the CDO corporate cash flow sector... To my knowledge we missed only one CLO from BofA and that CLO was unratable by us because of it’s [sic] bizarre structure.”¹⁰¹⁸

Another example of emphasis on market share was an email circulated in the fall of 2007, in the midst of significant downgrades in the structured finance market. Group Managing Director of U.S. Derivatives Yuri Yoshizawa asked her team’s managing directors to explain a market share decrease from 98% to 94%.¹⁰¹⁹ Yoshizawa confirmed to FCIC staff that her inquiry was typical of others she would make concerning market coverage.¹⁰²⁰

¹⁰¹⁷ MOODYS-FCIC-0035795 – MOODYS-FCIC-0035797 email from Brain Clarkson to Ed Bankole, Pramila Gupta, Michael Kanef, Andrew Kriegler, Sam Pilcer, Andrew Silver, and Linda Stesney re “June YTD AFG by analyst.xls” (July 5, 2001).

¹⁰¹⁸ PSI-MOODYS-000072 [Exhibit #16] Email from William May to Gus Harris “RE: BES and PEs” (January 12, 2006). PIR pg 40

¹⁰¹⁹ PSI-MOODYS-MS-000001 [Exhibit #24a] Email from Yuri Yoshizawa to direct report MDs re “3Q Market Coverage-CDO,” October 5, 2007. PIR pg 51

¹⁰²⁰ Transcript of FCIC interview with Yuri Yoshizawa, May 17, 2010.

Witt recalled that the “smoking gun” moment of his employment at Moody’s occurred during a third quarter 2007 “town hall” meeting with Moody’s management and its managing directors, after Moody’s had already announced mass downgrades on mortgage-related securities.¹⁰²¹ After McDaniel made a presentation about Moody’s financial outlook for the year ahead, one managing director replied: “I was interested, Ray, to hear your belief that the first thing in the minds of people in this room is the financial outlook for the remainder of the year.... [M]y thinking is there’s a much greater concern about the franchise,” he explained.¹⁰²² “I think that the greater anxiety being felt by the people in this room and... by the analysts is what’s going on with the ratings and what the outlook is...specifically the severe ratings transitions we’re dealing with... and uncertainty about what’s ahead on that, the ratings accuracy.”¹⁰²³ Witt recalled, “Moody’s reputation was just being absolutely lacerated; and that these people are standing here, and they’re not even addressing – they’re acting like it’s not even happening, even now that it’s already happened.... [T]hat just made it so clear to me... that the balance was far too much on the side of short term profitability.”¹⁰²⁴

In an internal memorandum from October 2007 sent to McDaniel, in a section entitled “Conflict of Interest: Market Share,” Chief Credit Officer Andrew Kimball explained that “Moody’s has

¹⁰²¹ Gary Witt, testimony to the FCIC, hearing on “The Credibility of Credit Ratings, the Investment Decisions Made Based on those Ratings, and the Financial Crisis,” Session 3: The Credit Rating Agency Business Model, June 2, 2010, p. 456-457 (ID# 4818-8776-0390)

¹⁰²² MD Town Hall Meeting Survey Results and Transcript, September 11, 2007, MOODY’S-COGR-0052080 – 0052160, pp. MOODY’S-COGR-0052122, 0052131 [ID# 4820-7781-2487]

¹⁰²³ MD Town Hall Meeting Survey Results and Transcript, September 11, 2007, MOODY’S-COGR-0052080 – 0052160, pp. MOODY’S-COGR-0052131 - 0052132 [ID# 4820-7781-2487]

¹⁰²⁴ Gary Witt, interview with the FCIC, April 21, 2010, p. 20 (ID# 4818-7724-2630).

erected safeguards to keep teams from too easily solving the market share problem by lowering standards.”¹⁰²⁵ However, he observed that these protections were far from failsafe:

- (a) Ratings are assigned by committee, not individuals. (However, entire committees, entire departments, are susceptible to market share objectives)¹⁰²⁶
- (b) Methodologies & criteria are published and thus put boundaries on rating committee discretion. (However, there is usually plenty of latitude within those boundaries to register market influence.)¹⁰²⁷

Moreover, the pressure for market share, combined with complacency, may have served as a disincentive to create new models or update assumptions. In the October 2007 memorandum, Kimball acknowledges the disincentives: “Organizations often interpret past successes as evidencing their competence and the adequacy of their procedures rather than a run of good luck.... [O]ur 24 years of success rating RMBS may have induced managers to merely fine-tune the existing system—to make it more efficient, more profitable, cheaper, more versatile. Fine-tuning rarely raises the probability of success; in fact, it often makes success less certain.”¹⁰²⁸

¹⁰²⁵ MOODY’S-COGR-0038027 “Credit policy issues at Moody’s suggested by the subprime/liquidity crisis” (internal October 2007 memorandum by Chief Credit Officer Andrew Kimball).

¹⁰²⁶ MOODY’S-COGR-0038027 “Credit policy issues at Moody’s suggested by the subprime/liquidity crisis” (internal October 2007 memorandum by Chief Credit Officer Andrew Kimball). The susceptibility of a ratings committee to external pressures was evidenced in the CPDO scandal in Europe. *See infra*.

¹⁰²⁷ MOODY’S-COGR-0038027 “Credit policy issues at Moody’s suggested by the subprime/liquidity crisis” (internal October 2007 memorandum by Chief Credit Officer Andrew Kimball).

¹⁰²⁸ MOODY’S-COGR-0038027 “Credit policy issues at Moody’s suggested by the subprime/liquidity crisis” (internal October 2007 memorandum by Chief Credit Officer Andrew Kimball).

If an issuer didn't like Moody's rating on a particular deal, it might get a better rating from another rating agency.¹⁰²⁹ The agencies were compensated only for rated deals—in effect, only for the deals for which their ratings were accepted by the issuer. So the pressure came from two directions: in-house, as well as direct demands from the issuers and investment bankers, who pushed for better ratings with fewer conditions.¹⁰³⁰

Richard Michalek, a former Moody's vice president and senior credit officer, testified to the FCIC, “[T]he threat of losing business to a competitor, even if not realized, absolutely tilted the balance away from an independent arbiter of risk towards a captive facilitator of risk transfer.”¹⁰³¹ Witt agreed. Asked if the investment banks frequently threatened to withdraw their business if they didn't get their desired rating, Witt replied, “Oh god, are you kidding? All the time. I mean, that's routine. I mean, they would threaten you all of the time...It's like, ‘Well, next time, we're just going to go with Fitch and S&P.’”¹⁰³²

Former managing director Fons suggested that Moody's was complacent about this pressure. “[Moody's] knew that they were being bullied into caving in to bank pressure from the investment banks and originators of these things.... Moody's allows itself to be bullied. And, you know, they willingly played the game They could have stood up and said, ‘I'm sorry, this is not—we're not going to sign off on this. We're going to protect investors. We're going to

¹⁰²⁹ David Teicher, interview with the FCIC, May 4, 2010, pp. 59-60, 83-84 [ID# 4842-6086-2726].

¹⁰³⁰ David Teicher, interview with the FCIC, May 4, 2010, pp. 59-60, 83-84 [ID# 4842-6086-2726]; “Credit FAQ: The Basics of Credit Enhancement in Securitizations,” Standard & Poor's RatingsDirect, June 24, 2008, http://www2.standardandpoors.com/spf/pdf/media/subprime_credit_enhance_062408.pdf.

¹⁰³¹ Richard Michalek, testimony to the FCIC, hearing on “The Credibility of Credit Ratings, the Investment Decisions Made Based on those Ratings, and the Financial Crisis,” Session 3: The Credit Rating Agency Business Model, June 2, 2010, p. 361 (ID# 4818-8776-0390)

¹⁰³² Transcript of FCIC interview with Gary Witt April 21, 2010.

stop—you know, we're going to try to protect our reputation. We're not going to rate these CDOs, we're not going to rate these RMBS.”¹⁰³³

Kimball elaborated further in his October 2007 memorandum: “Ideally, competition would be primarily on the basis of ratings quality, with a second component of price and a third component of service. Unfortunately, of the three competitive factors, *rating quality is proving the least powerful given the long tail in measuring performance....* The real problem is not that the market does underweights [sic] ratings quality but rather that, in some sectors, it actually penalizes quality by awarding rating mandates based on the lowest credit enhancement needed for the highest rating. *Unchecked, competition on this basis can place the entire financial system at risk.* It turns out that ratings quality has surprisingly few friends: issuers want high ratings; investors don't want rating downgrades; short-sighted bankers labor short-sightedly to game the rating agencies for a few extra basis points on execution.”¹⁰³⁴ [check italics in original]

Moody's employees told the FCIC that a tactic the investment bankers used to apply implicit pressure was submit a deal for a rating under a very tight timeframe. Eric Kolchinsky, a former team managing director overseeing CDOs, recalled in particular having a short timeframe to rate a particular CDO. “What the trouble on this deal was, and this is crucial about the market share, was that the banker gave us hardly any notice and any documents and any time to analyze this deal.... [B]ecause bankers knew that we could not say no to a deal, could not walk away from

¹⁰³³ Jerome Fons, interview with the FCIC, April 22, 2010, p. 69 (ID# 4842-7212-1862).

¹⁰³⁴ MOODY'S-COGR-0038026 “Credit policy issues at Moody's suggested by the subprime/liquidity crisis” (internal October 2007 memorandum by Chief Credit Officer Andrew Kimball, (emphasis added).

the deal because of a market share, they took advantage of that.”¹⁰³⁵ For this CDO deal, the bankers gave only three or four days for review and final judgment. Kolchinsky emailed Yoshizawa that the transactions had “egregiously pushed our time limits (and analysts).”¹⁰³⁶ Before the frothy days of the peak of the housing boom, an agency took six weeks, even two months to rate a CDO.¹⁰³⁷ By 2006, Kolchinsky described the environment in the CDO group: “Bankers were pushing more aggressively, so that it became from a quiet little group to more of a machine.”¹⁰³⁸ In 2006, Moody’s gave triple-A ratings to an average of more than 30 mortgage securities each and every working day.

Evidence of such pressure can be seen in an April 2006 email from a managing director in synthetic CDO trading at Credit Suisse to Yoshizawa. The Credit Suisse managing director explained, “I’m going to have a major political problem if we can’t make this [deal rating] short and sweet because, even though I always explain to investors that closing is subject to Moody’s timelines, they often choose not to hear it.”¹⁰³⁹

The external pressure was summed up in Kimball’s October 2007 memorandum: “Analysts and [managing directors] are continually ‘pitched’ by bankers, issuers, investors—all with reasonable arguments—whose views can color credit judgment, sometimes improving it, other times

¹⁰³⁵ Eric Kolchinsky, testimony to the FCIC, hearing on “The Credibility of Credit Ratings, the Investment Decisions Made Based on those Ratings, and the Financial Crisis,” Session 1: The Ratings Process, June 2, 2010, p. 68-69 (ID# 4818-8776-0390)

¹⁰³⁶ E Kolchinsky email to Y Fu, Y Yoshizawa 2006-5-30_1

¹⁰³⁷ Eric Kolchinsky, testimony to the FCIC, hearing on “The Credibility of Credit Ratings, the Investment Decisions Made Based on those Ratings, and the Financial Crisis,” Session 1: The Ratings Process, June 2, 2010, p. 68-69 (ID# 4818-8776-0390)

¹⁰³⁸ Transcript of FCIC interview with Eric Kolchinsky, April 14, 2010.

¹⁰³⁹ PSI-MOODYS-000090 [Exhibit #19] Email from Riachra O’Driscoll to Yuri Yoshizawa, subject “Magnolia 2006-5 Class Ds,” April 27, 2006.

degrading it (we ‘drink the kool-aid’). Coupled with strong internal emphasis on market share & margin focus, this does constitute a ‘risk’ to ratings quality.”¹⁰⁴⁰

So matters stood in 2007, when the machine that had been humming so smoothly and so lucratively slipped a gear, and then another, and another—and then seized up entirely. [insert information on SEC report on Moody’s]

CONFIDENTIAL

¹⁰⁴⁰ MOODY’S-COGR-0038027 “Credit policy issues at Moody’s suggested by the subprime/liquidity crisis” (internal October 2007 memorandum by Chief Credit Officer Andrew Kimball).

CHAPTER CONCLUSIONS HERE

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Part, Chapter 6: The bust

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What does it look like when a bubble pops? In early 2007, it became obvious that home prices were falling in regions that had once boomed, that mortgage originators were foundering, and that more and more families would be unable to make their mortgage payments, especially those with subprime and Alt-A loans.

What wasn't immediately clear was how the housing crisis would affect the financial system that had helped to inflate the bubble. Were all those mortgage-backed securities and CDOs ticking time bombs on the balance sheets of the world's largest financial institutions? “[T]he concerns were just that if people ... couldn't value the assets, then that created ... questions about the solvency of the firms,” as William C. Dudley, now president of the Federal Reserve Bank of New York, told the FCIC.¹⁰⁴¹

In theory, securitization and the many pathways of the shadow banking system were supposed to distribute risk among many investors. The theory was about to be tested – and proved wrong. Much of the risk from mortgage-backed securities had in actuality been taken by a small group of companies with out-sized holdings of the super-senior and AAA tranches of CDOs. These companies would ultimately bear great losses, even though those investments were supposed to be super-safe.

¹⁰⁴¹ Need cite

As 2007 went on, rising mortgage delinquencies and defaults compelled the rating agencies to downgrade first mortgage-backed securities, then CDOs. Alarmed investors would send prices plummeting. Hedge funds faced with margin calls from their repo lenders would be forced to sell at distressed prices; many would shut down. Banks would write down the value of their holdings of mortgage-backed securities and CDOs by billions of dollars.

The summer of 2007 also marked the freezing up in the private mortgage securitization markets, where non-GSE subprime and Alt-A securitizations were sold. A total of \$75 billion in subprime securitizations were issued in the second quarter of 2007 (already down from the prior quarters). That figure dropped precipitously to \$27 billion in the third quarter and to only \$11 billion in the fourth quarter of 2007. Alt-A issuance topped \$100 billion in the second quarter only to fall to \$13 billion in the fourth quarter of 2007. Once booming markets were now gone – less than \$4 billion in subprime or Alt-A mortgage-backed securities were issued in first half of 2008 and none after that.

CDO issuance followed suit. From a high of more than \$100 billion in the second quarter of 2007, issuance worldwide plummeted to \$40 billion in the third quarter of 2007 and only \$18 billion in the fourth quarter. And as the mortgage-related CDO market ground to a halt, investors no longer trusted other structured products. While \$80 billion of CLOs, securitized leveraged loans, were issued in 2007, only \$10 billion were issued in 2008. Commercial real estate mortgage-backed securities issuance plummeted from \$230 billion in 2007 to \$12 billion in 2008.

Those securitization markets that held up initially during the turmoil in 2007 eventually suffered in 2008 as the crisis deepened. Securitization of auto loans, credit cards, small business loans, and equipment leases all nearly ceased in the third and fourth quarters of 2008. These markets have somewhat recovered, unlike the private market for mortgage securitizations.

Delinquencies: “The turn of the housing market”

Home prices rose 16% nationally in 2005, their third year of double-digit growth. Then, by the spring of 2006, the number of months it would take to sell off all the homes on the market—given the slowing sales pace—was at its highest level in 10 years.¹⁰⁴² Nationwide, home prices peaked in April 2006. In October 2006, with the housing market downturn underway, Moody’s Economy.com, a separate business unit from Moody’s Investor Services, issued a report authored by Chief Economist Mark Zandi entitled “Housing at the Tipping Point: The Outlook for the U.S. Residential Real Estate Market.” The report concluded that:

Nearly 20 of the nation’s metro areas will experience a crash in house prices: a double-digit peak-to-trough decline in house prices... These sharp declines in house prices are expected along the Southwest coast of Florida, in the metro areas of Arizona and Nevada, in a number of California areas, throughout the broad Washington, D.C. area, and in and around Detroit. Many more metro areas are expected to experience only house-price corrections in which peak-to-trough price declines remain in the single digits. ...It is important to note that price declines in various markets are expected to extend into 2008 and even 2009.

With over 100 metro areas representing nearly one-half of the nation’s housing stock experiencing or about to experience price declines, national house prices are also set to decline. Indeed, odds are high that national house prices will decline in 2007; the first decline in nominal national house prices since the Great Depression.¹⁰⁴³

¹⁰⁴² NAR

¹⁰⁴³ Moody’s 2006

For 2007, the National Association of Realtors announced that the number of existing home sales had declined the most in 25 years. That year, home prices declined 9%. In 2008, prices would drop a stunning 17%. Overall, by the end of 2009, prices dropped 29% from their peak in 2006.¹⁰⁴⁴

In some areas, home prices started to fall as early as late 2005. For example, in Ocean City, New Jersey, where many properties are vacation homes, home prices had risen 144% since 2001; they topped out in December 2005 and fell 4% in just the first half of 2006. (In mid-2010, they would be 22% below their peak.) In most places, prices rose for a bit longer. For instance, in Tucson, Arizona, prices kept increasing for much of 2006, rising 95% from 2001 to their high point in August 2006, and then fell only 3% by the end of the year.

The first evidence of the housing crash was in early payment defaults— usually defined as borrowers being between 60 and 90 days delinquent within the first year. Figures released to the FCIC show that by summer of 2006, 1.5% of loans less than a year old were in default. The figure would peak in late 2007 at 2.5%, well above the 1.0% peak in the 2000 recession.¹⁰⁴⁵ Even more stunning, first payment defaults — literally, borrowers who took out home loans and never made a single payment — reached above 1.5% of loans in early 2007.¹⁰⁴⁶ Responding to questions about these data, CoreLogic Chief Economist Mark Fleming told the FCIC that the early payment default rate “certainly correlates with the increase in the Alt-A and subprime shares and the turn of the housing market and the sensitivity of those loan products.”¹⁰⁴⁷

¹⁰⁴⁴ Cite: CoreLogic CSBA Home Price Index, FCIC calculations

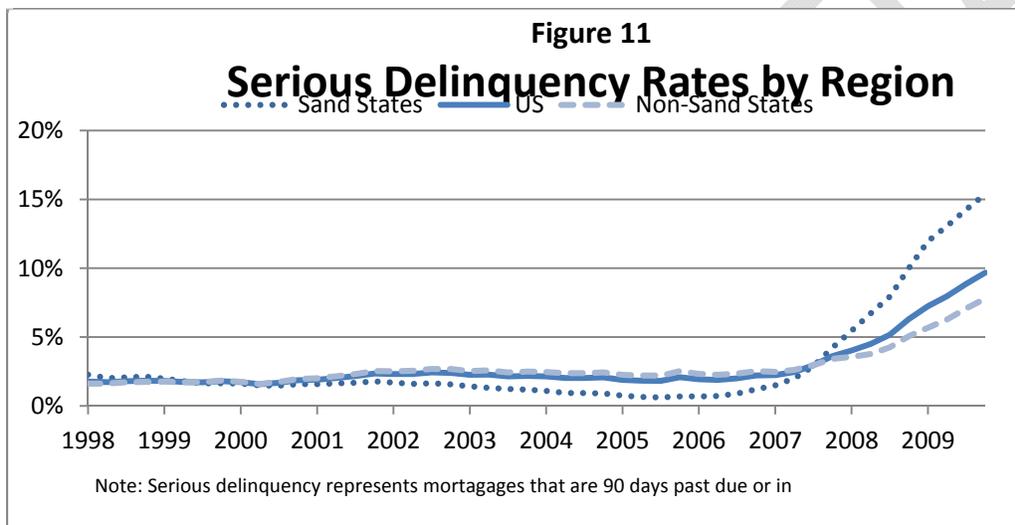
¹⁰⁴⁵ Data provide by Mark Fleming, Chief Economist for CoreLogic at the FCIC Sacramento Field Hearing, 9/23/2010, available at <http://www.fcic.gov/hearings/pdfs/2010-0923-Fleming.pdf> Figure 4

¹⁰⁴⁶ Data provide by Mark Fleming, Chief Economist for CoreLogic at the FCIC Sacramento Field Hearing, 9/23/2010, available at <http://www.fcic.gov/hearings/pdfs/2010-0923-Fleming.pdf> Figure 5

¹⁰⁴⁷ Transcript of the FCIC Sacramento Field Hearing, available on NetDocs at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4834-0266-0104&open=Y>

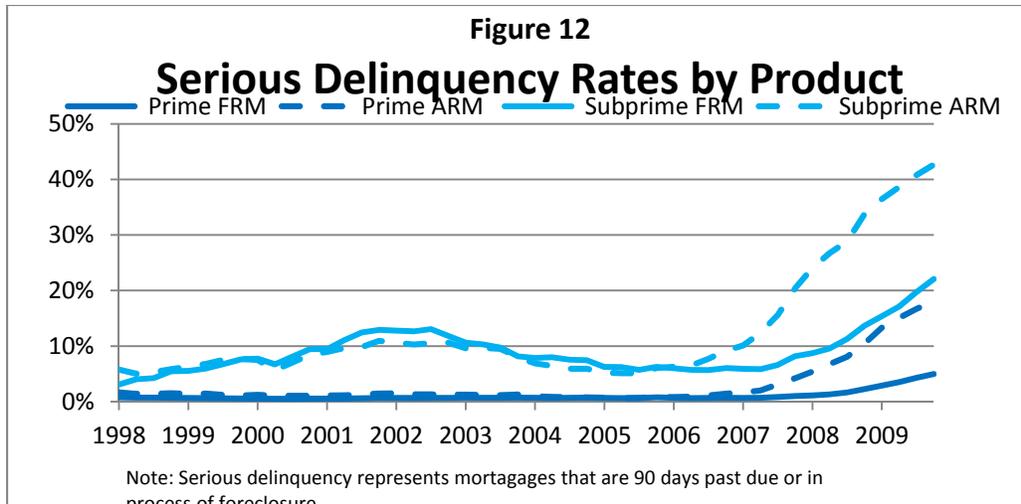
Mortgages in serious delinquency, defined as 90 or more days past due, or in foreclosure, had hovered around 1% during the early 2000s, jumped in 2006, and kept climbing. By the summer of 2009, 4% of mortgage loans were 90 days or more delinquent. By comparison, serious delinquencies peaked at 2.4% right after the recession in 2002.¹⁰⁴⁸

Serious delinquency was highest in areas of the country that had experienced the biggest housing booms. In the “sand states” --California, Arizona, Nevada, and Florida—serious delinquency rose to 3% in mid-2007 and 15% by September 2009, double the rate in other areas of the country.



Serious delinquencies also varied by type of loan. Subprime ARMs began to show increases in serious delinquency in early 2006, even as house prices were peaking; the rate rose rapidly to 20% in 2007. By September 2009, the delinquency rate for subprime ARMs was 40%. Prime ARMs did not weaken until more than a year later, at about the same time as subprime fixed-rate mortgages. Prime fixed-rate mortgages, which have been historically the least risky, showed a slow increase in serious delinquency that coincided with the increasing severity of the recession and unemployment in 2008.

¹⁰⁴⁸ Current figures from Data from the National Delinquency Survey provided to the FCIC by The Mortgage Bankers Association



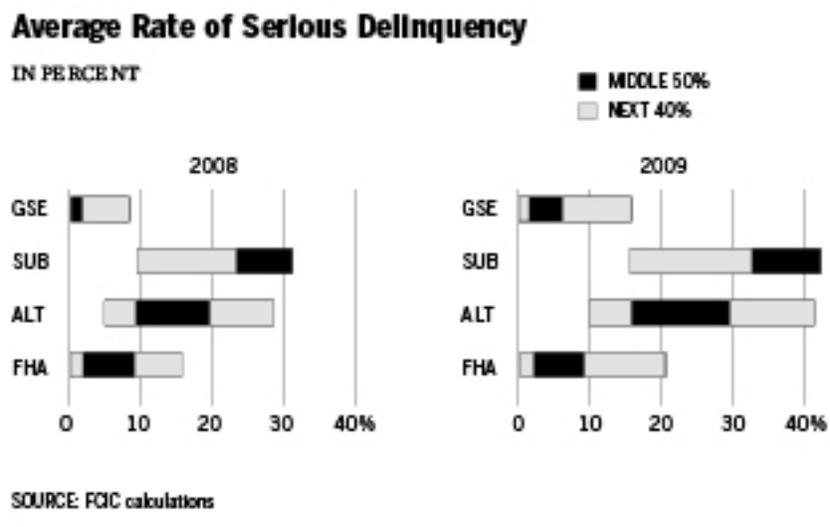
The FCIC examined the relative performance among mortgages purchased or guaranteed by the GSEs, those securitized in the private market, and securitized FHA- or VA- insured mortgages. The analysis was conducted using roughly 25 million mortgages that were outstanding at the end of each year from 2006 through 2009.¹⁰⁴⁹ The data contain mortgages in four groups – loans that were sold into securitizations labeled subprime by investors (labeled SUB), loans sold into Alt-A securitizations (ALT), loans either purchased or guaranteed by the GSEs, and loans guaranteed by the federal agencies (FHA).¹⁰⁵⁰ The GSE group includes any mortgages that the GSEs identified as subprime and Alt-A loans owing to their characteristics, as described in previous chapters.

Within each group, we created subgroups based on characteristics that affect the performance of the loan: FICO credit scores, loan-to-value ratios (LTV), and mortgage size. As an example, one subgroup would be GSE loans with a balance below \$417,000 (conforming to GSE loan limits), a FICO score between 640 and 659 (a borrower with below average credit history), and LTV between 80% and

¹⁰⁴⁹ The underlying data come from Corelogic and Loan Processing Svcs. Tabulations were provided to the FCIC by staff at the Federal Reserve.

¹⁰⁵⁰ Subprime mortgages were defined as [XXX]. Alt-A mortgages were defined as [XXX]. GSE mortgages included [XXX]. FHA mortgages included [XXX].

100% (having relatively small down payments). Another group would be Alt-A loans with the same characteristics. In each year, in each group, the loans were broken into 144 [ck] different subgroups.



[Chart will include changes to legend; explanatory text will define the four groups shown. Legend will not say “next 40%”]

Examining the rates of serious delinquency after the bubble burst shows that the differences across the four broad groups were significant. Imagine lining up the 144 subgroups within each group from best performing to worst performing. Then pinpoint the loan 25% of the way up the line; one-quarter of the loans would then be in subgroups with an equal or lower average rate of serious delinquency than the subgroup containing that loan. Repeat that exercise at the other end of the line so that exactly one-quarter of the loans are in subgroups with an equal or greater average rate of serious delinquency than the subgroup containing that worse performing, second loan. This leaves exactly one-half of all the loans, the “middle 50%,” between these two points as shown in Figure X.X. A similar exercise leaving only 5% of the loans on each end defines the “middle 90%.”

At the end of 2008, the middle 50% of GSE loans were in subgroups with average delinquency rates between 0.6% and 2.4%. The middle 90% of GSE loans were in subgroups with average

delinquency rates between 0.1 x% and 6%. That means that only 5% of GSE loans were in subgroups with average delinquency rates above 6%. In sharp contrast, the middle 50% of securitized subprime loans were in subgroups with average delinquency rates between 24% and 31%. The middle 90% of SUB loans were in subgroups with average delinquency between 10% and 32%. The GSE and SUB groups just barely overlap. The worst performing 5% of GSE loans are in subgroups with rates of serious delinquency that match the rate of serious delinquency of the best performing 5% of SUB loans.¹⁰⁵¹

By the end of 2009, the performance within all segments of the market had weakened. The median delinquency rate -- the rate where one-half the loans are in subgroups with lower rates of serious delinquency and one-half are in subgroups with higher rates of serious delinquency -- rose from 1% to 2.5% for GSE loans, from 29% to 39% for SUB loans, from 12% to 21% for Alt-A loans, and remained at roughly 6% for FHA loans.

The data illustrate that GSE loans performed significantly better than privately securitized or non-GSE subprime and Alt-A loans. That holds true even for loans in GSE pools that had many of the same characteristics as privately securitized mortgages, such as low FICO scores. For example, among borrowers with FICO scores below 660, a privately securitized mortgage was more than four times as likely to be seriously delinquent as a GSE mortgage: 28.3% vs. 6.2%.¹⁰⁵²

These patterns are most likely driven by differences in underwriting standards as well as some differences not captured in these data. For instance, in the GSE pool, borrowers tended to make bigger down payments. The FCIC's data show that 58% of GSE loans with FICO scores below 660 had an original loan-to-value ratio (LTV) below 80%, meaning the borrower made a down payment of at least 20% of the sales price. This would help offset the effect of the lower FICO score. In contrast, only 31%

¹⁰⁵¹ A recent analysis published by the FHFA comes to very similar conclusions. See XXXX.

¹⁰⁵² In the sample data provided by the Federal Reserve, Fannie Mae and Freddie Mac mortgages with a FICO score below 660 had an average rate of serious delinquency of 6.2% in 2008. In public reports, the GSEs stated that the average serious delinquency rates for loans with FICO scores less than 660 in their guarantee books was 6.3%.

of loans with FICO scores below 660 in non-GSE subprime securitizations had an LTV under 80%. The data illustrates that non-agency securitized loans were much more likely to have more than one risk factor, so called “risk-layering,” such as low FICO scores on top of small down payments.

GSE mortgages with Alt-A characteristics also performed significantly better than mortgages packaged into non-GSE Alt-A securities. For example, among loans with an LTV above 90%, the GSE pools have an average rate of serious delinquency of 5.7%, versus a rate of 15.5% for loans in private Alt-A securities.¹⁰⁵³ These results are also, in large part, driven by differences in risk layering.

Others frame the situation differently. According to Ed Pinto, a consultant to the mortgage-finance industry who was chief credit officer at Fannie Mae in the 1980s, GSEs dominated the market for risky loans because of the high number of GSE loans that had FICO scores below 660, a combined loan-to-value ratio of greater than 90%, or other characteristics. Using these strict cutoffs that ignore risk layering and thus are only partly related to mortgage performance (as well as a number of other assumptions), Pinto estimates that as of June 30, 2008, 49% of all mortgages in the country – 26.7 million mortgages – were risky mortgages that he defines as subprime or Alt-A. Of these, Pinto counts 11.9 million or 45% that were purchased or guaranteed by the GSEs.¹⁰⁵⁴ In contrast, the GSEs categorize fewer than 3 million of their loans as subprime or Alt-A.

¹⁰⁵³ In the sample data provided by the Federal Reserve, Fannie Mae and Freddie Mac mortgages with LTVs above 90% had an average rate of serious delinquency of 5.7% in 2008. In public reports, the GSEs stated that the average serious delinquency rates for loans with LTVs above 90% in their guarantee books was 5.8%.

¹⁰⁵⁴ The 26.7 million loans include 6.7 million loans in subprime securitizations and another 2.1 million loans in Alt-A securitizations, for a total of 8.8 million mortgages in subprime or Alt-A pools. These Pinto calls “self-denominated” subprime and Alt-A, respectively. To these, he adds another 8.8 million loans with FICO score below 660 which he labels “subprime by characteristic.” He also adds 6.3 million loans at the GSEs that are either interest only loans, negative amortization loans, or loans with an LTV—including any second mortgage—greater than 90% which he collectively refers to as “Alt-A by characteristic.” The last additions include an estimated 1.4 million loans insured by the FHA and VA with an LTV greater than 90% - out of a total of roughly 5½ million FHA and VA loans - and 1.3 million loans in bank portfolios that are inferred to have his defined “Alt-A characteristics”.

Importantly, the additional loans classified as subprime or Alt-A in Pinto’s analysis did not perform nearly as poorly as loans in non-agency securities, regardless of their label. These differences suggest that grouping all of these loans together is misleading. The performance data assembled and analyzed by the FCIC show that non-GSE securitized loans experienced much higher rates of delinquency than the GSE loans with similar characteristics

CRA: “Loans to people they might not lend to otherwise”

In addition to examining loans owned and guaranteed by the GSEs, Pinto also discussed the role of the Community Reinvestment Act in causing the crisis, in particular, writing, “[t]he pain and hardship that CRA has likely spawned are immeasurable.”¹⁰⁵⁵

Despite this view, lenders actually made few subprime loans to meet their CRA requirements, two Fed economists determined. Analyzing a database of nearly 14 million loans originated in 2006,¹⁰⁵⁶ the economists found that only 6% of all higher-cost loans (a rough proxy for subprime) had any connection to the CRA – that is, they were loans to low- or moderate-income borrowers or in low- or moderate-income neighborhoods made by banks and thrifts (and their subsidiaries) covered by the CRA. Using other data sources, they also found that CRA-related subprime loans appeared to perform better than other subprime loans. “Taken together, the available evidence seems to run counter to the contention that the CRA contributed in any substantive way to the current crisis,” they wrote.¹⁰⁵⁷

¹⁰⁵⁵ Cite

¹⁰⁵⁶ The authors use the HMDA data which covers roughly 80% of the mortgage market in the United States – see “Opportunities and Issues in Using HMDA data,” JRER 29(4) 2007 – Avery, Brevoort and Canner.

¹⁰⁵⁷ Neil Bhutta and Glenn Canner, *Did the CRA cause the mortgage market meltdown?*, Federal Reserve Board of Governors, March 2009.

Subsequent research has come to similar conclusions.¹⁰⁵⁸ For example, two economists at the San Francisco Fed, using a different methodology and data on the California mortgage market, found that lending to low- and moderate-income communities was only a small portion of lending for CRA lenders, even at the peak of the market. And, after accounting for characteristics of the loans and the borrowers, such as income and credit score, the authors found that loans made by CRA-covered lenders in their CRA assessment areas were half as likely to default as similar loans made by independent mortgage companies, which are not subject to CRA and are subject to less regulatory oversight in general. “While certainly not conclusive, this suggests that the CRA, and particularly its emphasis on loans made within a lender’s assessment area, helped to ensure responsible lending, even during a period of overall declines in underwriting standards,” they wrote.¹⁰⁵⁹

John Reed, former CEO of Citigroup, when asked whether he thought government policies such as the Community Reinvestment Act played a role in the crisis, said that he didn’t believe banks would originate “a bad mortgage because they thought the government policy allowed it” unless the bank could sell off the mortgage to Fannie or Freddie, which had their own obligations in this arena. He did believe that government housing policy played a role in the lack of oversight by regulators, saying, “the regulators didn’t jump up and down and yell at the low-doc, no-doc subprime mortgage... because they felt that the Congress had sort of pushed in that direction.”¹⁰⁶⁰ When the FCIC asked Christopher Cruise, a mortgage broker trainer, whether lending that he suggested was irresponsible was driven by the Community

¹⁰⁵⁸ See also “The subprime crisis: How much did Lender Regulation Matter,” by Avery and Brevoort. “It is not hard to see why the CRA and GSE affordable housing goals are raised as causes or contributors to the subprime crisis. Both regulations favor lending to borrowers in lower-income Census tracts which accounted for a disproportionate share of the growth in lending during the subprime buildup ... and elevated levels of loan delinquency. However a more nuanced look at the data ... suggests that this superficial association may be misleading.”

¹⁰⁵⁹ Elizabeth Laderman and Carolina Reid, *Lending in low and moderate income neighborhoods in California: The Performance of CRA Lending During the Subprime Meltdown*, November 26, 2008, Working paper to be presented at the Federal Reserve System Conference on Housing and Mortgage Markets, Washington, DC, December 4, 2008.

¹⁰⁶⁰ John Reed transcript

Reinvestment Act he responded, “If every CRA loan went bad it still wouldn’t have caused this crisis.”

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“You know, CRA could be a pain in the neck,” banker Lewis Ranieri told the FCIC. “But you know what? It always, in my view, it always did much more good than it did anything. You know, we did a lot. CRA made a big difference in communities... You were really putting money in the communities in ways that really stabilized the communities and made a difference.” But lenders including Countrywide used pro-homeownership policies as a “smokescreen” to do away with underwriting standards such as requiring down payments, he said. “The danger is that it gives air cover to all of this kind of madness that had nothing to do with the housing goal.”¹⁰⁶²

Downgrades: “Never before”

Prior to 2004, the ratings of mortgage-backed securities at Moody’s were monitored by the same analysts who had rated them in the first place.¹⁰⁶³ In 2004, Nicolas Weill, Moody’s chief credit officer and team managing director, was charged with creating a surveillance team to monitor previously rated deals.¹⁰⁶⁴ By 2007, that team had increased from a few people to a couple of dozen.¹⁰⁶⁵

By November 2006, the surveillance team began to see rising early payment defaults in mortgages originated by Fremont Investment & Loan.¹⁰⁶⁶ Throughout that month, the surveillance desk downgraded

¹⁰⁶¹ Cruise audio

¹⁰⁶² FCIC interview with Lewis Ranieri, July 30, 2010.

¹⁰⁶³ Nicolas Weill, interview with the FCIC, May 11, 2010, p. 6 [ID# 4818-9291-8278].

¹⁰⁶⁴ Nicolas Weill, interview with the FCIC, May 11, 2010, p. 6 [ID# 4818-9291-8278].

¹⁰⁶⁵ Nicolas Weill, interview with the FCIC, May 11, 2010, p. 14 [ID# 4818-9291-8278].

¹⁰⁶⁶ Nicolas Weill, interview with the FCIC, May 11, 2010, p. 11 [ID# 4818-9291-8278].

several securities with underlying Fremont collateral or put them on watch for future downgrades.¹⁰⁶⁷

“This was a very unusual situation as never before had we put on watch deals rated in the same calendar year,”¹⁰⁶⁸ Weill later wrote to Raymond McDaniel, the chairman and CEO of Moody’s Corporation, and Brian Clarkson, the president of Moody’s Investors Service.

In early 2007, Moody’s issued a special report about early payment defaults.¹⁰⁶⁹ “Mortgages backing securities issued in late 2005 and early 2006 have had sharply higher rates of foreclosure ... than previously issued securities at similar, early points in their lives,”¹⁰⁷⁰ according to the report overseen by Weill. These foreclosures were concentrated in subprime mortgage pools.¹⁰⁷¹ Additionally, more than 2.75% of the subprime mortgages securitized in the second quarter of 2006 were 60 days delinquent within six months, more than double the 1.25% rate a year earlier.¹⁰⁷² The exact cause of the trouble was still unclear to the ratings agency, though. “Moody’s is currently assessing whether this represents an

¹⁰⁶⁷ See, for example, “Moody’s downgrades and confirms two certificates from one Fremont deal from 2002,” November 2, 2006 [ID# 4826-9348-9416], “Rating Action: Moody’s has placed under review for possible downgrade one class of MASTR Asset Backed Securities Trust 2006-FRE2 securitization,” November 14, 2006 [ID# 4827-2704-3848], “Moody’s has placed four classes issued by Two Fremont Home Loan Trust Deals under review for possible downgrade,” November 14, 2006 [ID# 4827-1026-6632], “Moody’s has placed under review for possible downgrade two classes of MASTR Asset Backed Securities Trust 2006-FRE1 securitization,” November 30, 2006 [ID# 4830-4581-0952].

¹⁰⁶⁸ MOODY’S-COGR-0005422 – MOODY’S-COGR-0005424 Email from Nicolas Weill to Raymond McDaniel, Brian Clarkson, July 4, 2007 [ID# 4812-5572-8903].

¹⁰⁶⁹ “Early Defaults Rise in Mortgage Securitizations,” Moody’s structured finance special report, January 18, 2007 [ID# 4849-7525-6328].

¹⁰⁷⁰ “Early Defaults Rise in Mortgage Securitizations,” Moody’s structured finance special report, January 18, 2007, p. 1 [ID# 4849-7525-6328].

¹⁰⁷¹ “Early Defaults Rise in Mortgage Securitizations,” Moody’s structured finance special report, January 18, 2007, p. 1 [ID# 4849-7525-6328].

¹⁰⁷² “Early Defaults Rise in Mortgage Securitizations,” Moody’s structured finance special report, January 18, 2007, p. 3 [ID# 4849-7525-6328].

overall worsening of collateral credit quality or merely a shifting forward of eventual defaults which may not significantly impact a pool's overall expected loss.”¹⁰⁷³

For the next few months, the company published regular updates about the subprime mortgage market.¹⁰⁷⁴

In a March publication, Moody’s CDO rating team discussed that downgrades of securities backed by subprime loans could be “severe” for CDOs backed by these securities.¹⁰⁷⁵ Negative rating actions had been taken on 4.5% of the outstanding subprime mortgage securities rated Baa in just three months.¹⁰⁷⁶

Then, on July 10, 2007, in an unprecedented move, Moody’s downgraded 399 subprime 2006 vintage mortgage-backed securities and put an additional 32 securities on watch.¹⁰⁷⁷ The \$5.2 billion of securities that were affected, all rated Baa and lower, accounted for 1.2% of the dollar volume and 6.8% of the subprime securities that Moody’s rated in 2006 but a larger 19% of the subprime securities originally rated Baa.¹⁰⁷⁸ For the time being, there were no downgrades on higher-rated tranches. Moody’s attributed the downgrades to “aggressive underwriting combined with prolonged, slowing home price appreciation” and noted that approximately 60% of the securities affected contained mortgages from one

¹⁰⁷³ “Early Defaults Rise in Mortgage Securitizations,” Moody’s structured finance special report, January 18, 2007, p. 1 [ID# 4849-7525-6328].

¹⁰⁷⁴ See, for example, “Challenging Times for the US Subprime Mortgage Market,” March 7, 2007 [ID# 4833-1804-7752], “The Impact of Subprime Residential Mortgage-Backed Securities on Moody's-Rated Structured Finance ;CDOs: A Preliminary Review,” March 23, 2007 [ID# 4835-5082-8552]; “US Subprime Mortgage Market Update: April 2007,” April 20, 2007 [ID# 4848-9459-1238]; “US Subprime Mortgage Market Update: June 2007,” June 7, 2007 [ID# 4816-9053-6198].

¹⁰⁷⁵ “The Impact of Subprime Residential Mortgage-Backed Securities on Moody's-Rated Structured Finance ;CDOs: A Preliminary Review,” March 23, 2007, p. 8 [ID# 4835-5082-8552]

¹⁰⁷⁶ “The Impact of Subprime Residential Mortgage-Backed Securities on Moody's-Rated Structured Finance ;CDOs: A Preliminary Review,” March 23, 2007, p. 4 [ID# 4835-5082-8552]

¹⁰⁷⁷ “Moody’s Downgrades Subprime First-lien RMBS-Global Credit Research Announcement”, Moody’s Investors Service, July 10, 2007 [ID# 4813-5639-2199].

¹⁰⁷⁸ “Moody’s Downgrades Subprime First-lien RMBS-Global Credit Research Announcement”, Moody’s Investors Service, July 10, 2007 [ID# 4813-5639-2199].

of four originators: Fremont Investment & Loan, Long Beach Mortgage Company, New Century Mortgage Corporation, or WMC Mortgage Corp.¹⁰⁷⁹

Weill later told the FCIC staff that Moody's issued a mass announcement, rather than downgrading a few securities at a time, to avoid creating confusion in the market.¹⁰⁸⁰ A few days later, Standard & Poor's downgraded 498 similar tranches, including [XXX] that had been rated AAA. These initial downgrades were remarkable not only because of the number of securities, but also because of the sharp rating cuts—an average of four notches per security, when one or two notches was more routine. Among the tranches downgraded in July 2007 were the bottom three mezzanine tranches (M9, M10, and M11) of CMLTI 2006-NC2, the case-study deal we have been tracking throughout the report. By that point, [XXX%] of the original loans had prepaid but another [XXX%] were 90 or more days past due or in foreclosure.

The news of downgrades affected Bear Stearns Asset Management, which managed [seven] CDOs with a combined [\$18 billion] in mostly mortgage-related collateral. One of its CDOs, Tall Ships, had direct exposure to the case-study deal, owning \$8 million of the M7 and M8 tranches. BSAM's High Grade hedge fund also had [synthetic] exposure through a \$10 million credit default swap position with Lehman referencing the M8 tranche. And its Enhanced Leverage hedge fund owned parts of the equity in Independence CDO [verify], which in turn owned the M9 tranche of CMLTI 2006-NC2. In addition, these funds had exposure through their holdings of other CDOs that in turn owned tranches of CMLTI 2006-NC2. Investors across the world were assessing their own, and guessing at others', exposure, however indirect, to these assets.

Then, on October 11, Moody's downgraded another 2,506 tranches (\$33.4 billion) of subprime mortgage-backed securities and placed 577 tranches (\$23.8 billion) on watch for potential

¹⁰⁷⁹ "Moody's Downgrades Subprime First-lien RMBS-Global Credit Research Announcement", Moody's Investors Service, July 10, 2007 [ID# 4813-5639-2199].

¹⁰⁸⁰ Nicolas Weill, interview with the FCIC, May 11, 2010, p. 73 [ID# 4818-9291-8278].

downgrade.¹⁰⁸¹ Now, the securities downgraded and put on watch represented a total 13.4% of the original dollar volume of all 2006 subprime mortgage-backed securities that Moody's rated.¹⁰⁸² Of the securities placed on watch in October, 48 tranches (\$6.9 billion) were Aaa-rated and 529 (\$16.9 billion) were Aa-rated.¹⁰⁸³ All told, in the first 10 months of 2007, 92% of the mortgage-backed security deals issued in 2006 had at least one tranche downgraded or put on watch.¹⁰⁸⁴

By this point in October, [XXX%] of the borrowers in CMLTI 2006-NC2 were seriously delinquent and some homes had already been repossessed. The M4 through M8 tranches were downgraded as part of the second wave of mass downgrades.¹⁰⁸⁵ Five additional tranches would eventually be downgraded in April 2008.

Before it was over, Moody's downgraded 83% of the 2006 Aaa mortgage-backed securities tranches and all of the Baa tranches. For those issued in the second half of 2007, nearly all Aaa and Baa tranches were downgraded. The downgrades were often severe. Of all tranches initially rated investment grade, meaning rated Baa or higher, 76% of the 2006 vintage were downgraded to junk as were 89% of the 2007 vintage.

¹⁰⁸¹ "Moody's Downgrades \$33.4 billion of 2006 Subprime First-Lien RMBS and Affirms \$280 billion Aaa's and Aa's," Moody's Investors Service, October 11, 2007 [ID# 4825-5422-6184]; "October 11 Rating Actions Related to 2006 Subprime First-Lien RMBS," Moody's Structured Finance Special Report, October 17, 2007, p. 1-2 [ID# 4826-0409-9080].

¹⁰⁸² "Moody's Downgrades \$33.4 billion of 2006 Subprime First-Lien RMBS and Affirms \$280 billion Aaa's and Aa's," Moody's Investors Service, October 11, 2007.

¹⁰⁸³ "Moody's Downgrades \$33.4 billion of 2006 Subprime First-Lien RMBS and Affirms \$280 billion Aaa's and Aa's," Moody's Investors Service, October 11, 2007.

¹⁰⁸⁴ "October 11 Rating Actions Related to 2006 Subprime First-Lien RMBS," Moody's Structured Finance Special Report, October 17, 2007, p. 2 [ID# 4826-0409-9080]

¹⁰⁸⁵ "Moody's Downgrades \$33.4 billion of 2006 Subprime First-Lien RMBS and Affirms \$280 billion Aaa's and Aa's," Moody's Investors Service, October 11, 2007.

CDOs: “Climbing the wall of subprime worry”

In March 2007, in one of its by-then-frequent reports on the subprime market, Moody’s discussed CDOs and said those with high concentrations of subprime mortgage-backed securities could incur “severe” downgrades.¹⁰⁸⁶ In an internal email five days later, Group Managing Director of U.S. Derivatives Yuri Yoshizawa explained to McDaniel and to Executive Vice President of Derivatives Noel Kirnon that one managing director at Credit Suisse First Boston “sees banks like Merrill, Citi, and UBS still furiously doing transactions to clear out their warehouses He believes that they are creating and pricing the CDOs in order to remove the assets from the warehouses, but that they are holding on to the CDOs ... in hopes that they will be able to sell them later.”¹⁰⁸⁷ Several months later, in a review of the CDO market entitled “Climbing the Wall of Subprime Worry,” Moody’s noted, “Some of the first quarter’s activity [in 2007] was the result of some arrangers feverishly working to clear inventory and reduce their balance sheet exposure to the subprime class.”¹⁰⁸⁸ Even though Moody’s was aware that the investment banks were dumping collateral out of the warehouses and into CDOs—possibly regardless of quality—the firm continued to rate new CDOs using existing assumptions.

Former managing director Richard Michalek testified to the FCIC, “It was a case of, with respect to why didn’t we stop and change our methodology, there is a very conservative culture at Moody’s, at least while I was there, that suggested that the only thing worse than quickly getting a new methodology in

¹⁰⁸⁶ “The Impact of Subprime Residential Mortgage-Backed Securities on Moody’s-Rated Structured Finance CDOs: A Preliminary Review,” March 23, 2007, p. 2 [ID# 4835-5082-8552].

¹⁰⁸⁷ Email from Yuri Yoshizawa to Noel Kirnon and Raymond McDaniel, cc Eric Kolchinsky subject: “CSFB Pipeline information,” March 28, 2007, *from emails provided by Eric Kolchinsky*

¹⁰⁸⁸ “First Quarter 2007 U.S. CDO Review: Climbing the Wall of Subprime Worry,” May 31, 2007, p. 2 [ID# 4811-9868-0072]

place is quickly getting the wrong methodology in place and having to unwind that and to fail to consider the unintended consequences.”¹⁰⁸⁹

In July, McDaniel gave a presentation to the board on the company’s 2007 strategic plan. His slides included bleak titles such as: “Spotlight on Mortgages: Quality Continues to Erode,” “House Prices Are Falling...,” “Mortgage Payment Resets are Mounting,” and “1.3 MM Mortgage Defaults Forecast 2007-08.”¹⁰⁹⁰ Despite all the evidence that the quality of the underlying mortgages might be declining, Moody’s did not make any significant adjustments to CDO ratings assumptions until late September.¹⁰⁹¹ Out of \$51 billion in CDOs that Moody’s rated after the mass downgrade of subprime mortgage-backed securities on July 10, 2007, 88% were rated Aaa.¹⁰⁹²

Moody’s had hoped that ratings downgrades could be staved off by mortgage modifications making monthly payments more affordable so that borrowers might stay current. In mid-September, Eric Kolchinsky, a team managing director for CDOs, learned from Nicolas Weill, the chief credit officer of the structured finance group, that a survey of servicers’ indicated very few troubled mortgages were being modified.¹⁰⁹³

Worried that continuing to rate CDOs without adjusting for known deterioration in the underlying securities could expose Moody’s to liability,¹⁰⁹⁴ Kolchinsky notified Yoshizawa that the company should

¹⁰⁸⁹ Richard Michalek, testimony to the FCIC, hearing on “The Credibility of Credit Ratings, the Investment Decisions Made Based on those Ratings, and the Financial Crisis,” Session 3: The Credit Rating Agency Business Model, June 2, 2010, p. 448-449 (ID# 4818-8776-0390)

¹⁰⁹⁰ MOODY’S-FCIC-0002561 “2007 MCO Strategic Plan Overview,” presentation by Ray McDaniel, July 2007 [ID# 4841-0803-7638].

¹⁰⁹¹ Chronology Prepared by Eric Kolchinsky [ID# 4813-3992-8070]

¹⁰⁹² From PSR. Need cite.

¹⁰⁹³ Chronology Prepared by Eric Kolchinsky [ID# 4813-3992-8070]

¹⁰⁹⁴ Chronology Prepared by Eric Kolchinsky [ID# 4813-3992-8070]; *see also* transcript of FCIC interview of Eric Kolchinsky, April 27, 2010 [ID# 4828-9967-1046].

stop rating CDOs until the securities downgrades were completed.¹⁰⁹⁵ Kolchinsky told the FCIC that Yoshizawa “admonished” him for making the suggestion.¹⁰⁹⁶

By the end of 2008, more than 90% of all tranches of CDOs had been downgraded. Moody’s downgraded nearly all of the 2006 Aaa and all of the Baa CDO tranches. And, again, the downgrades were large -- more than 80% of Aaa CDO bonds and more than 90% of Baa CDO bonds were eventually downgraded to junk.

Remedies: “Based on incorrect assumptions”

As discussed in an earlier chapter, after the crisis unfolded, those with exposure to mortgages and structured products—including investors, financial firms, and private mortgage insurance firms—would closely examine representations and warranties made by mortgage originators and securities issuers. When mortgages are securitized, sold, or insured, certain representations and warranties are made to assure investors and insurers that the mortgages meet stated guidelines. For example, Fannie and Freddie, where they have discovered breaches of representations and warranties, have sought to put back to originators billions of dollars of mortgages that they purchased or guaranteed—demanding that the seller buy back the loans. In addition, with much the same reasoning, private mortgage insurance companies have denied claims to an unprecedented extent. As mortgage securities have lost value investors have found significant deficiencies in the extent of securitizers’ due diligence on the mortgage pools underlying the mortgage-backed securities as well as the adequacy of disclosure about the characteristics of those deals.

Fannie and Freddie acquire or guarantee millions of loans each year. They delegate underwriting authority to originators on the legal understanding—through representations and warranties— that the

¹⁰⁹⁵ Chronology Prepared by Eric Kolchinsky [ID# 4813-3992-8070]; *see also* transcript of FCIC interview of Eric Kolchinsky, April 27, 2010 [ID# 4828-9967-1046].

¹⁰⁹⁶ Chronology Prepared by Eric Kolchinsky [ID# 4813-3992-8070]; *see also* transcript of FCIC interview of Eric Kolchinsky, April 27, 2010 [ID# 4828-9967-1046].

loans meet specified criteria. They then check samples of the loans to ensure that these representations and warranties are not breached.

If the loans turn out to be “ineligible” for purchase by the GSE, then the GSE has the right to “put back” the loan to the originator or wholesaler from which it was acquired, demanding that the seller buy back the loan—assuming of course that the seller has not gone bankrupt.¹⁰⁹⁷ As a result of such sampling, during the three years and eight months ending August 31, 2010 Freddie and Fannie put back loans having unpaid balances totaling \$15.6 billion and \$19.2 billion, respectively, for a total of \$34.8 billion.¹⁰⁹⁸ These sums were the unpaid balances of more than 200,000 loans. So far, Freddie, has received \$9.1 billion from sellers,¹⁰⁹⁹ and Fannie has received \$11.8 billion.¹¹⁰⁰

The volumes are notable, being xx% of the losses that Fannie has recorded in losses on its single-family guarantee book, and xx% of the losses that Freddie has recorded.

In testing to ensure compliance with its standards, Freddie reviews a small percentage of performing loans and high percentages of foreclosed loans (including well over 90% of all loans that default in the

¹⁰⁹⁷ Fannie, Freddie and private firms all buy whole loans from originators or home loan wholesalers, then guarantee those loans. Each of these methods of acquisition presents a means where the GSE can earn or lose money depending on the performance of the underlying loan. For these purposes a guarantee of a whole loan is considered the equivalent of a purchase. Though not reflected on the GSE’s balance sheet, the GSE bears the full risk of loss. If a loss occurs, the GSE pays on the guarantee and pursues collection against the borrower, or if it finds the loan did not meet the agreed upon underwriting standards, against the originator.

On the PLS side, the right to put back the loan belongs not to the GSE which purchases a PLS, but to the Trustee of the trust established to issue the PLS/RMBS. In this situation, the GSE must act through the Trustee, the holder of the underlying mortgages for the benefit of the holders of the RMBS.

¹⁰⁹⁸ Letter from Bingham, Freddie’s counsel dated September 21, 2010 (“Bingham Letter”). Letter from O’Melveny & Meyers LLP, Fannie’s counsel (“O’Melveny Letter”), dated September 21, 2010

¹⁰⁹⁹ Letter from Bingham, Freddie’s counsel dated September 21, 2010 (“Bingham Letter”). Letter from O’Melveny & Meyers LLP, Fannie’s counsel (“O’Melveny Letter”), dated September 21, 2010 (as of August 6, 2010)

¹¹⁰⁰ Letter from Bingham, Freddie’s counsel dated September 21, 2010 (“Bingham Letter”). Letter from O’Melveny & Meyers LLP, Fannie’s counsel (“O’Melveny Letter”), dated September 21, 2010 (as of August 31, 2010)

first two years)¹¹⁰¹ In total, Freddie reviewed \$76.8 billion of loans (out of \$1.51 trillion in loans acquired or guaranteed) and found \$21.7 billion to be ineligible.¹¹⁰²

Among the performing loans that were sampled, an increasing percentage were found to be ineligible over the years, with the percentage rising from 10% for mortgages originated in 2005 to 23% in 2008. Still, Freddie put back very few of these performing loans to the originators. Among mortgages originated from 2005 to 2008, they found that 17% of the delinquent loans were ineligible as were 27% of the loans in foreclosure. Most of these were put back to originators—again where originators were still in operation. In addition, loans might not be put back if the reason for ineligibility was minor.¹¹⁰³

Overall, of the delinquent loans and loans in foreclosure sampled by Freddie, 20% were put back.¹¹⁰⁴ In 2009 and 2010 Freddie put back significant loan volumes to the following lenders: Countrywide, \$1.9 billion; Wells Fargo, \$1.2 billion; Chase Home Financial, \$1.1 billion; Bank of America, \$476 million and Ally Financial, \$453 million.¹¹⁰⁵

Using a method similar to Freddie's to test for loan eligibility, Fannie reviewed between 2% and 5% of the mortgages originated in each of those years—with larger sampling for delinquent loans. From 2007 through 2010, Fannie put back loans to the following large lenders: Bank of America, \$6.9 billion; Wells Fargo, \$2.3 billion; JP Morgan Chase, \$2.2 billion; Citigroup, \$1.5 billion; Suntrust Bank, \$898 million and Ally Financial, \$838 million. Fannie acquired \$2.24 trillion in loans (11.8 million loans) between 2005 and 2008.

¹¹⁰¹ Id. See also Staff interview of Frank Romano of Freddie

¹¹⁰² Id. 9/21/10 Hershman letter to Cohen, Tab 3.

¹¹⁰³ Staff interview of Frank Romano;

¹¹⁰⁴ Average loan size of approximately \$222,000 per loan.

¹¹⁰⁵ Bingham Letter.

Similar to Fannie and Freddie, private mortgage insurance companies are turning back loans. This insurance protects the holder of the mortgage if a homeowner defaults on a loan, even though the homeowner is generally responsible for the premiums. By the end of 2006, PMI companies insured a total of \$668 billion in potential mortgage losses.

With the increase in defaults and losses on the mortgages, the PMI companies have seen a spike in claims. The seven largest PMI companies, with 98% of the market, have rejected approximately 25% of the claims (or \$6 billion of \$24 billion) brought to them because of violations of origination guidelines, improper employment and income reporting, and issues with property valuation.¹¹⁰⁶

Separate from the GSEs' purchase and guarantee of mortgages, they also purchased \$xx billions of dollars of AAA- rated PLS, which have resulted in total losses of \$xx billion for the GSEs.¹¹⁰⁷ While the GSEs do not have access to the loan files on the underlying mortgages, they are grappling with understanding why the securities have fared so much worse than expected. Frustrated with the lack of information from the securities' servicers and trustees as well as other holders of the securities, on July 12, 2010 the GSEs through their regulator issued 64 subpoenas to various trustees and servicers in transactions where the GSEs lost money. To the extent the GSEs find that the non-performing loans in the pools have violations, the GSEs intend to demand that the trustee enforce the GSEs' rights (including any rights to put loans

¹¹⁰⁶ Document production from United Guaranty Residential Insurance, MGIC, Genworth, RMIC, Triad, PMI, and Radian. In netdocs, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4814-7096-8071&open=Y>, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4814-7096-8071&open=Y>, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4827-9152-3336&open=Y>, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4820-9126-6311&open=Y>, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4820-0738-0231&open=Y>, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4833-9806-1064&open=Y>, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4842-9732-5319&open=Y>, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4827-3710-9767&open=Y>, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4838-5130-8040&open=Y>, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4822-4447-7447&open=Y>

¹¹⁰⁷ A high percentage of these losses are believed to represent mark-to-market losses rather than actual cash losses.

back to the originator or wholesaler).¹¹⁰⁸ The GSEs are not expected to take further steps enforcing their rights until early 2011.¹¹⁰⁹

The strategy being followed by the GSEs is based in contract law as opposed to securities law. Other investors are filing lawsuits and winning settlements claiming they were misled by inaccurate or incomplete prospectuses.

As of mid-2010, court actions embroiled almost all major loan originators, underwriters and bond insurers—more than 400 crisis lawsuits related to breaches of representations and warranties, by one estimate.¹¹¹⁰ These lawsuits filed in the wake of the financial crisis include those alleging “untrue statements of material fact” or “material misrepresentations” in registration statements and prospectuses that were provided to investors that purchased securities. On the whole, these lawsuits allege violations of the Securities Exchange Act of 1934 and the Securities Act of 1933.

Both private and government entities have gone to court. As one example, investment broker Charles Schwab has sued units of Bank of America, Wells Fargo and UBS Securities. The Massachusetts Attorney General’s Office settled charges against Morgan Stanley and Goldman Sachs, after accusing the firms of inadequate disclosure in its mortgage-backed securities.¹¹¹¹ The investigations resulted in a settlement from Morgan Stanley of \$23.4 million and from Goldman Sachs of \$9 million being paid to Massachusetts authorities that had investments in securities from the firms.

As another example, the Federal Home Loan Bank of Chicago sued several defendants including Bank of America, Credit Suisse Securities, Citigroup and Goldman Sachs over \$3.3 billion investment in private

¹¹⁰⁸ See letter from Covington & Burling LLP, Freddie’s counsel, dated October 19, 2010. See also letter from O’Melveny & Meyers LLP dated October 19, 2010.

¹¹⁰⁹ Id.

¹¹¹⁰ Nera Economic Consulting; May 2010 Part VII of a NERA Insights Series; Credit Crisis Litigation Revisited: Litigating the Alphabet of Structured Products

mortgage backed securities claiming that the defendants did not give accurate information about securities for sale. Similarly, Cambridge Place Investment Management sued units of Morgan Stanley, Citigroup, HSBC, Goldman Sachs, Barclays, and Bank of America among others,¹¹¹² “on the basis of the information contained in the applicable registration statement, prospectus, and prospective supplements.”¹¹¹³

Losses: “Who owns residential credit risk?”

As the ratings went, so would go losses. Through 2007 and into 2008, as the rating agencies downgraded mortgage-backed securities and CDOs, and investors began to panic, market prices for these securities would plunge. The drop in market prices for these securities reflected the higher probability of the underlying mortgages actually defaulting, meaning that less cash would flow to the investors, as well as the more generalized fear among investors that this market had become less liquid. Investors value liquidity because they want the assurance that securities can be sold quickly to raise cash if necessary. Potential investors worried they might get stuck holding these securities as market participants looked to limit their exposure to the weakened mortgage market.

With the drop in market prices, accounting rules required many firms holding these securities to take write downs, that is, lower the value of the assets on their books, even though they did not necessarily intend to sell the securities right away. How exactly to determine the value of these assets would become a contentious issue during the crisis as fewer and fewer trades took place. And further, the unrealized losses would become realized losses – actual money lost – only if and when the securities were sold at the lower price, or if cash from mortgage payments stopped flowing to the securities over time. Regardless of whether the securities suffered realized losses, the write downs would often mean that financial firms needed to raise additional capital to cover the unrealized losses.

¹¹¹² Cambridge Place v. Morgan Stanley et alia; Commonwealth of Massachusetts complaint 10 2741 filed 7/9/2010

¹¹¹³ Cambridge Place page 28 #68

These accounting and capital rules received a good deal of criticism during the crisis, as firms argued that the lower market prices did not reflect reasonable expectations of future realized losses. Joseph Grundfest, when he was a member of the SEC's Committee on Improvements to Financial Reporting, noted that at times, marking securities at market prices “creates situations where you have to go out and raise physical capital in order to cover losses that as a practical matter were never really there.”¹¹¹⁴ By this logic, the value of some of the securities could eventually be written up as they turn out to perform better than expected. But, not marking assets down to market values allows firms to postpone taking losses that market participants view as likely. This might mean that the firms would not have sufficient capital to absorb these losses when they are realized, a fundamental reason for the accounting rules.

As the mortgage market was crashing, some economists and analysts guessed that while unrealized losses might be much higher, realized losses on subprime and Alt-A mortgages would total \$200 to \$300 billion; by 2010, the figure would turn out not to be much more than that. Those numbers are small relative to the \$14 trillion U.S. economy. “Subprime mortgages themselves are a pretty small asset class,” Fed Chairman Ben Bernanke told the FCIC, explaining how he and Treasury Secretary Hank Paulson had in 2007 under-estimated the repercussions of the emerging housing crisis. “You know, the stock market goes up and down every day more than the entire value of the subprime mortgages in the country. But what created the contagion, or one of the things that created the contagion, was that the subprime mortgages were entangled in these huge securitized pools.”¹¹¹⁵

Nonetheless, the large drop in market prices of the mortgage securities had large spillover effects to the financial sector for three reasons. First, as discussed, when the prices of mortgage-backed securities and CDOs fell, many of the holders of those securities would have to mark down the value of their holdings – long before they experienced any actual defaults. That was true most notably for the holdings of the

¹¹¹⁴ *CFO Magazine* “How Far Can Fair Value Go?” May 6, 2008 <http://cfo.com/article.cfm/11323562?f=search>

¹¹¹⁵ Closed session

GSEs, which had purchased a combined [\$XXX] billion in the AAA tranches of non-GSE mortgage-backed securities; they would mark down their holdings by [\$XXX] billion in 2007 alone.

Second, rather than spreading the risks of losses among many investors, the securitization market had concentrated them. “Who owns residential credit risk?” two Lehman analysts asked in a September 2007 report. The answer looking forward: Three-quarters of subprime and Alt-A mortgages had been securitized – and “[m]uch of the risk in these securitizations is in the investment-grade securities and has been almost entirely transferred to AAA collateralized debt obligation (CDO) holders.”¹¹¹⁶ A small group of companies held the largest share of those super-senior and AAA CDOs – including Citigroup, Merrill Lynch, and UBS, and the insurance companies that had guaranteed them, such as AIG and MBIA. It would turn out that those companies held very little capital to protect against potential losses on those securities. And it would turn out that most of those companies would be considered too big to fail by the authorities in the midst of a financial crisis.

Published in April 2008 using data compiled in late 2007 before the bottom fell out of the U. S. subprime market, the International Monetary Fund’s Global Stability Report also estimated where the declining assets were held and how severe the write downs would be. All told, the IMF estimated that \$10 trillion in mortgage assets were held throughout the financial system. Of these, \$3.8 trillion were GSE mortgage-backed securities that the IMF expected to suffer no losses. Another \$4.7 trillion were estimated to be prime and nonprime mortgages held largely by the banks and the GSEs. These were expected to suffer as much as \$115 billion in losses due to declines in market value. The remaining \$1.5 trillion in assets were estimated to be mortgage-backed securities and CDOs. Losses on those assets were expected to be a much larger \$450 billion. And, more troubling, as much as \$260 billion of these write downs were

¹¹¹⁶ Vikas Shilpiekandula and Olga Gorodetsky, *Who Owns Residential Credit Risk?*, Lehman Brothers Fixed Income Research, September 7, 2007. The Lehman analysts pegged ultimate subprime and Alt-A losses at \$200 billion. Those forecasts were based, the analysts said, on a scenario in which house prices fell an average 30% across the country. “Although residential credit losses should increase by a significant amount, we believe they are not overwhelming.”

expected to be borne by the banks. The rest of the losses from non-agency mortgage backed securities were shared among institutions such as insurance companies, pension funds, the GSEs, and hedge funds.¹¹¹⁷ The report also expected another \$380 billion in losses on commercial mortgage-backed securities, CLOs, leveraged loans, and other loans and securities—with more than half coming from commercial mortgage-backed securities. Again, banks were expected to bear much of the brunt.

Third, when the crisis began, uncertainty and leverage would promote contagion. Investors would realize they didn't know as much as they wanted to know about the assets that banks and investment banks held. To an extent not understood by many prior to the crisis, hedge funds and investment banks had leveraged themselves in the short-term repo markets, in part using mortgage-backed securities and CDOs as collateral. Lenders would question the value of the assets those companies had posted as collateral at the same time that they would question the value of those companies' balance sheets.

Even the highest rated tranches of mortgage-backed securities were downgraded and large write downs were recorded on financial institutions' balance sheets based on declines in market value. However, although this could not be known in 2007, most of the AAA tranches of mortgage-backed securities have avoided actual losses in cash flow through 2010 and are likely to avoid realized losses going forward – including, for example, those tranches held by the GSEs. Fannie Mae for example, wrote down their \$155 million initial investment in the A1 tranche of CMLTI-2006 NC2 by \$25 million, reflecting a decline in the market value of their holdings, even though the tranche has yet to suffer realized losses from a loss in actual payments to the tranche.

Overall for tranches of mortgage-backed securities originally rated AAA, by the end of 2009, despite the mass downgrades only about [10%] of Alt-A and [4%] of subprime securities had been “materially impaired” – that is, they had either been downgraded to Ca or C, indicating that actual losses were

¹¹¹⁷ IMF Global Stability Report April 2008 page 78; <http://www.asiaing.com/global-financial-stability-report-april-2008-imf.html>

imminent, or they had already suffered principal losses. For the lower-rated BBB tranches, [9x%] of Alt-A and [9x%] of subprime were impaired. In total, by the end of 2009, \$320 billion worth of subprime and Alt-A tranches had been “materially impaired” – including [\$XXX] billion originally rated AAA. The outcome would be far worse for CDO investors whose fate largely depended on the performance of lower-rated mortgage-backed securities. Over 90% of Baa CDO bonds and 80% of Aaa CDO bonds were ultimately impaired.¹¹¹⁸ While the value of some of the highly-rated mortgage-backed assets may turn out to be better than current market prices suggest, the CDOs created over the housing boom unequivocally turned out to be a poor investment.

¹¹¹⁸ From PSR. Need cite.

CHAPTER CONCLUSIONS HERE

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Part III: The Financial Crisis

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Chapter 1: Early 2007: Subprime concerns spread

Over the course of 2007, the collapse of the housing bubble and the abrupt shutdown of the subprime lending business led to losses for many financial institutions, runs on money market funds, and, ultimately, tighter access to credit and higher interest rates for many consumers and businesses. Early evidence of the coming storm was the decline, beginning in November, 2006, of the ABX index for lower-rated, BBB- tranches of mortgage-backed securities, which was viewed by investors as a sort of Dow Jones Index for the subprime market. The index fell 1.5% in November.¹¹¹⁹

That small drop reflected Moody’s downgrade of selected tranches in one selected deal issued by one selected mortgage originator: Fremont. That’s how skittish the subprime market had become. Then, in December, the same index fell another 3% after Ownit Mortgage Solutions and Sebring Capital, two mortgage companies that had been well-known names during the boom, ceased operations. Senior risk

¹¹¹⁹ Nomura Fixed Income Research, *CDO/CDS Update 12/18/06*. The figures refer to the BBB- index of the ABX.HE 06-2, which is a derivative referencing subprime mortgage-backed securities issued in the six months leading up to June 2006. Launched by Markit in January 2006, each ABX index references 20 RMBS. Each index vintage consists of five individual subindices, each referencing exposures to the same 20 underlying subprime mortgage securitizations at different rating levels: AAA, AA, A, BBB, BBB-. Therefore, each ABX index reflects the trading price of credit default swaps on RMBS within a certain rating level for a 6-month vintage.

officers of the five largest investment banks told the SEC that they expected to see further failures and consolidation in the subprime mortgage sector in 2007. “[T]here is broad recognition that with the refinancing and real estate booms over, the business model of many of the smaller subprime originators is no longer viable,” SEC analysts informed Deputy Director Erik Sirri in a January 4, 2007 email.¹¹²⁰

Soon, the evidence was pouring in, with more of the mortgage companies that had pioneered subprime lending – some of the largest in the nation – reporting alarming losses, then failing. In January, Mortgage Lenders Network announced it had stopped funding mortgages and accepting new applications. In February, New Century reported bigger-than-expected mortgage credit losses and HSBC, the largest subprime lender in the U.S., announced a \$1.4 billion quarterly provision for losses. In March, Fremont stopped originating subprime loans after suffering losses and receiving a cease and desist order from the FDIC. In April, New Century filed for bankruptcy.

These institutions had relied for their operating cash on short-term funding through commercial paper, bank-provided lines of credit, and the “repurchase agreement” (repo) market. But commercial paper buyers and banks became unwilling to provide this cash in 2007, and the repo market became more demanding about the quality of collateral. While the housing market was heating up over the preceding years, repo lenders had been willing to accept some amount of “mortgage risk” in their collateral; by early 2007, they had extended billions of dollars of repo loans backed by subprime and Alt-A mortgage securities. But now, as the news worsened, these repo lenders would become less and less willing to accept this “nontraditional” collateral. They also insisted on shorter and shorter maturities, increasingly just one day – an inherently destabilizing factor in itself, but indicative of the lenders’ increasing and understandable lack of confidence.

¹¹²⁰ SEC, *Risk Management Reviews of Consolidated Supervised Entities*, memo to Erik Sirri and others, January 4, 2007. SEC_TM_FCIC_002442.

In the first months of 2007, the investment banks took measures to reduce their subprime exposures. Goldman Sachs was the earliest to move; regulators later highlighted that decision as differentiating Goldman from its peers.¹¹²¹ So did the some commercial banks and thrifts, many of whom were now recording substantial losses in their subprime lending business. Some institutions, including Citigroup and Merrill Lynch, reduced exposure in some areas but increased it in others. In short, banks that had been busy for nearly four years creating and selling subprime-backed collateralized debt obligations (CDOs) scrambled in about that many months to sell or hedge whatever they had accumulated in their inventories. Goldman Sachs, Citigroup, Merrill Lynch, and others dumped these products into some of the most toxic CDOs ever engineered – and then sometimes struggled to sell them, because some formerly dependable buyers had already seen enough and refused to buy any more mortgage-related products, period. Citigroup and Merrill Lynch, particularly, were forced to retain larger and larger quantities of “super-senior” CDO tranches. The bankers could always hope – and many apparently even believed – that all would turn out well with these super-seniors, which were, in theory, the safest of all those tranches. Traders were referring to the subprime mortgage as *e coli* bacteria that was now infecting markets in bewildering new ways (cite to come).

With buyers and sellers holding very divergent views on the assets’ value, trades become scarce and setting prices in the markets for these subprime-backed instruments became difficult.

Government officials and supervisors certainly knew about the deterioration in the subprime markets but misjudged the risks posed to the financial system. In January, the SEC noted that investment banks had credit exposure to struggling and failing subprime lenders but believed there was no reason for concern. In March, the SEC reported these banks did not expect material losses.¹¹²² The Treasury and the Federal Reserve insisted throughout the spring and early summer that the subprime collapse would have limited

¹¹²¹ Senior Supervisors Group report.

¹¹²²

economic impacts. Testifying on March 28 before the Joint Economic Committee in Congress, Fed Chairman Ben Bernanke said, “At this juncture, however, the impact on the broader economy and financial markets of the problems in the subprime market seems likely to be contained.”¹¹²³ The same day, Treasury Secretary Hank Paulson told a House Appropriations subcommittee that “from the standpoint of the overall economy, my bottom line is we’re watching it closely but it appears to be contained.”¹¹²⁴

The supervisors of the commercial banks continued to focus on the traditional lending activities, missing the risks posed by all the mortgage-related CDOs the largest banks had accumulated. In a confidential survey in April, the Fed noted only limited subprime exposures at the largest commercial banks. The survey, however, identified only loans and mortgage-backed securities on the banks’ balance sheets – and not all of them. The bankers did not mention the tens of billions of dollars in exposures that Citigroup and others had taken in the super-senior tranches of CDOs, because these were “super-safe” investments—even though very few investors would buy them. The banks’ credit derivatives and liquidity commitments maintained *off* the balance sheet were left out of the banks’ response to the Fed’s survey, under the mistaken theory that these assets were effectively quarantined. For example, Citigroup did not include \$25 billion in liquidity puts it had written on commercial paper issued by CDOs, although these puts meant Citigroup had the obligation to purchase the commercial paper if the holders could not find buyers in the rapidly deteriorating market. The survey aside, the regulators generally knew about these exposures but apparently assumed that they would remain safe—that risk had been effectively and efficiently distributed, no matter what happened next.

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Goldman: “Let’s be aggressive distributing things”

In December, following the decline in ABX BBB indices and having experienced 10 consecutive days of trading losses on the mortgage desk, executives at Goldman Sachs, the biggest investment bank, decided to reduce the firm’s risk of loss if the subprime market continued to decline.¹¹²⁵ As it marked down the value of its mortgage-related products to reflect the lower ABX prices, Goldman began posting daily losses for this inventory.¹¹²⁶

On December 13, 2006 Goldman analysts delivered an internal report on “the recent volatility in the subprime mortgage market” to Chief Financial Officer David Viniar and Chief Risk Officer Craig Broderick. The next day, Viniar called a meeting to discuss the situation and everyone decided to get “closer to home”: sell what could be sold as is, repackage and sell everything else.¹¹²⁷ Kevin Gasvoda, the managing director for Goldman’s Fixed Income, Currency, and Commodities business line, instructed the sales team to sell ABS and CDO positions even if they had to take a loss: “Pls refocus on retained new issue bond positions and move them out. There will be big opportunities the next several months and we don’t want to be hamstrung based on old inventory. Refocus efforts and move stuff out even if you have to take a small loss.” At the same time, Goldman also wanted to take advantage of good opportunities, as xx said “keep powder dry and look around the market hard.”¹¹²⁸ In a December 15 email, Viniar described the new strategy to Tom Montag, the co-head of global securities: “On ABX, the position is reasonably sensible but is just too big. Might have to spend a little to size it appropriately. On everything

¹¹²⁵ See April 27, 2010 Testimony of David Viniar to the Senate Permanent Subcommittee on Investigations, at 3-4.

¹¹²⁶ See April 27, 2010 Testimony of David Viniar to the Senate Permanent Subcommittee on Investigations, at 3-4.

¹¹²⁷ See April 27, 2010 Testimony of David Viniar to the Senate Permanent Subcommittee on Investigations, at 4.

¹¹²⁸ In a prior email in the same conversation, Goldman mortgage sales chief Dan Sparks had described a December 14 meeting in which executives discussed six types of subprime exposure: (1) credit derivatives, (2) loans on Goldman’s balance sheet, (3) residual positions from MBS created by Goldman, (4) MBS and other securities held in the “warehouse” with the intention of putting them into future CDOs, (5) early payment defaults on subprime loans, and (6) loans held in the “loan warehouse” with the intention of putting them into future MBS. Sparks said the group agreed to reduce exposures, carefully track market prices of securities held by Goldman, and “be ready for the good opportunities that are coming.”

else my basic message was let's be aggressive distributing things because there will be very good opportunities as the market goes into what is likely to be even greater distress and we want to be in position to take advantage of them.”¹¹²⁹

Subsequent emails suggest that the “everything else” meant mortgage-related assets. On December 20, in an internal email with broad distribution, Goldman’s Stacy Bash-Polley [title tk] noted that the firm, unlike some of the others, had been able to find buyers for the “super-senior” and “equity” tranches of CDOs, but the “mezzanine” tranches – those that had earned the lowest levels within the rating agencies’ investment grades – remained the biggest challenge. The “best target,” she said, would be to put them in other CDOs: “We have been thinking collectively as a group about how to help move some of the risk. While we have made great progress moving the tail risks-ssr and equity- we think it is critical to focus on the mezz risk that has been built up over the past few months... Given some of the feedback we have received so far [from investors,] it seems that cdo’s maybe the best target for moving some of this risk but clearly in limited size (and timing right now not ideal).”

It was getting harder and harder to find clients interested in buying these increasingly toxic assets. Back in October, Goldman Sachs traders had noted that some investors were “too smart to buy this kind of junk” and complained that they were being asked to “distribute junk nobody was dumb enough to take the first time around.” Two months later, in a December 28 email discussing a list of customers to target for the year, Goldman’s Fabrice Tourre [title tk] said, “[F]ocus efforts on buy and hold rating-based buyers rather than sophisticated HFs that will be on same side of trade as GS.” HFs are hedge funds, and the “same of side of trade” as Goldman was the selling or shorting side—meaning the side that expected the mortgage market to continue to decline. In January, Dan Sparks, the head of Goldman’s Mortgage department, extolled Goldman’s success in dumping their toxic inventory, writing that the team had “structured like mad and traveled the world, and worked their tails off to make some lemonade from some big old

¹¹²⁹ Permanent Subcommittee on Investigations, Exhibit 3.

lemons.” Toure acknowledged that there was “more and more leverage in system,” and that he was “standing in middle of complex, highly levered, exotic trades he created w/o understanding the implications of the monstrosities.”

On February 11, Goldman CEO Lloyd Blankfein questioned co-head of Global Securities Tom Montag about the \$20 million in losses incurred on residual positions from old deals and asked, “Could/should we have cleaned up these books before and are we doing enough right now to sell off cats and dogs in other books throughout the division?”

The numbers suggest that the answer was yes. Even given a \$20 million write-off and billions in subprime exposure still retained, Goldman was doing just fine. In the three months through February, 2007, its mortgage business earned \$226 million, a record for that unit (but only ??% of Goldman’s total revenues); the mortgage revenues were driven primarily by short positions on credit default swaps, including a \$10 billion short position on the telltale ABX BBB Index, whose drop the previous November had been the red flag that got Goldman’s attention.

In the ensuing months, Goldman reduced mortgage risk in several ways while continuing to create and sell mortgage-related products to its clients. From December through xx of 2007, it created and sold \$xx billion in CDOs, using them to unload much of its own remaining inventory of other CDO securities – the toxic ones – and mortgage-backed securities. Goldman also produced \$xx billion worth of synthetic CDOs for its clients. [will reference the Timberwolf deal, will put these numbers in the context of how many cash and synthetic deals were getting done by all institutions in the market]

The firms took short positions worth \$xx billion on some of these cash and synthetic securities using credit default swaps; it also took short positions on the ABX indices and on some of the financial firms with whom it did business. And it “marked” or valued mortgage-related securities at prices that were significantly lower than other companies.

Everyone at Goldman understood that the \$226 million profit for the mortgage business was not the whole story. The daily mortgage “value-at-risk” measure, or VaR, which tracks potential losses a firm would experience if the market moved unexpectedly, increased in the three months through February. According to SEC reports, by February Goldman’s *company-wide* VaR reached an all-time high.¹¹³⁰ The dominant driver of the increase in VaR was the one-sided bet on the mortgage market continuing to decline. Preferring to be risk-neutral, between March and May, the mortgage-securities desk reduced its short position on the ABX Index; between June and August, it again reversed course, increasing its short position by purchasing protection on mortgage-related assets.

Like every market participant, Goldman “marked” its securities – that is, put a value on them for the record – based in part on surveys of how other institutions dealing in these securities valued the assets, or dealers’ marks, and actual trades in the marketplace. As this crisis unfolded, Goldman consistently set its marks on the questionable mortgage-related investments at significantly lower levels than other companies’ valuations. It knew that those lower marks would adversely affect those other companies, who might be its own clients. Trading an asset with Goldman at the lower mark would require the company to mark all of its similar assets at those same lower marks. And, Goldman’s marks would get picked up by its competitors in dealer surveys. As a result, Goldman’s marks could indirectly cause the other companies to record “mark-to-market” losses, meaning a lower reported value of their assets.

The markdowns of these assets could also require companies to reduce their repo borrowings or post additional collateral to counterparties to whom they had sold credit default swap protection. In a May 11 email, Craig Broderick, Goldman’s Chief Risk Officer, responsible for tracking how much of the company’s money was at risk, noted to colleagues that the mortgage group was “in the process of considering making significant downward adjustments to the marks on their mortgage portfolio esp CDOs and CDO squared. This will potentially have a big [profit and loss] impact on us, but also to our clients

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due to the marks and associated margin calls on repos, derivatives, and other products. We need to survey our clients and take a shot at determining the most vulnerable clients, knock on implications, etc. This is getting lots of 30th floor attention right now.”¹¹³¹

Broderick was right about the impact of its marks on clients and counterparties, including American Insurance Group (AIG). But the first significant dispute about these marks began in May 2007, and concerned two high-flying, mortgage-focused hedge funds run by Bear Stearns Asset Management (BSAM).

Bear Stearns’s hedge funds: “Looks pretty damn ugly”

Bear Stearns started its asset management business in the 1990s. This was basic strategy for the industry. Every investment bank and most of the large commercial banks – Citi, Bank of America, JP Morgan – had an asset management business within their massive structures. Asset management brought in steady fee income, allowed the banks to offer new products to customers, and required little capital.

In 2003, Ralph Cioffi, a former Bear Stearns fixed-income salesman, and Matthew Tannin, who had structured CDOs at the firm, suggested to BSAM’s management the creation of a hedge fund focused on various securitization products. This fund, called the High-Grade Structured Credit Strategies Fund, would invest in low-risk, high-grade debt securities, such as AAA- and AA- rated tranches of collateralized debt obligations (CDO), funded by low-cost, short-term repo money. In 2003, this was a promising market with seemingly manageable risks. The fund could plausibly seek to provide an annual return to investors of [??%.] Within three years, High-Grade would become BSAM’s largest hedge fund, with more than \$1.5 billion provided by wealthy individuals and institutional investors, including employee benefit plans and corporations. Although Bear Stearns owned BSAM and initially capitalized it with \$20 billion, Bear’s management exercised little supervision over its business.

¹¹³¹ PSI, Exhibit 84.

By January 2007, internal BSAM risk-exposure reports showed the fund's collateral to be approximately 60% subprime mortgage-backed CDOs. Like many hedge funds, High Grade was leveraged. For every dollar obtained from investors, the fund borrowed between eight and 10 more. Such leveraging can significantly increase profits when the investment rises, but losses are that much steeper, too. The fund had ten large repo counterparties, including Barclays, Goldman Sachs, Lehman Brothers, Merrill Lynch, Citigroup, Deutsche Bank, and JP Morgan. It was therefore highly dependent on the largest financial institutions, which provided both financing through the repo market *and* most of the mortgage-related CDOs and other securities that the hedge fund purchased.

That is, the banks loaned High-Grade the money to purchase the securities that these same banks were selling.¹¹³² This financing arrangement made Ralph Cioffi “a very popular fellow with most Wall Street firms,”¹¹³³ in the words of Thomas Marano, head of Bear Stearns' mortgage trading desk. Cioffi was also very popular with his supervisors, because High-Grade generated profits of 9.46% in 2005 and 10.68% in 2006.¹¹³⁴ Cioffi was rewarded with annual compensation worth \$xx million dollars from 20xx to 20xx. Tannin, his lead manager, was awarded multi-million dollar compensation of \$xx over the same time period. Both managers invested some of their own money in the funds, and used this as a selling point to others.¹¹³⁵

In August 2006, encouraged by Cioffi's success with High-Grade, BSAM started a second, more aggressive and higher-risk fund, the High-Grade Structured Credit Strategies Enhanced Leverage Fund.

¹¹³² FCIC Interview with Alan Schwartz.

¹¹³³ FCIC Interview with Thomas Marano.

¹¹³⁴ BSC-FCIC 00000690.

¹¹³⁵ SEC Complaint at 5.

The Enhanced fund would be leveraged at 12:1, with returns projected to be commensurately high.¹¹³⁶ But the timing for the Enhanced fund was bad. Shortly after the fund opened for business, the ABX BBB-index started to falter, falling 4% in the last three months of 2006; the index then plunged 8% in January and 25% in February. The market's confidence followed suit. Investors began to bail out of their investments. Cioffi and Tannin stepped up their marketing efforts. On March 12, they conducted a conference call to assure investors that both hedge funds were in good shape, and they continued to use the investment of their own money as evidence of their confidence. Tannin even claimed he was *increasing* his investment, although he never did. Two weeks after the conference call, Cioffi redeemed \$2 million of his own investment in his funds, according to an SEC complaint.¹¹³⁷

Despite avowals of confidence, Cioffi and Tannin were in full red-alert mode. They tried to sell the toxic ABS CDO securities about which everyone was increasingly concerned. Of course they had little success selling them directly on the market, but there was another way. On May 24, BSAM, acting as a CDO manager, launched a \$4 billion "CDO-squared" deal comprised mostly of ABS CDO assets purchased from the High-Grade and Enhanced funds.¹¹³⁸ Super-senior tranches, theoretically the safest of the lot, worth \$3.2 billion were sold as commercial paper to short-term investors such as money market mutual funds. Critically, Bank of America guaranteed those deals with a traditional liquidity put—for a fee, of course. Later in the year, when commercial paper investors refused to roll over this particular paper, Bank of America had to step in and ultimately lost \$xx billion on the deal. [We are discussing this with BSAM and BofA in the next two weeks.]

¹¹³⁶ SEC Complaint; *see also* Merrill Lynch analysis, "Bear Stearns Asset Mgm't: What Went Wrong." BAC-FCIC-000054648. Virtually every Bear Stearns executive familiar with the Bear Stearns Hedge Funds agreed that the leverage for the High Grade Fund was in the 8 to 10 times range; BSC-FCIC 00000690.

¹¹³⁷ SEC complaint.

¹¹³⁸ The CDO was called High Grade Structured Credit CDO 2007-1. Underwritten by Credit Suisse, it was the largest ABS CDO issued in 2007.

“19% is doomsday”

Nearly all hedge funds provide their investors with market value reports at least monthly based on computed “mark-to-market” prices for the fund’s various investments. Industry standards generally called for valuing readily traded assets, such as stocks, at the current trading price, while assets in very slow markets were marked by surveying price quotes from other dealers, factoring in other pricing information, and arriving at a final net asset value. And in the market for mortgage-backed investments, this was a supremely important exercise, because the market values were used to inform investors and to calculate their total fund value for internal risk management purposes, and because these assets were held as collateral for repo and other lenders. Crucially, if the value of a hedge fund’s portfolio declined, repo and other lenders might require more collateral.

Dealer marks were slow to keep up with changes in the ABX indices. While the ABX BBB- index actually recovered some of the earlier losses in March, rebounding 6%, dealer marks finally started to reflect the lower values. On Thursday, April 19, in preparation for an investor call the following week, BSAM analysts informed Cioffi and Tannin that, in their view, the value of the funds’ portfolios had declined sharply. On Sunday, Tannin sent an email from his personal account to Cioffi’s personal email account arguing both hedge funds should be closed and liquidated: “Looks pretty damn ugly.... If we believe the runs [the analyst] has been doing are ANYWHERE CLOSE to accurate, I think we should close the Funds now.... [I]f [the runs] are correct then the entire sub-prime market is toast...” But by the following Wednesday, Cioffi and Tannin were back on the same page. At the beginning of the conference call, Tannin told investors, “[T]he key sort of big picture point for us at this point is our confidence that the structured credit market and the sub-prime market in particular, has not systemically broken down... we’re very comfortable with exactly where we are.” Cioffi also assured investors that the funds would likely finish the year with positive returns. In April, the two hedge funds had attracted \$23 million in new investor funds, but others continued to pull money out. In April alone, the funds received more than [\$?] in redemption requests, including Cioffi’s own \$2 million withdrawal.

On April 7, 2007, according to Rich Marin, BSAM's former Chairman and CEO, BSAM received marks on its mortgage assets from Goldman, Citigroup and Lehman that were all in the 96 cents to 98 cents on the dollar range, suggesting that the value of these assets had only declined slightly. Also in April, JPMorgan told Bear Stearns' co-president Alan Schwartz that the bank would be asking the BSAM hedge funds to post additional collateral to support its repo borrowing.¹¹³⁹

In May, the situation took a turn for the worse. Lehman and Citigroup provided marks in April that would have—on their own—suggested a 6.75% drop in the value of the fund. Then Goldman Sachs sent marks that were 50 cents to 60 cents on the dollar – a stunning development. According to Marin, averaging these Goldman marks with the other dealers' marks would yield a startling 19% drop in the Enhanced Leverage Fund's value. Goldman disputes Marin's account and told the FCIC its marks covered only about \$10 million of positions, so they could not have caused a 19% drop in the Enhanced Leverage Fund's value. [staff is still collecting information]

On May 13, Cioffi admitted to Tannin it was "somewhat certain" that the Enhanced Leverage Fund would have to be liquidated if investors continued pulling out their money at the current rate. On May 31, Cioffi argued to BSAM's pricing committee that Goldman's marks were out of line with the other dealer quotes and should be tossed out. Committee members challenged him, suggesting that his only reason for dropping Goldman marks from the calculation was his fear that the lower numbers would tank the fund. After the meeting, Cioffi emailed one committee member: "There is no market . . . its [sic] all academic anyway -19% [value] is doomsday."¹¹⁴⁰

¹¹³⁹ Notably, as one of only two tri-party repo clearing banks, JP Morgan had more information about BSAM's lending obligations than most other market participants or regulators did. As discussed in greater detail below, this superior market knowledge later put JP Morgan in a position to step in and purchase Bear Stearns virtually overnight. (See Daryll Hendricks MFR).

¹¹⁴⁰

The pricing committee over-ruled Cioffi, Goldman's marks stayed in the mix, and news of the 19% drop in the end-of-April value for the Enhanced Leverage Fund had the predictable impact on investors. Their requests for redemptions increased. And margin calls increased from the fund's repo lenders, including JP Morgan, which had been the first to call the previous month.

“Canary in the mine shaft”

When JP Morgan called Bear co-president Alan Schwartz in April with its margin call, Schwartz was concerned that neither High-Grade nor Enhanced had sufficient cash on hand to post the requested collateral. In early June, he met with the 10 repo counterparties to the BSAM funds to negotiate a grace period to allow BSAM to raise capital.¹¹⁴¹ As noted, some of these very same firms had sold the funds some of the same CDOs and other securities that were turning out to be such bad assets.¹¹⁴² Now all 10 refused Schwartz's appeal and instead increased their margin calls.¹¹⁴³ As a direct result, the two funds had to sell bonds at distressed prices in order to raise cash.¹¹⁴⁴ Selling the bonds led to a complete loss of confidence by the investors, whose requests for redemptions accelerated.¹¹⁴⁵

On June 7, BSAM threw the gate, suspending investor redemptions from the High-Grade and Enhanced funds – a drastic step. According to Bear Stearns' then co-president Warren Spector, the idea was to instill confidence in the funds' repo lenders and avoid a run that could leave the funds bankrupt.¹¹⁴⁶ The strategy backfired. Shortly after the suspension, Merrill Lynch seized more than \$850 million in collateral

¹¹⁴¹ *Barclays Bank Plc v. Bear Stearns Asset Management Inc.*, 07-11400, page 42, paragraph 175.

¹¹⁴² *Barclays Bank Plc v. Bear Stearns Asset Management Inc.*, 07-11400, page 42, paragraph 175.

¹¹⁴³ FCIC Interview with Alan Schwartz; *Barclays Bank Plc v. Bear Stearns Asset Management Inc.*, 07-11400, page 54, paragraphs 227 – 229.

¹¹⁴⁴ FCIC Interview with Alan Schwartz; *Barclays Bank Plc v. Bear Stearns Asset Management Inc.*, 07-11400, page 54, paragraphs 227 – 229.

¹¹⁴⁵ See Upton interview & Schwartz interview.

¹¹⁴⁶ FCIC Interview with Warren Spector.

for its outstanding repo loans. Auctioning this seized collateral, Merrill was only able to sell certain portions – and at deep discounts to face value.¹¹⁴⁷ [requesting further information on this sale.] Other repo lenders were increasing their collateral requirements or refusing to roll over their loans.¹¹⁴⁸ This run on both hedge funds left BSAM with limited options. It also left Bear Stearns itself with limited options. Although it owned the asset management business, its equity positions in BSAM’s two failed hedge funds were relatively small. Initially, Bear Stearns had invested \$20 million total, and in June Warren Spector approved an additional \$25 million investment into High-Grade without review by Bear’s CEO or Board of Directors—to CEO Cayne’s subsequent alarm when he learned about it.

Bear Stearns had no legal obligation to rescue either the funds or their repo lenders. However, those lenders were the same large investment banks that Bear Stearns dealt with on a daily basis.¹¹⁴⁹ Moreover, any failure of entities related in any way to Bear Stearns could and ultimately did raise investors’ concerns about the firm itself.

Thomas Marano, head of its mortgage trading desk, recalled to FCIC staff that the constant barrage of margin calls had created chaos. In mid-June, Bear Stearns dispatched him to engineer a solution with BSAM CEO Richard Marin.¹¹⁵⁰ Marano now worked to understand the basics of the portfolio, including

¹¹⁴⁷ Merrill Lynch analysis, “Bear Stearns Asset Mgm’t: What Went Wrong.” BAC-FCIC-000054648; FCIC Interview with Paul Friedman. While most of the Bear Stearns executives interviewed by FCIC staff did not recall the percentage discount at which the collateral seized by Merrill Lynch was auctioned, they did believe that it was material. (Collecting more info on the haircut)

¹¹⁴⁸ “While the High Grade fund was not in default/had not missed any margin calls, creditors were cutting off its liquidity by increasing haircuts or not rolling repo facilities.” SEC_TM_FCIC_1053310; FCIC Interview with Robert Upton.

¹¹⁴⁹ FCIC Interview with Robert Upton; FCIC Interview with Thomas Marano; FCIC Interview with Warren Spector.

¹¹⁵⁰ FCIC Interview with Warren Spector.

what could be done in a worst-case scenario in which significant amounts of assets had to be sold.¹¹⁵¹

Marano and Marin's conclusion: High-Grade still had positive value, but Enhanced Leverage did not.

Based on that analysis, Bear Stearns committed up to \$3.2 billion – and ultimately loaned \$1.6 billion – to take-out the High Grade Fund repo lenders and become the sole repo lender to its own fund.¹¹⁵²

Enhanced Leverage was on its own. Bear Stearns executives did not universally support providing financing to the High Grade fund. CEO Jimmy Cayne and Earl Hedin (former senior managing director of Bear Stearns and BSAM) were opposed, because they did not want to increase shareholder liability. However, some of Bear Stearns's other executives did not expect to lose money on the bailout.¹¹⁵³ They were wrong, and Cayne and Hedin were right. By July, the two hedge funds had shrunk almost to nothing: High-Grade Fund was down 90%; Enhanced Leverage Fund, 99%. On July 31, both filed for bankruptcy.¹¹⁵⁴ Bear Stearns seized the collateral for its loan to the High Grade Fund and moved it onto its own books, where it remained until a substantial portion was written off in November.¹¹⁵⁵ [We have sent a request to BSAM's current owner, JPMC, for details on the hedge funds' holdings and redemption requests by investors.]

Looking back, Marano told the FCIC, "We caught a lot of flak for allowing the funds to fail, but we had no option."¹¹⁵⁶ In an internal email in June, Bill Jamison of Federated Investors, one of the largest mutual fund companies, referred to the Bear Stearns hedge funds as the "canary in the mine shaft" and predicted

¹¹⁵¹ FCIC Interview with Thomas Marano. 4/19/2010.

¹¹⁵² Email from Thomas Marano to Warren Spector. BSC-FCIC-e00118978.

¹¹⁵³ FCIC Interview with Alan Schwartz.

¹¹⁵⁴ *In re Bear Stearns High-Grade Structured Credit Strategies Master Fund, Ltd.* (US Bankruptcy Court SDNY, 2007).

¹¹⁵⁵ FCIC Interview with Samuel Molinaro; FCIC Interview with Alan Schwartz.

¹¹⁵⁶ FCIC Interview with Tom Marano, 4/19/2010.

more market turmoil.¹¹⁵⁷ [other counterparties will be added] He was right. As the two funds were collapsing, short-term secured lending tightened across the board. Many repo lenders sharpened their focus on the valuation of any collateral with potential subprime exposures, and on the relative exposures of different financial institutions. They required increased margins on loans to certain institutions with certain types of collateral; they often required Treasury securities; in many cases, they demanded shorter lending terms.¹¹⁵⁸ Clearly, the AAA-rated mortgage-backed securities and ABS CDOs were not really AAA anymore. They were not the “super-safe” investments that investors – and some dealers – had only recently believed.

On August xx, Jimmy Cayne called Bear Stearns co-president Warren Spector into his office and asked him to resign.

Rating agencies are told: “Investors Don’t Want Rating Downgrades”

While Bear Stearns Asset Management was wrestling with its two ailing flagship hedge funds, the three major credit rating agencies finally joined investors in admitting that subprime mortgage-backed securities would not perform as advertised. On July 10, 2007, they issued comprehensive rating downgrades and credit watch warnings on an array of residential mortgage-backed securities (RMBS). These rating announcements foreshadowed the actual losses to come.

The raw details provided in the press releases reveal some of the challenges the agencies faced in dealing with these securities. S&P announced that it had placed 612 RMBS tranches backed by US subprime collateral on negative “CreditWatch,” affecting \$7.3 billion of securities. (This designation often means that a given bond will be downgraded within days. Such was the case here.) S&P warned that 60 ABS CDOs, or about 13.5% of the outstanding US cash flow and hybrid ABS CDO transactions that they had

¹¹⁵⁷ Internal email from Bill Jamison of Federated (June 21, 2007). FEDFCIC 0000131.

¹¹⁵⁸ JPM Morgan, “Worldwide Securities Services Risk Review”, Directors Risk Policy Committee (September 18, 2007). JPM-FCIC 00000213; FCIC Interview with Michael Alix.

reviewed, had some exposure to the 612 subprime RMBS tranches placed on CreditWatch. S&P promised to review every deal in its ratings database for adverse effects, with the likelihood that eight to 10 of the 60 cash CDOs and 100% of synthetic CDO transactions that they had already analyzed would be downgraded. In the afternoon, Moody's downgraded 399 RMBS tranches issued in 2006 backed by US subprime collateral and put an additional 32 tranches on watch. These Moody's downgrades affected approximately \$5.2 billion in securities. The following day, Moody's placed 184 tranches of CDOs backed primarily by RMBS, with original face value of approximately \$5 billion, on watch for possible downgrade. Two days after its original announcement, S&P downgraded 498 of the 612 tranches it had placed on negative CreditWatch. S&P stated that its actions were based upon "poor collateral performance, our expectation of increasing losses on the underlying collateral pools.... The levels of loss continue to exceed historical precedents and our initial expectations." Fitch Ratings, the smallest of the three major credit rating agencies, announced similar downgrades.

These unanimous opinions and actions by the rating agencies were very sudden and very meaningful for all who understood the implications. While the specific securities downgraded – the riskiest tranches of the RMBS – were only a small fraction of the RMBS universe (less than 2% of RMBS issued in 2006^{1159,1160}), investors knew that more downgrades on CDOs and less risky tranches might come. Many investors were also critical of the rating agencies, lambasting them for their belated reaction to the troubles in the subprime market. By July 2007, housing prices had already fallen about 4% nationally from their peak at the beginning of 2006.

On the July 10 conference call with S&P, Steve Eisman of FrontPoint Partners, a hedge fund, harangued Tom Warrack, managing director of S&P's RMBS group. This is the transcript of one exchange:

¹¹⁵⁹ S&P July 10, 2007, teleconference transcript, p. 2; Moody's July 12, 2007, teleconference presentation, p. 12.

¹¹⁶⁰ First-lien RMBS were mortgage-back bonds contains home mortgage whereby the bank had the first lien on the property. Baa or below securities were carved out of the RMBS to provide investors with differing levels of risk and return.

Eisman: *I'd like to know "why now?" I mean, the news has been out on subprime now for many, many months. The delinquencies have been a disaster now for many, many months. (Your) ratings have been called into question now for many, many months. I'd like to understand why you're making this move today when you – and why didn't you do this many, many months ago.*

Warrack: *Yes, it's a good question. It takes a period of time for these deals to begin to show their true performance. We have been surveying these transactions actively on a regular basis beginning in 2005 and 2006. We believe that the performance that we've been able to observe now warrants action. And that--*

Eisman: *If I may press that for a moment, I mean, I track this market every single day. The performance has been a disaster now for several months. I mean, it can't be that all of a sudden the performance has reached a level where you've woken up. I'd like to understand why now when you could've made this move many, many months ago. I mean, the paper just deteriorates every single month like clockwork. I mean, you need to have a better answer than the one you just gave.*

Warrick: *So our answer remains that we took action as soon as possible given the information at hand.*

The ratings agencies' downgrades, in tandem with the problems at Bear Stearns's hedge funds, had the predictable chilling effect on the markets. The ABX BBB- index fell another 33% in July, confirming and guaranteeing even more problems for holders of mortgage securities. In the same inexorable, vicious-cycle dynamic that had taken down the Bear Stearns funds the previous month, repo lenders increasingly required other borrowers, including many hedge funds, who had put up mortgage-backed securities as collateral, to put up more, because their value was no longer clear – or if it was clear, it was depressed. Many of these borrowers were forced to sell assets to meet these margin calls, and each sale had the potential to further depress prices. If at all possible, the borrowers sold other assets for which prices were readily available, pushing prices downward in those other markets. [will add quotes from interviews]

AIG: “We’re f***ed, basically”

Of all the possible losers in the rout that was looming by the summer of 2007, American Insurance Group should have been the most concerned. By that time, after several years of aggressive growth, AIG’s Financial Products subsidiary had written \$78 billion in over-the-counter credit default swap (CDS) protection on super-senior tranches of multi-sector ABS CDOs. Notwithstanding the term “multi-sector,” the subsidiary wrote increasing volumes of CDS contracts on CDOs backed largely by U.S. subprime residential mortgages. Although management had taken note of the peaking housing market and made a decision to stop writing CDS on super-senior tranches of subprime CDOs over a year before, in reality it continued to write similar new deals and it did not do anything to reduce or hedge its exposure. On the day that the agencies started to downgrade the securities, AIG had the dubious distinction of holding the largest exposure in the world to the super-senior tranches of subprime CDOs.

In a phone call the next day, July 11, Financial Products executive Andrew Forster told Alan Frost, the executive vice president, that he had to analyze exposures because “every f***ing ... rating agency we’ve spoken to ... [came] out with more downgrades” and that he was even more concerned than before: “About a month ago I was like, you know, suicidal...the problem that we’re going to face is that we’re going to have just enormous downgrades on the stuff we got....Everyone tells me that it’s trading and it’s two points lower and all the rest of it and how come you can’t mark your book. So it’s definitely going to give it renewed focus. I mean we can’t... we have to mark it. It’s, it’s, uh, we’re [UNINTEL] f***ed basically.”

Forster was likely worried most of AIG’ credit default swaps required posting collateral to the purchasers, should the market value of the referenced mortgage-backed securities decline by a certain amount, or if rating agencies downgraded AIG’s long-term debt.¹¹⁶¹ That is, collateral calls could therefore be triggered even if there were no actual cash losses in, for example, the super-senior tranche upon which the

¹¹⁶¹ AIG 2007 Form 10K pg. 164; Memorandum to File From AIG FSD CFO Elias Habayeb at PWC-FCIC000101; GS 00001—GS 00062; AIG-FCIC00384254—AIG-FCIC00384295.

protection had been written.¹¹⁶² Remarkably, top AIG executives including CEO Martin Sullivan, CFO Steven Bensinger, Chief Risk Officer Robert Lewis, Chief Credit Officer Kevin McGinn, and even Financial Services Division CFO Elias Habayeb told FCIC investigators that they did not even know about these terms until the collateral calls started rolling in during July.¹¹⁶³ Regulators at the Office of Thrift Supervision, who supervised AIG on a consolidated basis, didn't know either. Alan Frost *did* know about the terms and said they were standard for the industry. He said that other executives at AIG FP, including Joe Cassano, the Financial Products division CEO, also knew about these terms.

And the counterparties knew, of course. On the evening of July 26, Goldman Sachs, which held the largest portion – \$21 billion – of AIG's total of \$78 billion super-senior credit default swaps, brought news of the first collateral call in the form of an email from Goldman salesman Andrew Davilman to Frost:

Davilman: *Sorry to bother you on vacation. Margin call coming your way. Want to give you a heads up.*

Frost, eighteen minutes later: *On what?*

Davilman, one minute later: *20bb of supersenior*

The next day, Goldman made the collateral call official by forwarding an invoice requesting \$1.8 billion.¹¹⁶⁴ On the same day, Goldman purchased \$100 million of protection– in the form of credit default swaps – against the possibility AIG may default on its obligations.

¹¹⁶² CDS transactions between AIG and Goldman – which accounted for approximately 27% of AIG's multi-sector CDS portfolio - were governed by an International Swap Dealers Association (ISDA) Master Agreement (“Master Agreement”) and an ISDA Credit Support Annex (“CSA”), which the parties executed on 8/19/03. The Master Agreement included general terms, obligations and definitions for swaps executed between the parties and the CSA required the parties to post collateral under certain circumstances short of a credit event. Upon agreed trigger events and/or on agreed valuation dates, collateral payment obligations, or “credit support obligations,” are determined by calculating the current “exposure” value of the swap (*i.e.*, the present value of the transaction if it were terminated).

¹¹⁶³

¹¹⁶⁴ AIG-FCIC00370077 (7/26/07 email); AIG-SEC2035262 (8/2/07 email); Get collateral invoice from Goldman.

The \$1.8 billion invoice cast a pall over Frost's vacation. He was stunned. He assured Davilman and Dan Sparks, the head of Goldman's mortgage trading desk, that there was no need for a collateral demand. AIG's models showed there would no defaults on any of the bond payments AIG's swaps insured.¹¹⁶⁵ The Goldman executives considered those models irrelevant, because the contracts required collateral to be posted in the event of a decline in market value, irrespective of any long-term cash losses.¹¹⁶⁶ Goldman estimated that the bonds had declined in market value by xx%.

So, first Bear Stearns' hedge funds and now AIG were getting hit by Goldman's aggressive marks on mortgage-backed securities. Like Ralph Cioffi and his colleagues at the Bear Stearns funds, Frost and his colleagues at AIG now disputed Goldman's marks. On July 30, Andrew Forster told another AIG trader that "[AIG] would be in fine shape if Goldman wasn't hanging its head out there..." The margin call was "something that hit out of the blue and a f***ing number that's well bigger than we ever planned for." Forster said that Goldman's prices were "ridiculous," that some AA paper was trading at much higher marks. He said that relative to an initial value of 100 cents on the dollar the marks "could be anything from 80 to sort of, you know, 95."

In testimony to the FCIC, Goldman said it had stood ready to sell mortgage-backed securities at its own marks. AIG's Forster testified that he would not buy the bonds at even 90 cents on the dollar because the bonds might decline further in value. Another reason not to buy the bonds at any such price: AIG would be required to value its own portfolio of similar assets at the same price. Forster said, "in the current environment I still wouldn't buy them... because they could probably go low... we can't mark any of our positions, and obviously that's what saves us having this enormous mark to market. If we start buying the

¹¹⁶⁵ Sparks MFR at ____.

¹¹⁶⁶ Dan Sparks interview.

physical bonds back then any accountant is going to turn around and say, well, John, you know you traded at 90, you must be able to mark your bonds then.”¹¹⁶⁷

At first, AIG refused to post the cash collateral to Goldman Sachs. Within a week, Goldman reduced its demand by one-third down, from \$1.8 billion to \$1.2 billion.¹¹⁶⁸ Thinking back on the initial demand, Cassano recalled that Goldman Co-CEO Michael Sherwood told him that Goldman “didn’t cover ourselves in glory” during this period.¹¹⁶⁹ AIG still disputed Goldman’s marks and balked at posting the money.¹¹⁷⁰ Tough negotiations followed. According to an email to Forster from his colleague Tom Athan, describing a conference call with Goldman executives on August 1, the Goldman executives said that “this has gone to the ‘highest levels’ at GS and they feel that the [contract] has to work or they cannot do synthetic trades anymore across the firm in these types of instruments.”¹¹⁷¹ Many times, Athan added, the Goldman executives called the collateral call a “test case.”

Goldman Sachs and AIG would continue to dispute Goldman’s marks, even as AIG would continue to post collateral that would fall short of Goldman’s demands and even as Goldman would continue to purchase CDS contracts against the possibility of AIG’s default. Over the next 14 months, more such “test cases” resulting in collateral calls would cost AIG tens of billions of dollars and help to lead to one of the biggest government bailouts in American history.

ue to subprime defaults, if any at all. Panic was spreading.

¹¹⁶⁷ AIG-SEC 1361819-20. Emphasis added.

¹¹⁶⁸ AIG-SEC2035262 (8/2/07 email); AIG-SEC1913380 (8/8/07 email).

¹¹⁶⁹ MFR of Joseph Cassano (June 25, 2010) at 3.

¹¹⁷⁰ AIG-SEC2035262 (8/2/07 email); AIG-SEC1913380 (8/8/07 email).

¹¹⁷¹ AIG-SEC9990006.

CONFIDENTIAL

Part III, Chapter 2: Investors “run” asset-backed commercial paper

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Throughout the summer of 2007, the bills for conference calls soared on Wall Street and throughout the financial industry. Provocative emails were exchanged. Despite Secretary Paulson’s reassurance in a July 26 interview with Bloomberg saying, “I don’t think it [the subprime mess] poses any threat to the overall economy,” research departments and unnerved investors participating in any aspect of the markets looked under every rock for hidden or latent subprime exposure. In late July, they found it in the market for asset-backed commercial paper (ABCP), a crucial but usually boring backwater of the financial sector.

As we have seen, this kind of commercial paper had evolved rapidly from the 1980s, when it allowed companies to post high-quality, short-term assets such as receivables in return for quick cash infusions. The leading lenders of this cash, notably the money market mutual funds, were, for the most part, highly risk-averse and short-term oriented by nature. But the market quickly evolved and these funds started accepting notes backed by longer-term assets that would prove far less stable than trade receivables. By mid-2007, among these longer-term assets were hundreds of billions of dollars’ worth of mortgage-related

assets. The \$1.2 trillion ABCP market included \$68 billion in paper issued by CDOs; \$104 billion issued by structured investment vehicles, or SIVs; and \$218 billion in single-seller programs, through which many mortgage companies financed their mortgages awaiting securitization. With these and other mechanisms, the asset-backed commercial paper market accommodated many complex financial arrangements that would, in the end, allow relatively small amounts of subprime *e coli* to jeopardize the entire financial system. The rating agencies proved unable to anticipate how these money market structures would perform; when released on the market, all received top investment-grade ratings from S&P and Moody's.

In many cases, the reason they earned those ratings were the contractual "liquidity puts" from commercial banks – insurance, in effect. Financing long-term securities with short-term paper requires frequent refinancing, or rollovers. Simply put, you pay off the debt of the maturing paper with a new loan using new paper. If the money market funds and other investors refuse to roll over the paper when it comes due, the banks backing the liquidity puts could be obliged to buy the paper until it can be rolled over again.

Citigroup and other big banks liked the asset-backed commercial paper market because it provided a relatively cheap way to originate and fund loans for their clients while avoiding the need to hold the loans on their balance sheets. Under regulatory capital rules, regulators generally required banks to hold 8% of on-balance sheet assets as capital—4% in the case of residential mortgage loans—to protect against unexpected losses. The more capital required, the lower the return on capital for shareholders. But when banks created asset-backed commercial paper programs, they put the assets into specially designed, limited-purpose corporations that the accounting rules allowed them to consider "off-balance sheet." The capital charge for these off-balance sheet programs was 0.8% if the bank provided a liquidity put and 0% otherwise. When the mortgage securities market dried up and money market mutual funds became skittish about broad categories of ABCP, these banks were required under these liquidity puts to support the ABCP and bring assets onto their balance sheets after all, leading to tremendous losses.

IKB of Germany: \$20 billion of CDOs financed short-term

The first big casualty of the run on ABCP was a German bank, IKB Deutsche Industriebank AG. Since its foundation in 1924, IKB's business had been lending to mid-size German businesses. In 2001, management decided to diversify and expand into other business lines, at first buying US-structured finance securities backed by credit card receivables, business loans, auto loans, and mortgages, always sticking to those the rating agencies had determined to be investment grade.

In 2002, IKB created a special off-balance-sheet ABCP program, which it called Rhineland, to purchase a portfolio of those securities. By March 31, 2007, IKB held €6.8 billion (\$10.2 billion) worth of these structured finance products on its balance sheet. In comparison, Rhineland owned €12.7 billion (\$20 billion) of assets, 95% of which were CDOs and CLOs. And at least €8 billion (\$12 billion) of that was protected by IKB through liquidity puts. Importantly, at the time, German regulators did not require IKB to hold any capital to offset potential losses from its Rhineland commitments.¹¹⁷² IKB's strategy was known as "securities arbitrage" because it involved financing higher yielding long-term assets with less expensive short-term commercial paper.

Even as late as June, 2007, when so many were bailing out of the market, IKB was planning to *expand* its off-balance sheet holdings in the structured credit products. The German bank was willing to take those exposures by taking "long" positions in mortgage-related derivatives. This rare attitude made this commercial bank quite popular among the investment banks and hedge funds that were desperate to take the "short" side.

When Goldman's Fabrice Tourre was looking for buyers on which to unload new CDOs, his eyes lit on the German bank. In early 2007, Tourre created a synthetic CDO, Abacus 2007-AC1, for which a hedge fund, Paulson & Co., had intentionally picked low-quality assets, according to an SEC case. A Paulson

¹¹⁷² As noted, in the US, there was a minimal capital charge for liquidity puts equal to 10% of the base 8%, or 0.8%. For example, Citigroup would have held \$200 million in capital against potential losses on the \$25 billion in liquidity put exposure that it had accumulated on CDOs it had issued.

employee said bluntly that IKB and other “long” investors were out-gunned. “[T]he market is not pricing the subprime RMBS wipeout scenario. In my opinion this situation is due to the fact that rating agencies, CDO managers and underwriters have all the incentives to keep the game going, while ‘real money’ investors have neither the analytical tools nor the institutional framework to take action before the losses that one could anticipate based [on] the ‘news’ available everywhere are actually realized.”¹¹⁷³

The Abacus deal alone would lose [\$XXX] for IKB.

A number of American investors held Rhineland’s asset-backed commercial paper in mid-2007, including the Montana Board of Investments, the city of Oakland, California, and the Robbinsdale Area School District in suburban Minneapolis. On July 20, IKB reassured these investors that the rating agencies’ recently announced downgrades would have only a limited impact on its business. This reassurance was contradicted [??] days later, when Goldman Sachs, which regularly helped Rhineland raise money in the commercial paper market, asked IKB for detailed information regarding all of its investments. Assessing this portfolio, Goldman needed only [??] days to inform IKB that it would not sell any more of Rhineland’s ABCP to its clients. On Friday, July 27, Deutsche Bank, recognizing that the ABCP markets would soon abandon Rhineland paper and IKB would have to fund the paper itself, cut its derivative trading credit lines to IKB. Deutsche also alerted the German bank regulator to IKB’s critical state. With the regulator’s encouragement, IKB’s largest shareholder, KfW Bankengruppe, snapped into action and announced on July 30 that it would bail out IKB. A few days later, Rhineland was forced to exercise its liquidity puts with IKB. This meant that Rhineland’s commercial paper investors were able to get rid of the paper prior to suffering losses, with KfW instead taking the hit – eventually a 95% expected loss from the Rhineland liquidity puts.

¹¹⁷³ Securities And Exchange Commission (plaintiff) vs. Goldman Sachs & Co. and Fabrice Tourre (defendants) Securities Fraud Complaint, Unites States District Court, Southern District of New York,

Even though global money market investors escaped the IKB episode unscathed, it alerted anyone who might still be unaware of the potential problems with subprime mortgage assets. Before long, short-term, risk-averse investors took losses on their subprime exposures and panic seized the short-term funding markets, even those that were not exposed to risky mortgages. State Street's Steve Meier stated in testimony before the FCIC, "Come August of 2007, there was a recognition, I'd say an acute recognition, that potentially some of the asset-backed commercial paper conduits could have exposure to those areas. As a result, investors in general – without even looking into the underlying assets – decided 'I don't want to be in any asset-backed commercial paper, I don't want to invest in a fund that may have those positions.' " [will add market statistics, and will add additional analysis and reactions by other policy makers and regulators]

At a press roundtable on August 1, Secretary Paulson had an exchange with a reporter suggesting that despite the market turmoil he still thought that the subprime crisis would not threaten the broader economy.

Question: Mr. Secretary, with markets tumbling around the world over the last 24 hours, we're obliged to ask for a comment or observation on what may be going on there. You stated clearly in recent weeks and months that you think the housing market's near a bottom, that the collapse of the sub-prime markets is contained. Yet markets continue to fall, companies report their profits are shrinking because of the effects from the housing market. Have you seen anything that's changed your view on what's going on?

Secretary Paulson: No... When I said the housing market, that there had been a major correction and the housing market was at or near the bottom, I also have said that I thought this would not resolve itself any time soon, and that it would take a reasonably good period of time for the sub-prime issues to move through the economy as mortgages reset. But that as, even though this, and it is a cause of concern, the impact on individual homeowners, and we care a lot about that, but I

said as an economic matter I believe this was largely contained because we have a diverse and healthy economy...

*We talked about the sub-prime. There are some excesses there. We've also seen excesses in terms of other lending behavior. Some of the loans to fund leveraged buy-outs. These loans have not had traditional covenants. So now the market is focused on this. There's a wakeup call and there's a, as I've said, an adjustment to this repricing of risk. But I see the underlying economies being very healthy.*¹¹⁷⁴

Countrywide: “That’s our 9/11”

On August 2, three days after the IKB rescue, Countrywide Financial Corporation CEO Angelo Mozilo realized that his company was unable to roll its commercial paper or borrow on the repo market. “When we talk about [August 2] at Countrywide, that’s our 9/11,”¹¹⁷⁵ he said. “We worked seven days a week trying to figure this thing out and trying to work with the banks. Our repurchase lines were coming due billions and billions of dollars. We had worked night and day to secure and renew these repurchase lines which was very critical to us once we realized the commercial paper market was shut down.”¹¹⁷⁶

Mozilo emailed Lyle Gramley, a former Fed Governor and a former Countrywide director, “Fear in the credit markets is now tending towards panic. There is little to no liquidity in the mortgage market with the exception of Fannie and Freddie... Any mortgage product that is not deemed to be conforming either cannot be sold into the secondary markets or are subject to egregious discounts.”¹¹⁷⁷

On August 2, despite the internal turmoil, Countrywide CFO Eric Sieracki told investors that it had “significant short-term funding liquidity cushions” and “ample liquidity sources of our bank... It is

¹¹⁷⁴ <http://www.treasury.gov/press/releases/hp525.htm>

¹¹⁷⁵ Transcript of Deposition of Angelo Mozilo by the SEC, 11/9/2007 at 150:24.

¹¹⁷⁶ Transcript of Deposition of Angelo Mozilo by the SEC, 11/9/2007 at 36:4-23.

¹¹⁷⁷ 8/1/07 Mozilo email to Lyle Gramley (cc Michael Perry, IndyMac), BAC-FCIC-E-0000661408-09.

important to note that the company has experienced no disruption in financing its ongoing daily operations, including placement of commercial paper.”¹¹⁷⁸ Both Moody’s and S&P reaffirmed their respective A3 and A ratings and their stable outlook on the company. “Countrywide’s improved diversification, which includes material, annuity-like income streams from banking and insurance operations, increases its earnings stability,” Moody’s wrote. “Liquidity provided by a growing deposit base at Countrywide Bank and access to Federal Home Loan Bank advances should help the company weather current reduced liquidity in the US mortgage market.”¹¹⁷⁹

The ratings agencies and the company itself would quickly reverse their positions. On August 6, Mozilo reported to the board during a specially-convened meeting that “the secondary market for virtually all classes of mortgage securities (both prime and non-prime) had unexpectedly and with almost no warning seized up and [the] Company was unable to sell high-quality mortgage-backed securities.”¹¹⁸⁰ Executive David Sambol told the board that Countrywide needed to “quickly pursue alternative financing arrangements for the Company’s loan funding and inventory” given the possibility that the company could lose all access to the commercial paper market.¹¹⁸¹ Sambol said that “management can only plan on a week by week basis due to the tenuous nature of the situation.”¹¹⁸² Mozilo reported that although he continued to negotiate with banks to try and secure alternative sources of liquidity, the “unprecedented and unanticipated” absence of a secondary market could force the company to draw down on its back-up

¹¹⁷⁸ Mark DeCambre. “Countrywide Defends Liquidity.” TheStreet.com, 8/2/07. Available at <http://www.thestreet.com/story/10372054/countrywide-defends-liquidity.html>.

¹¹⁷⁹ “Countrywide Financial ratings confirmed on co’s sound performance - Moody’s.” Forbes. 8/3/07, available at <http://www.forbes.com/feeds/afx/2007/08/03/afx3984073.html>.

¹¹⁸⁰ 8/6/2007 Minutes of a Special Telephonic Meeting of the Board of Directors of Countrywide Financial Corporation at BAC-FCIC-0000080557-61 at 57.

¹¹⁸¹ 8/6/2007 Minutes of a Special Telephonic Meeting of the Board of Directors of Countrywide Financial Corporation at BAC-FCIC-0000080557-61 at 58.

¹¹⁸² 8/6/2007 Minutes of a Special Telephonic Meeting of the Board of Directors of Countrywide Financial Corporation at BAC-FCIC-0000080557-61 at 58.

credit lines.¹¹⁸³ The same day, the company stated in a public disclosure that it had “highly reliable short-term funding liquidity” of \$46.2 billion.”¹¹⁸⁴

Eight days later, on August 14, Countrywide released its July 2007 operational results, reporting that foreclosures and delinquencies had reached a five-year high and loan production had fallen by 14% during the preceding month. A company spokesman told the Los Angeles Times that layoffs would be considered.¹¹⁸⁵ Also that day, Federal Reserve staff, who had supervised Countrywide’s holding company until the bank switched to a thrift charter in March 2007, sent a confidential memo to the Board of Governors warning about the mortgage lender’s financial condition: “The company is heavily reliant on an originate-to-distribute model, and, given current market conditions, the firm is unable to securitize or sell any of its non-conforming mortgages... Countrywide’s short-term funding strategy relied heavily on commercial paper (CP) and, especially, on ABCP. In current market conditions, the viability of that strategy is questionable....The company has a considerable volume of mortgage-backed securities on its books. Those securities are generally not agency-backed, but rather are mostly backed by loans originated by Countrywide itself. The ability of the company to use those securities as collateral in [repo transactions] is consequently uncertain in the current market environment. The company may thus find it very difficult to obtain funding on normal terms and may not have time to make changes to its operations. As a result, it could face severe liquidity pressures. Those liquidity pressures conceivably could lead eventually to possible insolvency.”¹¹⁸⁶

¹¹⁸³ 8/6/2007 Minutes of a Special Telephonic Meeting of the Board of Directors of Countrywide Financial Corporation at BAC-FCIC-0000080557-61 at 59.

¹¹⁸⁴ 8/6/07 Countrywide Form 8-K, Exhibit 99.1.

¹¹⁸⁵ 8/14/07 Countrywide Press Release. *See also* E. Scott Reckard. “Lender reports risking defaults: Countrywide home foreclosures and delinquencies surge to five-year highs in July. Mortgage stocks tumble.”

¹¹⁸⁶ 8/14/07 Federal Reserve Memo re Background on Countrywide Financial Corporation. FCIC-149538-63 at 14.

According to the memo, Countrywide told its regulator, the Office of Thrift Supervision, that it needed assistance from the government because the liquidity pressures facing the company “conceivably could lead eventually to possible insolvency.”

“Conceivably...eventually...possible insolvency....” The words capture the tenor of the times.

Countrywide asked the OTS if the Federal Reserve could provide assistance through regulatory relief, perhaps by waiving a Fed rule and allowing Countrywide’s thrift subsidiary to support its holding company, perhaps through discount-window lending, which would require the Fed to accept risky mortgage-backed securities as collateral, something it never had done and would not do—until the following spring. The Fed’s staff recommended that it not intervene in Countrywide’s problem:

“Substantial statutory requirements would have to be met before the Board could authorize lending to the holding company or mortgage subsidiary; ... the Federal Reserve had not lent to a nonbank in many decades; and ... such lending in the current circumstances seemed highly improbable.”¹¹⁸⁷

The Fed decided not to act. The following day, with no available sources of funding on the horizon, Countrywide gave notice to its lenders that the company intended to draw down \$11.5 billion on back-up lines of credit. Mozilo and his team knew that their decision could lead to ratings downgrades. In the press release announcing the decision, Countrywide reported that it had “materially tightened its underwriting standards” and would reduce the company’s reliance on credit markets.¹¹⁸⁸

That same day, Merrill Lynch analyst Kenneth Bruce issued a report changing his view from only two days earlier, when he had reaffirmed a “buy” rating. Bruce now issued a “sell” rating with a “negative” outlook, noting that Merrill Lynch’s “view has changed, materially” because of the pressures Countrywide faced in financing its mortgage-backed securities in both the asset-backed commercial paper and repo markets. “We cannot understate the importance of liquidity for a specialty finance company like

¹¹⁸⁷ 8/14/07 Federal Reserve Memo re Background on Countrywide Financial Corporation. FCIC-149538-63 at 14.

¹¹⁸⁸ Countrywide Press Announcement, August 16, 2007, “Countrywide Supplements Funding Liquidity Position.”

CFC,” he wrote, referring to Countrywide’s stock ticker. “If enough financial pressure is placed on CFC, or if the market loses confidence in its ability to function properly, then the model can break, leading to an effective insolvency... If liquidations occur in a weak market, then it is possible for CFC to go bankrupt.”¹¹⁸⁹

Bruce wrote that this had been a “gut-wrenching call.” Moody’s downgraded the company’s senior unsecured debt ratings to the lowest tier of investment grade.¹¹⁹⁰ Countrywide shares fell 11%, closing at \$18.95. For the year, CFC stock was down 60%. With all of the bad news, an old-fashioned bank run ensued. Depositors crowded its southern California bank branches. The Los Angeles Times reported, “A flood of spooked customers seeking to withdraw their certificates of deposit and money-market accounts overwhelmed the small staff... The Countrywide employees were forced to resort to taking down names and asking people to wait it out or come back later.”¹¹⁹¹

Six days later, after the markets closed, Bank of America announced a \$2 billion equity investment for a 16% stake in the Countrywide.¹¹⁹² The investment represented a vote of confidence in Countrywide, and immediately fueled rumors that the nation’s biggest bank would acquire the mortgage lender. In public, both companies denied the rumors, and Mozilo stressed that his company was well-positioned for the future. He told the press that “there was never a question about our survival,” and that Bank of America’s investment was “win-win.” He boasted that the investment reinforced the fact that Countrywide was one of the “strongest and best-run companies in the country.”¹¹⁹³

¹¹⁸⁹ Bruce, Kenneth. “Liquidity is the Achilles heel.” Merrill Lynch Analyst Report. 8/15/07, pg 4

¹¹⁹⁰ Moody’s Investors Service, August 16, 2007, “Moody’s lowers Countrywide debt to Baa3.”

¹¹⁹¹ E. Scott Rekart. “The Mortgage Meltdown: A rush to pull out cash; Unsure about the future of home-loan giant Countrywide, bank customers line up to withdraw money.” Los Angeles Times. 8/07/07

¹¹⁹² “Bank of America Takes Countrywide Stake.” The Associated Press. 8/22/07.

¹¹⁹³ 8/23/2007 CNBC Video of Maria Bartiromo interview with Angelo Mozilo, available online at <http://www.cnbc.com/id/15840232?video=481763309&play=1> (last retrieved 9/22/2010).

In October, Countrywide reported a \$2 billion pretax loss, its first quarterly loss in 25 years. Confronting increased future default estimates and rising net-charge offs, Countrywide raised provisions for loan losses from the \$38 million allocated in the third quarter of 2006 to \$934 million one year later.¹¹⁹⁴ The year closed with the company's first annual net loss in over three decades. On January 11, 2008, Bank of America announced a definitive agreement to purchase Countrywide for approximately \$4 billion.¹¹⁹⁵ Bank of America said in a press release that the newly combined entity would stop originating subprime loans and would expand programs to help distressed borrowers.

BNP Paribas: “The ringing of the bell”

Meanwhile, the emerging problems in the U.S. markets hit the largest French bank. On August 9, BNP Paribas SA suspended redemptions from three investment funds that had plunged 20% in less than two weeks. Total assets in those funds were \$2.2 billion, with a third of that amount in subprime securities rated AA or higher. The bank also said it would also stop calculating a fair market value for the funds because “the complete evaporation of liquidity in certain market segments of the U.S. securitization market has made it impossible to value certain assets fairly regardless of their quality or credit rating.”¹¹⁹⁶

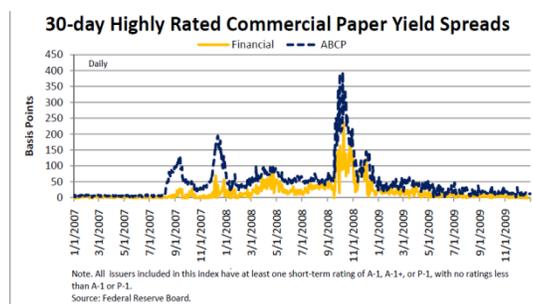
In retrospect, many investors regarded the suspension of these three French funds as the true beginning of the unprecedented liquidity crisis in the money markets. Paul McCulley of Pimco told the FCIC that August 9 “was the ringing of the bell” for short-term funding markets. “It was very obvious in the summer of 2007 that a run on the asset-backed commercial paper was underway,” he said. “The buyers went on a buyer strike and simply weren't rolling.” That is, they stopped rolling over their commercial paper and demanded payment of the amount due. On that one day, the spreads for overnight lending of A-

¹¹⁹⁴ Countrywide, October 26, 2007, PRNewswire-FirstCall, earnings release, pg 3

¹¹⁹⁵ Bank of America website. www.bankofamerica.com, Press Releases. 01/11/08.

¹¹⁹⁶ Cite to public BNP Paribas statement

1 rated asset-backed commercial paper rose 20 basis points, from 5.36% to 5.56%, the highest level since March 2001.¹¹⁹⁷



Throughout that summer, investors increasingly shunned ABCP securities. In August alone, that market shrank by \$190 billion, or 20 percent, and it would shrink by another \$120 billion through year's end. ABCP programs that typically had just one issuer – “single-seller” programs – were deemed the most unsuitable of all and fell over the summer from \$35 billion to \$4.25 billion.¹¹⁹⁸ And the ABCP that did sell had significantly shorter maturities, reflecting creditors' desire to reassess their counterparties' creditworthiness as frequently as possible. The percentage of ABCPs issued for 1-4 day maturities rose from 60% of all asset-backed commercial paper at the beginning of August to 75% at the end of the month.¹¹⁹⁹ Just about the only positive news was the relative confidence in the general financial sector. The market for commercial paper issued by banks and other financial institutions did momentarily shrink in August by 5.5% but rose to record levels by the end of the year. [This phenomenon will be explained through interviews.]

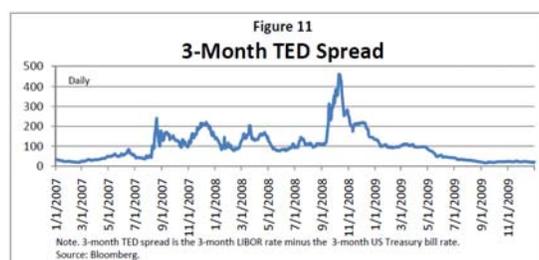
Given the ubiquity of commercial paper as both a funding source and an investment opportunity, disruptions in this market quickly spilled over to other parts of the money market. In a flight to quality, cautious investors dumped their securities and increased their holdings in the apparently safer money

¹¹⁹⁷ Mark Pittman, “Commercial Paper Yields Soar to Highest Since 2001,” August 9, 2007, available at <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=amnaMTq9t2xY> (accessed August 13, 2010).

¹¹⁹⁸ Covitz, Liang, and Suarez (2009).

¹¹⁹⁹ Confirm numbers

market mutual funds and the refuge of last resort, U.S. Treasuries. Domestic money market funds reached a record high of \$2.66 trillion in assets and Treasuries rallied.¹²⁰⁰ Many market participants were struggling to understand the extent of their own liquidity supports—and banks therefore became less willing to lend to each other. The TED spread, the difference in the three-month London Interbank Offered Rate (LIBOR) and the rate on three-month U.S. Treasury bills, rose. LIBOR is a measure of the rate that banks are willing to lend to each other and therefore reflects a degree of credit risk. In contrast, U.S. Treasury bills are considered risk-free. Therefore the spread, or difference, between the two rates is a measure of the perceived uncertainty and credit risk when lending to other banks. Beginning on that pivotal day, August 9, the spreads began to rise from their historical range of 20 to 60 basis points and peaked at 240 basis points later in August; in 2008, they would peak much higher.



Federal Reserve: “Prepared to act as needed”

The panic in the commercial paper and interbank markets was met by government action. The day after BNP Paribas’s August 9 suspension of redemptions, the Federal Reserve announced that it would “provid[e] liquidity as necessary to facilitate the orderly functioning of financial markets.”¹²⁰¹ The European Central Bank infused €95 billion into the overnight lending markets.¹²⁰² On August 17, the Fed cut the discount rate by 50 basis points—from 6.25 percent to 5.25 percent. This would be the first of many

¹²⁰⁰ Insert reference to ICI data – August 2007 MMMF flows and assets; Cite (Treasuries statement)

¹²⁰¹ “FOMC Statement: The Federal Reserve is providing liquidity to facilitate the orderly functioning of financial markets,” Federal Reserve press release, August 10, 2007, available at <http://www.federalreserve.gov/newsevents/press/monetary/20070810a.htm> (accessed August 20, 2010).

¹²⁰² Cite

such cuts aimed at increasing liquidity in the market. The Fed also extended the term of discount window lending to 30 days (from the usual overnight or very short-term) in an effort to offer banking institutions a more stable source of funds.¹²⁰³ On the same day, the Fed's Federal Open Market Committee released a statement acknowledging the continued deterioration of the financial markets and promising that the FOMC "is prepared to act as needed to mitigate the adverse effects on the economy arising from the disruptions in financial markets."¹²⁰⁴

SIVs: "An oasis of calm" disturbed

In late August, the turmoil in asset-backed commercial paper markets spread into a corner where subprime exposures were not dominant – the market for structured investment vehicles, or SIVs.

Compared to some of the other complicated short-term financing schemes, SIVs had a reasonably long operating history in some tough times. In a report issued on August 15, 2007, S&P noted: "These investment vehicles have weathered the difficult credit conditions of 1990-1991, the Long-Term Capital Management collapse, and the Sept. 11, 2001 terrorist attacks. SIVs responded to each event by diversifying into multiple funding markets, such as Europe and the U.S., and by having access to the best available liquidity sources, including banks and easily traded assets."¹²⁰⁵

Moody's had come to the same conclusion on July 20, noting that SIVs had been "an oasis of calm in the storm."

Unlike other asset-backed commercial paper programs, SIVs were primarily funded through medium-term notes—bonds maturing in one to five years. Short-term commercial paper therefore accounted for only about one-quarter of their funding. This feature, combined with a requirement SIVs hold significant

¹²⁰³ "Federal Reserve Board discount rate action," Federal Reserve press release, August 17, 2007, available at <http://www.federalreserve.gov/newsevents/press/monetary/20070817a.htm> (accessed August 20, 2010).

¹²⁰⁴ "FOMC statement," Federal Reserve press release, August 17, 2007, available at <http://www.federalreserve.gov/newsevents/press/monetary/20070817b.htm> (accessed August 20, 2010).

¹²⁰⁵ S&P, *Structured Investment Vehicle Ratings Are Weathering the Current Market Disruptions*, 8/15/07.

amounts of highly liquid assets, allowed them to operate without much liquidity support from the banks. And assets had to be “marked to market” daily or weekly, which investors believed would give managers the needed information to adjust to market changes.

Not all SIVs were alike. Some, like the ones sponsored by Citigroup (which had introduced the first SIVs in 1988), mostly invested in relatively safe assets like bank debt, while others focused on mortgage-backed securities and CDOs. Many had the advantage of being sponsored by banks, which were more likely to bail out a failing SIV to maintain relationships with frequent clients who had invested in this debt.

By 2007, a total of 34 SIVs had \$400 billion in assets. Only about a quarter of that sum – about \$100 billion – was invested in mortgage-backed securities or CDOs. Still, in 2007, even high-quality assets that had nothing to do with the mortgage market were declining in market value [will provide numbers and detail]. The strict mark-to-market requirements forced each SIV to recognize those losses in real time, pushing them closer to operational limits that would force restructuring and possibly liquidation. [will improve this explanation and provide details] Managers labored to avoid the need to sell assets at market prices that they hoped were only temporarily depressed. On September 5, Moody’s stated, “...the blow to confidence in the global financial system means that what was once liquid is now illiquid, and good collateral cannot be sold or financed at anything approaching its true value.”

Ultimately, even SIVs, a formerly reliable class of structures that selected high quality assets, were caught up in the emerging contagion. [substantially more detail to be added to this paragraph] Not surprisingly, the first to fail, like Cheyne, had concentrations in subprime and ABS CDOs. Soon to follow were others not sponsored by banks, because investors believed they were the least likely to be saved. After that, sector-wide ABCP runs and depressed market values destroyed the safer SIVs. Sponsors restructured and rescued some of these prior to default. Others did default, with severe losses. In some cases, investors had to wait a year to receive payment and ultimately recouped only a portion of their investment. As of

fall 2010, not a single SIV remained in operation. The subprime imbroglio had brought to its knees a historically resilient market in which the specific vehicles had incurred very modest and localized losses due to subprime defaults, if any at all. Panic was spreading.

Money funds and other investors: “TK”

The next dominos in line were the money-market funds, most of them sponsored by investment banks, bank holding companies, or “mutual fund complexes” such as Fidelity, Vanguard, and Federated. While money-market funds are not insured by the federal government, but investors tend to overlook this fact and treat them as the equivalent of safe bank deposits. They expect that their principal investment will maintain its value while generating a competitive return. Under SEC regulations, funds that serve retail investors are required to keep two sets of accounting books, one reflecting book value, meaning xx, and the other the mark-to-market value (the “shadow price,” in money-market parlance). However, they do not have to disclose the shadow price unless that value has fallen by 0.5% below \$1 per share. In other words, there is a very small cushion for price movements before the net asset value of one of these funds with a \$1 “NAV” has fallen below \$0.995 per share. When a fund does report a market value of less than \$0.995 per share, that event is known as “breaking the buck.” For a money-market fund manager, breaking the buck generally means the collapse of the fund.

The 0.5% loss threshold is so low that the default of even one security in a fund’s portfolio can have profound consequences. For example, if just 5% of the portfolio is in an investment that loses just 10% of its value, the mark-to-market valuation for that money-market mutual fund may break the buck. Thus, a fund manager cannot afford to take big risks with the fund’s investments—but SIVs were considered very safe investments, because they always had been—so they were widely held by the money funds. In the fall, investors became concerned and looked through their funds’ portfolios for any sign of SIV commercial paper. They found it. Some SIVs with falling values were bailed out by their sponsors, but others were not. Therefore dozens of money market funds faced losses on their SIV investments (and other asset-backed commercial paper as well, of course). The sponsors of these money market funds

stepped in to prevent those losses from causing the funds to “break the buck.” At least 44 sponsors, including Bank of America, US Bancorp, and SunTrust, purchased the SIV assets from their money market funds.¹²⁰⁶ Propping up a fund does not violate SEC rules,¹²⁰⁷ and this [\$XX] billion of combined support was a welcome backstop for the money-market fund business and its retail investors.

Columbia Fund folds after a \$20 billion withdrawal

Similar dramas played out in the less-regulated sector of the money market known as enhanced cash funds, and some of these funds did actually break the buck. These funds focus not on retail investors but on a limited number of institutions and sophisticated, wealthy investors who can put up at least \$25 million. Enhanced cash funds are structured under the hedge fund exemptions in the securities laws and fall outside most SEC regulations and disclosure requirements. Because these funds have much higher investment thresholds than retail money market funds, and because these enhanced funds do not have to

¹²⁰⁶ The SEC indicated it is aware of at least 44 money market funds that were supported by affiliates because of SIV investments. SEC Proposed Money Fund Rule, footnote #38; On November 13, 2007, Bank of America committed to provide as much as \$600 million to its money market funds holding asset-backed commercial paper. Other fund advisers, including Legg Mason, US Bancorp, SEI, and SunTrust also committed in November and December 2007 to support their money market funds to ensure that investors did not lose money if their funds fell below a \$1 net asset value. In order to prevent two money market funds from breaking the buck, Sun Trust purchased \$1.4 billion in securities issued by SIVs from their STI Classic Prime Quality Money Market Fund and the STI Classic Institutional Cash Management Money Market Fund. The company expected to recognize a loss as a result of these asset purchases of between \$225 and \$250 million. In November 2007, U.S. Bancorp represented it would commit capital to its First American Prime Obligations Fund in the event that securities issued by the Cheyne SIV held by the fund resulted in a loss.

¹²⁰⁷ While SEC rules normally prohibit a fund from selling securities to an affiliate, even if the purpose is to provide liquidity to the fund or prevent it from breaking the buck, there is an exception provided in SEC Rule 17a-9 for cash purchases of certain distressed money market fund assets by an affiliate at a price “equal to the greater of the amortized cost of the security or its market price (in each case, including accrued interest).” Funds that secured support from an affiliate through a transaction authorized by Rule 17a-9 did not require SEC approval, or a no-action letter. For some non-2a-7 funds, such as bank common and collective investment funds, other rules apply that limit the ability of a bank to purchase assets out of a bank-run fund. 12 CFR 9.18(b)(8) – self-dealing and conflicts of interest limitations. A bank is authorized to purchase a defaulted investment held by a fund “if, in the judgment of the bank, the cost of segregating the investment is excessive in light of the market value of the investment. If a bank elects to purchase a defaulted investment, it shall do so at the greater of market value or the sum of cost and accrued unpaid interest.” 12 CFR 9.18(b)(8)(iii).

comply with the disclosures and other requirements associated with the retail funds, investors expect somewhat riskier investing and higher returns for their money. Nonetheless, enhanced funds also operate with an overall objective of maintaining a \$1 market value and never breaking the buck. For these funds, too, SIVs had therefore been deemed a good investment. But, as it turned out, for these funds, too, they were not. Just as the precipitous decline of the SIVs prompted the sponsors of retail money-market funds to prop them up, so too the sponsors of some of the high-powered enhanced cash funds stepped in to rescue them for the benefit of their well-heeled investors.

The largest enhanced cash fund in the country was Strategic Cash Portfolio, run by Bank of America Corporation's Columbia Management subsidiary and boasting \$40 billion in assets at its peak. Despite its size, however, the fund had just a few investors. Amid all the concern about subprime-related securities, in November 2007, one of them withdrew \$20 billion.¹²⁰⁸ Reportedly, that investor was the Government of Kuwait. [cite] In order to stem a precipitous run on Strategic Cash, the managers temporarily halted all redemptions. Subsequently, Bank of America's holding company used its own cash to support the fund's \$1 market value. In addition, the bank offered different deals to different investors who wanted to exit the fund but couldn't because redemptions had been halted. For example, some investors were "invited" to cash out at about \$0.994 per share, which kept the fund from technically breaking the buck.

Other enhanced cash funds did not obtain sponsor support and were forced to liquidate at prices below their \$1.00 target price. During a three-week period in August 2007, State Street's Global Advisers' \$1.4 billion Limited Duration Fund lost 37% of its value, thanks to its concentrated investment in subprime mortgage-backed securities and derivatives, and to investor redemptions. Other funds that had been advised by State Street and investors in the Limited Duration Fund began to redeem shares. In order to accommodate these redemptions, the fund redeemed its most liquid holdings, further concentrating the fund in illiquid, mortgage-related securities.

¹²⁰⁸ It has never been publicly disclosed who the investor was.

The SEC and the State of Massachusetts ultimately sued State Street, alleging misrepresentations about risks associated with what was touted as a conservative money market fund, particularly its concentration in subprime investments. State Street settled the cases in February 2010 with terms of xx and xx.

Another short-term enhanced cash fund that ran aground with its mortgage-related investments in late 2007 was the \$5 billion GE Asset Management Trust Enhanced Cash Trust. In June of that year, the GE-sponsored fund had 50% of its assets in residential mortgage securities, with additional holdings in credit-card securities and corporate bonds. Most of the investors were GE's own pension and employee benefit assets, but the fund also had outside investors. All lost money. When the fund closed in November 2007 after reportedly losing \$200 million, investors redeemed their interests at \$0.96, meaning that it broke the buck.

The State of Florida fund experiences a run on its \$27 billion fund

The losses on SIVs and other investments that held mortgage-related securities also dealt a severe blow to “local-government investment pools” across the country, some of which had billions of dollars invested in these securities. LGIPs, like the enhanced cash funds that appeal to wealthy investors, are typically not limited in the riskiness of their assets, but like money-market and even enhanced cash funds, they do seek to maintain at least a \$1 market value. This enables their participants to withdraw their funds on short notice without losses. This pooling mechanism provides local municipalities, school districts, and other government agencies with economies of scale, investment diversification, and liquidity that the smaller entities would be unlikely to achieve on their own. In some jurisdictions and for certain government entities, participation in the pertinent pool is mandatory; in others it is optional.

At the beginning of the liquidity crisis, 100 LGIPs in 45 states held combined assets of over \$250 billion [need to confirm date and \$ amt]. With \$27 billion in assets, Florida's was the largest in xx, 200xx. (It was also just one of 35 pools managed by states to help local governments manage surplus funds.) As stated in an investigation by the Florida Legislature, “The pool [was] intended to operate like a highly

liquid, low-risk money market fund, with securities like cash, certificates of deposit, cash, U.S. Treasury bills, and bonds issued by other U.S. government agencies comprising the fund.”¹²⁰⁹

That wasn't the way the fund was actually run. In the summer of 2007, Tracs Financial reported that the Florida LGIP was among the highest yielding LGIPs in the country, both on a daily and monthly basis.¹²¹⁰ The return was [XX%]. In order to achieve this distinction, Florida's managers were investing in instruments yielding as much as 6.7% in a rate environment in which typical money market investments were yielding about 5%.¹²¹¹ By November, the Florida LGIP had invested at least \$1.5 billion in securities that no longer met the state's top credit rating requirement of xx, due to the rating agency downgrades. It had more than \$2 billion in SIVs and other distressed securities, of which about \$725 million had already defaulted. Further exacerbating its problem, the Florida LGIP had also bought \$650 million in Countrywide certificates of deposit with maturities that stretched out as far as June 2008.

In early November, following a series of articles in Bloomberg and other news services about Florida's LGIP, the fund suffered a run by concerned constituent agencies wanting out. Within two weeks, they had withdrawn \$8 billion.¹²¹² Orange and Pinellas Counties pulled out their entire investments. On November 29, the fund's managers stopped all withdrawals. This prohibition lasted only [??how long].

Florida had assumed that SIVs would remain as stable as they had always been. It was the hardest hit of all the LGIPs, but other state pools also took losses from their SIVs, as well as other mortgage- and subprime-tainted holdings. In that Tracs Financial report on the LGIPs in the summer of 2007, the highest yielding fund was Connecticut's at 5.43%. It turned out that 10% of that pool was invested in CDO

¹²⁰⁹ The Florida Legislature, Office of Program Policy Analysis and Government Accountability, Research Memorandum, “The SBA [State Board of Administration] is Correcting Problems Relating to its Oversight of the Local Government Investment Pool” (March 31, 2009) (“OPPGA Report”), pg. 2.

¹²¹⁰ Bloomberg, Public School Funds Hit by SIV Debts Hidden in Investment Pools (November 15, 2007).

¹²¹¹ NEED CITE – typical yield in August 2007 for MMF investments.

¹²¹² Florida School Fund Rocked by \$8 Billion Pullout (November 28, 2007).

commercial paper backed by subprime mortgages.¹²¹³ Two percent was invested in the Cheyne Finance SIV, which was the first SIV whose rating was downgraded, on August 29. When Cheyne failed on October 17, the Connecticut LGIP lost about \$xx.

All told, an estimated xx state agencies and municipalities lost money through investments in SIVs. For those state agencies and municipalities that relied upon these funds maintaining a \$1 NAV and returning principal with some interest, these losses were substantial.

4822-2501-1207, v. 1

¹²¹³ Bloomberg, Public School Funds article (November 15, 2007).

CHAPTER CONCLUSIONS HERE

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Overview

While a handful of banks were bailing out their money market funds and commercial paper programs in the fall of 2007, the financial sector as a whole faced a much larger problem: the billions of dollars in mortgage-related write-downs on loans, securities, and derivatives, with no end in sight. By the end of the year, Citigroup had written down \$41 billion in mortgage-related assets; Merrill Lynch, \$24.7 billion; Bank of America, \$15 billion; Morgan Stanley, \$12.6 billion; JPMorgan, \$9.7 billion; and Bear Stearns, \$2.3 billion.¹²¹⁴[Add Wachovia and WaMu.]

¹²¹⁴ Wachovia/Wamu

Insurance companies, hedge funds and other financial institutions collectively had taken additional mortgage-related losses of approximately \$100 billion.¹²¹⁵ [Need to check]

The large writedowns strained the banks' capital and cash reserves. Further, market participants remained concerned about where the *e coli* – to use Chairman Bernanke's term – might still be hiding, and they began discriminating between firms perceived to be relatively healthy and others about which they were not so sure. Bear Stearns and Lehman Brothers were at the top of the “suspect” list; the cost of protection against default on their obligations stood at \$176,000 and \$119,000 for every \$10 million, respectively, while the cost for the relatively stronger Goldman Sachs stood at \$68,000.¹²¹⁶ [Need to confirm these numbers.]

Merrill Lynch: “Dawning awareness over the course of the summer”

On October 24, Merrill Lynch stunned investors when it announced that third quarter earnings would include a \$6.9 billion loss on CDOs and \$1 billion on subprime mortgages--\$7.9 billion total, the largest write-down in Wall Street history to that point, and nearly twice the \$4.5 billion loss that the company had warned investors to expect just three weeks earlier.¹²¹⁷ Six days later, embattled CEO Stanley O'Neal, a 21-year Merrill veteran, resigned under pressure.¹²¹⁸

Much of this write-down came from the firm's significant holdings of the super-senior tranches of mortgage related CDOs that Merrill had previously thought to be extremely safe. Marketwide,

¹²¹⁵

¹²¹⁶ Figures refer to credit default swaps on five-year senior debt.

¹²¹⁷ 3Q07 Earnings Press Release, http://sec.gov/Archives/edgar/data/65100/000115752307010139/a5526482ex99_1.txt. 3Q07 Earnings Call transcript. Available: <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4834-6259-7126&open=Y>. (ok)

¹²¹⁸ <http://sec.gov/Archives/edgar/data/65100/000095012307014495/y41570exv99w1.htm> (ok)

a total of \$387.90 billion in CDOs had been created in 2006 and \$281.25 billion in 2007.¹²¹⁹ Merrill had accounted for \$55.3 billion and \$35.89 billion, respectively.^{1220, 1221} As late as fall, 2006, its management had been “bullish on growth” and “bullish on [the subprime] asset class.”¹²²² In September 2006, Merrill had even acquired subprime loan originator First Franklin for \$1.3 billion--a move that puzzled analysts who saw the subprime and Alt-A markets souring in a hurry.¹²²³ By late that year, the signs of trouble were becoming difficult for even for Merrill to ignore. Two mortgage originators to whom the firm had extended credit lines – Mortgage Lenders Network and Ownit, in which Merrill also had a small equity stake – failed, leaving the bank with no choice but to seize the collateral backing those loans--\$1.5 billion from Mortgage Lenders, \$1.2 billion from Ownit.¹²²⁴

After sensing that the mortgage market was turning, Merrill, like many others in the market, started packaging its existing inventory of mortgage loans and securities into CDOs for sale with new vigor. Their goal was to reduce their risk by getting those loans and securities off their balance sheet. Yet, Merrill found that it could not sell the super senior tranches of those CDOs at

¹²¹⁹ “Pioneer Helped Merrill Move Into CDOs,” Serena Ng and Carrick Mollenkamp, *Wall Street Journal*, October 25, 2007.

¹²²⁰ “Pioneer Helped Merrill Move Into CDOs,” Serena Ng and Carrick Mollenkamp, *Wall Street Journal*, October 25, 2007.

¹²²¹ 10/21/07 Presentation to the ML Board of Directors – Leveraged Finance and Mortgage/CDO Review; BAC-ML-CDO-000077035-073 at 073.

¹²²² 10/21/07 Presentation to Merrill Lynch & Co. Board of Directors – Leveraged Finance and Mortgage/CDO Review; BAC-ML-CD)-000077035-89, at 061.

¹²²³

¹²²⁴ 2/2/07 SEC OPSRA memo, SEC_TM_FCIC_002447-451.

acceptable prices and that it had to “take down senior tranches into inventory in order to execute deals”¹²²⁵ – leading to the accumulation of tens of billions of dollars of those tranches on Merrill’s books. Dow Kim, then the co-president of Merrill’s investment banking segment, told FCIC staff that the buildup of the retained super-senior tranches in the CDO positions was actually part of a strategy begun in late 2006 to reduce the firm’s current inventory of subprime and Alt-A mortgages. Sell the lower-rated CDO tranches, retain the super-senior tranches: those had been his instructions to his managers at the end 2006, Kim told the FCIC. He argued that this strategy would reduce overall credit risk. After all, the super-senior tranches were theoretically the safest pieces of those investments.¹²²⁶ To some degree, however, the strategy was involuntary: his people were having trouble selling these investments, and some they even sold at a loss.¹²²⁷ (As previously explained, because the super-seniors were theoretically the safest of the tranches, they offered a lower return—too low for many investors, all things considered.)

Initially, the strategy seemed to work. By May, the amount of mortgage loans and securities to be packaged into CDOs had declined to \$3.5 billion from \$12.8 billion in March. According to a September 2007 internal Merrill presentation, net retained super senior CDO tranches had increased from \$9.3 billion in September 2006 to \$25.4 billion by March 2007 and to \$28.9 billion by May.¹²²⁸ But, as the mortgage market came under increasing pressure and as market value of even super senior tranches crumpled, the strategy would come back to haunt the firm.

¹²²⁵ 10/21/07 Presentation to Merrill Lynch & Co. Board of Directors – Leveraged Finance and Mortgage/CDO Review; BAC-ML-CD)-000077035-89, at 061.

¹²²⁶ Kim MFR at 8.

¹²²⁷ 10/21/07 Presentation, BAC-ML-CDO-000077073-77085, at 77061.

¹²²⁸

Merrill's first-quarter results for 2007— net revenues of \$9.9 billion—were its second-highest quarterly net revenue ever, including a record for the Fixed Income, Currencies and Commodities business, which housed the retained CDO positions.¹²²⁹ In that quarter's conference call with analysts, then-CFO Jeffrey Edwards indicated that Merrill's results would not be adversely affected by the dislocation in the subprime market because "revenues from subprime mortgage-related activities comprise[d] less than 1% of our net revenues" over the last five quarters, and because Merrill's "risk management capabilities are better than ever, and crucial to our success in navigating turbulent markets." He provided further assurances, stating, "[W]e believe the issues in this narrow slice of the market remain contained and have not negatively impacted other sectors."¹²³⁰

However, neither Edwards nor anyone else representing Merrill on that call disclosed the large increase in retained super senior CDO tranches or one of the reasons for it: the difficulty of selling those tranches, even at a loss—this in the face of specific questions about the subject.

In July, Merrill followed its strong first-quarter report with another for the second quarter that included "very strong net revenues, net earnings and earnings per diluted share for the second quarter of 2007, which enabled the company to achieve record net revenues, net earnings and net earnings per diluted share for the first half of 2007." During this conference call, UBS analyst Glenn Schorr listened to Edwards's prepared remarks, and then asked the CFO to provide some "color around myth versus reality" on Merrill's exposure to retained ABS CDO positions.¹²³¹ As

¹²²⁹ 4/19/07 Merrill Press Release at 1.

¹²³⁰ 4/19/07 conference call transcript at 3.

¹²³¹ 7/17/2007 Merrill Earnings Call Transcript.

he had three months earlier, Edwards stressed Merrill's risk management and the fact that the CDO business was a small part of Merrill's overall business. He said that there had been significant reductions in Merrill's retained exposures to lower-rated segments of the market, although he failed to indicate that the total amount of Merrill's retained CDOs had reached \$30.4 billion by June.

Deutsche Bank analyst Mike Mayo asked Edwards to disclose the level of assets related to subprime mortgages CDOs, and any inventory of mortgage-backed securities to be packaged into CDOs—that is, how much of the firm's capital was at risk from these assets?

Analyst Mike Mayo could not get an answer. Edwards responded, “[W]e don't disclose our capital allocations against any specific or even broader group.”¹²³²

On July 22, after many months of accumulating the super-senior tranches, Merrill's board would first be officially informed about the buildup. At a presentation to the Merrill Board's Finance Committee Dale Lattanzio, co-head of the American branch of the Fixed Income, Currency, and Commodities business, reported a “net” exposure of \$32 billion in CDO-related assets, essentially all of them rated AAA, with exposure to the lower-rated asset class significantly reduced.¹²³³ This “net” exposure was the amount of retained CDO positions after subtracting the amount of hedges - guarantees in one form or another - that Merrill purchased to pass along its ultimate risk to third parties willing to provide that insurance and take that risk for a fee. AIG and the small club of monoline insurers were the main suppliers of these guarantees, commonly

¹²³² 7/17/2007 Merrill Earnings Call Transcript.

¹²³³ BAC-FCIC-0000078547-579, at 553-554. (can't find)

done as credit default swaps. In July 2007, Merrill had begun to increase the amount of credit default swap protection to offset the retained CDO positions. Its hedges to protect against possible losses on the retained CDOs and other assets totaled \$95.9 billion by the fall of 2007.¹²³⁴

Lattanzio told the committee, “[Management] decided in the beginning of this year to significantly reduce exposure to lower-rated assets in the sub-prime asset class and instead migrate exposure to senior and super senior tranches.”¹²³⁵ Edwards did not see any problems here. As Dow Kim explained to FCIC investigators, “Everyone at the firm and most people in the industry felt that super-senior was super safe.”¹²³⁶

Deposed CEO Stanley O’Neal told FCIC investigators he had not known that the company was retaining the super-senior tranches of the CDOs until Lattanzio’s presentation to the Merrill Board’s Finance Committee in July of 2007.¹²³⁷ He was surprised, if only because he had been under the impression that Merrill’s mortgage-backed-assets business had been driven by the demand: he had assumed that if there were no new customers, there would be no new offerings. If customers demanded the CDOs, why would Merrill have to retain CDO tranches on the balance sheet?¹²³⁸ O’Neal was surprised about the retained positions but stated that the presentation, analyses and estimation of potential losses were not sufficient to raise alarm bells.”¹²³⁹ Lattanzio’s report indicated that the retained positions had experienced only \$73

¹²³⁴ SEC_TM_FCIC002551.

¹²³⁵ July 22, 2007 Minutes of the Finance Committee. BAC-FCIC-0000078554. ABS/CDO Update, July 2007. BAC-ML-CDO-000076862-884

¹²³⁶ MFR of Dow Kim Interview with FCIC, at 8.

¹²³⁷ O’Neal MFR at 3-4.

¹²³⁸ O’Neal MFR at 4. (ID# 4829-1444-3527) (ok)

¹²³⁹ O’Neal MFR at 4.

million in losses so far.¹²⁴⁰ These losses would balloon over the next months as the market value of the super senior tranches plummeted. Regarding the risk the super senior tranches represented, O’Neal told the FCIC that after the July presentation, the losses increased over the next three months. “I had a dawning awareness over the course of the summer and through September as the size of the losses were being estimated.”¹²⁴¹

On October 21, the Merrill Board of Directors was given a detailed account of how the firm found itself with what was by that time \$15.2 billion in net exposure to the super-senior tranches—down from a peak in July of \$32.2 billion because the firm had increasingly hedged, written-off, and sold its exposure. On October 24, Merrill announced its third-quarter earnings: a stunning \$7.9 billion mortgage-related write-down for the third quarter, yielding a net loss of \$2.3 billion. Merrill also reported--for the first time--its net \$15.2 billion net exposure to retained CDO positions. Still, in the conference call with analysts, CEO O’Neal and CFO Edwards refused to disclose the gross exposures, excluding the hedges from the monolines and AIG. Responding to a request for a precise breakdown of positions sold and hedged in an attempt to reduce Merrill’s exposure, Edwards replied, “I just don’t want to get into the details behind that.”¹²⁴² Pressed, he added, “[L]et me just say that what we have provided again we think is extraordinarily high level of disclosure and it should be sufficient.”¹²⁴³ Deutsche Bank analyst Mike Mayo tried again, but his request for additional information was rejected. According to the SEC, by September 2007, Merrill had accumulated \$55 billion of “gross” retained CDO

¹²⁴⁰ July 2007 Presentation to the Finance Committee. BAC-ML-CDO-000076871.

¹²⁴¹ O’Neal MFR at 7. (ID# 4829-1444-3527) (ok)

¹²⁴² October 24, 2007 Merrill Earnings Call Transcript.

¹²⁴³ October 24, 2007 Merrill Earnings Call Transcript.

positions, almost four times the \$15.2 billion of “net” CDO positions reported during the October 24 conference call.¹²⁴⁴

On October 30, when O’Neal resigned as CEO, he left with a severance package worth \$161.5 million.¹²⁴⁵ – on top of the \$91.4 million in total compensation he earned in 2006 when his company was still expanding its mortgage banking operations. Dow Kim, who oversaw the strategy that left Merrill with billions in losses, had left in May 2007 after being paid \$40 million for his work in 2006.

By late 2007, the viability of the monoline insurers from whom Merrill had purchased almost \$100 billion in hedges had come into question, and the ratings agencies were downgrading them, as we will see in more detail shortly. The SEC had told Merrill that it would impose a punitive capital charge on the firm if it purchased additional credit default protection from the monolines. Recognizing that the monolines might not be good for all the protection purchased, Merrill would begin to put aside loss allowances as a result.. On January 17, 2008, Merrill took a \$2.6 billion charge,¹²⁴⁶ the first of a series of write-offs against the guarantees purchased from the financially troubled monolines, eventually totaling \$13 billion.^{1247, 1248}

In the five quarters following the record-setting write-down of \$7.9 billion for the third quarter of 2007—Merrill Lynch would report more than \$25 billion of additional subprime-related write-

¹²⁴⁴ SEC_TM_FCIC_002550.

¹²⁴⁵ <http://www.bloomberg.com/apps/news?sid=aPxzn5U8zNBo&pid=newsarchive> (ok); 10/30/07 Press Release at 1; March 14, 2008 Proxy at 32-33.

¹²⁴⁶

¹²⁴⁷ 1/17/08 press release at 1.

¹²⁴⁸ Writedowns from CDOs, other retained and warehouse, and subprime.

downs to add to the \$13 billion of losses associated with the hedges with the monolines.¹²⁴⁹ John Thain, the former head of the New York Stock Exchange who took over from Stanley O’Neal as Merrill CEO,¹²⁵⁰ would last just long enough to finalize the sale of the firm to Bank of America in January, 2009.

Citigroup: “That would not in any way have excited my attention”

Five days after Stan O’Neal’s October 30 departure from Merrill Lynch, Citigroup announced that it would be taking an \$8 to \$11 billion loss on its subprime mortgage related holdings and that Chuck Prince was resigning as its CEO.¹²⁵¹ O’Neal told the FCIC that he had not learned about the extent of Merrill’s toxic subprime exposures until July 2007. Similarly, Prince stated that he was not aware until September 2007 that Citigroup’s total subprime exposure was \$55 billion, not less than \$13 billion, as the company had represented for months. Nor was he apparently aware that included within that exposure was \$43 billion in liquidity puts and super-senior tranches of CDOs, despite the fact that the firm had written the last of the \$25 billion in puts a year and half ago and had started to shell out billions of dollars because of the puts two months before. And even after Prince, the Board, and key executives like Robert Rubin, Chairman of the Executive Committee of the Board, learned of the puts and CDOs, it would be another eight weeks before the company would publicly announce the full extent of its subprime exposure and losses.

¹²⁴⁹ Writedowns from CDOs, other retained and warehouse, and subprime.

¹²⁵⁰ <http://sec.gov/Archives/edgar/data/65100/000095012307014495/y41570exv99w1.htm>;
<http://sec.gov/Archives/edgar/data/65100/000095012307015698/y42801exv99w1.htm> (ok)

¹²⁵¹ “Robert E. Rubin to Serve as Chairman of the Board of Citi; Sir Win Bischoff to Serve as Acting Chief Executive Officer; Charles Prince Elects to Retire from Citi,” Citigroup press release, November 4, 2007, available at <http://www.citigroup.com/citi/press/2007/071104a.htm>.

Like Merrill, Citigroup had aggressively packaged and sold subprime related CDOs for years, even as the housing market flagged in late 2006 and the early months of 2007. Like Merrill, the firm had held on to some super senior tranches of those CDOs assuming that they carried little risk. In other cases, Citigroup sold those tranches with liquidity puts, which would force them onto the firm's balance sheet if market conditions soured. And like Merrill when the mortgage market began to unravel, Citigroup's management belatedly learned of the risks and losses that the firm faced, and even more belatedly shared this news with the public.

Despite the fact that the subprime-related losses had cost him his job, Prince told the FCIC that even in hindsight it was difficult for him to criticize any of his team's decisions.¹²⁵² He explained, "If someone had elevated to my level that we were putting on a \$2 trillion balance sheet, \$40 billion of triple A-rated, zero-risk paper, that would not in any way have excited my attention.... [I]t wouldn't have been useful for someone to come to me and say, 'Now, we have got \$2 trillion on the balance sheet of assets. I want to point out to you there is a one in a billion chance that this \$40 billion could go south.' That would not have been useful information. There is nothing I can do with that, because there is that level of chance on everything."¹²⁵³

Certainly, Citigroup was a large and complex organization. That \$2 trillion on the balance sheet – and \$1.3 trillion off-balance sheet – in 2007 was divvied up among 2,000-plus operating subsidiaries.¹²⁵⁴ Prince insisted that Citigroup was not "too big to manage,"¹²⁵⁵ but it was also an

¹²⁵² Charles O. Prince, former Chairman and CEO of Citigroup, interview with the FCIC, March 17, 2010, pp. 191-194, transcript available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4849-5576-9861&open=Y>

¹²⁵³ Charles O. Prince, former Chairman and CEO of Citigroup, interview with the FCIC, March 17, 2010, p. 153, transcript available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4849-5576-9861&open=Y>

¹²⁵⁴ Citigroup 2007 10-K, Exhibit 21.01, Citigroup Inc. Principal Subsidiaries as of December 31, 2007, available at <http://www.sec.gov/Archives/edgar/data/831001/000119312508036445/dex2101.htm>. Off-balance sheet figure calculated by FCIC staff.

organization in which one unit would decide to reduce risk in the mortgage arena while another unit increased it, an organization in which senior management would not be notified of \$43 billion in concentrated exposure – 2% of the company’s balance sheet – because it was perceived to be “zero-risk paper.”¹²⁵⁶ And, with the firm’s total capital standing at \$120 billion at the end of 2006, it turned out that a \$43 billion exposure to assets in a declining market did indeed matter.

The risks associated with these assets should not have come as a surprise to Citigroup’s management. The FCIC in its investigation found two occasions in which Citigroup executives highlighted the risks the company was taking in 2006. First, Citigroup’s Financial Control Group noted that the liquidity puts had been priced too cheaply considering the risks. In particular, it noted that the committee that approved the transactions had not considered the risk that all of the deals could fail to “roll at the same time”, creating a \$25 billion cash demand for Citibank. An undated and unattributed internal document (believed to have been drafted in 2006) also suggested that there was a potential conflict of interest in that the investment bankers on the CDO desk were paid for generating the deals but were not penalized for any losses. The memo states, “There is a potential conflict of interest in pricing the liquidity put cheap so that more CDO equities can be sold and more structuring fee to be generated.”¹²⁵⁷ However, Citigroup’s risk management did not take any action at any point to mitigate the risk it was

¹²⁵⁵ Chuck Prince testimony before the Financial Crisis Inquiry Commission, hearing on “Subprime Lending and Securitization and Government-Sponsored Enterprises (GSEs),” Session 1: Citigroup Senior Management, April 8, 2010, p. 11 of transcript, available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4843-1996-8262&open=Y>

¹²⁵⁶ Charles O. Prince, former Chairman and CEO of Citigroup, interview with the FCIC, March 17, 2010, p. 153, transcript available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4849-5576-9861&open=Y>. Citigroup’s 2007 10-K indicates that total assets as of December 31, 2007 were \$2.188 trillion; \$43 billion is 1.97% of the balance sheet.

¹²⁵⁷ CITI 00004244, Citigroup liquidity put discussion.

taking in the liquidity puts. Other banks that offered liquidity puts on CDOs, such as Societe Generale, had protected themselves by buying insurance in the form of credit default swaps from other counterparties such as AIG Financial Products.

Second, in early 2006, an executive in the securitization unit – which bought mortgages from other companies and bundled them into mortgage-backed securities for sale to investors – took note of reports of rising delinquencies in the subprime market. That executive, Susan Mills, Managing Director of the Mortgage Finance Group, created a surveillance group to track the quality of individual loans that her unit purchased.^{1258,1259} By mid-2006, Mills’s group was seeing deterioration in the quality of loans and an increase in early payment defaults.¹²⁶⁰ From 2005 to 2007, Mills recalled before the FCIC, the early payment default rates tripled from 2 percent to 5 or 6 percent.¹²⁶¹ In response, the securitization unit slowed down its purchase of loans, demanded higher quality mortgages, and conducted more extensive due diligence on the pools of loans that

¹²⁵⁸ FCIC interview of Susan Mills, head of Mortgage Finance, February 3, 2010, MFR available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4810-5008-2822&open=Y>

¹²⁵⁹ Financial Industry Regulatory Authority (FINRA) interview of James Xanthos, March 24, 2009, available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4847-5896-4487&open=Y>

¹²⁶⁰ FCIC interview of Susan Mills, head of Mortgage Finance, February 3, 2010, MFR available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4810-5008-2822&open=Y>; Susan Mills testimony before the FCIC, hearing on “Subprime Lending and Securitization and Government-Sponsored Enterprises (GSEs),” Session 2: Subprime Origination and Securitization, April 7, 2010, p. 213 of transcript, available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4842-8641-3830&open=Y>

¹²⁶¹ Susan Mills testimony before the FCIC, hearing on “Subprime Lending and Securitization and Government-Sponsored Enterprises (GSEs),” Session 2: Subprime Origination and Securitization, April 7, 2010, p. 212 of transcript, available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4842-8641-3830&open=Y>

it did purchase.¹²⁶² However, neither Mills nor other members of the unit shared any of this information with other divisions in Citigroup, including the CDO desk.¹²⁶³

“No dialogue across businesses”

Citigroup’s mortgage-backed securities structuring desk and CDO desk ran different businesses, but were subject to very similar mortgage-related risks. Unlike the securitization desk that packaged mortgage-backed securities from whole loans and sold them on the secondary market, the CDO desk underwrote CDO offerings – that is, the desk designed the CDO, bought the collateral, which included mortgage-related securities, and then sold commercial paper and other instruments to investors backed by the mortgage principal and interest payments going to the CDO. In order to more easily sell commercial paper backed by the most senior tranches of the CDOs, Citigroup wrote liquidity puts and provided other assurances to prospective buyers that, if worse-came-to-worst, Citigroup would buy the commercial paper from those investors. When Citigroup had reached its internal risk limits and could write no more liquidity puts, it had simply retained the most senior tranches rather than sell them at unfavorable prices.

Late 2006: Citigroup’s securitization unit began exercising more caution in its purchases of subprime loans. Early 2007: Citigroup’s CDO desk *increased* its purchases of mortgage securities because it saw the distressed market as a buying opportunity.¹²⁶⁴ Later that year, in a meeting in November 2007, after Citi had revealed to the public its full exposure to subprime

¹²⁶² FCIC interview of Susan Mills, head of Mortgage Finance, February 3, 2010, MFR available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4810-5008-2822&open=Y>

¹²⁶³ FCIC interview of Susan Mills, head of Mortgage Finance, February 3, 2010, MFR available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4810-5008-2822&open=Y>

¹²⁶⁴ FCIC interview of Murray Barnes, former Managing Director of Independent Risk, March 2, 2010, MFR available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4829-6661-6325&open=Y>

mortgages, several of Citigroup's supervisors, including the Federal Reserve, the OCC, and the SEC, would meet with representatives of the firm's senior management, including Chief Risk Officer David Bushnell and Chairman of the Executive Committee Robert Rubin.¹²⁶⁵ The supervisors observed: "[E]ffective communication across businesses was lacking. Management acknowledged that, in looking back, it should have made the mortgage deterioration known throughout the firm. The Global Consumer Group saw signs of sub-prime issues and avoided losses, as did mortgage backed securities traders, but CDO structures business did so belatedly – no dialogue across businesses."¹²⁶⁶

The co-heads of the CDO desk told the FCIC that they first saw weaknesses in the underlying market in the first quarter of 2007.¹²⁶⁷ In February, management decided to slow down on purchases of mortgage securities for inventory for CDO production for two reasons: the business was nearing its existing risk limits on inventory, and the market for CDOs was "sluggish" anyway.¹²⁶⁸ Shortly thereafter, however, the CDO desk changed its collective mind and

¹²⁶⁵ FCIC interview with David Bushnell, former Chief Risk Officer, Citigroup, April 1, 2010, transcript available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4848-1644-8005&open=Y>

¹²⁶⁶ Notes on Senior Supervisors' Meeting with Firms, meeting between Citigroup and Federal Reserve Bank of New York, Federal Reserve Board, Office of the Comptroller of the Currency, Securities and Exchange Commission, UK Financial Services Authority, and Japan FSA, November 19, 2007, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4834-2280-6791&open=Y>.

¹²⁶⁷ FCIC staff interviews of Janice Warne, February 2, 2010, MFR available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4846-3994-8294&open=Y>, and Nestor Dominguez, March 2, 2010, MFR available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4828-8279-5781&open=Y>.

¹²⁶⁸ FCIC interview with Nestor Dominguez, March 2, 2010, MFR available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4828-8279-5781&open=Y>.

accelerated its purchases of inventory. Nestor Dominguez explained, “In April 2007, the RMBS market started to rally.”¹²⁶⁹

Murray Barnes, an Independent Risk managing director at Citigroup, approved the CDO business’s request to temporarily increase its limits on purchasing CDO collateral. “In hindsight,” he observed, “rather than looking at [the cheap collateral] as an opportunity, we should have reassessed our assumptions and whether that was a sign of themarket showing strains.... To the extent that we took losses on those positions in the third and fourth quarters because the market froze and we couldn’t sell those positions, yes that was a mistake.... There was a... complacency that our past ability to distribute risk would continue.”

And, in the first half of 2007, the risk-management division also increased the CDO desk’s limits for retaining the most senior tranches from \$30 billion to \$35 billion. Unlike at Merrill, however, the increase in retained positions was not part of a broader effort to reduce overall exposure to risky mortgage assets. Both traders and risk managers at Citi simply believed that the super-senior tranches carried little risk.¹²⁷⁰ On this subject, that report prepared in November by the Citigroup supervisors continued, “An acknowledgement of the risk in its Super Senior AAA CDO exposure was perhaps Citigroup’s ‘biggest miss.’ The original business model was to distribute all CDO risk. However, management found that it was unable to distribute the super-senior tranches at favorable prices. As management felt comfortable with the credit risk of these tranches, it began to retain large positions on the balance sheet.... As the sub-prime market

¹²⁶⁹ FCIC interview with Nestor Dominguez, March 2, 2010, MFR available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4828-8279-5781&open=Y>. [Quotes to unrecorded MFR. Need to check quote with Dominguez.]

¹²⁷⁰ FCIC interview of Murray Barnes, former Managing Director of Independent Risk, March 2, 2010, MFR available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4829-6661-6325&open=Y>.

began to deteriorate, the risk perceived in these tranches increased, causing large write-downs.”¹²⁷¹ Ultimately, losses at Citi from mortgages, residential mortgage-backed securities and mortgage-related CDOs would total approximately \$51 billion.

The decision to increase the super-senior retention risk limits was okayed by Barnes, with approval from his superior, Ellen “Bebe” Duke. Both Duke and Barnes reported to David Bushnell, the Chief Risk Officer. Bushnell—whom Chuck Prince referred to as “the best risk manager on Wall Street”[source to hearing]—told the FCIC that he did not recall specifically approving the increase in those limits but that, in general, the risk management function did approve higher risk limits when a business line was growing.¹²⁷² He described a “firm-wide initiative” to increase Citigroup’s structured products business: “[Risk management was aware] that risk limits were wanted to be, were needed to be, increased by the business.”¹²⁷³

Perhaps the most remarkable fact about the conflicting strategies employed by the securitization and CDO desks is that their respective risk officers attended the same weekly independent risk meetings.¹²⁷⁴ Duke recalled for the FCIC a risk meeting in the fall of 2007 during which the contradictory strategies were discussed.¹²⁷⁵ This was fully *six months* after the conflict arose.

¹²⁷¹ Notes on Senior Supervisors’ Meeting with Firms, meeting between Citigroup and Federal Reserve Bank of New York, Federal Reserve Board, Office of the Comptroller of the Currency, Securities and Exchange Commission, UK Financial Services Authority, and Japan FSA, November 19, 2007, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4834-2280-6791&open=Y>.

¹²⁷² Charles O. Prince, former Chairman and CEO of Citigroup, interview with the FCIC, March 17, 2010, p. 120, transcript available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4849-5576-9861&open=Y>

¹²⁷³ David Bushnell, former Chief Risk Officer of Citigroup, interview with FCIC, April 1, 2010, p. 126, transcript available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4848-1644-8005&open=Y>.

¹²⁷⁴ Ellen “Bebe” Duke, Citigroup Independent Risk, March 18, 2010, MFR available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4810-5913-9077&open=Y>.

¹²⁷⁵ Ellen “Bebe” Duke, Citigroup Independent Risk, March 18, 2010, MFR available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4810-5913-9077&open=Y>.

Even so, Duke was not particularly concerned when the issue did finally come up, because she and her unit assumed that the two other units had different quality collateral and thus conducted their businesses differently. Duke acknowledged that her assumption had been wrong and admitted, “We were seduced by structuring and failed to look at the underlying collateral.”¹²⁷⁶

That failure to look at the underlying collateral was, according to Barnes, the risk officer assigned to the CDO desk, due to a lack of “ability” to see loan performance data, such as delinquencies and early payment defaults, on the underlying mortgage pools comprising the CDOs.¹²⁷⁷ All the while, the surveillance unit in Citigroup’s securitization desk had the extensive database of underlying loan performance data that could have served to inform the decisions made by the CDO desk.¹²⁷⁸ Barnes reflected: “Risk management tended to be managed along business lines. In hindsight, it would have been better to look across risk factors.... I was two offices away from my colleague who covered the [securitization] business, but I didn’t understand the nuances of what was happening to the underlying loans.... One massive regret is that we didn’t reach out to the consumer bank to get the pulse of mortgage origination. An industry-wide problem is that we didn’t have the tools to understand the underlying collateral.”¹²⁷⁹ But of course, they did.

“That has never happened since the Depression”

¹²⁷⁶ Ellen “Bebe” Duke, Citigroup Independent Risk, March 18, 2010, MFR available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4810-5913-9077&open=Y>.

¹²⁷⁷ FCIC interview of Murray Barnes, former Managing Director of Independent Risk, March 2, 2010, MFR available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4829-6661-6325&open=Y>

¹²⁷⁸ Financial Industry Regulatory Authority (FINRA) interview of James Xanthos, March 24, 2009, available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4847-5896-4487&open=Y>

¹²⁷⁹ FCIC interview of Murray Barnes, former Managing Director of Independent Risk, March 2, 2010, MFR available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4829-6661-6325&open=Y>. [Quotes to unrecorded MFR. Need to check quote with Barnes.]

Prince and Rubin told the commission they believed up until the fall of 2007 that any downside risk to the mortgage-backed securities business was minuscule, a crack too small to bring down the dike and flood the whole empire. But they appeared to come to that conclusion without giving the matter much consideration.[cite] Robert Rubin, chairman of the executive committee and a “very important member of [the] board,”¹²⁸⁰ told FCIC staff, “I don’t think anybody focused on the CDOs. This was one business in a vast enterprise, and until the trouble developed, it wasn’t one that had any particular profile. In the RMBS, every firm on the street had enormous mortgage trading operations, and unless somebody came to the board and said we’ve got a problem, or there is something substantially wrong someplace, the board had people who – you know, Tom Maheras was in charge of trading. Tom was an extremely well regarded trading figure on the street. In fact, he was chairman, I am pretty sure of this, I know he was, actually, of the Treasury Advisory Committee, whatever that was called. And this is what traders do, they handle these kinds of problems.” Recall that Maheras told the FCIC that he spent less than 1% of his time thinking about or dealing with the CDO business that would ultimately cause massive losses for the company.^{1281,1282}

Citigroup’s risk management function was simply not concerned about the risks that the housing market could pose to the firm.. According to CEO Prince, Bushnell, his chief risk officer, and others told him, in effect, “ ‘Gosh, housing prices would have to go down 30% nationwide for us

¹²⁸⁰ Transcript of FCIC staff interview of Robert Rubin, former Chairman of the Executive Committee and adviser, March 11, 2010.

¹²⁸¹ FCIC interview with Nestor Dominguez, March 2, 2010. The CDO desk earned revenues of \$367 million in 2005. Letter from Brad Karp (Paul, Weiss) on behalf of Citigroup to Bradley J. Bondi in re the FCIC’s second and third supplement requests, March 31, 2010, “Response to Interrogatory No. 21.”

¹²⁸² FCIC staff interview of Thomas Maheras, former Co-CEO of Citi Markets & Banking, March 10, 2010, pp. 250-253.

to have, not *a problem* with [mortgage-backed securities] CDOs, but for us to have *problems*,’ and that has never happened since the Depression.”¹²⁸³ Housing prices would be down much less than 30% before Citigroup had problems.

“I think we’ve had good risk management”

By [month] 2007, national house prices had fallen xx%, delinquencies in subprime mortgages had risen xx%, and the subprime ABX index (the *de facto* “Dow Jones” for this market) had fallen xx%. Yet, Citigroup still did not expect that the liquidity puts could be triggered and it was not concerned about the value of its retained super-senior tranches of CDOs. On June 4, 2007, Citigroup made a presentation to the Securities and Exchange Commission about subprime exposure in its CDO business. The presentation noted that Citigroup did not factor two positions into its overall subprime exposure for the CDO desk: \$14.6 billion in super-senior tranches and \$23.2 billion in liquidity puts.¹²⁸⁴ The presentation explained that the liquidity puts were not a concern: “[T]he risk of default is extremely unlikely... [and] certain market events must also occur for us to be required to fund. Therefore, we view these positions to be even less risky than the Super Senior Book.”¹²⁸⁵

Just a few short weeks later, the July 2007 collapse of the two Bear Stearns hedge funds spelled trouble. Following the failure of the hedge funds, commercial paper written against three

¹²⁸³ FCIC interview with Chuck Prince.

¹²⁸⁴ Presentation to the Securities and Exchange Commission Regarding Overall CDO Business and Subprime Exposure, June 2007, CITI 00007657 – 00007690, p. CITI 00007673, available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4841-9122-7909&open=Y>

¹²⁸⁵ Presentation to the Securities and Exchange Commission Regarding Overall CDO Business and Subprime Exposure, June 2007, CITI 00007657 – 00007690, p. CITI 00007673, available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4841-9122-7909&open=Y>

Citigroup-underwritten CDOs for which Bear Stearns Asset Management was the asset manager and on which Citi had issued liquidity puts began losing value and the interest rates began rising. The liquidity puts would be triggered if interest rates on the asset-backed commercial paper rose above a certain level.

Citigroup's national bank regulator, the Office of the Comptroller of the Currency (OCC), knew about the liquidity puts since Citigroup first issued them in 2003 but didn't express concerns. Then, by the summer of 2007, the OCC became concerned that Citigroup would have to buy the commercial paper, OCC Examiner-in-Charge John Lyons told the FCIC. Doing so would drain \$25 billion of the company's cash and expose it to possible balance-sheet losses at a time when markets were increasingly in distress. But, looking at the rising rates on the commercial paper backing the three BSAM-managed CDOs, Lyons also said Citigroup did not have the option to wait until further interest rate rises actually triggered the liquidity puts. Large mutual funds that had bought the commercial paper were important customers, and so in July Citigroup purchased \$2.5 billion of paper. "It was to address the reputation risk and the potential loss of large fund providers to the company... They were large depositors in the corporation. There was an implied threat that if Citibank didn't step up, they would pull their other funds.... There was a fear within the company there would be a deposit run."¹²⁸⁶ Over the next six months, Citigroup purchased all \$25 billion of the commercial paper that had been subject to its liquidity puts.¹²⁸⁷

On July 20, Citigroup held an earnings call to discuss its second quarter performance. CFO Gary Crittenden specifically discusses the company's subprime exposures, noting that Citigroup had

¹²⁸⁶ Interview with John Lyons at 7:21, 8:45.

¹²⁸⁷ Interrogatory response from Paul, Weiss, Rifkind, Wharton & Garrison LLP on behalf of Citigroup, response to Interrogatory #18, March 1, 2010, letter available at

reduced its exposure from \$24 billion at the end of 2006 to \$13 billion at the end of the second quarter of 2007.¹²⁸⁸ Crittenden did not make any mention of the subprime exposure related to super-senior tranches or liquidity puts. He explained: “I think our risk team did a nice job of anticipating that this was going to be a difficult environment, and so set about in a pretty concentrated effort to reduce our exposure [to CDOs and other subprime-related assets] over the last six months.”¹²⁸⁹ A week later, on a July 27 investor call, Crittenden reiterated his point: “Subprime exposure of CDOs has actually gone down over the course of the last six months or so. So I think we’ve had good risk management that has been anticipating some market dislocation here, and that had helped contain some of the risk that we have.”¹²⁹⁰

By August, Citigroup’s CDO desk was re-valuing the super-senior tranches that it held as market conditions worsened, despite the absence of an effective model to do so. Rather, CDO desk bankers marked the value of the securities to market using traders’ marks, which were generally at or near par (the original face value of the securities), despite the fact that market demand at those prices was weak to nonexistent.¹²⁹¹ However, as the market congealed, then froze, the paucity of actual market prices for these tranches necessitated the development of a model of some sort.¹²⁹² The New York Fed later noted that “the model for Super Senior CDOs, based on

¹²⁸⁸ Citigroup, Inc. Q2 2007 earnings call presentation, July 20, 2007, 10:00 a.m., transcript available at <http://seekingalpha.com/article/41799-citigroup-q2-2007-earnings-call-transcript?>

¹²⁸⁹ Citigroup, Inc. Q2 2007 earnings call Q&A, July 20, 2007, 10:00 a.m., transcript available at <http://seekingalpha.com/article/41799-citigroup-q2-2007-earnings-call-transcript?part=qanda>

¹²⁹⁰ *Securities and Exchange Commission v. Citigroup Inc.*, 1:10-cv-01277, Complaint, July 29, 2010, <http://www.sec.gov/litigation/complaints/2010/comp21605.pdf>

¹²⁹¹ FCIC staff interviews with Murray Barnes, March 2, 2010, Ellen “Bebe” Duke, March 18, 2010; FCIC interview with Chris Larson, former Examiner with the Federal Reserve Board of New York, March 1, 2010.

¹²⁹² FCIC interview of Murray Barnes, former Managing Director of Independent Risk, March 2, 2010, MFR available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4829-6661-6325&open=Y>

fundamental economic factors, could not be fully validated by Citigroup's current validation methodologies yet it was relied upon for reporting exposures."¹²⁹³

CDO risk-management officer Murray Barnes told the FCIC that sometime that summer he had met with the co-heads of the CDO desk to express concern about possible losses on both the unsold CDO inventory and the retained super-senior tranches. The message got through. Nestor Dominguez told the FCIC, "[W]e began extensive discussions about the implications of the... dramatic decline of the underlying subprime markets, and how that would feed into the super senior positions."¹²⁹⁴ Also at this time—and for the first time--such concerns reached Thomas Maheras, the co-head of Citigroup's investment bank.¹²⁹⁵ He justified his lack of prior knowledge of the \$xx billion in inventory and super-senior tranches in these terms: "The entire CDO business in [fiscal year 2006], its best year ever, comprised under 2 percent of [the investment bank's] revenues. I believe that the business was appropriately supervised by experienced and highly competent managers and by an independent risk group and that I was properly apprised of the general nature of our work in this area and its attendant risks."¹²⁹⁶

¹²⁹³ FCIC-Citi-000198, letter from the Federal Reserve Board of New York to Vikram Pandit and the Board of the Directors of Citigroup, April 15, 2008, p. 10.

¹²⁹⁴ Nestor Dominguez, testimony before the FCIC, hearing on "Subprime Lending and Securitization and Government-Sponsored Enterprises (GSEs)," Session 3: Citigroup Subprime-Related Structured Products and Risk Management, April 7, 2010, p. 281 of transcript, available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4842-8641-3830&open=Y>

¹²⁹⁵ Thomas Maheras, former co-head of Citi Markets & Banking, interview with the FCIC, March 10, 2010, p. 76, available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4852-0736-2565&open=Y>

¹²⁹⁶ Thomas Maheras, testimony before the FCIC, hearing on "Subprime Lending and Securitization and Government-Sponsored Enterprises (GSEs)," Session 3: Citigroup Subprime-Related Structured Products and Risk Management, April 7, 2010, p. 268 of transcript, available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4842-8641-3830&open=Y>

The exact dates are not certain, but other sectors of Citigroup’s senior management also heard about the growing mark-to-market losses on those super-senior tranches in “late August, early September,” to cite Chief Risk Officer Bushnell, well after Citigroup had been compelled to buy the commercial paper backing the senior tranches of the CDO managed by BSAM. The context was a discussion of the upcoming third-quarter results. As reported, this is also when Chairman and CEO Prince first heard about the super-senior CDO tranches: “[I]t wasn’t presented at the time in a startling fashion.... [but] then it got bigger and bigger and bigger, obviously, over the next 30 days.”¹²⁹⁷ In late August, Citigroup’s valuation models suggested that losses on the super-senior tranches might range from \$15 million to \$2 billion.¹²⁹⁸ This number was recalculated as \$300 to \$500 million in mid-September as the valuation methodology was refined.¹²⁹⁹ In the weeks ahead, those numbers would skyrocket.

“DEFCON calls”

To get a handle on the company’s potential losses from the CDOs and liquidity puts, starting on September 9, Prince convened a series of meetings, and later nightly “DEFCON calls,” with members of his senior management team, including Rubin, Maheras and Bushnell as well as Lou Kaden, the chief administrative officer and Gary Crittenden, the chief financial officer.¹³⁰⁰ Rubin was in Korea during the first meeting, but was updated on the discussions that took place by

¹²⁹⁷ *Id.* p. 81.

¹²⁹⁸ *Securities and Exchange Commission v. Citigroup Inc.*, 1:10-cv-01277, Complaint, July 29, 2010, <http://www.sec.gov/litigation/complaints/2010/comp21605.pdf>

¹²⁹⁹ *Securities and Exchange Commission v. Citigroup Inc.*, 1:10-cv-01277, Complaint, July 29, 2010, <http://www.sec.gov/litigation/complaints/2010/comp21605.pdf>

¹³⁰⁰ Thomas Maheras, former co-head of Citi Markets & Banking, interview with the FCIC, March 10, 2010, p. 165, available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4852-0736-2565&open=Y>; see also Thomas Maheras, former co-head of Citi Markets & Banking, interview with the FCIC, March 10, 2010, p. 165, available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4852-0736-2565&open=Y>

Kaden.¹³⁰¹ Rubin later emailed CEO Prince: “According to Lou, Tom [Maheras] never did provide a clear and direct answer on the super seniors. If that is so, and the meeting did not bring that to a head, isn’t that deeply troubling not as to what happened – that is a different question that is also troubling – but as to providing full and clear information and analysis now.”¹³⁰² Prince disagreed, saying, “I thought, for first mtg, it was good. We weren’t trying to get to final answers.”¹³⁰³

A second meeting was scheduled for September 12 – after Rubin was back in the country – and management’s focus shifted squarely to the CDOs. This meeting was attended by the same senior executives and it marked the first time Rubin recalled hearing of the super-senior and liquidity-put exposure.¹³⁰⁴ Rubin later commented, “As far as I was concerned they were all one thing, because if there was a put back to Citi under any circumstance, however remote that circumstance might be, you hadn’t fully disposed of the risk.”¹³⁰⁵ And, of course, the circumstance was not remote, since billions of dollars in subprime mortgage assets had *already* been “put back” to Citi.

Chuck Prince told the FCIC that Thomas Maheras repeatedly assured him throughout the meetings and the DEFCON calls that the super-seniors posed no risk to Citigroup, even as the

¹³⁰¹ *Id.* pp. 141-42; CITI-FCIC-E 00036374 Chuck Prince email to Robert Rubin re Thomas Maheras and super seniors, September 9, 2007.

¹³⁰² CITI-FCIC-E 00036374 Chuck Prince email to Robert Rubin re Thomas Maheras and super seniors, September 9, 2007.

¹³⁰³ CITI-FCIC-E 00036374 Chuck Prince email to Robert Rubin re Thomas Maheras and super seniors, September 9, 2007.

¹³⁰⁴ Robert Rubin, former chairman of the executive committee, Citigroup, March 11, 2010, pp. 68-73, available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4811-1378-7397&open=Y>

¹³⁰⁵ Robert Rubin, former chairman of the executive committee, Citigroup, March 11, 2010, p. 74, available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4811-1378-7397&open=Y>

market deteriorated, and that he, Prince, recalled becoming more and more uneasy with Maheras' assessment. "Tom had said and said till his last day at work [October 11]: 'We are never going to lose a penny on these super seniors. We are never going to lose a penny on these super seniors....' And as we went along and I was more and more uncomfortable with this and more and more uncomfortable with Tom's conclusions on ultimate valuations, that is when I really began to have some very serious concerns about what was going to happen."¹³⁰⁶

Despite Prince's concerns, Citigroup publicly remained silent about the additional subprime exposure from the super-senior positions and liquidity puts. On October 1, 2007, Citigroup pre-announced its third-quarter earnings and predicted that the company's net income could fall as much as 60% from the third quarter of 2006. It also disclosed an estimated \$1 billion in write downs on subprime inventory for the CDO desk and unsold tranches.¹³⁰⁷ The press release did not mention any estimates of Citigroup's remaining subprime exposures that could cause further losses.

On October 11, 2007, the rating agencies initiated a series of rolling downgrades on thousands of securities. CEO Prince told the FCIC that the rating downgrades effectively turned the supposedly AAA securities into "junk."¹³⁰⁸ He indicated that the day of these downgrades was the "canary in the coal mine" for Citigroup and "the precipitating event in the financial crisis."¹³⁰⁹ The same day, Prince restructured the investment bank, leading to the resignation of Maheras

¹³⁰⁶ Transcript of FCIC staff interview of Chuck Prince, March 17, 2010, pp. 83-84.

¹³⁰⁷ "October 1, 2007 Recorded Call Transcript" and cover email, CITI-FCIC-E 00016495 – 00016505, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4822-0738-9445&open=Y> and <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4849-9253-8373&open=Y>

¹³⁰⁸ Transcript of FCIC staff interview of Chuck Prince, March 17, 2010, p. 82.

¹³⁰⁹ Transcript of FCIC staff interview of Chuck Prince, March 17, 2010, pp. 117, 119.

and the termination of Randy Barker, Maheras's subordinate who had responsibility for the fixed income unit that housed the CDO desk.¹³¹⁰

Four days later, the issue of the super-senior CDOs and liquidity puts was raised specifically to the Board of Director's Corporate Audit and Risk Management Committee meeting and to the full Board.¹³¹¹ [add main attendees from meeting minutes] A presentation concluded that "total sub-prime exposure in [the investment bank] was \$13bn with an additional \$16bn in Direct Super Senior and \$27bn in Liquidity and Par Puts."¹³¹² Aggregated together, Citigroup's subprime exposure was \$56 billion. The calculation was straight forward but, during an analysts' conference call later that day CFO Gary Crittenden omitted mention of the super-senior and liquidity-put related exposure and told participants that Citigroup had *under \$13 billion* in subprime exposure.¹³¹³

A week later, on Saturday, October 27, Prince learned from Crittenden that the company would have to report subprime-related losses of \$8 to \$11 billion,, and on Monday he immediately tendered his resignation to the Board.¹³¹⁴ He later reflected, "When I drove home and Gary called me and told me it wasn't going to be two or 300 million but it was going to be 8 billion – I will

¹³¹⁰ Thomas Maheras, former co-head of Citi Markets & Banking, interview with the FCIC, March 10, 2010, pp. 200-209, available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4852-0736-2565&open=Y>

¹³¹¹ CITI-FCIC 00000673, minutes of a meeting of the Corporate Audit and Risk Management Committee, October 15, 2007, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4819-6602-4709&open=Y>.

¹³¹² CITI-FCIC 00002793, "Risk Management Review: An Update to the Corporate Audit and Risk Management Committee," October 15, 2007, p. CITI-FCIC 00002794.

¹³¹³ CITI-FCIC 00002793, "Risk Management Review: An Update to the Corporate Audit and Risk Management Committee," October 15, 2007, p. CITI-FCIC 00002794.

¹³¹⁴ Transcript of FCIC staff interview of Chuck Prince, March 17, 2010, p. 208.

never forget that call. I continued driving, and I got home, I walked in the door, I told my wife, I said here's what I just heard and if this turns out to be true, I am resigning."¹³¹⁵

On November 4, Citigroup revealed the accurate subprime exposure – now estimated at \$55 billion – and it disclosed the subprime-related losses.¹³¹⁶ While Prince resigned, he remained on Citigroup's payroll until the end of the year, and the Board of Directors gave him a generous parting compensation package: \$11.9 million in cash and \$24 million in stock, bringing his total compensation to \$79 million from 2004 to 2008.¹³¹⁷ Citigroup's stock declined 4.9%. An analyst's report the next day summed up investor reaction: "We are disappointed with the lack of previous disclosure surrounding the extent of the company's CDO exposure.... [W]e find management's previous disclosures surrounding subprime exposure as deceptive at best. Specifically, while management appears to have accurately portrayed its secured lending exposure of less than \$13 billion on the 3Q07 conference call, by leaving out the additional (and much more substantial) \$43 billion in subprime CDO exposure within other areas of the business, we feel misled."¹³¹⁸ The Federal Reserve Bank of New York would later conclude, "[T]here was little communications on the extensive level of subprime exposure posed by Super Senior CDO.... Senior management, as well as the independent Risk Management function

¹³¹⁵ Page 195 of Prince interview transcript, March 17, 2010

¹³¹⁶ "Citi's Sub-Prime Related Exposure in Securities and Banking," Citigroup press release, November 4, 2007, available at <http://www.citigroup.com/citi/press/2007/071104b.htm>

¹³¹⁷ Citigroup 2008 Proxy Statement, p. 73-74.

¹³¹⁸ Buckingham Analyst Report, November 5, 2007.

charged with monitoring responsibilities, did not properly identify and analyze these risks in a timely fashion.”¹³¹⁹

Citigroup’s poor performance in the third quarter led to extensive restructuring in the investment bank. By the end of 2007, approximately 100 people had been laid off of the CDO desk, including co-head Nestor Dominguez, leaving only a skeletal staff behind to wind down the business.¹³²⁰ A new chief risk officer replaced David Bushnell in November 2007, and Chuck Prince’s replacements as chairman and CEO – Richard Parsons and Vikram Pandit – were announced in December. Robert Rubin would stay on board until January of 2009 – having been paid over \$50 million from 2004 to 2009.

AIG and Goldman: “A gesture of goodwill”

From the first Goldman email that interrupted AIG’s Alan Frost while he was on vacation on July 26, 2007, the collateral dispute between Goldman and AIG captured nearly the full attention of the senior management of both companies. For fourteen months, Goldman pressed its case and sent AIG a formal demand letter every single business day. It would pursue AIG relentlessly with demands for collateral based on marks that were initially well below those of other firms – while AIG and its management struggled to come to grips with a burgeoning crisis facing the firm.

¹³¹⁹ FCIC-Citi-000198, letter from the Federal Reserve Board of New York to Vikram Pandit and the Board of Directors of Citigroup, April 15, 2008, at 8, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4843-9347-8661&open=Y>.

¹³²⁰ FCIC interview with Nestor Dominguez, March 2, 2010, MFR available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4828-8279-5781&open=Y>.

“Rule Number 1”

The initial collateral call was a shock to AIG executives. As noted, many members of AIG’s most senior management, including CEO Martin Sullivan, CFO Steven Bensinger and CRO Robert Lewis, as well as executives of the Financial Products subsidiary, had not even known there were collateral call provisions in the credit default swaps with Goldman.

They did know there were enormous exposures. In 2005, AIG Financial Products had tripled its exposure to CDOs backed in large part by subprime and Alt-A loans.¹³²¹ By 2007, AIG Financial Products had written \$78 billion worth of credit default swaps on super-senior tranches of CDOs, with Goldman Sachs accounting for \$21 billion of the swaps. By comparison, the parent company’s total reported capital was \$95.8 billion at the end of 2007.

While the exposures were enormous, executives said they had never been concerned – the swaps were considered to be practically “risk-free.” Vice President of Accounting Policy Joseph St. Denis had always considered that “there could never be losses on the [super-senior] CDS.”^[33] He was not alone. Then came that first collateral call. St. Denis told FCIC staff that he was so “stunned” when he got the news, that he “had to sit down.”^[32] Even Gene Park, the executive who had insisted eighteen months earlier that AIG stop writing the swaps, was surprised by the collateral provisions.^[29] He told the FCIC that “rule Number 1 at AIG FP” was to never post collateral.^[30] This was particularly important in the credit default swap business, he said, because it was the only un-hedged business that AIG ran.^[31]

But Jake Sun, general counsel of the Financial Products subsidiary, who reviewed the swap contracts before they were executed, told the FCIC that the provisions were standard both at AIG

and in the industry.^[34] Alan Frost, who first learned about the collateral call, agreed and confirmed that other financial institutions also commonly did deals with collateral posting provisions. ^[35] Pierre Micottis, the Paris-based head of the AIG Financial Products' Enterprise Risk Management department, told the FCIC that collateral provisions were indeed common in derivatives contracts – but surprising in the super-senior CDS contracts, which were considered safe investments. Moreover, the two largest monoline guarantors, MBIA and Ambac, which were regulated by state insurance supervisors in New York and Wisconsin, did not permit such collateral terms in their contracts.¹³²²

However, there they were in the Goldman contracts. As disturbing as the senior AIG executives' surprise at the collateral provisions was their firm's inability to determine the validity of Goldman's numbers. AIG Financial Products did not have its own model to estimate the value of the CDS portfolio. It had never tried to determine the market value of the CDS, nor had it ever tried to hedge the company's exposure to them. Executives did not think there was a need to hedge. Gene Park explained that this view was based in part on the belief that AIG would only have to pay CDS counterparties if there were actual losses incurred by the holders of the super senior tranches.¹³²³ He also said that purchasing a hedge from UBS was considered but that Andrew Forster, the head of credit trading at AIG Financial Products, rejected it because the cost was more than the fees AIGFP was receiving for the CDS protection it wrote. "We're not going to pay a dime for this," Forster told Park.¹³²⁴

¹³²² Dinallo MFR; Micottis MFR.

¹³²³ Park MFR at 121-125.

¹³²⁴ Park MFR at 133.

Therefore, AIG Financial Products relied on an actuarial model that did not provide a tool for monitoring the market value of the CDS. The model was developed by Gary Gorton, then a professor at the Wharton School of Finance who worked as a consultant to AIG Financial Products starting in 1996 and was close to its CEO, Joe Cassano.¹³²⁵ The Gorton model had determined with 99.85% confidence that the owners of the super-senior tranches of the CDOs AIG Financial Products insured would never suffer real economic losses, even in an economy as troubled as the worst post-World War II recessionary scenario. AIG Financial Products was not alone in trusting the Gorton model. The company's auditors, PricewaterhouseCoopers ("PwC"), concluded that "The risk of default on [AIG Financial Products'] portfolio has been effectively removed and as a result from a risk management perspective, there are no substantive economic risks in the portfolio and as a result the fair value of the liability stream on these positions from a risk management perspective could reasonably be considered to be zero."¹³²⁶

Speaking with the FCIC, Financial Products CEO Joe Cassano was adamant that the "CDS book"—all the tens of billions of dollars in swaps--was "effectively hedged." He said that the fact that the CDS contracts were written only on the super senior tranches of top-rated securities with high "attachment points" (essentially, the percentage of loans in the underlying CDO that would have to default in order for losses to reach the super senior tranche, forcing AIG to pay out on the credit default swap contract), and the fact that the bulk of the exposure came from loans made before 2006 (since underwriting standards had deteriorated by that year), assured that the company AIG could never suffer losses on the swaps.¹³²⁷ Indeed, according to Gene Park,

¹³²⁵ Transcript of Gene Park Interview at 50. Available on NetDocs here: <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4845-7976-0902&open=Y>

¹³²⁶ 11/7/07 PwC memo re 3Q07 review of SSCDS portfolio (PwC-FCIC 000224-240) at PwC-FCIC 000225.

¹³²⁷ Cassano MFR.

Cassano put a halt to a \$150 million hedge using the ABX index. As Park explained, “Joe stopped that because after we put on the first 150 ... the market moved against us ... we were losing money on the 150 million ... Joe said ‘ You know, I don’t think the world is going to blow up ... I don’t want to spend that money. Stop it’ “.

Ultimately, any hedges that Cassano felt were built into the portfolio (he called them “structural hedges”) meant to protect against economic losses were irrelevant. While there was a very small likelihood that AIGFP would suffer actual economic losses as a result of massive defaults on the underlying securities, triggering AIGFP’s coverage, the key provisions in the swap contracts with counterparties required AIG to pay collateral if the *market value* of the underlying securities dropped, or if rating agencies lowered AIG’s debt rating. That was a totally different danger than massive defaults in the underlying securities.

AIG’s inability to determine a market value proved to be a serious handicap in its dispute with Goldman Sachs, which, according to the investment bank, priced all of its positions on a daily basis. Despite the limited transparency in the market in the summer of 2007, Goldman used what information there was to estimate what it considered to be realistic prices for the securities at issue. Much of the price information came from the public derivatives indices – the ABX and TABX – which investors could use to track the performance of a group of credit default swaps based on subprime loans. Looking at those indices, Goldman gauged the changes in pricing for investments similar to the ones underlying AIG’s credit default swaps. In addition to finding public information about comparable securities from public indices, Goldman also spoke with

other companies to see what values they assigned to the securities. Finally, Goldman looked to its own experience: in most cases, when the bank bought credit protection on an investment, it turned around and sold credit protection on the same investment to other counterparties. These deals yielded more information.¹³²⁸

AIG also received quotes from other dealers but had only the Gorton model for predicting the likelihood that defaults in the underlying securities would be so severe as to hit the super senior “attachment point” – that is, the point at which all lower-ranking tranches would be wiped out, leaving the super-seniors exposed to loss. The model did not provide a tool for determining the “market value” of underlying securities. When AIG initially received Goldman’s marks, it was caught by surprise. “That was just something that hit out of the blue,” Jon Liebergall, an AIG Financial Products executive, said during a July 30 telephone conversation with Forster. “It’s a f**king** number that’s well bigger than we ever planned for.”¹³²⁹ And, as Forster had recognized, if AIG agreed to the low marks, it would also have to acknowledge that its own assets had lost value. That would result in a massive hit to its earnings and capital.

Goldman “was not budging” on the issue of demanding collateral, according to Tom Athan, a managing director at AIG Financial Products. “I played almost every card I had, legal wording, market practice, intent of the language, meaning of the [contract], and also stressed the potential

¹³²⁸ Goldman’s submissions to the FCIC on its valuation and pricing related to collateral calls made to AIG are available on Goldman Sachs’s website. See: <http://www2.goldmansachs.com/our-firm/on-the-issues/responses-fcic.print.html> See doc on FCIC website.

¹³²⁹ Transcript of 7/30/2007 phone call with Jonathan Liebergall and Andrew Forster, AIG-SEC 1361815 (Tab 9 of AIG/Goldman Sachs collateral call timeline – available on FCIC website).

damage to the relationship and GS said that this has gone to the ‘highest levels’ at GS and they feel that... this is a ‘test case’ ...”¹³³⁰

Actually, Goldman did budge. It almost immediately reduced its July 27 of \$1.8 billion by \$600 million – a move that underscored the difficulty of finding reliable market prices in the summer of 2007. The new demand, \$1.2 billion, was still too high, in AIG’s view, which was corroborated by third party marks. Forster characterized their marks as “ridiculous.” Goldman’s marks valued the CDOs between 80 and 97 cents on the dollar, while Merrill Lynch—for example—was valuing the same securities between 95 and 100 cents on the dollar.¹³³¹

On August 7, Joe Cassano, CEO of AIG Financial Products, told his independent auditors, PwC, that there was “little or no price transparency” on the proper marks and it was “difficult to determine whether [collateral calls] were indicative of true market levels moving.” AIG managers did call other dealers holding similar bonds to check their marks to help its case with Goldman, but those marks were not “actionable”-- that is, the dealers would not actually execute transactions at the quoted prices. “The above estimated values ... do not represent actual bids or offers by Merrill Lynch” was the disclaimer in listing of estimated market values provided by Merrill to AIG.¹³³² Goldman Sachs disputed the reliability of such estimates.

“Without being flippant”

Prior to that August, investors had no way of knowing AIG had a \$78 billion mortgage-related credit default swap portfolio. On August 9, during the company’s second-quarter earnings call

¹³³² 11/9/07 email and enclosed marks from Merrill Lynch; Tab 20 the collateral call timeline.

with analysts, AIG executives disclosed the protection on the super-senior tranches of CDOs and acknowledged that the great majority of the underlying bonds thus insured – \$64 billion – were backed by subprime mortgages.^[37] Of this amount, \$19.4 billion was written on CDOs predominantly backed by risky BBB-rated collateral. To reassure his audience, CEO Cassano maintained that the exposures were no problem: “It is hard for us, without being flippant, to even see a scenario within any kind of realm or reason that would see us losing \$1 in any of those transactions.”^[38] He added at the end of the call, “[W]e see no issues at all emerging. We see no dollar of loss associated with any of [the CDS] business. Any reasonable scenario that anyone can draw, and when I say reasonable, I mean a severe recession scenario that you can draw out for the life of the securities.”¹³³³ Robert E. Lewis, the parent company’s chief risk officer, seconded that reassurance: “We believe that it would take declines in housing values to reach depression proportions, along with default frequencies never experienced, before AAA and AA investments would be impaired.”^[39]

These assurances focused on actual defaults on the underlying subprime assets—but this was not the immediate problem. The immediate problem was Goldman’s ominous collateral call triggered by declines in the market value of subprime-backed securities. In that second-quarter earnings call, no one mentioned collateral calls, and the executives knew that it didn’t matter if the cash flows from the underlying loans were sufficient to pay the owners of the CDO tranches. What mattered was Goldman’s demand for \$1.2 billion in cash, with the clear possibility that future, much-larger collateral calls could jeopardize AIG’s liquidity, even if the CDS contracts did not have to pay out on the bonds they insured. The possibility of the “enormous mark” on

¹³³³ 8/9/07 AIG 2Q 2007 Earnings call transcript, available online at <http://seekingalpha.com/article/44048-american-international-group-q2-2007-earnings-call-transcript?part=qanda>

AIG's existing book that Andrew Forster identified also mattered – if AIG was forced to write down the value of its assets, the company could fact a huge mark-to-market loss, seriously weakening its financial condition. On the basis of AIG executives' comments during the earnings call, investors had no way of knowing about the tremendous risks the company was facing.

On August 10, the day after Cassano and Lewis made assurances to investors , AIG posted \$450 million in cash to Goldman. As Alan Frost wrote to Andrew Forster in an August 16, 2007 email, the idea was “to get everyone to chill out.”¹³³⁴ For one thing, some AIG executives had late-summer vacations planned. Cassano signed off on the \$450 million “good faith deposit”¹³³⁵ before leaving for a cycling trip through Germany and Austria.¹³³⁶ The parties executed a side letter making clear that both disputed the amount.^[26] For the time being, two companies that had been doing business together for decades agreed to disagree.

On August 14, Frost went to Goldman's offices to “start the dialog [sic],” which had stalled while Cassano and other key executives were on vacation.¹³³⁷ Two days later, Frost wrote to Andrew Forster. “Trust me,” he said. “This is not the last margin call we are going to debate.”¹³³⁸ He was right. By September 11, Société Générale – known more commonly as SocGen - demanded \$40 million in collateral, UBS demanded \$67 million, and Goldman had upped its

¹³³⁴ 8/16/07 Alan Frost email to Andrew Forster, AICSEC11604624-25 (Tab 13 of AIG/Goldman Sachs Collateral Call Timeline, available of FCIC website.)

¹³³⁵ Cassano transcript, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4826-1920-8966&open=Y> at 101.

¹³³⁶ Cassano transcript, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4826-1920-8966&open=Y> at 101.

¹³³⁷ 8/14/07 Alan Frost email to Andrew Forster, AICSEC11604624-25 (Tab 13 of AIG/Goldman Sachs Collateral Call Timeline, available here: <http://fcic.gov/hearings/pdfs/2010-0701-AIG-Goldman-supporting-docs.pdf>).

¹³³⁸ 8/16/07 Alan Frost email to Andrew Forster, AICSEC11604624-25 (Tab 13 of AIG/Goldman Sachs Collateral Call Timeline, available here: <http://fcic.gov/hearings/pdfs/2010-0701-AIG-Goldman-supporting-docs.pdf>).

demand by \$300 million..¹³³⁹ The SocGen demand was based on an 82.5 bid price provided by Goldman which AIG disputed – as apparently did SocGen itself.¹³⁴⁰ Athan told Forster that SocGen “received marks from GS on positions that would result in big collateral calls but SG disputed them with GS.”¹³⁴¹ Several weeks later Cassano told AIG’s Financial Services Division CFO Elias Habayeb that he believed the SocGen margin call had been “spurred by Goldman,” and that AIG “disputed the call and [had] not heard from SocGen again on that specific call.”¹³⁴² In the second week of October, the rating agencies announced hundreds of additional downgrades affecting tens of billions of dollars of subprime mortgage-backed securities.[\[48\]](#) These downgrades promised to spark additional declines in the market value of the securities underlying AIG’s CDS contracts, triggering additional calls. By November 2, Goldman’s demand had almost doubled, to \$2.8 billion. On November 6, Steve Bensinger, the parent company’s CFO, informed AIG’s audit committee that Financial Products had received margin calls from five counterparties and was disputing every single one.[\[50\]](#)

This stance was still rooted in the company’s belief that Goldman had undervalued the underlying securities. AIG’s position was corroborated, at least in part, by the wide disparity in marks from other counterparties. At one point, Merrill Lynch and Goldman made collateral demands on the exact same CDS positions, but Goldman’s marks were almost 35% lower than

¹³³⁹ 9/11/2007 Tom Athan email to Andrew Forster, cc Adam Budnick, AIG-SEC2052791-92 (Tab 14 of AIG/Goldman Sachs Collateral Call Timeline, available of FCIC website).

¹³⁴⁰ 9/11/2007 Tom Athan email to Andrew Forster, cc Adam Budnick, AIG-SEC2052791-92 (Tab 14 of AIG/Goldman Sachs Collateral Call Timeline, available of FCIC website).

¹³⁴¹ 9/11/2007 Tom Athan email to Andrew Forster, cc Adam Budnick, AIG-SEC2052791-92 (Tab 14 of AIG/Goldman Sachs Collateral Call Timeline, available of FCIC website).

¹³⁴² 11/1/07 email, Tab 16 to collateral call timeline.

Merrill's.¹³⁴³ Goldman insisted that its marks represented the “constantly evolving additional information from our market making activities, including trades that we had executed, market activity we observed, price changes in comparable securities and derivatives and the current prices of relevant liquid ABS and TABX indices.”¹³⁴⁴ But Cassano believed that the quick reduction in Goldman's first collateral demand (from \$1.8 billion on July 27 to \$1.2 billion on July 28) and the interim agreement on the \$450 million deposit confirmed that Goldman was not as certain in the accuracy of its marks as it later insisted. Cassano told the FCIC that Goldman's Michael Sherwood admitted to him that Goldman “didn't cover ourselves in glory during this period. I understand that.” According to Cassano, Sherman also said in that conversation that “The market's starting to come our [Goldman's] way,” which Cassano took as an implicit admission that Goldman's initial marks had been too low.¹³⁴⁵

“More love notes”

In mid-August, Andrew Forster sent an email to Alan Frost, the chief salesman of credit default swaps at AIGFP, reporting on rumors that Goldman was pursuing a strategy of aggressively marking down assets to “cause maximum pain to their competitors.”¹³⁴⁶ If the rumors were true, the fact that AIG did not have a model or “actionable” quotes from other dealers meant that it had fewer defenses against that strategy. PricewaterhouseCoopers, which served as auditor for

¹³⁴³ 11/18/2007 Andrew Forster email to Joe Cassano re: GS Prices vs Others (no bates), available at Tab 22 of AIG/Goldman Sachs Collateral Call Timeline, available here: <http://fcic.gov/hearings/pdfs/2010-0701-AIG-Goldman-supporting-docs.pdf>)

¹³⁴⁴ Goldman's submission re Valuation & Pricing Related to Initial Collateral Calls on Transactions with AIG, available at <http://www2.goldmansachs.com/our-firm/on-the-issues/valuation-doc.pdf> at 2-3.

¹³⁴⁶ AIG-SEC 11604624

both AIG and Goldman during this period, knew full well that AIG had never before marked these positions to market. In the third quarter of 2007, with the collateral demands piling up, PwC prompted AIG to begin developing a model of its own. Prior to the Goldman margin call, PwC concluded that “compensating controls” made up for AIG’s absence of a valuation model. Among those “compensating controls” was notice from counterparties that collateral was due.¹³⁴⁷ In other words, one of AIG’s risk management tools was to learn of problems at AIG from counterparties who did have the ability to mark their own positions to market prices, and, as a result of their analysis, demand collateral from AIG.

The decision to develop a valuation model was not unanimous. In mid-September, Cassano and Forster met with Financial Services Division CFO Habayeb and others to discuss marking the positions down and actually recording valuation losses in its financial statements.^[44] Cassano still thought the valuation process was unnecessary because the possibility of defaults was “remote.”^[44] He sent Forster and others emails describing requests from Habayeb as “more love notes... [asking us to go through] the same drill of drafting answers.”^[45] Nevertheless, by October, and in consultation with PwC, AIG started to evaluate the pricing model for subprime instruments developed and used by Moody’s, the rating agency that had given these instruments their top ratings. Cassano considered the Moody’s model only a “gut check” until it was fully internally validated. ^[47] AIG coupled this model with generic CDO tranche data sold by JPMorgan that was considered to be relatively representative of the market. Of course, by this time – and for several months prior--there was no active market for many of these tranches. Everyone understood that this patchwork model wasn’t a perfect solution, but AIG and its

¹³⁴⁷ Tim Ryan MFR.

auditors thought it could serve as an interim step. The makeshift model was up and running in the third quarter.

“Confident in our marks”

On November 7 when AIG reported its third-quarter earnings [\[52\]](#) the company disclosed that it was taking a \$352 million charge “related to its super senior credit default swap portfolio” and “a further unrealized market valuation loss through October 2007 of approximately \$550 million before tax [on that] portfolio.”¹³⁴⁸ On a conference call discussing the numbers, AIG CEO Martin Sullivan assured investors that the insurance company had “active and strong risk management.” He said, “AIG continues to believe that it is highly unlikely that AIGFP will be required to make payments with respect to these derivatives.”¹³⁴⁹ Financial Products CEO Cassano added that AIG had “more than enough resources to meet any of the collateral calls that might come in.”¹³⁵⁰

While the company remained adamant that there would be no realized economic losses from the credit default swaps, it used the newly adopted – and adapted – Moody’s model to estimate the \$352 million charge. In fact, PricewaterhouseCoopers had questioned the relevance of the model: it hadn’t been validated in advance of the earnings release, it didn’t take into account important structural information about the swap contracts, and there were questions about the quality of the data.¹³⁵¹ Still, AIG reported the \$352 million charge without any caveats about the questionable model used to calculate it.

¹³⁴⁸ 11/7/07 AIG press release at 5.

¹³⁴⁹ 11/7/07 AIG press release at 1.

¹³⁵⁰ 11/8/07 AIG earnings call transcript at 20.

¹³⁵¹ 11/7/07 PwC Memo (PwC-FCIC 000224-240).

Two weeks later, on November 23, Goldman demanded an additional \$3 billion in cash. AIG protested, but agreed to post \$1.55 billion, bringing the total amount posted to \$2 billion. The parties crafted another side letter stating that each of them disputed the amount.^[54] Four days later, Cassano forwarded a memo from Andrew Forster listing the pertinent marks for the securities from Goldman Sachs, Merrill Lynch, Calyon, Bank of Montreal and SocGen.¹³⁵² The marks varied widely, from as low as 55% of the bonds' original value to virtually full value. Goldman's estimated values were much lower than other dealers. For example, Goldman valued the Dunhill CDO at 75% of par but Merrill valued it at 95% of par. As another example, the Orient Point CDO was valued at 60% of par by Goldman but at 95% of par by Merrill. Forster suggested that the marks validated AIG's longstanding contention: "There is no one dealer with more knowledge than the others or with a better deal flow of trades and all admit to 'guesstimating' pricing." Cassano agreed. "No one seems to know how to discern a market valuation price from the current opaque market environment," Cassano wrote to a colleague. "This information is limited due to the lack of participants [willing] to even give indications on these obligations. These are not freely traded instruments and even in the best of times are priced through analogue."¹³⁵³

One week later, Cassano called Sherwood in Goldman's London office and demanded return of \$1.4 billion.^[56] He told both AIG and Goldman executives that independent third-party pricing for 70% of the 3,500 underlying securities and AIG's own valuation for the other 30% indicated

¹³⁵² Memo re: Collateral Call Status, AIG-SEC1364131-40 (Tab 25 of AIG/Goldman Sachs Collateral Call Timeline, available here: <http://fcic.gov/hearings/pdfs/2010-0701-AIG-Goldman-supporting-docs.pdf>).

¹³⁵³ 11/27/2007 Joe Cassano email to Bill Dooley re: Collateral Calls, AIG-SEC1364131-40 (Tab 25 of AIG/Goldman Sachs Collateral Call Timeline, available here: <http://fcic.gov/hearings/pdfs/2010-0701-AIG-Goldman-supporting-docs.pdf>).

Goldman's demand was unsupported, and Goldman should return the money.^[57] Goldman refused, and instead demanded an *additional* [\$1.4] billion.¹³⁵⁴

By late November, there was relative agreement within AIG and its auditor that the Moody's model incorporated into AIG's valuation system was inadequate for valuing the super-senior book.^[58] But there was no consensus on how that book *should* be valued. Inputting generic CDO collateral data into the Moody's model would result in a \$1.5 billion valuation loss; using Goldman's marks would result in a \$5 billion valuation loss, which would wipe out the quarter's profits.^[59] On November 29, auditors from PricewaterhouseCoopers or PwC met with senior executives from AIG and the Financial Products subsidiary to discuss the whole situation. According to PwC meeting notes, AIG reported that disagreements with Goldman were still ongoing, and AIG did not have data to dispute Goldman's marks. Andrew Forster recalled that CEO Sullivan said that he was going to have a heart attack when he learned that using Goldman's marks would eliminate the quarter's profits.¹³⁵⁵ Sullivan told FCIC staff that he did not recall this part of the meeting.¹³⁵⁶ According to Forster's recollection, after Sullivan reacted to the potential of a \$5 billion valuation loss, Cassano said, "Obviously, that needs to be adjusted... everyone then is much calmer and understands that, okay, well then that completely changes the magnitude of the number."¹³⁵⁷

¹³⁵⁴ GS 08183-8236, and GS08318-344.

¹³⁵⁵ Andrew Forster Interview Transcript at 107, available here: <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4810-4228-6086&open=Y>

¹³⁵⁶ Martin Sullivan Interview Transcript at 82, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4849-7653-4022&open=Y>

¹³⁵⁷ Andrew Forster Interview Transcript at 107, available here: <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4810-4228-6086&open=Y>

AIG did adjust the number, and when doing so it chose not to rely on dealer quotes. James Bridgewater, the Financial Products executive vice president in charge of models, came up with a solution. Convinced that there was a calculable difference between the value of the underlying bonds and the value of the swap protection AIG had written on those bonds, Bridgewater suggested using a “negative basis adjustment,” which would reduce the unrealized loss estimate from \$5.1 billion (which would result from using Goldman’s figures) to approximately \$1.5 billion. With their auditor’s knowledge, Cassano and others agreed that the negative basis adjustment was the way to go.

Several documents produced to the FCIC by PwC, AIG and Cassano reflect discussions during and after the November 29 meeting. During a second meeting between only the auditor and parent company executives (Financial Products executives including Cassano and Forster did not attend), PwC expressed significant concerns about risk management, specifically related to the valuation of the credit default swap portfolio, as well as the company’s procedures in posting collateral. AIG Financial Products had paid out \$2 billion without active involvement from the parent company’s Enterprise Risk Management group. Another issue was “the way in which AIGFP [had] been ‘managing’ the SS valuation process – saying PwC will not get any more information until after the investor day presentation.”

The auditors were voiced concerns about conflicting strategies pursued by AIG subsidiaries, and they laid out the details. Notably, the securities lending subsidiary, which used profits earned from its short-term securities lending business to invest in residential mortgage backed securities, had been increasing its subprime exposure by purchasing mortgage-backed securities. From the end of 2006 through September 2007, its purchases rose from \$69 billion to \$88 billion. Meanwhile, Financial Products, acting on its own analysis, had made a decision to begin pulling

back on new credit protection commitments for subprime related securities in 2006. In PwC's view, parent company risk management failed by allowing one subsidiary to increase exposure to subprime while another subsidiary worked to exit the market entirely. PwC also said that the company's second quarter financial disclosures would have been changed if the exposure of the securities lending business was known. The auditors concluded that "these items together raised control concerns around risk management which could be a material weakness."¹³⁵⁸ Kevin McGinn, AIG's Chief Credit Officer, shared these concerns about the conflicting strategies. In a November 19, 2007 email, McGinn wrote that, "All units were apprised regularly of our concerns about the housing market. Some listened and responded; others simply chose not to listen and then, to add insult to injury, [did] not spot the manifest signs." He concluded that this was akin to "Nero playing the fiddle while Rome burned."¹³⁵⁹ In contrast, CEO Sullivan insisted to the FCIC that the conflicting strategies in the securities lending business and at AIGFP simply reflected two subsidiaries adopting different business models, and did not constitute a risk management failure.¹³⁶⁰ The billions of dollars in write-offs AIG ultimately recorded in the securities lending business proved PwC and McGinn right.

Six days after receiving PwC's warnings about risk management failures and the possibility of a "material weakness" in the company's internal controls, CEO Sullivan boasted about AIG's risk management systems and the company's oversight of the subprime exposure. The occasion was a conference call with analysts on December 5: "The risk we have taken in the U.S. residential housing sector is supported by sound analysis and a risk management structure. . . . The business

¹³⁵⁸ Notes of 11/29/07 meeting produced by PwC, PwC-FCIC000111-113.

¹³⁵⁹ 11/19-20/07 email (AIG-SEC9422058-60) at 059.

¹³⁶⁰ Martin Sullivan Interview Transcript at 74, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4849-7653-4022&open=Y>.

was carefully underwritten and . . . we believe the probability that it will sustain an economic loss is close to zero. . . . [W]e are confident in our marks and the reasonableness of our valuation methods.”^[65] Cassano implored investors to recognize “there is a major disconnect going on in the market between what the market is telling and what the market is doing versus the economic realities of our portfolio”^[64] Cassano was trying to reassure investors that the market was overreacting. AIG continued to believe that the current market prices of the CDOs were too low, and inconsistent with the actual performance of the securities. Credit Suisse analyst Charlie Gates asked directly about valuation and collateral disputes with counterparties that AIG had alluded to in its third-quarter financial results.¹³⁶¹ ^[66] Cassano replied, “We have from time to time gotten collateral calls from people and then we say to them, well we don't agree with your numbers. And they go, oh, and they go away. And you say well what was that? It's like a drive-by in a way. And the other times they sat down with us, and none of this is hostile or anything, it's all very cordial, and we sit down and we try and find the middle ground and compare where we are.”¹³⁶²

Cassano failed to reveal the \$2 billion already paid in cash in order to keep Goldman at bay, the several hundred million posted to other counterparties, and the daily demands from Goldman and the others for *additional* cash. The analysts and investors on the call were not informed about the “negative basis adjustment” used to derive the announced \$1.5 billion maximum potential exposure. Investors therefore did not know that AIG’s earnings were overstated by \$3.6 billion – they would not learn that until February 11, 2008.

¹³⁶¹ AIG, 11/7/2007 Form 10Q at 70.

¹³⁶² 12/5/07 AIG Investor Conference Call at 29.

http://www.scribd.com/doc/16785264/AIGTranscript20071205T13301#open_download

PwC Finds Material Weaknesses; Cassano Has to Go

By January 2008, AIG still did not have a reliable way to determine the market price of the securities on which it written credit protection. Nevertheless, on January 16, Cassano sent an email to Michael Sherwood and CFO David Viniar at Goldman demanding that they return \$1.1 billion of the \$2 billion posted to date.¹³⁶³ He attached a spreadsheet showing that AIG was valuing many securities at par, as if there had been no decline in their value. That was simply not credible, Goldman executives told the FCIC.¹³⁶⁴ All the deficiencies PricewaterhouseCoopers had noted on November 29 were still present. Meanwhile, Goldman had by this point built up \$1.45 billion in insurance protection by purchasing credit default swaps *on AIG* to cover the difference between the amount of collateral they had demanded and the amount that AIG had paid.^[27]

On February 6 2008, PwC auditors met with Robert Willumstad, the chairman of AIG's board of directors. They informed him that the "negative basis" adjustment used to reach the \$1.5 billion estimate disclosed on the December 5 investor call had been "improper," "unsupported," and reflected that "controls over the AIG Financial Products super senior credit default swap portfolio valuation process and oversight thereof were not effective"¹³⁶⁵ PwC concluded that "this deficiency was a material weakness as of December 31, 2007."¹³⁶⁶

¹³⁶³ 1/16/2008 Cassano email to Michael Sherwood and David Viniar re: CDO Valuations. AIG-FCIC-00

56900-43 (Tab 26 of AIG/Goldman Sachs Collateral Call timeline, available at <http://fcic.gov/hearings/pdfs/2010-0701-AIG-Goldman-supporting-docs.pdf>).

¹³⁶⁴ See Davilman MFR, Lehman MFR.

¹³⁶⁵ PwC workpaper, PwC-FCIC 000001-12, at 00004-5.

¹³⁶⁶ PwC workpaper, PwC-FCIC 000001-12, at 00001.

Why the auditors waited until January 2008 to make this pronouncement is unclear, particularly given the fact that PwC had known about the improper and unsupported adjustment in November. It had not allowed the “negative basis” adjustment on AIG’s fourth-quarter and fiscal 2007 results because it concluded that AIG Financial Products had not provided sufficient support.

In the meeting with Chairman Willumstad, the auditors were broadly critical of CEO Sullivan, CFO Steve Bensinger, who they deemed unable to compensate for Sullivan’s weaknesses, and Chief Risk Officer Bob Lewis, who might not have “the skill set to run an enterprise-wide risk management department.” The auditors concluded that “a lack of leadership, unwillingness to make difficult decisions regarding FP in the past and inexperience in dealing with these complex matters” contributed to the problems with the valuation of AIGFP’s super senior CDS book.¹³⁶⁷ Despite PwC’s findings, Sullivan received \$107 million over 4 years, including a severance package of \$18 million. When asked about these figures at a FCIC hearing, he said, “I have no knowledge or recollection of those numbers whatsoever, sir... I certainly don't recall earning that amount of money, sir.”

The following day, PwC met with the entire AIG audit committee [76] and repeated the analysis already discussed with Willumstad. The auditors said they could complete AIG’s audit, but only if Cassano “did not interfere in the process.” Retaining Cassano was a “management judgment, but the culture needed to change at FP.” [77] On February 11, AIG disclosed in an SEC filing that its auditor had identified a “material weakness” in its internal controls relating to the company’s

¹³⁶⁷ Notes of 2/6/08 meeting produced by PwC (PwC-FCIC 000384-386). Available online, <http://fcic.gov/hearings/pdfs/2010-0630-AIG-Risk-Management.pdf>

financial reporting and oversight of the fair value of the super-senior swap portfolio.¹³⁶⁸ AIG acknowledged that its December valuation loss estimates included an unsupported reduction of \$3.6 billion [78] (that is, the difference between the \$5.1 billion and \$1.5 billion estimates).

The rating agencies responded immediately. Moody's and S&P announced downgrades, and Fitch placed AIG on "Ratings Watch Negative," suggesting that a future downgrade was possible.¹³⁶⁹ AIG's stock declined 12% for the day, closing at \$44.74.

By the end of February, Goldman held \$2 billion in cash collateral, was demanding an additional \$2.5 billion, and had upped to \$2.15 billion its protection against an AIG failure. On February 28, AIG disappointed Wall Street again – this time with dismal fourth-quarter and fiscal year 2007 earnings.[79] The company reported a net loss of \$5.29 billion, largely due to \$11.12 billion in valuation losses related to the subprime exposure[80] and more than \$2.6 billion in losses relating to the securities lending business's mortgage-backed purchases.[82] Along with the losses, CEO Sullivan announced Cassano's retirement, [81] but the news wasn't all bad for the former Financial Products chief. In addition to the more than \$300 million he received from the time he joined AIG Financial Products in January of 1987 until his retirement in 2008, Cassano was put on a consulting agreement with AIG that paid him \$1 million a month.¹³⁷⁰

In March, the Office of Thrift Supervision, the federal regulator in charge of regulating AIG and its subsidiaries, downgraded the company's composite rating from a 2, meaning AIG was "fundamentally sound" to a 3, indicating moderate to severe supervisory concern. The OTS still

¹³⁶⁸ AIG, Form 8K, 2/11/2008.

¹³⁶⁹ Fitch Ratings, Chicago, February 11, 2008.

¹³⁷⁰ Transcript of FCIC Hearing on Complex Financial Derivatives at page 233; FCIC interview with Joe Cassano at page 10.

judged the threat to overall viability as remote.^[83] It did not schedule a follow-up review of the company's financial condition for another six months.

By then, it would be too late.

Federal Reserve: “The discount window wasn’t working”

On August 10, 2007, the day after subprime investment losses prompted Bank Paribas to freeze withdrawals from three of its investment funds, the Federal Reserve Bank made a statement committing to provide liquidity and stability in that market.¹³⁷¹ But, over the course of the fall, it became clear that financial institutions were going to take serious losses from their exposures to the weakening mortgage market. Following the third-quarter earnings reports of financial firms, financial stocks fell sharply; by the end of November, the S&P Financials Index had fallen more than 16% for the year.¹³⁷² Between July and November, asset-backed commercial paper declined 30%; nonfinancial commercial paper declined 16%.¹³⁷³ [We need to note where financial paper fits into those numbers]. As investment banks and other financial institutions faced tighter funding markets and increasing cash pressures, the Fed decided the August initiatives had not been sufficient. By December, it had lowered its target interest rate by a full percentage point to 4.25%.¹³⁷⁴

But these tools still did not seem to be doing the job. Despite its attractive interest rate, the Fed's discount window didn't attract much bank borrowing because of the discount window's stigma.

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¹³⁷³ Federal Reserve Bank of St. Louis, Federal Reserve Economic Data (FRED), data series: COMPOUT, FINCP, ABCOMP, and NFINCP, November 28, 2007.

¹³⁷⁴

The banks feared that other market participants would see a loan from the Fed as a sign of weakness. “The problem with the discount window is that people don’t like to use it because they view it as a risk that they will be viewed as weak,” said William Dudley, then head of the capital markets group at the New York Fed and currently its President.¹³⁷⁵

Banks and thrifts preferred to draw on other sources of liquidity; in particular, during the second half of 2007, the Federal Home Loan Banks – which are government-sponsored entities that lend to banks and thrifts, accepting mortgages as collateral – increased their lending by \$235 billion so that total lending rose to \$875 billion when the securitization market froze, a 37% increase.¹³⁷⁶

Between the end of March and the end of December, 2007, Washington Mutual, the largest thrift, increased its borrowing from the Federal Home Loan Banks from \$28 billion to \$73 billion; Countrywide increased its borrowing from \$27 billion to \$48 billion; Bank of America increased its borrowing from \$38 billion to \$56 billion.¹³⁷⁷ In a sense, the Federal Home Loan Banks were available to commercial banks and thrifts as the “lender of next to last resort,” the Fed being the last resort.¹³⁷⁸

¹³⁷⁵ FCIC interview with William Dudley, October 15, 2010.

¹³⁷⁶ Ashcraft, Adam B., Morten L. Bech, and W. Scott Frame, *The Federal Home Loan Bank System: The Lender of Next to Last Resort?*, November 2008. “During the recent financial crisis, the liquidity facilities of the Federal Reserve and the FHLB System have at the same time complemented and competed with each other. The FHLB System took the early lead, and it was not until March 2008 that the Federal Reserve became the largest government-sponsored liquidity facility in terms of crisis-related lending to the financial system. Hence, we view the FHLB system as the lender of next to last resort... While the Federal Reserve has eclipsed the FHLB System in terms of total lending during the crisis, the FHLB System has been the largest lender to U.S. depository institutions and much of the Federal Reserve’s liquidity operations have been for the benefit of non-depository or foreign financial institutions.”

¹³⁷⁷ *Inside the GSEs*, June 25, 2008, page 8.

¹³⁷⁸ Ashcraft, Adam B., Morten L. Bech, and W. Scott Frame, *The Federal Home Loan Bank System: The Lender of Next to Last Resort?*, November 2008.

The loss of liquidity in the financial sector was also making it more difficult for businesses and consumers to get the credit they needed. [survey and lending data will be inserted.] “The Federal Reserve pursued a whole slew of nonconventional policies ... very creative measures when the Discount Window wasn’t working as hoped,” Frederic Mishkin, a Fed Governor from 2006 to 2008, told the FCIC. “These actions were very aggressive, [and] they were extremely controversial.” [From interview notes, need to confirm with audio.]¹³⁷⁹ The first of these measures, announced on December 12, was the creation of the Term Auction Facility (TAF). The idea to reduce the perceived stigma of discount window borrowing by making the money available to all banks at once through a regular auction process. At first, the program appeared successful, with banks borrowing \$40 billion by the end of the year. As the crisis continued, the Fed would continue to tweak the parameters of the TAF auctions, offering more credit and longer maturities at each auction.¹³⁸⁰

Another Fed concern was hoarding of cash by those banks and other market participants that did have steady access to it. As a result of hoarding, foreign banks had difficulty borrowing in dollars and were therefore under pressure to sell their dollar-denominated assets. This was a particular concern for foreign banks that had sponsored – but now had to support – asset-backed commercial paper programs that owned U.S. dollar-denominated assets. Those sales and fears of more sales to come weighed on the market prices of U.S. securities. In response, the Fed and other central banks around the world announced (also on December 12) new “currency swap

¹³⁸⁰ LuAnne Pederson and Niel Willardson, “Federal Reserve Liquidity Programs: An Update,” The Region, Federal Reserve Bank of Minneapolis, June 2010, available at <http://www.minneapolisfed.org/pubs/region/10-06/liquidity.pdf> (accessed August 17, 2010).

lines” to help foreign banks borrow dollars.¹³⁸¹ Under this mechanism, foreign central banks swapped currencies with the Federal Reserve – local currency for U.S. dollars – and lent these dollars to foreign banks.¹³⁸² “During the crisis, the U.S. banks were very reluctant to extend liquidity to European banks,” Dudley said. “We took the forex swaps that were already in place and opened up the magnitude. We made them auctions. People could get as many dollars as they needed.”¹³⁸³[From notes; need to check audio.] Central banks had used similar arrangements in the aftermath of the 9/11 attacks to bolster the global financial markets.¹³⁸⁴ In late 2001, the “swap lines” totaled [\$? billion]. During the financial crisis seven years later, they would reach [\$\$\$] billion.¹³⁸⁵

The Fed expected the TAF and the swap lines to reduce strains in short-term money markets, easing some of the funding pressure on other struggling participants in those markets such as investment banks. This mechanism had worked in the past: following the Penn Central commercial paper disruption in 1970 and the stock market crash in 1987, the Fed provided cash to commercial banks, which then turned around and provided cash in the markets and helped staunch fears about liquidity. In this new crisis, however, this dependable “spare tire” could not carry the load. During this period, it wasn’t so much the commercial banks and thrifts as the “broader financial system” that concerned the Fed, said Dudley. “The role of the Fed was

¹³⁸¹ [We need to clarify the extent to which these lines existed and were “expanded.”]

¹³⁸² Michael J. Fleming and Nicholas J. Klagge, “The Federal Reserve’s Foreign Exchange Swap Lines,” *Current Issues in Economics and Finance*, Federal Reserve Bank of New York, Vol. 16, No. 4., April 2010, available at http://www.ny.frb.org/research/current_issues/ci16-4.pdf (accessed August 20, 2010).

¹³⁸³ FCIC Interview with William Dudley, October 15, 2010.

¹³⁸⁴ *Id.*

¹³⁸⁵

historically to provide liquidity to the banks so that liquidity could be passed on to nonbanks. That didn't take place to the extent it had in the past. I don't think people going in had a real understanding of the complexity of the shadow banking system the role of SIVs and conduits, the backstops, either explicit or implicit. There were a lot of things there that we didn't really understand."¹³⁸⁶ [From notes, need to check audio.]

With capital markets not functioning properly, the banks were not financially stable enough to fill the void, even after the Fed's lowering of interest rates and the unprecedented provision of funds through the new TAF auctions. In January, therefore, the Fed returned to the more traditional mechanism for revitalizing the markets by lowering interest rates again—and then again, twice within a single two-week period, which is highly unusual, dropping the prime rate from 4.5% to 3.0%.¹³⁸⁷

On March 7, not giving up on the value of the TAF auctions, the Fed increased the total available in each of the bi-weekly auctions from \$30 billion to \$50 billion, and guaranteed at least that amount for six months, with the possibility of increases “as necessary.” The Fed also liberalized its standard for collateral. Primary dealers—which were primarily the investment banks and the broker/dealer affiliates of large commercial banks—could post GSE debt, even GSE mortgage-backed securities as collateral. The Fed expected to have \$100 billion in such loans outstanding at any given time.¹³⁸⁸

¹³⁸⁶ FCIC Interview with William Dudley, October 15, 2010.

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¹³⁸⁸ Federal Reserve, Press Release, March 7, 2008.

Also at this time, the central bankers began contemplating a revolutionary step for the American financial system: a program that would allow investment banks, institutions over which the Fed had no supervisory or regulatory responsibility, to borrow from the discount window on terms similar to those enjoyed by commercial banks.

Monoline insurers: “We never expected losses”

The rating agencies continued to downgrade mortgage-backed securities and collateralized debt obligations through 2007. By January, 2008, S&P had downgraded 3,389 classes of residential mortgage backed securities and 1,383 tranches from 420 CDOs as a result of the stress in the mortgage market.¹³⁸⁹

These downgrades hit the monoline insurers with expected losses that needed to be booked, because these were the companies that had written guarantees on the value of those investments. As a result, investors and regulators called into question the financial strength of these companies.¹³⁹⁰ This was new territory for the monolines, whose main business for many years had been guaranteeing the obligations of relatively safe borrowers, mostly municipalities. While it lasted, they had enjoyed the profitable new business of offering the same type of coverage to collateralized debt obligations and, for the monolines, a new type of coverage to mortgage-backed securities - credit default swaps.¹³⁹¹

¹³⁸⁹ http://www2.standardandpoors.com/spf/pdf/media/subprime_action_rmbs_cdo.pdf

¹³⁹⁰ Q3 2007 Ambac Financial Group Earnings Conference Call, October 24, 2007; Carrick Mollenkamp and Edward Taylor, Banks Fear New Losses as Defaults Mount, Oct 31, 2007.

¹³⁹¹ Arvind Rajan, A Primer on Credit Default Swaps, in The Structured Credit Handbook 17.

MBIA and Ambac, the two largest monolines, had taken on a combined \$265 billion of such exposure.¹³⁹² Typically, they would provide a “wrap” that guaranteed interest and principal payments to CDO investors. Unlike the credit default swaps that AIG wrote on CDOs, these wraps were not burdened by the possibility of collateral calls, should the market value of the underlying securities drop significantly. The monolines were only required to make payments if the CDOs were unable to meet principal and interest payments to investors. In this respect, the monolines did not have AIG’s problem. In the fall of 2007, they had not been taking the heat that AIG had been enduring from Goldman Sachs and others. Those collateral calls against AIG were a fact, while the ability of the mortgage-related assets to meet scheduled payments was an open question.

But not for long. If the cash flow for the securities could credibly be expected to be disrupted—if it looked like problems with mortgage payments would actually flow through to the various tranches of the securities backed by the monolines—then the monolines were obligated to book losses, since they would expect to have to make payments. The rating agency downgrades of mortgage-related securities through the fall and winter of 2007 forced the question, creating mark-to-market losses on MBS and CDO securities and more collateral calls on AIG. They also increased fears that super-senior tranches would see disruptions in payments, which would require the monolines to recognize losses and perhaps make payments to investors. Specifically, analysts estimated that a downgrade of all of the monoline-guaranteed positions from AAA- to AA- would require an estimated capital charge up to \$400 million for Ambac¹³⁹³ and \$50 million

¹³⁹² MBIA and Ambac 2007 10-Ks..

¹³⁹³ [http://www.ambac.com/pdfs/RA/Detailed%20Results%20Of%20Subprime%20Stress%20Test%20Of%20Financial%20Guarantors%20\(02-25-08\).pdf](http://www.ambac.com/pdfs/RA/Detailed%20Results%20Of%20Subprime%20Stress%20Test%20Of%20Financial%20Guarantors%20(02-25-08).pdf) and still checking for MBIA . . .

for MBIA.¹³⁹⁴ This would affect the monolines' own credit ratings, which in turn could lead to further downgrades of the CDOs and MBS the monolines had guaranteed. It could even cause the value of the other securities they insured--largely municipal debt--to suffer corresponding losses. Municipal debt is generally safe, but it's considered to be *less* safe if the guarantor of last resort is or perceived to be in trouble.

This really was new territory for these companies. They and various stakeholders--the rating agencies, investors and monoline creditors--had traditionally assumed that the monolines would never have to take a loss. In fact, the principle of "zero-loss tolerance" was central to the viability of their business model. As Alan Roseman, CEO of ACA Capital, a small monoline, told FCIC staff: "We never expected losses. ... We were providing hedges on market volatility to institutional counterparties... We were positioned, we believed, to take the volatility because we didn't have to post collateral against the changes in market value to our counterparty, number one. Number two, we were told by the rating agencies that rated us that that mark-to-market variation was not important to our rating, from a financial strength point of view at the insurance company."¹³⁹⁵

ACA Capital had built a large business managing credit default swaps. Like all of the monolines, the firm kept razor thin capital – less than \$700 million¹³⁹⁶ – even as it agreed to write \$69 billion in credit default swaps on CDOs, including \$22 billion in products backed by subprime mortgages.^[4] In late 2007, this strategy backfired. In the third quarter, its subsidiary, ACA

¹³⁹⁴

¹³⁹⁵ FCIC interview with Alan Roseman, May 17, 2010.

¹³⁹⁶ <http://www.aca.com/financial-information/pdfs/2007/2007-ACA-Annual-Stmt.pdf>

^[4] Id, at page 2

Guaranty Corporation, that had written the protection, reported a net loss of \$1.7 billion.¹³⁹⁷ The losses almost entirely reflected losses in their swap guarantees on CDOs. Within weeks, the rating agencies sent a strong message to all the monolines: if they wanted to retain their stellar ratings, they would have to raise capital. On November 9, Standard and Poor's placed ACA's "A" rating on CreditWatch for a potential downgrade.^[5] On December 19, the downgrade became official: ACA was suddenly "CCC,"^[6] which is fatal for a company whose "rating is the franchise," in Roseman's words.¹³⁹⁸

In December, the Maryland Insurance Administration released a plan under which ACA's creditors – including large investment banks such as Merrill Lynch – would relinquish their claims on the insurer. ACA terminated \$65 billion in CDS contracts and other guarantees—almost all of its obligations to its counterparties. In return, these firms would receive bonds backed by the few holdings at ACA Guaranty, which likely will pay little in the future.^{1399,1400} Speaking of the banks who had received these bonds, Alex Hart, an investment specialist for

¹³⁹⁷ Maryland Insurance Administration, Consent Order, MIA No. MIA-2007-12-037, at page 1, www.mdinsurance.state.md.us/sa/documents/MIA-2007-12-037-ACAfinancial.pdf

^[5] Id, at page 2

^[6] Maryland Insurance Administration, Consent Order, MIA: 2008-08-011, at page 2 available online at www.mdinsurance.state.md.us/sa/documents/MIA-2008-08-011-ACA.pdf (document provided to FCIC in interview with Maryland Insurance Administration)

¹³⁹⁸ FCIC interview with Alan Roseman, May 17, 2010.

¹³⁹⁹ Maryland Insurance Administration, "Insurance Commissioner Approves ACA Financial Guaranty Corporation Settlement and Restructuring Plan," 8/8/2008, at p1 available at www.mdinsurance.state.md.us/sa/documents/ACArelease-final-08-08.pdf

¹⁴⁰⁰ "ACA Terminates \$65 Billion of Credit-Default Swaps (Update 2)," By Christine Richard, Bloomberg, 8/8/2008, available at <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=a1200aBGdx6Y>

MIA, said, “Realistically speaking they could get nothing at the end of the runoff, they could get a penny.”¹⁴⁰¹

The monolines were relatively small players in the financial markets but suddenly very important. The large Wall Street firms attempted to minimize their exposure to ACA. In early November, the SEC referred to the growing concern about Merrill’s use of the monolines for hedging as “a concern that we also share.”^[7] Bear Stearns faced the largest counterparty loss and placed \$140 million in reserves against losses on its positions with ACA^[8], Goldman reported limited direct exposure^[9], and Lehman Brothers posted \$500 million in reserves to reduce its net exposure to \$50 million.^[10]

Despite the losses taken by ACA counterparties and the negative outlooks from the rating agencies, the SEC saw the monoline problems as largely confined to ACA. In a January 2008 internal document, the SEC wrote, “While there is a clear sentiment that capital raising will need to continue, the fact that the guarantors (with the exception of ACA) are relatively insulated from liquidity driven failures provides hope that event[s] in this sector will unfold in a manageable manner”.^[11] Though MBIA and Ambac did ultimately increase their capital holdings by \$1.65 and \$1.5 billion, respectively, in an effort to stave off downgrades, both were downgraded to AA

¹⁴⁰¹ MFR of Neil Miller at p9, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4842-1206-8615&open=Y>

^[7] Internal SEC Memo, To Directors from Economic team, RE: Risk Management Reviews of Consolidated Supervised Entities, November 6, 2007, SEC_TM_FCIC_002494 (**This document needs to be cleared**)

^[8] Internal SEC Memo, To Directors from Economic team, RE: Risk Management of Consolidated Supervised Entities, November 30, 2007, SEC_TM_FCIC_002498

^[9] Id at SEC_TM_FCIC_002498 (**Needs to be cleared**)

^[10] Id at SEC_TM_FCIC_002499 (**Needs to be cleared**)

^[11] SEC Internal Memo, To Directors from Economic team, RE: Risk Management of Consolidated Supervised Entities, January 2, 2008, SEC_TM_FCIC_002512, (**Needs to be cleared**)

in June 2008.¹⁴⁰² As the crisis played out, most of the monolines stopped writing new business, which has continued to put strains on markets that historically depended on them. As of the fall of 2010, only Assured Guaranty—less exposed to the mortgage market than its peers—actively was writing bond insurance.

Auction Rate Securities: “ ”

The subprime contagion spread through the monolines and into a previously unimpaired market: municipal bonds. These dominoes are easy to follow: In anticipation of the monoline downgrades, investors devalued the protection the monolines provided for other securities - even those having nothing whatsoever to do with the mortgage-backed markets, including a set of investments known as auction rate securities or ARS. An ARS gives the holder the right to principal and interest payments on debt that is typically long-term, often five years. The debt is often municipal bonds, or “munis.” According to the Securities Industry and Financial Markets Association, as of December 31, 2007, state and local governments had issued a total of \$165 billion in auction rate securities, accounting for nearly half of the \$330 billion market.¹⁴⁰³ The other half were primarily bundles of student loans and non-profit debt such as [XXX].

The key point: local and state governments and others like non-profit organizations wanted to borrow long term, but get the benefit of short term rates, and investors wanted to get the safety of investing in these securities, without having their money tied up for a long time. So while the debt was long-term, the ARS was not a long-term security. Investors held an auction rate security for 7 to 35 days, at which time it would be put up for auction. At that point, they could bid again to invest in the security or let other investors take their place. In this way, the market was similar

¹⁴⁰² http://www.bondbuyer.com/issues/117_107/-290197-1.html.

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to commercial paper. Unlike commercial paper markets, though, there was no explicit liquidity backstop from a bank. There was an implicit one: sometimes, if there were not enough new buyers to replace the previous investors, the dealers running these auctions, including [XXX], [XXX], and [XXX], would often step in and prevent an auction failure by buying any remaining debt.¹⁴⁰⁴ Because of these interventions, failures were infrequent. In the ARS market, there had been only [XXX] failures in [XXX] years.¹⁴⁰⁵ Dealers used those miniscule failure rates to convince clients that ARS were very liquid, short-term instruments, even in times of stress.

But if an auction *did* fail, the previous ARS investors would be obligated to retain their investments. In compensation, the interest rates on the debt would reset to much higher levels, but investors' funds would be trapped until new investors or the dealer stepped up to replace their investment or the borrower paid off the loan.. Since ARS investors were typically very risk averse and valued liquidity, the monolines often wrote guarantees on the ARS investments to help ensure that the market viewed the investments as safe and liquid. It necessarily followed that the monolines' growing problems in the latter half of 2007 affected the ARS market.

Investors fled because of the fear that the monolines couldn't perform on their guarantees. The dealers' interventions were all that kept it going, but the stress became too great. With their own problems to contend with, the dealers finally wanted out. They had to protect themselves. In February, *en masse*, they pulled up stakes. The market collapsed almost instantaneously. On February 13, in one of the starkest market dislocations of the entire financial crisis, 80% of the ARS auctions failed; the following week, 62% failed.¹⁴⁰⁶

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This seizing up of the ARS market was particularly painful for the U.S. economy. Hundreds of billions of dollars of dollars were trapped inside the ARS instruments, as investors were obligated to retain their investments. And retail investors--individuals investing less than \$1 million, small businesses and charities—comprised about half of this \$330 billion market. Moreover, investors who did participate in the market demanded a premium to take on the risk, so countless governments, infrastructure projects, and non-profits on tight budgets were slammed with interest rates of 10% or higher. Such was the case with the Chicago Board of Education, whose rates doubled in a matter of months from [XXX] to [XXX].¹⁴⁰⁷[confirm] New York State was stuck with interest rates that soared from about 3.5% to over 14% on \$4 billion of its debt. The higher interest payments cost New York over \$138 million.¹⁴⁰⁸_[confirm] Perhaps most remarkably, the annual interest rate on the debt of the Port Authority of New York and New Jersey, an agency that manages bridges, tunnels, and other public facilities with an annual budget of \$[XX] billion, rose from 4.3% to 20% in a single week in February.¹⁴⁰⁹

By March, dealers began marking down the value of auction rate securities in their respective customer brokerage accounts. They had no choice: the bonds were illiquid and had no trading market. UBS reportedly marked the bonds down by anywhere from a few percent to more than 20%.¹⁴¹⁰ [Confirm with UBS: check NY class action complaints; get Cuomo/Galvin quote; explain better] [don't quite understand this – do investment banks have to mark value of client

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accounts – how does that affect their balance sheets? – it’s ok to include, just don’t understand how it impacted banks – if we can say, great.

The SEC received more than a thousand investor complaints regarding the failed ARS auctions.¹⁴¹¹ Investors argued that brokers had led them to believe ARS were safe and liquid, essentially the equivalent of money market accounts, but with the potential of a slightly higher interest rate. Investors also reported that the frozen market blocked their access to funds necessary for important short-term needs, such as medical expenses, college tuition, and, for some small businesses and charities, payroll. In response to these complaints, the SEC, a number of State Attorneys General, most notably those in New York and Massachusetts, the North American Association of Securities Administrators, and the Financial Industry Regulatory Authority all began actively looking into the market disruption.¹⁴¹² [will update].

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CHAPTER CONCLUSIONS HERE

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Following the high-profile failure of its two hedge funds in July, the second half of 2007 was a difficult time for Bear Stearns. Taking out the repo lenders in the High Grade Fund ultimately brought nearly \$1.6 billion in subprime assets onto Bear's books, contributing to what would be a \$1.9 billion write-down on mortgage-related assets just four months later.¹⁴¹³ That ugly outcome also drew attention to Bear Stearns's overall financial condition. Over the course of the fall, Bear's own repo lenders – mostly money market mutual funds – increasingly required the investment bank to post more collateral when borrowing in that market. In the first months of 2008, while the overall repo market generally held up, the interest rates Bear had to pay increased.¹⁴¹⁴ Then, in one short week in March, 2008, Bear finally suffered an extraordinary run by these lenders, hedge fund customers, and derivatives counterparties, and had to be taken over by JP Morgan in a government-backed shotgun rescue.

“We're in the moving business, not the storage business”

Mortgage securitization was the main driver of Bear Stearns's fixed-income business, representing \$4.2 billion in revenue in 2006, or 45% of the firm's total revenue. By comparison, its equities division generated \$2 billion in revenues in 2006 and its investment banking division generated \$1.2 billion. Also fast-growing and important was the Global Client Services division, which housed Bear's prime brokerage operation, providing financing for hedge funds and clearing services for smaller brokerage firms. Bear Stearns was the second-biggest prime broker, with a 21% market share in 2006, trailing only

¹⁴¹³ Bear Stearns Fourth Quarter 2007 Earnings Call Transcript, available at <http://seekingalpha.com/article/58030-the-bear-stearns-companies-fq407-qtr-end-11-30-07-earnings-call-transcript?>

¹⁴¹⁴ FCIC Interview with Thomas Marano.

Morgan Stanley's 23% market share.¹⁴¹⁵ As we will see, this business would figure prominently in the debacle that followed.

In the mortgage securitization business, Bear followed a “vertically integrated” business model that gave it a money-making role every step of the way, from loan origination through securitization and sale. It acquired “captive originators” to generate the mortgages that Bear then bundled, turned into securities, and sold to investors. The smallest of the Big Five investment banks, it was a top-three underwriter of non-GSE mortgage-backed securities from 2000 to 2007.¹⁴¹⁶ In 2006, it underwrote \$23 billion in collateralized debt obligations, double its volume in 2005 and good for [XX] place in the standings.[check] In the words of both former CFO Sam Molinaro and former chief risk officer Mike Alix: “We were in the moving business, not the storage business.”¹⁴¹⁷

Like other firms, Bear expanded this business despite evidence that the market was beginning to give way. As early as May, 2006, it had incurred \$3 million in losses relating to early payment defaults – that is, defaults within 90 days of origination, which had until now been a rare occurrence. But Bear pushed ahead, assuming that the setback would be temporary.

In February 2007, Bear even acquired Encore Credit, its third captive mortgage originator in the U.S., doubling its origination capacity.¹⁴¹⁸ Former company Treasurer Robert Upton later described that purchase as consistent with Bear's contrarian business model – buying into distressed markets and waiting for them to turn around.¹⁴¹⁹ One month later, the SEC wrote in an internal report, “Bear's mortgage business incurred significant market risk losses” on its Alt-A mortgage assets. The losses were

¹⁴¹⁵ 2007 Upper Hedge World Prime Brokerage League Table.

¹⁴¹⁶ The 2009 Mortgage Market Statistical Annual: Volume II: The Secondary Market at 18-25.

¹⁴¹⁷ FCIC Interview with Samuel Molinaro; FCIC Interview with Michael Alix.

¹⁴¹⁸ Jeff Mayer and Thomas Marano, Fixed Income Overview (March 29, 2007), produced by JP Morgan.

¹⁴¹⁹ FCIC Interview with Robert Upton.

small, but the SEC reported that “risk managers note[d] that these events reflect a more rapid and severe deterioration in collateral performance than anticipated in ex-ante models of stress events.” [Cite.]

Bear Stearns’s emphasis on – even *dependence* on – mortgage securitization, which accounted for almost half of its total revenues, were coming back to haunt the firm.

High Leverage is “Simply What Investment Banks Do”

Vacationing on Nantucket Island when the two Bear-sponsored hedge funds finally declared bankruptcy on July 31, 2007, Upton anticipated a reaction by the rating agencies. A downgrade would hurt, of course. Bear Stearns funded much of its operations with short-term financing in the repo market, and it borrowed \$50 to \$60 billion in the *overnight* repo market. Even a published *threat* of a downgrade by one of the rating agencies would make tens of billions of short-term financing more expensive, starting the next morning.¹⁴²⁰

Like other investment banks, Bear used repo financing and other short-term borrowing to increase its leverage. As CEO Jimmy Cayne told the FCIC, using short-term funding for longer-term liabilities and utilizing high leverage was “simply what investment banks do.”¹⁴²¹ By November of 2007, Bear’s leverage—its ratio of tangible assets to tangible common equity had reached 38 to 1. Among the investment banks, Morgan Stanley was similarly leveraged, and Merrill Lynch and Lehman Brothers were not far behind; Goldman was the least leveraged, with a ratio of 32.2 to 1.

Leverage is one measure of risk, as we have discussed. Another key measure of risk is a firm’s amount of “Level 3 assets” – illiquid assets which are difficult to sell and value given the lack of a market for those assets. By the end of 2007, Bear’s Level III assets were 269% of the firm’s tangible common equity This means that if these illiquid assets had been written down by 37% at the end of the 2007, Bear’s tangible

¹⁴²⁰ Note: We’ve asked of repo balances as of July 31, 2007 and a response was due Oct. 7 and we’ve followed up with Paul Weiss. BSC-FCIC-e00955623 shows short-term funding of \$48 billion as of June 30, 2007.

¹⁴²¹ Cayne MFR.

common equity would have been wiped out.[cite, note fiscal year] At the end of the 2007 fiscal year, the similar ratio was 200% for Goldman Sachs,¹⁴²² 113% for JP Morgan,¹⁴²³ and 141% for Wells Fargo.¹⁴²⁴

Investors, analysts, and the credit rating agencies paid close attention to the investment banks' leverage ratios, available at the end of each quarter. Knowing this, Bear would target a lower ratio at the end of the quarter by selling assets only to buy them back at the beginning of the next quarter. Bear and other firms booked these transactions as sales – even though the assets didn't stay off the balance sheet for long. Booking them as sales lowered the total value of their assets, thus lowering their leverage ratio. Former treasurer Upton called such activities “window dressing” and said it was done to “make sure that creditors and rating agencies were happy.”¹⁴²⁵ People who read Bear's public filings could have some idea that they were doing this. At the end of a quarter, Bear's balance sheet was typically 12% lower than the average month-end balance over the previous twelve months.

“I requested some forbearance”

Given the declining mortgage markets, Bear's high leverage, and its dependence on the repo market for the funds with which to achieve that leverage, Treasurer Robert Upton had good reason to fear a ratings downgrade. Attempting to forestall what was probably inevitable, he spoke with executives at the three main ratings agencies, Moody's, Standard & Poor's, and Fitch. Twice in 2007[check] – April 9 and June 22 – S&P had confirmed Bear's xx rating and “stable” outlook, noting in April that “strong senior management oversight and a strong culture throughout the firm are the foundation of Bear's risk management process.... However, a firm wide risk appetite is not well articulated.” On June 22, Moody's had also confirmed its “A1” rating, and Fitch had confirmed its “stable” outlook.

¹⁴²² Goldman Sachs Group, Inc., Form 10K for the fiscal year ending November 30, 2007.

¹⁴²³ JP Morgan Chase, Inc., Form 10K for the year ending December 31, 2007.

¹⁴²⁴ Wells Fargo & Company, Form 10K for the year ending December 31, 2007. JPM and WFC have December fiscal year-ends. GS had a November fiscal year-end in 2007, but now has a December fiscal year-end.

¹⁴²⁵ Upton MFR

Now, in early August, Upton made the case that Bear management had learned its lesson about governance and risk management from the failure of the two hedge funds. It was going to reduce its reliance on short-term unsecured funding and rely more on the repo market. Because the repo market is secured by collateral, Bear expected repo funding to be a more reliable funding source: rather than just relying on Bear's creditworthiness, counterparties could take comfort in the collateral Bear posted. Bear and other market participants did not foresee that, one day, counterparties could be unwilling to provide repo to Bear Stearns – not when backed by risky mortgage assets, eventually not even when backed by highly-liquid Treasury securities.

Over the next few days, Upton provided the ratings agencies with more information and “requested some forbearance,” as he told the FCIC. He did not get it. On August 3, just three days after the two Bear Stearns hedge funds had declared bankruptcy, S&P highlighted the bankrupt hedge funds, Bear's mortgage-related investments, and its heavy reliance on short-term money markets [check], and placed Bear on a “negative outlook.” A ratings downgrade could follow. In nervous markets, prospects of a downgrade hurt Bear Stearns and created uncertainty.

“We believe Bear Stearns' reputation has suffered from the widely publicized problems of its managed hedge funds, leaving the company a potential target of litigation from investors who have suffered substantial losses,” the rating agency wrote.¹⁴²⁶ Discussing how he felt about the downgrade, Cayne said: “A negative outlook can touch a number of parts of your businesses. I don't remember ever being downgraded. It was like having a beautiful child and they have a disease of some sort that you never expect to happen and it did. How did I feel? Lousy.”¹⁴²⁷

Bear executives feared that investors would conclude that the agencies had somehow learned about problems at Bear that had not been publicly disclosed. Hoping to reassure investors that no more shoes

¹⁴²⁶ S&P, *Bear Stearns Cos. Inc. Outlook Revised To Negative; 'A+/A-1' Rating Affirmed*, August 3, 2007.

¹⁴²⁷ Cayen MFR

would drop, Bear invited them to a conference call on the day of S&P's "negative outlook" pronouncement. By most accounts the call was going well for Bear executives until one financial analyst broke the mood by asking how the growing crisis compared with past market upheavals mentioned in Cayne's opening remarks. [Also mention Cayne stepping off call .] CFO Sam Molinaro responded that the fixed income market was "about as bad as I have seen it" in 22 years in the business. If the remark was designed to soothe market concerns, it didn't work. Bear's stock slid 6%, to \$12.37, although it would rise from this low over the next months. Still, it would not again come even close to its all-time high of \$169.61 in 2007.

"We were suitably skeptical"

On Sunday, August 5, two days after Bear executives had tried to calm investors on the conference call, they had another opportunity with regulators from the SEC. The agency had skipped its 2006 annual examination of Bear Stearns and, in fact had not conducted an examination of the firm since November 2005, when the SEC approved Bear's application to join the Consolidated Supervised Entities program and became the firm's consolidated supervisor.¹⁴²⁸ While the SEC had not conducted the annual exams as it was supposed to, it had been making monthly visits. In addition, CSE monitors had been meeting quarterly with Bear executives to discuss liquidity and funding issues.¹⁴²⁹

So an SEC staff that was thin in normal times, and never permanently on-site like other bank regulators, was now charged with handling the emerging crisis at Bear. The two CSE program supervisors who visited the company on that Sunday were Mike Macchiaroli and Matt Eichner, respectively associate director and assistant director of the division of market regulation. Eichner told the FCIC that the review had focused on making sure that there were no further surprises at Bear. The virtual shutdown of the

¹⁴²⁸ Information Memorandum Non-Public dated November 4, 2005. SEC_TM_FCIC_1053369-1053376.

¹⁴²⁹ FCIC Interview of James Giles; FCIC Interview of Matthew Eichner.

market for mortgage-backed securities had raised questions, if not yet actual doubts, about the firm's viability; the regulators reviewed exposures to asset-backed securities and mortgages and the large amount— \$13 billion—of adjustable rate mortgages that the company retained on the balance sheet. These were assets that Bear wanted to securitize but for which they could not find buyers.¹⁴³⁰ Bear executives replied with glib reassurance that the inventory would shrink once investors returned in September from their summer retreats in the Hamptons.¹⁴³¹ “Regulators are not supposed to listen to happy talk and go away smiling,” Eichner told the FCIC, explaining the gravity of the situation, “\$13 billion in ARMs is no joke.” Still, Eichner did not believe the Bear executives were being disingenuous. He thought that they were just putting more weight on the upside than the downside.[cite]

Alan Schwartz, co-President who later succeeded Jimmy Cayne as CEO, and Tom Marano, the head of Global Mortgages and Asset Backed Securities, seemed unconcerned by Bear's high concentration in mortgage assets. Other executives were leery. Treasurer Upton wanted to sell off \$1.5 billion in assets but was overruled by Schwartz.¹⁴³² Wendy de Monchaux, head of proprietary trading, urged Marano to trim the mortgage portfolio as did Steven Meyer, co-head of stock sales and trading.¹⁴³³, ¹⁴³⁴ So did Alan Greenberg, former chairman, who told Upton “the best hedge is a sale.”[cite]. Marano confirmed these warnings about the mortgage portfolio to the FCIC. Bear reduced the portfolio from \$55.7 billion in the third quarter to \$46.1 billion in the fourth quarter, but by then it was too little and too late.

On the liquidity question that summer, the SEC regulators were comfortable that Bear's position was adequate for the immediate future.¹⁴³⁵ “We were suitably skeptical,” Eichner insisted. “We wanted to

¹⁴³⁰ FCIC Interview with Matthew Eichner.

¹⁴³¹ FCIC Interview with Matthew Eichner.

¹⁴³² FCIC Interview with Thomas Marano.

¹⁴³³ FCIC Interview with Wendy de Monchaux.

¹⁴³⁴ FCIC Interview with Alan Schwartz; FCIC Interview with Steven Meyer.

¹⁴³⁵ FCIC Interview with Matthew Eichner.

know how much liquidity they had.” However, he admitted that he and his agency had grossly underestimated the possibility of a liquidity crisis down the road. After the August 5 meeting, the SEC required daily reporting on liquidity.

Every weeknight for the benefit of the SEC, Upton provided an update on Bear’s \$400 billion balance sheet. He furnished details about specific repo and commercial paper lenders. On September 27, Bear Stearns raised approximately \$2.5 billion in additional unsecured ten-year notes, and the SEC reduced the frequency of its liquidity monitoring to weekly rather than daily.¹⁴³⁶ The SEC never required, or even suggested, that the firm reduce its mortgage portfolio, make specific changes to its assumptions or models, or reduce its reliance on overnight repo. In fact, according to a subsequent SEC Inspector General report, the regulators still made no effort to require the firm to reduce leverage and “did not make any efforts to limit Bear Stearns’ mortgage securities concentration” despite the SEC’s “aware[ness] that risk management of mortgages at Bear Stearns had numerous shortcomings, including lack of expertise by risk managers in mortgage backed securities” and “persistent understaffing; a proximity of risk managers to traders suggesting a lack of independence; turnover of key personnel during times of crisis; and the inability or unwillingness to update models to reflect changing circumstances.”¹⁴³⁷

Michael Halloran, Senior Advisor to SEC Chairman Cox, told the FCIC that the SEC had ample information and authority to require that Bear Stearns decrease its leverage and reduce its mortgage backed securities holdings, as other financial institutions were doing at the time. Halloran said that as early as the first quarter of 2007, he had specifically asked Eric Sirri, the official in charge of the CSE program about Bear Stearns (and Lehman Brothers): “Why can’t we make them reduce their risk?”

¹⁴³⁶ FCIC Interview with Matthew Eichner; *see also* SEC_TM_FCIC_1053317.

¹⁴³⁷ 9/26/2008 IG Report

According to Halloran, Sirri had responded that the SEC's job was not to tell the banks how to run their respective companies, but to protect the firms' customer assets.¹⁴³⁸

“Turn into a death spiral”

In August, following the market-wide liquidity crisis and S&P's decision to put Bear on a negative outlook, CEO Jimmy Cayne tried to obtain lines of credit from Citigroup and JP Morgan. Both banks offered perfunctory acknowledgement that Bear had always been a very good customer, and they were interested in helping out. But, Cayne told the FCIC, nothing happened. CFO Molinaro told the FCIC that he spoke with many U.S. banks during that period about securing larger liquidity lines. “We wanted to try to be belts-and-suspenders,”¹⁴³⁹ he said, meaning Bear tried to both obtain lines of credit with banks and shore up traditional sources of short-term liquidity, such as money market funds. But neither worked. “Why the U.S. money center banks were not more willing to participate and provide lines during that period of time, I can't tell you.”¹⁴⁴⁰

Throughout 2007, as the SEC watched, Bear Stearns had drastically reduced its reliance on unsecured commercial paper and replaced it with secured repo borrowing. This borrowing rose from \$69 billion at the end of 2006 to \$102 billion at the end of 2007. Borrowing with unsecured commercial paper fell to only \$3.9 billion.¹⁴⁴¹ To be sure, unsecured commercial paper was a riskier lifeline than repo. To wit, on October 1, Federated Investors, a prominent lender cited credit deterioration as the reason it was dropping Bear Stearns from its list of approved counterparties for unsecured commercial paper. Still, Bear Stearns was alarmingly dependent on overnight repo, which would have its own problems.

¹⁴³⁸ Halloran MFR

¹⁴³⁹ Official Transcript of FCIC Hearing on the Shadow Banking System, May 5, 2010.

¹⁴⁴⁰ Official Transcript of FCIC Hearing on the Shadow Banking System, May 5, 2010.

¹⁴⁴¹ The Bear Stearns Companies Inc., Form 10-K for the year ending November 30, 2007.

As we have explained, the repo market created a way for lenders to put their excess cash to use while allowing borrowers to efficiently re-deploy their ever-changing inventories of securities as collateral. It had become a very deep and liquid market: by early 2008, the tri-party repo market had an average daily volume of \$2.8 trillion.¹⁴⁴² Even though most repo was rolled overnight, it was considered a very safe market because transactions were over-collateralized, meaning that loans would be made for less than the collateral was worth. That was before the onset of the financial crisis, when the Bear Stearns situation highlighted the vulnerability of the market as a whole. As Bear increased its tri-party repo borrowing, it necessarily became more connected to JP Morgan, the clearing agent for its tri-party repurchase agreements. As the go-between in the repo transactions between Bear Stearns and other counterparties, JP Morgan would bear risk of loss if a repo counterparty – such as Bear Stearns – defaulted. Clearing banks such as JP Morgan “unwind” all repos the morning of each business day. This means that they return cash to investors such as money market funds and lend their own cash to Bear Stearns (and other borrowers) during the day. At around 5 p.m., JP Morgan “rewinds” the tri-party repo transactions, reassigning collateral to specific lenders and alleviating themselves of their intraday credit exposures to Bear Stearns. In effect, JP Morgan served as the daytime repo lender to Bear Stearns.

In other words, in a sense even long-term repo loans have to be rolled over by the clearing bank every day, if not by the lender. Seth Carpenter, an officer at the Federal Reserve Board, compared it to a mortgage that has to be refinanced every week. “Imagine that your mortgage is only a week. Instead of a 30-year mortgage, you’ve got a one-week mortgage. If everything’s going fine, you get to the end of the week, you go out and you refinance that mortgage because you don’t have enough cash on hand to pay off the whole mortgage. And then you get to the end of another week and you refinance that mortgage. And that’s, for all intents and purposes, what repos are like for many institutions.”¹⁴⁴³

¹⁴⁴² http://www.newyorkfed.org/banking/nyfrb_triparty_whitepaper.pdf p.39.

¹⁴⁴³ MFR Seth Carpenter

During the fall, some of Bear's repo counterparties demanded more collateral, or reduced the amount they would loan, or shortened the length of the maturity of their repo exposures. Federated Investors, which would no longer make unsecured loans to Bear, as noted above, continued to provide secured repo loans, without modifications to the terms, but Fidelity Investment, another major lender in the market, retreated from repo trades with non-traditional collateral (such as mortgage-backed securities, which Bear sometimes posted), limited its overall exposure to Bear, and shortened the maturities. In October, State Street Global Advisors stopped any repo lending to Bear for longer than overnight.

These moves were ominous and underscored the liquidity shortfalls stalking the bank. Simply put, the repo market was its lifeline, and this market seemed to be turning against Bear, just as it had turned against Countrywide and other mortgage companies earlier in 2007.

In the fourth quarter of 2007, Bear Stearns reported a loss of \$379 million, its first quarterly loss ever.¹⁴⁴⁴ Mortgage-related write-downs of \$1.9 billion – including \$200 million associated with the failure of the hedge funds - were a key factor.¹⁴⁴⁵ These losses further eroded market participants' confidence in Bear Stearns, and the SEC reviewed Bear's liquidity weekly but saw "no evidence of any deterioration in the firm's liquidity position following the release and related negative press coverage."¹⁴⁴⁶ The SEC concluded "Bear Stearn's liquidity pool remains stable."¹⁴⁴⁷ In December, the weekly liquidity calls ended altogether.

Bear's balance sheet was loaded with now hard-to-value mortgage-backed assets, and it continued to fund these long-term assets with short-term debt. As noted, at the end of November 2007, the total balance of mortgages, mortgage-backed securities and other asset-back securities was \$46.1 billion. Over one-third

¹⁴⁴⁴ Bear Stearns Q4'07 Earnings call transcript, December 20, 2007.

¹⁴⁴⁵ Transcript for Bear Stearns Companies, Inc. Fourth Quarter 2007 Earnings Call, held on December 20, 2007.

¹⁴⁴⁶ SEC_TM_FCIC 1053317, SEC Timeline Regarding the Bear Stearns Companies Inc. April 3, 2008.

¹⁴⁴⁷ SEC_TM_FCIC 1053317-1053318, SEC Timeline Regarding the Bear Stearns Companies Inc. April 3, 2008.

of that total – \$17.2 billion worth, more than the entire equity of the firm – were classified Level 3: hard to value, hard to sell. In a word, illiquid.^{1448,1449}

In retrospect, CEO Jimmy Cayne accepted responsibility for the deterioration of Bear Stearns.¹⁴⁵⁰ He told the FCIC, “I take responsibility for what happened. I’m not going to walk away from the responsibility.” In January 2008, Cayne resigned as CEO, after receiving \$93.6 million in compensation from 2004 through 2007. He remained as non-executive Chairman of the Board. . Some senior executives at the firm were highly critical of him and the Board of Directors. Thomas Marano told the FCIC that Cayne played a lot of golf and a lot of bridge. About the time of Cayne’s resignation, Marano said, “there was a fevered pitch, and we effectively had a mutiny on our hands.”

Regarding the failure of the Board to get more involved in the market dislocations sooner, Paul Friedman, Former Bear Stearns Senior Managing Director, said this:

I guess because I’d never worked at a firm with a real Board, it never dawned on me that at some point somebody would have or should have gotten the Board involved in all of this, because we didn’t have a Board. We had this group of cronies and Jimmy. I guess if you had a real board that had real outsiders with real expertise, you would actually get them involved and they might have some role to play, but not here. What would they do? What would the board do? We were living it and we couldn’t figure out what to do. What the hell are they going to do? But I can see in the real world that’s an odd thing.¹⁴⁵¹

¹⁴⁴⁸ The Bear Stearns Companies, Inc., Form 10K for the year ending November 30, 2007.

¹⁴⁴⁹ The Bear Stearns Companies, Inc., Form 10K for the year ending November 30, 2007.¹⁴⁴⁹ Level 3 assets are those whose fair value is estimated based on internally developed models or methodologies utilizing significant inputs that are generally unobservable and are not corroborated by market data.

¹⁴⁵⁰ FCIC Interview with Jimmy Cayne. Cayne stated that in retrospect, “I take responsibility for what happened. I’m not going to walk away from the responsibility.”

¹⁴⁵¹ House of Cards 71. While Mr. Friedman acknowledged making the cited statements to the FCIC, and many others as well, he attributes them to anger and frustration over Bear Stearns’ failure. Currently, Mr. Friedman is

The Corporate Library, a corporate governance research and rating organization, would give Bear Stearns a rating of “D,” reflecting “a high degree of governance risk and result[ing] from high levels of concern related to the board and compensation.”¹⁴⁵²

In the fall of 2007, the Bear Stearns commissioned outside consultant Oliver Wyman to review and report on the firm’s risk management. The report, “Risk Governance Diagnostic: Recommendations and Case for Economic Capital Development,” was presented on February 5 to the firm’s management committee. The report stated “risk assessment was infrequent and ad hoc and was hampered by insufficient and poorly aligned resources,” “risk managers were not effectively positioned and sufficiently independent to challenge front office decisions, risk management was understaffed and considered a low priority, and there was inadequate risk monitoring, compliance and reporting.” In hindsight, Schwartz told the FCIC that the findings did not indicate substantial deficiencies. Instead, Schwartz said the Wyman report was meant to provide a multi-year roadmap of what a “the gold standard” in risk management would be, and that he expressly asked the consultants not to include anything favorable.

Even with the losses for 2007, the failures in risk management, and the ominous prospects for the immediate future, Bear Stearns paid out 58% of its net revenues in compensation in 2007. Mike Alix, who sat on the Compensation Committee, told FCIC staff that the firm typically paid out 50% of net revenues as compensation but that the percentage increased in 2007 because revenues were down – if management had lowered compensation proportionately, he said, many employees may have quit.

employed at Guggenheim Securities, Inc. where he works for Alan Schwartz, the former President of Bear Stearns. FCIC Interview with Paul Friedman.

¹⁴⁵² “Governance Rating Information,” “The Bear Stearns Companies Inc: Governance Profile”, The Corporate Library, June 20, 2008.

Despite the poor corporate governance over a period of years that contributed to the firm's demise, its senior executives and traders had been paid handsomely. Base salaries for senior managers were capped at \$250,000, with the remainder of compensation a discretionary mix of cash, restricted stock and options.¹⁴⁵³ At Bear, compensation was based largely on the return on equity in a given year, creating an incentive to focus on short-term gains, rather than creating value for shareholders over the long-term.¹⁴⁵⁴ [check] Half of bonuses were paid in cash, half in restricted stock that vested over three years and had to be held for five years.¹⁴⁵⁵ The formula for calculating the size of each year's compensation pool was determined by a subcommittee of the Board. The performance compensation plan and capital accumulation plan for senior managing directors was approved by stockholders.¹⁴⁵⁶

CEO Cayne told the FCIC that he set his own compensation, and also the compensation for all five members of the Executive Committee.¹⁴⁵⁷ According to Cayne, no one else, including the Board of Directors, questioned his decisions.¹⁴⁵⁸

¹⁴⁵³ The salary cap was \$200,000 until 2006, when it was raised to \$250,000. FCIC Interview with Michael Alix.

¹⁴⁵⁵ FCIC Interview with Samuel Molinaro.

¹⁴⁵⁶ The Bear Stearns Companies Inc. Annual Meeting of Stockholders April 18, 2007. BSC-FCIC 00000097; The Bear Stearns Companies Inc. 2007 Performance Compensation Plan requires approval from both the Board of Directors and the stockholders. BSC-FCIC 00000131; In 2007, the stockholders approved the 2007 Performance Compensation Plan with 95.96% of votes cast in favor and they approved the Capital Accumulation Plan for senior managing directors with 94.31% of the votes cast in favor. The Bear Stearns Companies Inc. Minutes of Regular Meeting of Board of Directors, April 8, 2007. BSC-FCIC00000086; In 2007, the shareholders rejected a pay-for-superior performance proposal. The Bear Stearns Companies Inc. Annual Meeting of Stockholders, April 18, 2007. BSC-FCIC00000097.

¹⁴⁵⁷ The Bear Stearns Companies Inc. Minutes of Regular Meeting of Board of Directors, March 22, 2007. BSC-FCIC-00000109; FCIC Interview with Jimmy Cayne.

From 2000 through 2008, the top five executives at Bear Stearns took home over \$326.5 million in cash and over \$1.1 billion as net inflows from stock sales, for a total of over \$1.4 billion.¹⁴⁵⁹ This was more than the entire annual budget for the Securities and Exchange Commission [confirm]. Alan Schwartz, who took over as CEO after Cayne and had been a leading proponent of Bear's heavy investment in the mortgage sector, earned over \$87 million from 2004 to 2007. Warren Spector, responsible for overseeing the two hedge funds that had failed so spectacularly, received over \$98 million for the between 2004 and 2007. Although Spector was finally fired, Bear never asked him to return any of his \$98 million. In 2006, Cayne, Schwartz and Spector each earned more than ten times as much as chief risk officer Mike Alix.¹⁴⁶⁰

CEO Jimmy Cayne was out, Alan Schwartz had taken over, and the rest of Bear Stearns was hanging on in the early months of 2008. According to Thomas Marano, head of mortgage trading and originations, Bear was still able to fund its balance sheet through repo loans, although the interest rates Bear had to pay had increased.¹⁴⁶¹ Marano was concerned that this increased cost in the repo market would signal that Bear was distressed, which could "make our problems turn into a death spiral."¹⁴⁶²

On February 1, 2008, Treasurer Upton disclosed an internal accounting error that showed Bear Stearns having less than \$5 billion in liquidity – triggering a report to the SEC.¹⁴⁶³ The SEC once again reinstated the daily reporting of Bear's liquidity in response. On February 2, Bear bolstered its liquidity

¹⁴⁵⁸ FCIC Interview with Jimmy Cayne; FCIC Interview with Alan Schwartz. Schwartz stated that bonuses for individual executives were discussed by the Compensation Committee, and the final recommendation for bonuses came from the CEO.

¹⁴⁵⁹ Bebhuck study.

¹⁴⁶⁰ In 2006, Alix received \$3 million in total compensation, Cayne and Schwartz each received more than \$38.3 million in salary and bonus, and Schwartz received \$35.7 million in salary and bonus.

¹⁴⁶¹ FCIC Interview with Thomas Marano.

¹⁴⁶² BSC-FCIC-e00782718 -- BSC-FCIC-e00782723, email from Elizabeth Ventura to Tom Marano, et al., February 5, 2008.

¹⁴⁶³ SEC_TM_FCIC_1053254_3260.

above \$10 billion by borrowing \$3 billion in long-term debt.¹⁴⁶⁴ [will add more detail on this debt if available] However, Bear was encountering increasingly reluctant lenders and customers.¹⁴⁶⁵

By the middle of February, Bear Stearns had reduced its mortgage-related assets somewhat. On February 15, Bear Stearns had a net position of \$36.7 billion in mortgages, mortgage-backed and asset-backed securities on its balance sheet, down almost \$10 billion from November. But, these assets were largely high-risk. Nearly \$10 billion were Alt-A non-GSE mortgage-backed securities. Another only \$16 billion were other risky mortgage assets such as other nonprime mortgage-backed securities and CDOs. Only \$11 billion were GSE assets, which would hold their value throughout the crisis.

“Duty to protect investors”

Particularly concerned were the hedge funds that were clients of Bear’s prime brokerage services. That business unit loaned money to hedge funds, conducted trades for them, and held their cash and securities in its own accounts. At the turn of the year, however, it was the hedge fund managers who were worried about the risk that Bear would be unable to return their cash and securities. Lou Lebedin, the head of Bear’s prime brokerage, told the FCIC that the hedge fund clients had made occasional inquiries about the bank’s overall financial condition in the latter half of 2007, but such inquiries picked up at the beginning of 2008.¹⁴⁶⁶ As the cost of purchasing credit default swaps on Bear (these credit default swaps were derivatives that paid the purchaser if Bear defaulted on its underlying credit obligations) increased, hedge funds increased their inquiries.¹⁴⁶⁷ In the first week of March, the inquiries became withdrawals – hedge

¹⁴⁶⁴ SEC_TM_FCIC_1053485.

¹⁴⁶⁵ Email from Friedman to Alix re: WSJ – Liquidity Guidelines to Get Update (February 21, 2008). FSC-FCIC-e0112654. In response to a WSJ article Friedman writes to Alix “Oh good, just what we need: regulators urging banks to be even more reluctant to lend.”

¹⁴⁶⁶ Lebedin MFR.

¹⁴⁶⁷ Lebedin MFR

funds started taking their business elsewhere.¹⁴⁶⁸ “They felt there were too many concerns about us and felt that this was a short-term move. Often they would tell us they’d be happy to bring the business back, but that they had the duty to protect their investors.” Renaissance Technologies, one of Bear’s biggest prime brokerage clients, would pull out all [\$10 billion] of its business.¹⁴⁶⁹ By the end of the month, Lebedin’s prime brokerage operation would be holding \$90 billion in assets under management, down over 40% from the \$160 billion under management just two months earlier.

Nonetheless, the week of March 3, SEC staff conducted an on-site inspection of Bear’s liquidity pool and identified “no significant issues.”¹⁴⁷⁰ The SEC found that Bear’s liquidity pool ranged from \$18 billion to \$20.1 billion.¹⁴⁷¹

Bear opened for business on Monday, March 10 with more than \$18 billion in cash reserves. The same day, Moody’s downgraded 15 mortgage-backed securities issued by Bear Stearns Alt-A Trust. Bloomberg and other financial reporting wires carried the news; Bloomberg’s abbreviated headline was misleading: “Moody’s Downgrades Bear Stearns.” Market rumors flew and counterparties panicked. Bear experienced \$2.5 to \$3 billion in customer withdrawals.¹⁴⁷² [update to say which customers] Monitoring the situation, the New York Fed began to see “some buy-side firms trying to move away from Bear as a prime broker counterparty.”¹⁴⁷³ Also monitoring the situation was the SEC, whose main concern was the liquidity pool, which was getting squeezed from all directions.¹⁴⁷⁴ While “everything rolled” during the

¹⁴⁶⁸ FCIC Interview with Lou Lebedin.

¹⁴⁶⁹ FCIC Interview of Lou Lebedin.

¹⁴⁷⁰ SEC Timeline regarding Bear Stearns. SEC_TM_FCIC_1053317 – 1053321 at 1053318.

¹⁴⁷¹ SEC Timeline regarding Bear Stearns. SEC_TM_FCIC_1053317 – 1053321 at 1053318.

¹⁴⁷² The Bear Stearns Companies Inc. Minutes of Special Meeting of Board of Directors – March 13, 2008. BSC-FCIC 00000368 – 00000371 at 00000369.

¹⁴⁷³ Email from Brian Peters to Matt Eichner March 11, 2008. SEC_TM_FCIC_1053247.

¹⁴⁷⁴ Email from Pat Lewis of Bear Stearns to Matt Eichner, Steven Spurry, James Giles and Kevin Silva Monday, March 10, 2008. SEC_TM_FCIC_1053244.

day – that is, Bear’s repo counterparties renewed their commitments – the SEC note suggested that this would “probably not continue.”¹⁴⁷⁵

On Tuesday, Bear’s customers pulled out another \$3 billion.¹⁴⁷⁶ Customers withdrawing funds included York Capital, which moved \$750 million of their prime brokerage accounts away from Bear Stearns, and Harbert, which withdrew \$700 million of its cash and securities on deposit with Bear.¹⁴⁷⁷ That same day, the Federal Reserve announced that it would make available to all investment banks and other “primary dealers” of U.S. securities¹⁴⁷⁸ a version of the discount window available to commercial banks in times of need. The mechanism was the Term Securities Lending Facility (TSLF), with which the Fed would make available up to \$200 billion in Treasury securities, accepting as collateral GSE mortgage-backed securities and non-GSE mortgage-backed securities rated AAA. This new lending facility would launch on March 27, over two weeks away. If Bear could last that long, it could offer illiquid mortgage-backed securities to the Fed and borrow Treasuries in return. The hope was that lenders would be more willing to lend to investment banks if the collateral were Treasuries rather than other highly-rated, but now suspect assets such as mortgage-backed securities. The Fed also announced that it would extend loan terms from [XX days] to 28 days, giving investment banks an added breather from the relentless need to “unwind” repos every morning.

Unusually, the Fed was saying that it would soon be willing to open its checkbook to institutions it did not regulate and whose financial condition it had never examined. The following day, Jim Embersit of the Federal Reserve Board in Washington checked on Bear’s liquidity position with the SEC. The SEC said that Bear had \$12.5 billion in cash and was able to finance all of its bank loans and most of its equity

¹⁴⁷⁵ Matt Eichner email to James Giles, March 11, 2008. SEC_TM_FCIC_1053247.

¹⁴⁷⁶ The Bear Stearns Companies Inc. Minutes of Special Meeting of Board of Directors – March 13, 2008. BSC-FCIC 00000368 – 00000371 at 00000369.

¹⁴⁷⁷ Email from David Rawlings to Alan Schwartz, March 12. BSC_FCIC-e00152678.

¹⁴⁷⁸ Email from Matthew Eichner to Brian Peters (March 11, 2008). SEC_TM_FCIC_1053247. FCIC Interview with Alan Schwartz.

securities through the repo market. “The SEC indicates that no notable losses have been sustained and that the capital position of the firm is ‘fine’.”¹⁴⁷⁹

Derivatives counterparties were increasingly reluctant to continue being exposed to Bear. In some cases they unwound trades in which they faced Bear and in other cases they made margin calls.¹⁴⁸⁰ In Bear’s last few years as an independent company, it had substantially increased its exposure to derivatives. At the end of fiscal year 2007, Bear had \$2.5 trillion in notional exposure on derivatives contracts, compared with \$1.9 trillion at the end of the 2006 fiscal year end and \$578 billion at the end of 2005.

One way derivatives counterparties could get out of derivative positions with Bear was through “novations.” In a derivative transaction, there are two parties. Depending on the value of the underlying asset, one party will have to pay the other party a set amount on the settlement date. Novations allow counterparties to assign their positions to someone else: If firm ‘x’ has a derivative contract with firm ‘y’, firm ‘x’ can novate its position to firm ‘z’, so that firm ‘z’ now is the one that has a derivative contract with firm ‘y’. Ordinarily, novations are routine transactions on Wall Street. But on Tuesday, Brian Peters of the New York Fed advised Matt Eichner of the SEC that the New York Fed was “seeing some HF [hedge funds] wishing to assign trades the clients had done with Bear Stearns to other CPs [counterparties] so that Bear ‘steps out.’”¹⁴⁸¹ Counterparties didn’t want to face Bear Stearns anymore.

Bear Stearns also ran into difficulties when it wanted to step into a trade. Hayman Partners, a hedge fund in Texas that wanted to decrease its exposure to sub-prime mortgages, had decided to close out a

¹⁴⁷⁹ Embersit Email FCIC-178610 - FCIC-178612.

¹⁴⁸⁰ JP Morgan Response to FCIC Interrogatories, BSC-FCIC 503. In response to our interrogatories, JP Morgan produced a list of all payments Bear Stearns made to or received from OTC derivative counterparties from March 10, 2008, through March 14, 2008. The spreadsheet was created in September 2008 by Bear Stearns in response to a request by the SEC Division of Trading and Markets. *Id.* Further, the existence of a large volume of novations away from Bear Stearns during the week of March 10 through March 14, 2008, and the week prior were confirmed by the New York Federal Reserve and ISDA. FCIC Interview with New York Federal Reserve personnel; FCIC Interview with ISDA personnel.

¹⁴⁸¹ Email from Brian Peters to Matt Eichner March 11, 2008. SEC_TM_FCIC_1053247.

relatively small \$5 million subprime derivative position with Goldman Sachs.¹⁴⁸² In this instance, Bear Stearns offered the best bid, so Hayman expected it could assign its position to Bear, who would then face Goldman in the derivative. Hayman notified Goldman of the trade by a routine email on Tuesday, March 11 at 4:06 p.m., East Coast time. The reply 41 minutes later was unexpected: “GS does not consent to this trade.”^{1483,1484}

That message startled Kyle Bass, Hayman’s managing partner. He told the FCIC that he could not recall any counterparty ever turning down a routine novation. On Wednesday morning, Debby LaMoy, Hayman’s chief operating officer, pressed Goldman for an explanation of its refusal the previous afternoon. Goldman’s reply at [8:44] am offered no details: “Our trading desk would prefer to stay facing Hayman. We do not want to face Bear.”¹⁴⁸⁵ Adding to the mystery, [sixteen] minutes later Goldman agreed to accept Bear Stearns as the counterparty after all. But the damage was done. The news hit the street that Goldman had refused a routine transaction with one of the other Big Five investment banks. The message could not have been more clear: Bear Stearns was not a counterparty to rely on.

Bear Stearns CEO Alan Schwartz hoped an appearance on CNBC would further reassure markets that Bear was solvent with plenty of cash. Schwartz was asked in about the rumor that a firm had refused to novate a derivative contract with Bear. Schwartz said he had no knowledge of this and rhetorically asked “Why do rumors start?” Asked if he was concerned about Bear’s financial condition, SEC Chairman Christopher Cox told reporters that his agency “[was] monitoring capital levels at Bear Stearns and other

¹⁴⁸² GS MBS 0000024919.

¹⁴⁸³ FCIC Interview with Kyle Bass of Hayman.

¹⁴⁸⁴ GS MBS GS MBS 0000024921.

¹⁴⁸⁵ GS MBS GS MBS 0000024933.

securities firms on a constant basis [and, the SEC has] a good deal of comfort about the capital cushions at these firms at the moment.”¹⁴⁸⁶

Despite these assurances, the run on Bear accelerated. Many investors interpreted the Fed’s announcement about the new facility to be directed specifically at Bear Stearns, and they were concerned that it would not be available for several weeks. From Monday to Tuesday night, Bear lost [\$7] billion in liquidity, closing the day with its liquidity pool at [\$8.2] billion.¹⁴⁸⁷ The SEC was monitoring the situation, noting that Bear paid another \$1.1 billion for margin calls from 142 nervous counterparties.¹⁴⁸⁸

That same day, derivatives counterparties drastically decreased their exposure to Bear, forcing Bear to pay out over \$1.2 billion. Morgan Stanley led the charge, receiving over \$238 million from Bear. Deutsche Bank was close on its heels, receiving over \$223 million from Bear. Lehman Brothers, Barclays and Citibank picked up \$100 million each.¹⁴⁸⁹

Repo lenders who had already tightened the leash on the terms for their contracts over the preceding four or five months tightened the leash again, demanding more collateral from Bear Stearns. Worries of a Bear default quickly mounted.¹⁴⁹⁰

By Wednesday night, Bear’s ability to borrow in the repo market was drying up. The SEC noted that some large and important money funds, including Fidelity and Mellon, had told the firm after the close of

¹⁴⁸⁶ Email from Matthew Eichner to CSE Monitor’s (March 11, 2008), subject: FW: (BN) Bear Stearns Investor Lewis May Increase His Stake (Upd. SEC_TM_FCIC_1053249).

¹⁴⁸⁷ Email from Matt Eichner to Erik Sirri, Robert Colby, and Michael Macchiaroli March 12. SEC_TM_FCIC_1053253.

¹⁴⁸⁸ Email from Matt Eichner to Erik Sirri, Robert Colby, and Michael Macchiaroli March 12. SEC_TM_FCIC_1053253.

¹⁴⁸⁹ BSC-FCIC 00000503.

¹⁴⁹⁰ Upton MFR at 20.

business Wednesday that they “might be hesitant to roll some funding tomorrow.”^{1491,1492} While the regulators believed the amounts were “very manageable (between \$1 and \$2 billion), the withdrawals would not send a helpful signal to the market.”¹⁴⁹³ But by this point, the issue was almost moot. Many counterparties had already become so averse to Bear that they declined to accept Treasury securities as repo collateral.[cite] Even the world’s safest form of collateral would not assuage their concerns. Schwartz was worried. He called New York Fed President Timothy Geithner Wednesday night to “talk about possible Fed flexibility in the event that some repo counterparties...do indeed pull away today.”^{1494,1495}

Upton, the treasurer, was stunned. Before that week, he had never worried about the disappearance of repo funding.¹⁴⁹⁶ By Thursday, he believed the end was near. He and other Bear executives informed the Board of Directors that the market rumors were causing counterparties not to do business with Bear; that Bear was receiving and meeting significant margin calls; that \$14 billion in repo was not going to roll over; and that “there was a reasonable chance there would not be enough cash to meet [Bear’s] needs.”¹⁴⁹⁷ Derivatives counterparties continued to run from Bear. Barclays received over \$321 million. Royal Bank

¹⁴⁹¹ Email from Matt Eichner to Erik Sirri, Robert Colby, and Michael Macchiaroli March 12. SEC_TM_FCIC_1053253.

¹⁴⁹² Upton MFR.

¹⁴⁹³ Email from Matt Eichner to Erik Sirri, Robert Colby, and Michael Macchiaroli March 12. SEC_TM_FCIC_1053253.

¹⁴⁹⁴ FCIC interview with Alan Schwartz.

¹⁴⁹⁵ Internal SEC Email from Matthew Eichner to Erik Sirri, Robert Colby, and Michael Macchiaroli, (March 13, 2008). SEC_TM_FCIC_1053253; The Bear Stearns Companies Inc. “Minutes of Special Meeting of Board of Directors”, (March 13, 2008). BSC-FCIC 00000368.

¹⁴⁹⁶ Upton MFR.

of Scotland got \$251 million, and Citibank \$205 million. The total: over [\$2.2] billion. By that night, liquidity was a mere \$2 billion.¹⁴⁹⁸



Bear had run out of cash in one week. The company’s executives and its regulators continued to believe the firm was solvent, however. SEC Chairman Cox testified before the FCIC, “At all times during the week of March 10 to 17, up to and including the time of its agreement to be acquired by JP Morgan, Bear Stearns had a capital cushion well above what is required to meet the Basel standards....even at the time of its sale, Bear Stearns’s consolidated capital, and its broker-dealers’ net capital, exceeded relevant supervisory standards.”¹⁴⁹⁹

“The government would not permit a higher number”

Bear CEO Alan Schwartz could feel the walls of the company’s midtown office building in Manhattan closing in on his company. Thursday evening, March 13, he called JP Morgan CEO Jamie Dimon to request a \$30 billion credit line.¹⁵⁰⁰ Dimon turned him down, citing, according to

¹⁴⁹⁸ The Bear Stearns Companies Inc. Minutes of Special Meeting of Board of Directors (March 13, 2008). BSC-FCIC 00000368.

¹⁴⁹⁹ Cox testimony to FCIC. March 5, 2010 at 6.

¹⁵⁰⁰ JP Morgan was Bear’s tri-party repo clearing bank and was in the best position to assess Bear Stearns’ collateral.

Schwartz, JP Morgan's own significant exposure to the mortgage market. Because Bear also had a large, illiquid portfolio of mortgage assets, JP Morgan could not render assistance without government support.¹⁵⁰¹ Schwartz spoke with New York Fed President Timothy Geithner again to discuss the run on the bank.[cite] After all, just two days earlier the Fed had announced the plan to open its new lending facility at the end of March. Schwartz insisted to Geithner that Bear's problem was liquidity, not insufficient capital.¹⁵⁰² A series of calls followed among Schwartz, Dimon, Geithner and Treasury Secretary Henry Paulson.¹⁵⁰³ Maybe something could be worked out with JP Morgan.¹⁵⁰⁴

The parties struck a deal before the market opened on Friday, March 14. The Fed could not lend directly to Bear Stearns. The new lending facility for the primary dealers would not be open for two more weeks. Instead, the Fed would immediately extend a \$30 billion emergency credit facility to JP Morgan, which would in turn extend a \$30 billion credit line to Bear Stearns. Early in the morning, the SEC issued a press release to reassure the markets: "As of February 2008, Bear Stearns' holding company capital exceeded relevant regulatory standards."

A few hours later, notwithstanding the new credit line and even as Bear prepared to report positive net income for its fiscal first quarter (which ended in February), Standard & Poor's lowered Bear Stearns' rating three levels to BBB.¹⁵⁰⁵ Moody's and Fitch Ratings also downgraded the company.¹⁵⁰⁶ By the end

¹⁵⁰¹ FCIC Interview with Alan Schwartz.

¹⁵⁰² *Id.*

¹⁵⁰³ FCIC interview with Alan Schwartz.

¹⁵⁰⁴ FCIC interview with Alan Schwartz.

¹⁵⁰⁵ Bloomberg, March 14, 2008.

¹⁵⁰⁶ Proxy pg. 28.

of the day, Bear was out of cash.¹⁵⁰⁷ In just four days, nearly [\$16] billion in cash had evaporated. The bank informed the SEC that it was “unable to operate normally on Friday.”¹⁵⁰⁸ Its common stock plummeted 47%, closing below \$30.¹⁵⁰⁹

From this evidence, the markets had viewed the \$30 billion loan to Bear Stearns as a sign of terminal weakness. After markets closed on Friday, Paulson and Geithner informed Schwartz that the Federal Reserve loan to JP Morgan (which provided the funds for JP Morgan to lend to Bear) would not be available after the weekend. Without the loan from JP Morgan backstopped by the Federal Reserve available on Monday, Bear could not conduct business. In fact, the deadline was even tighter than that: Bear Stearns had to find a buyer before the Asian markets opened Sunday night or game over.¹⁵¹⁰ Schwartz, Molinaro, Alix, Head of Global Mortgages Thomas Marano, and others spent the weekend in due diligence meetings with JP Morgan and other potential buyers, including private equity firm J.C. Flowers and Co.¹⁵¹¹ According to Schwartz, JP Morgan was quickly determined to be the only candidate with the size and stature to make a credible offer within the allotted 48 hours.¹⁵¹² Moreover, as Bear’s repo clearing bank, JP Morgan actually held a large percentage of Bear Stearns’ assets as collateral and had been assessing the value of that collateral on a daily basis.¹⁵¹³ JP Morgan’s prior knowledge of Bear’s assets allowed it to move more quickly than other potential suitors.

¹⁵⁰⁷ The Bear Stearns Companies Inc. Minutes of Special Meeting of Board of Directors (March 13, 2008). BSC-FCIC 00000368.

¹⁵⁰⁸ SEC_TM_FCIC_1053320

¹⁵⁰⁹ *Id.*

¹⁵¹⁰ FCIC Interview with Alan Schwartz.

¹⁵¹¹ FCIC Interview with Samuel Molinaro.

¹⁵¹² Cite

¹⁵¹³ Confirm & cite to JP Morgan MFRs—also add views of Daryl Hendricks from Tri-party Repo Task Force..

On Sunday, March 16, JP Morgan informed the New York Fed and the Treasury that it was interested in a deal with Bear Stearns if accompanied by financial support from the Fed. The Federal Reserve Board quickly found the “unusual and exigent circumstances” to intervene—the conclusion that the Fed is required to draw under Section 13(3) of the Federal Reserve Act before it can make an emergency loan to an institution that is not a commercial bank. The Fed agreed to provide up to \$30 billion to fund Maiden Lane LLC (named for a street that runs alongside the NY Fed), a limited liability company that would house collateral purchased for \$29.97 billion from Bear Stearns. The collateral - mostly mortgage-related securities, other assets, and hedges from Bear’s mortgage trading desk.- would be placed under New York Fed management. To finance the transfer of assets, JP Morgan made a \$1.15 billion subordinated loan and the New York Fed made a loan of \$28.82 billion. Under the negotiated structure, JP Morgan bore the risk of the first \$1.15 billion of losses; the Fed would bear any further losses up to \$28.82 billion.¹⁵¹⁴ The Fed would be repaid from the proceeds of an orderly sale of the collateral securing the loan.

On Sunday night, with the Maiden Lane structure in place, JP Morgan publicly announced a deal to purchase Bear Stearns for \$2 a share.¹⁵¹⁵ Minutes of the Special Meeting of Bear’s Board of Directors indicate that JP Morgan had considered proposing \$4 a share but reduced the amount to \$2 “because the government would not permit a higher number....The Fed and Treasury would not support a transaction where [Bear Stearns] equity holders received any significant consideration, because of the ‘moral hazard’ of the federal government using taxpayer money to ‘bail out’ the investment bank’s stockholders.”^{1516,1517}

¹⁵¹⁴ Report Pursuant to Section 129 of the Emergency Economic Stabilization Act of 2008: Loan To Facilitate the Acquisition of The Bear Stearns Companies, Inc. by JP Morgan & Co.

¹⁵¹⁵ JP Morgan press release “JP Morgan to Acquire Bear Stearns,” March 16, 2008 available at http://www.JPMorgan.com/cm/cs?pagename=JPM_redesign/JPM_Content_C/Generic_Detail_Page_Template&cid=1159338557604&c=JPM_Content_C.

¹⁵¹⁶ FN BSC-FCIC 00000340.

Eight days later, on March 24, Bear Stearns and JP Morgan amended the merger agreement to increase the share price to \$10. John Chrin, co-head of the financial institutions mergers and acquisitions group at JP Morgan, told the FCIC that the price was increased in order to make the approval of Bear's shareholders more likely.¹⁵¹⁸ President Alan Schwarz told the FCIC that the increase to \$10 allowed Bear to "preserve Bear Stearns's value to the greatest extent possible under the circumstances for our shareholders, our 14,000 employees, and our creditors."¹⁵¹⁹

"It was heading to a black hole"

Federal Reserve Chairman Ben Bernanke called the Bear Stearns decision the toughest of the entire financial crisis.¹⁵²⁰ The [\$2.8 trillion repo market], where the investment banks went for financing every night, had "really [begun] to break down."¹⁵²¹ "[A]s the fear increased," in Bernanke's view, short-term lenders began demanding increasing collateral for the same size loan, "which was making it more and more difficult for the financial firms to finance themselves and creating more and more liquidity pressure. And, it was heading sort of to a black hole."¹⁵²² In Bernanke's judgment, the collapse of Bear Stearns threatened to freeze the tri-party repo market, leaving the short-term lenders in possession of collateral that they would try to "dump on the market. You would have a big crunch in asset prices."¹⁵²³ "And following the rescue," Bernanke concluded, "the markets did improve quite a bit. Then we had for a number of months a considerable increased stability in funding markets."

¹⁵¹⁷ BSC-FCIC 00000340. In contradiction to what is stated in the Board minutes, when FCIC staff interviewed Schwartz he stated that the \$2 a share price came from JP Morgan, not Paulson. Schwartz also stated that Bear did not receive "a lot of competing offers" so they had to accept JP Morgan's offer of \$2 a share.

¹⁵¹⁸ FCIC Interview with John Chrin.

¹⁵¹⁹ Transcript of FCIC Hearing, May 5, 2010 at 142.

¹⁵²⁰ FCIC Closed Session with Ben Bernanke November 17, 2009 at 20.

¹⁵²¹ FCIC Closed Session with Ben Bernanke November 17, 2009 at 20-21.

¹⁵²² FCIC Closed Session with Ben Bernanke November 17, 2009 at 21.

¹⁵²³ FCIC Closed Session with Ben Bernanke November 17, 2009 at 21.

Unlike SEC Chairman Cox, Secretary of the Treasury Henry Paulson was not comforted by Bear's capital cushion. Paulson told the FCIC that Bear had a liquidity problem, and also a capital problem. "Could you just imagine the mess we would have had? If Bear had gone there were hundreds, maybe thousands of counterparties that all would have grabbed their collateral, would have started trying to sell their collateral, drove down prices, create even bigger losses. There was huge fear about the investment banking model at that time, and--because of the lack of Fed oversight and access to the discount window and so on. So I think you would have seen other investment banks go very quickly."¹⁵²⁴

"In late 2007, I think we knew the markets were fragile," Paulson told the FCIC. "But in late 2007, I think that I... was as concerned as anyone around me. And I underestimated... the magnitude and the scale of what we were dealing with. It was just so big – really, almost every step of the way." Paulson believed that if Bear had filed for bankruptcy, "you would have had Lehman going ... almost immediately if Bear had gone, and just the whole process would have just started earlier."¹⁵²⁵

Bear's SEC regulators, Mike Macchiarolli and Matt Eichner, were as stunned as anyone by the speed with which the firm collapsed. Macchiarolli had had his doubts about the bank as far back as August, he recalled for the FCIC, but he and his colleagues expected Bear would be able to fund itself through the repo market, albeit at higher margins. They were wrong.¹⁵²⁶

Bear's rapid demise had brought to light some harsh new realities about modern finance. Investment banks were subject to runs, like retail banks in the days before deposit insurance. Hedge funds could pull billions of dollars out of their prime brokerage accounts overnight. Money market funds could pull

¹⁵²⁴ Paulson testimony at FCIC Hearing May 6, 2010 at 58-59.

¹⁵²⁵ FCIC Hearing transcript May 6, 2010 at 78.

¹⁵²⁶ FCIC Interview with SEC March 18, 2010.

billions of dollars out of the repo market. Derivatives contracts could be canceled, and collateral could be demanded. Perhaps most disturbingly, when these market participants began to doubt an investment bank's liquidity, they would not lend, even when the collateral was Treasury bills.

It was a new financial world—and, for the first time in 85 years, one without the services of Bear Stearns. The JP Morgan acquisition closed on June 26, 2008.

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Part III, Chapter 5: March to August 2008: Emergence of systemic risk

JP Morgan’s federally assisted acquisition of Bear Stearns averted catastrophe – for the time being. The Fed had found novel ways to lend cash into the financial system, and many investors and lenders believed that it had set a precedent in the Bear episode: it would always save the day. Policy makers were officially in the bailout business, whether for individual institutions or markets in general. Investors began to worry less about a recession and more about inflation, as the price of oil hit \$140 per barrel and the Fed repeatedly cut interest rates. In May, the Dow Jones climbed to 13,058, within 8% of the record 14,093 set in October. The cost of protecting against the risk of default by financial institutions – reflected in the prices of credit default swaps – declined from the highs of March and April. “In hindsight, the markets were surprisingly stable and almost seemed to be neutral a month after Bear Stearns, leading all the way up to September,” said David Wong, Morgan Stanley’s treasurer^[footnote]. Taking advantage of the brief respite in investor concern, commercial banks and investment banks, sorting through the likely further losses on their balance sheets, raised [\$XXX] billion in new equity by the end of June.

Inside the banking world, however, the picture wasn’t quite so rosy. Bankers and their regulators were haunted by the speed of Bear Stearns’s demise. And they knew that the other investment banks shared

Bear's weaknesses: high leverage, high reliance on overnight funding, dependence on securitization markets to fund certain assets, and high concentrations in illiquid mortgage securities or other troubled assets. The Fed looked at individual companies in a new light. If the company were to fail, could the market sustain the fallout? As a last resort, how could the federal government mitigate the risks, with either regulatory or legislative authority?

Also, the dangers of tri-party repo and the counterparty risk caused by derivatives contracts had been exposed by the run on Bear. Regulators who had been caught off guard worked feverishly to fix these problems before market stresses could spawn another crisis that would ripple throughout the financial system. [add more on regulation of repo market, and when it became a concern.]

And the word on the street – despite the assurances of Lehman CEO Dick Fuld, at an April shareholder meeting, that “the worst is behind us” – was that Lehman's days were numbered.

Fed: “Lender of last resort” to the repo market

The most pressing danger was the repo market – a market that “grew very, very quickly with no single regulator having a purview of it,” former Treasury Secretary Hank Paulson would tell the FCIC. The little-regulated tri-party repo market had grown from \$800 billion in 2002 to \$1.7 trillion in 2005, and then \$2.4 trillion in 2007.¹⁵²⁷ It eventually would peak at \$2.8 trillion in March of 2008. Most market participants had believed that this market was a relatively safe and durable source of short-term financing for investment banks in which all loans were secured by collateral. This was exactly why Bear had shifted \$30 billion of its funding into repos in 2007. But now it was clear that repo funding could be just as vulnerable to runs as other forms of short-term financing. In the aftermath of Bear's near-collapse, the Federal Reserve decided that the repo market had to be fortified immediately. On Sunday, March 16, the Fed announced the Primary Dealer Credit Facility, or PDCF – a “lender of last resort” for investment

¹⁵²⁷ FRBNY Task Force on Tri-Party Infrastructure White Paper (2010)

banks and other primary dealers with good collateral. The move came “just about 45 minutes [too late for Bear Stearns],” James Cayne, Bear’s former CEO, told the FCIC.¹⁵²⁸

The repo runs of 2007 had devastated hedge funds such as the two Bear Stearns Asset Management funds and mortgage originators such as Countrywide. The run on Bear Stearns similarly opened eyes. Market participants and regulators now better appreciated how the quality of repo collateral had shifted over time. For decades, borrowers in the repo market had pledged as collateral Treasury notes and securities issued by Fannie Mae and Freddie Mac, which were considered to be almost as safe as Treasuries. Beginning in the mid-1990s, however, repo lenders started to accept “nontraditional” investments, which eventually included highly-rated mortgage-backed securities and CDOs. At the peak prior to the crisis, this riskier collateral accounted for as much as 30% of the total posted, according to FCIC interviews with market participants.¹⁵²⁹ As noted, the 2005 Bankruptcy Act had encouraged this development by giving repo lenders more confidence that they had clear, immediate rights to collateral in the event that a borrower declared bankruptcy. But starting in the summer of 2007, lenders began reducing their repos secured by MBS and CDOs. “When people got scared, they wouldn’t finance the nonstandard stuff at all,” Jamie Dimon, CEO of JP Morgan, told the FCIC.¹⁵³⁰ [Check audio.]

A second unappreciated fact about the repo market was that the lenders cared just as much about the financial health of the borrower as they cared about the quality of the collateral. Theoretically, good collateral should have trumped all doubts about the borrower. But it turned out that wasn’t always true in a crisis. Cash investors were not willing to take the risk that a counterparty would go bankrupt; they simply did not want the hassle of suddenly having to hold billions of dollars of collateral, even good

¹⁵²⁸ Transcript of FCIC Hearing on Shadow Banking at page 68, line 20. Transcript available online here: <http://fcic.gov/hearings/pdfs/2010-0505-Transcript.pdf>.

¹⁵²⁹ FCIC interviews with the JPMC repo desk[names will be added], February 25, 2010, and the New York Fed[names will be added], March 4, 2010.

¹⁵³⁰ FCIC interview with Jamie Dimon, October 20, 2010.

collateral. Steven Meier, the Chief Investment Officer at State Street, said at the FCIC's hearing on the "shadow banking" system, "I would say the counterparties are the first line of defense, and we don't want to go through that uncomfortable process of having to liquidate collateral, irrespective of whether it's over-collateralized or not." William Dudley, then head of the New York Fed's Markets Group (and currently President of the New York Fed) said, "At the first sign of trouble, the investors in tri-party repo tend to run rather than take the collateral that they've lent against. [They chose to] withdraw from the market rather than get stuck with the high-quality collateral. High-quality collateral is not sufficient."¹⁵³¹

Moreover, if a borrower defaults, money market funds can find themselves in possession of securities that have longer maturities than they can legally own. This can happen if the money market fund accepts long-term securities, such as agency MBS, as collateral in a repo transaction. Typically, if a borrower defaults and leaves the fund with such collateral, the money fund would liquidate the securities immediately. In these cases—and most certainly at the peak of the crisis—money funds would worry about needing to sell a lot of collateral quickly into a declining market. In short, once the crisis hit, collateral no longer mattered to the major investors that supplied cash to investment banks and other institutions through the repo market. And this lenders' attitude was more widespread than previously imagined. In the crisis, investors didn't consider secured funding to be much better than unsecured, according to Darryll Hendricks, a managing director and global head of quantitative risk control at UBS, and the head of a private-sector task force on the repo market organized by the New York Fed. Hendricks told the FCIC, "The largest cash investor participants in the task force repeated in nearly every meeting that they lend against the counterparty and not the collateral. The point at which they would run or not renew secured financing was the point at which they would not renew unsecured financing."¹⁵³²

¹⁵³¹ FCIC interview with William Dudley, October 15, 2010.

¹⁵³² FCIC interview with Darryll Hendricks, August 6, 2010.

Well in advance of the liquidity problems at Bear Stearns, the Fed had been developing a new program, the Term Securities Lending Facility or TSLF, to help investment banks and other nonbank financial firms get funding if repo lenders became skittish. As previously noted, the Fed had announced this program on the Tuesday before Bear's collapse, but it would not be available until March 27. The TSLF would lend up to \$200 billion of Treasury securities to the investment banks and other primary dealers, the securities affiliates of the large commercial banks and investment banks that trade with the New York Fed such as Citigroup, Goldman Sachs, and Countrywide, for up to 28 days. The banks and dealers would receive Treasuries in exchange for highly-rated securities, including GSE debt. The banks could then turn to the repo market and receive cash loans for their Treasuries, which repo lenders preferred. This would allow the investment banks and dealers to more reliably get cash for non-Treasury securities that repo lenders rejected in times of stress. Similar to the Term Auction Facility for commercial banks, the TSLF would be in the form of a regular auction to reduce the stigma of borrowing from the Fed.

However, after Bear's collapse, Fed officials realized that the situation called for a program that could be up and running right away. And they realized that the TSLF alone would not be able to save the investment banks. On the Sunday of Bear's collapse, the Fed announced the new Primary Dealer Credit Facility to provide *cash* – not Treasuries – to investment banks and other primary dealers on terms close to those that depository institutions – banks and thrifts - receive through the Fed's discount window. Unlike the TSLF, which would offer Treasuries for 28 days, the PDCF offered overnight cash loans to investment banks and other primary dealers in exchange for collateral. In effect, this program would be available to replace the overnight tri-party repo lenders. It could provide hundreds of billions of dollars of credit to the investment banks, if necessary. “So the idea of the PDCF then was... anything that the dealer couldn't finance – the securities that were acceptable under the discount window – if they couldn't get financing in the market, they could get financing from the Federal Reserve,” said Seth Carpenter. “And that way, you don't have to worry. And by providing that support, other lenders know that they're going to be able to get their money back the next day.”

It was a lucky break that the Fed was already developing the TSLF and had worked through the technical challenges; otherwise it would have been difficult to set up the PDCF by Monday morning. “The only way we were able to do that so quickly on Bear Stearns weekend was that the lending facility was already being set up. If we hadn’t had that it’s not obvious how that could have been done on Bear weekend,” Dudley told the FCIC.¹⁵³³ [From notes, need to check audio.]

By charging interest rates a quarter of a percentage point above the primary rate with additional fees for regular use, the Federal Reserve encouraged dealers to use the PDCF only as a last resort.¹⁵³⁴ In its first week of operation, this program immediately provided \$40 billion in cash to Lehman Brothers and other investment banks. [will add more detail on use] However, after the immediate post-Bear concerns subsided, use of the facility declined after April, dropping off completely by mid-July.¹⁵³⁵ The dealers feared that markets would see PDCF usage as an indication of severe distress, which resulted in the PDCF carrying a stigma similar to the Fed’s discount window. “Paradoxically, while the PDCF was created to mitigate the liquidity flight caused by the loss of confidence in an investment bank, use of the PDCF was seen both within Lehman, and possibly by the broader market, as an event that could trigger a loss of confidence,” noted the Lehman examiner, who was hired by the Trustee managing the Lehman estate following its bankruptcy.¹⁵³⁶ “Primary dealers view the PDCF as a last resort and will exhaust all other financing sources before pledging collateral here.”

Market participants credited the two new Fed facilities with rescuing the tri-party repo system for the time being. The fact that participation soon declined was good – fewer banks needed it – and their mere

¹⁵³³ FCIC interview with William Dudley, October 15, 2010.

¹⁵³⁴ http://www.ny.frb.org/research/current_issues/ci15-4.pdf p.8

¹⁵³⁵ Tobias Adrian, Christopher Burke, and James McAndrews, “The Federal Reserve’s Primary Dealer Credit Facility,” Federal Reserve Bank of New York, *Current Issues in Economics and Finance*, Volume 15, Number 4, August 2009, page 7.

¹⁵³⁶ Lehman Examiners report, pages 1396-98. “On January 16, 2009, the United States Bankruptcy Court for the Southern District of New York entered an order directing the U.S. Trustee to nominate an Examiner, and outlining the subject matter of the Examiner’s investigation.” Lehman Examiners report, page 28.

existence was crucial for returning confidence in the system. On May 2, the Fed broadened the kinds of collateral allowed in the TSLF to include other AAA rated asset-backed securities such as auto and credit card loans. In June, the Fed's Dudley urged in an internal email that both programs be extended at least through the end of the year. "PDCF remains critical to the stability of some of the [investment banks]," he wrote. "Amounts don't matter here, it is the fact that the PDCF underpins the tri-party repo system."¹⁵³⁷ On July 30, "[i]n light of the continued fragile circumstances in financial markets," the Fed extended both programs through January 30, 2009.¹⁵³⁸

JP Morgan: "It's a huge risk to us"

The repo run on Bear also alerted the two repo clearing banks to the risks they were taking – JP Morgan, which was the main clearing bank for Lehman and Merrill Lynch, as it had been for Bear Stearns, and the Bank of New York, which was the main clearing bank for Goldman Sachs and Morgan Stanley.

Prior to Bear's collapse, the market had not really understood the colossal exposures that the tri-party repo market creates for the clearing banks, JP Morgan and Bank of New York. As explained in the previous chapter, the "unwind/rewind" mechanism could leave the two banks with an enormous "intraday" exposure of about \$2.8 trillion at its peak in March 2008 – an interim exposure, a brief exposure, but no less real for that. JP Morgan and the Bank of New York were willing to accept this role because they had never imagined a scenario in which repo lenders became unwilling to lend on good collateral.¹⁵³⁹

In an interview with the FCIC, JP Morgan CEO Jamie Dimon acknowledged that he had not become fully aware of the risks stemming from his bank's clearing business until the Bear crisis in 2008.¹⁵⁴⁰ He now

¹⁵³⁷ 6/17/08 email, FCIC 154463-464.

¹⁵³⁸ Federal Reserve Board, press release, July 30, 2008.

¹⁵³⁹ Hendricks interview with the FCIC, p 5

¹⁵⁴⁰ FCIC interview with Jamie Dimon, October 20, 2010.

had two concerns: first, as the clearing bank, JP Morgan could be stuck with billions of dollars of unwanted securities if it unwound the trades in the morning and the repo lenders suddenly became unwilling to rewind in the afternoon. Worse – JP Morgan could be stuck in the event a large investment bank were to default. “If they default intraday, it’s a huge risk to us,” Dimon said.

To address those risks in 2008, for the first time both JP Morgan and the Bank of New York started to demand that intraday loans to tri-party repo borrowers – mostly the large investment banks – be overcollateralized.¹⁵⁴¹

“Refusing to unwind would be unforgivable”

The Fed increasingly focused on the systemic risk posed by the two repo clearing banks. If either JP Morgan or the Bank of New York chose not to unwind its trades one morning, they could stick the money funds and other repo lenders with billions of dollars in repo collateral. That would put those lenders in the difficult position of having to sell off large amounts of collateral in order to meet their own cash needs, resulting in the potential for widespread fire sales and runs by investors.¹⁵⁴² In the case of Bear Stearns, the money market funds had pulled their money *en masse* rather than face that possibility.

“The situation was really revealed to be unsatisfactory to all concerned,” UBS’s Hendricks said.

The PDCF did not protect against the possibility that clearing banks would balk at the intraday exposure to an investment bank – it only provided overnight funding, to address the situation in which repo lenders reduced their funding. On July 11, Fed officials circulated a plan, ultimately never implemented, under which the Fed would also provide intraday funding, to address a situation in which one of the clearing banks was unwilling or unable to unwind its trades. As focus shifted to the stability of Lehman Brothers, the plan contemplated the Fed providing the investment bank with \$200 billion in tri-party repo financing

¹⁵⁴¹ At first, the margin would be based on a percentage of the overnight margin that repo lenders required; over time, JP Morgan planned for that margin to be equivalent to the overnight margin.

¹⁵⁴² Hendricks p 4

during the day – essentially covering for JP Morgan if JP Morgan would not or could not provide that financing. The July 11 plan illustrates how critical tri-party repos were to firms like Lehman: “Currently, a dealer’s positions are financed overnight by tri-party repo investors and during the day by its clearing bank. Should a dealer lose the confidence of its investors or clearing bank, their efforts to pull away from providing credit could be disastrous for the firm and also cast widespread doubt about the instrument as a nearly risk free, liquid overnight investment.”

To manage the potential for a “disaster” to a tri-party repo borrower and “widespread doubt” in the market that would follow from a clearing bank’s refusal to unwind repos, the plan contemplated that the Fed would “step in and provide overnight financing as it does now through the PDCF, and by replacing the credit provided by the clearing bank during the day.” The plan was “intended to support market confidence in the dealer and, by continuing the smooth functioning of the market, in the tri-party repo instrument itself.”

Still, despite the dangers to the market, the July 11 plan carried political risks – by stepping in as the lender the Fed would be adding substantially to the government’s balance sheet. Without a buyer for the firm up to take these loans off the government’s balance sheet, Fed officials recognized that there was “little appetite for that.”

Also, Pat Parkinson, then Deputy Director of the Federal Reserve Board’s Division of Research and Statistics, believed the plan was too complex, and noted that the existence of the PDCF stabilized the repo market relative to its disrupted state in the period when Bear Stearns lost access to funding. Therefore, concerned that JPMC could refuse to unwind a repo borrower’s transactions, Parkinson emailed to Dudley and other Fed officials that “we should tell JPMC that with the PDCF in place refusing to unwind is unnecessary and would be unforgiveable. ...it would force us to lend an equal amount” even “when private parties may be willing to continue to fund a significant portion” because of the PDCF.¹⁵⁴³

¹⁵⁴³ 7/11/08 email thread, FCIC-155510-155512.

A week later, on July 20, Parkinson wrote to Fed Governor Kevin Warsh and Fed general counsel Scott Alvarez that JP Morgan was “likely to be the first to realize that the money funds and other investors that provide tri-party financing to LB [Lehman Brothers] are pulling back significantly.” Parkinson noted that JP Morgan might “threaten not to unwind LB’s previous nights repos” if “it fear[ed] that the investors [were] unlikely to roll their repos.” If JP Morgan did not unwind, Lehman “would be done,” Parkinson wrote. He explained that if JP Morgan refused to unwind, tri-party repo investors would control much of Lehman’s securities inventory, and would liquidate the collateral they controlled. Moreover, Parkinson foresaw a chain reaction if that occurred – he wrote that there was a good chance that the tri-party repo investors would “lose confidence in the tri-party mechanism and pull back from funding other dealers.” He wrote that “fear of these consequences was why the Fed facilitated Bear’s acquisition by JPMC.”

While Parkinson believed that the PDCF should have been enough to dissuade JP Morgan from refusing to unwind Lehman’s repos, he acknowledged that – even with the PDCF – the clearing bank still faced risks and might refuse anyway. Because a large portion of Lehman’s collateral was ineligible to be funded by the PDCF, and because of the risk that Lehman could fail during the day, before the repos were settled, JP Morgan still faced risks when it chose to unwind. Finally, Parkinson noted that even if the Fed extended as much as \$200 billion to Lehman, it would not be enough to ensure the firm’s survival absent an acquirer – if the stigma associated with PDCF borrowing caused other funding counterparties to stop providing funding to Lehman, it would fail.

Fed and SEC: “Liquidity stress scenarios”

Immediately after the Bear weekend, Fed and SEC supervisors also began to track more closely investment banks’ funding in the repo market. Over the course of 2008, each firm tried to reduce its overall reliance on repo funding – none wanted to be stuck in another crisis with the need to call again on the two Fed liquidity programs. One key metric of liquidity risk was the portion of total liabilities that the firms funded through the repo market: 15-20% for Lehman and Merrill Lynch, 10-15% for Morgan

Stanley, and about 10% for Goldman Sachs.¹⁵⁴⁴ Another metric was the reliance on overnight repo (which mature in one day) or open repo (which can be terminated at any time). Every analysis indicated that these elements of the market would be the most vulnerable to a run in a crisis. Between March and August, 2008, the four remaining major investment banks all reduced the portion of their repo financing that was overnight or open. However, that ratio was still over 40% for all but Goldman Sachs. Between March-May and July-August, Lehman's ratio of overnight and open repo funding to total repo funding fell from 45% to 40%, Merrill Lynch's fell from 46% to 43%, Morgan Stanley's fell from 70% to 55%, and Goldman's fell from 18% to 10%.¹⁵⁴⁵

Supervisors also paid attention to the haircuts that repo lenders required – that is, the amount of excess collateral that lenders demanded above the value of the loan. The haircut varied based on the counterparty and on the type of collateral. Haircuts rose substantially in the repo market [will include numbers]; for the next six months, Fed officials kept close tabs on the haircuts that investment banks, hedge funds, and other repo borrowers had to pay, particularly on nontraditional collateral such as mortgage-backed securities and CDOs.¹⁵⁴⁶ “With lenders worrying that they could lose money on the securities they held as collateral, haircuts increased – doubling for some agency mortgage securities and increasing significantly even for borrowers with high credit ratings and on relatively safe collateral such as Treasury securities.”¹⁵⁴⁷

The day of Bear's near-collapse, in an effort to get a better understanding of the investment banks – over which the Fed had no official supervisory authority – the New York Fed joined the SEC and sent in teams

¹⁵⁴⁴ Based on chart in Federal Reserve Bank of New York, *Developing Metrics for the Four Largest Securities Firms*, August, 2008. FCIC-AIG0015666.

¹⁵⁴⁵ Federal Reserve Bank of New York, *Developing Metrics for the Four Largest Securities Firms*, August, 2008. FCIC-AIG0015666.

¹⁵⁴⁶ FCIC interview with William Dudley, October 15, 2010.

¹⁵⁴⁷ Tobias Adrian, Christopher Burke, and James McAndrews, “The Federal Reserve's Primary Dealer Credit Facility,” Federal Reserve Bank of New York, *Current Issues in Economics and Finance*, Volume 15, Number 4, August 2009.

to work onsite at Lehman Brothers, Merrill Lynch, Goldman Sachs and Morgan Stanley. “After Bear, the nature of supervision of the investment banks changed, and the New York Fed and the SEC started meeting with the firms individually,” said Erik Sirri, director of the SEC’s Division of Trading and Markets. “The first round of meetings covered the quality of assets, funding, and capital. A later round of meetings covered the need to raise capital, and the firms were given target amounts.”¹⁵⁴⁸

Timothy Geithner, then President of the New York Fed, would tell the Lehman bankruptcy examiner that following Bear’s collapse, he was “consumed” with figuring out how to make Lehman “get more conservatively funded.”¹⁵⁴⁹ Federal Reserve Chairman Bernanke would testify before a House committee that the Fed’s primary role at the investment banks in 2008 was that of a potential *lender*, not a regulator; in that capacity, the examiners focused mainly on ensuring that the central bank would be repaid for the emergency cash loans made under the new Fed lending facilities.¹⁵⁵⁰ Two questions guided such analyses: First, was each investment bank liquid – did it have access to the cash needed to meet its commitments? Second, was it solvent – was net equity (the value of assets against the value of liabilities) sufficient to cover probable losses? The Washington headquarters of the U.S. Treasury, which is neither a supervisor nor a lender – but which *is* charged with overseeing the safety of the US financial system – also dispatched “SWAT teams” to the investment banks in the spring of 2008 in order to have direct access to information about what was going on at the firms.

The presence of officials from the Treasury and Fed created a full-time onsite presence – something the SEC had never had. In its traditional pre-CSE oversight role, the SEC’s primary concern with the investment banks had always been liquidity risk, because these firms were entirely dependent on the credit markets for funding.¹⁵⁵¹ [will include discussion of focus during CSE program: liquidity versus

¹⁵⁴⁸ FCIC interview with Erik Sirri, [Date?].

¹⁵⁴⁹ [Lehman Examiner’s report.]

¹⁵⁵⁰ Ben Bernanke testimony before the House Financial Services Committee, April 20, 2010.

¹⁵⁵¹ Examiner’s Interview of SEC staff, Aug. 24, 2009, at p. 10.

safety and soundness] (By contrast, commercial banks are less susceptible to runs because they are able to fund themselves largely through customer deposits – many of them through stable “core deposits” that have insurance protection provided by the Federal Deposit Insurance Corporation.) The SEC, which met on a monthly and quarterly basis with the investment banks to discuss funding and liquidity issues, already required these firms to implement “liquidity models” that were designed to ensure sufficient access to cash to sustain themselves on a stand-alone basis for a minimum of one year without access to *unsecured* funding and without having to liquidate a substantial position.

Prior to the run on Bear Stearns in the repo market, the SEC’s liquidity stress scenarios – also known as stress tests – had not considered the possibility that a firm would lose access to *secured* funding. “The SEC never thought that there would be a run on Bear or that there would be a situation where you couldn’t enter into a repo transaction with Treasuries. Thus, none of these situations were run as stress test scenarios,” said the SEC’s Sirri.¹⁵⁵² “As the financial crisis worsened, the SEC began to see liquidity and funding risk as the most important risks to be managed by the investment banks. The SEC encouraged a reduction in reliance on commercial paper and wanted the repo term extended from 28 to 40 days.”

The Fed and the SEC joined forces to develop two new stress tests to determine the investment banks’ ability to withstand a potential run or a system-wide disruption in the repo markets. The stress scenarios were called “Bear Stearns” and “Bear Stearns Light.” These scenarios were developed jointly with each firm. While each firm ran different scenarios that matched its risk profile, the supervisors tried to maintain comparability between the tests.¹⁵⁵³

¹⁵⁵² FCIC interview with Erik Sirri, [Date?].

¹⁵⁵³ *Joint Request from SEC and FRBNY: Liquidity Scenarios for CSEs*, May 20, 2008. LBHI_SEC07940_505195.

The test assumed that each firm would lose 100% of unsecured funding and a fraction of repo funding depending on the quality of collateral (up to 100% for relatively illiquid, nontraditional collateral).¹⁵⁵⁴

The stress tests concluded that Goldman Sachs and Morgan Stanley were relatively sound. Merrill Lynch and Lehman Brothers failed: the two banks came out \$22 billion and \$15 billion short of cash, respectively; as it turned out, each would have only [78%] of the liquidity they needed under the stress scenario.

The Fed's internal report on the stress tests criticized Merrill's "significant amount of illiquid fixed income assets" and noted that "Merrill's liquidity pool is low, a fact [the company] does not acknowledge."¹⁵⁵⁵ As for Lehman Brothers, which everyone considered the wobbliest of the four major investment banks, the Fed concluded, "Lehman's weak liquidity position is driven by its relatively large exposure to overnight [commercial paper], combined with significant overnight secured [repo] funding of less liquid assets."¹⁵⁵⁶ These "less liquid assets" included now devalued mortgage-related securities, which Lehman had come to rely on as collateral for its borrowing. Meanwhile, Lehman ran stress tests of its own, ostensibly modeled on similar assumptions, and passed with billions in "excess cash."¹⁵⁵⁷

While the SEC and the Fed worked together on the liquidity stress tests, with equal access to the data, each agency has said that for months during the crisis the other did not share their analyses and conclusions. For example, following Lehman's failure, the Fed would tell the bankruptcy examiner that the SEC declined to share two horizontal – cross-firm – reviews of the banks' liquidity positions and exposures to commercial real estate. The SEC replied that the documents were in "draft" form and had

¹⁵⁵⁴ The test assumed no loss of funding on discount window-eligible assets and, for other fixed-income assets, 20% if they were considered "liquid," 50% if "less liquid," and 100% if "illiquid."

¹⁵⁵⁵ Federal Reserve Bank of New York, *Primary Dealer Monitoring: Liquidity Stress Analysis*, June 25, 2008.

¹⁵⁵⁶ Federal Reserve Bank of New York, *Primary Dealer Monitoring: Liquidity Stress Analysis*, June 25, 2008.

¹⁵⁵⁷ See e.g. Lehman, Presentation to the Federal Reserve & SEC: Updated Stressed Liquidity Scenario (July 2, 2008), at p. 9 [LBHI_SEC07940_348894] (showing that Lehman would survive

the stress test with \$13.1 billion in excess cash

not been reviewed or finalized. The Fed’s on-site personnel expressed the view that the SEC on-site personnel did not have the background or expertise to adequately evaluate the data.¹⁵⁵⁸ This lack of communication could only be solved by a formal Memorandum of Understanding (MOU) governing information-sharing. SEC Chairman Christopher Cox, explaining why the two agencies had needed this, indicated that “[o]ne reason the MOU was needed was that the Fed was reluctant to share supervisory information with the SEC, out of concern that the investment banks would not be forthcoming with information if they thought they would be referred to the SEC for enforcement.”¹⁵⁵⁹ The MOU was executed in July 2008, more than three months after the collapse of Bear Stearns.¹⁵⁶⁰

Derivatives: “Early stages of assessing the potential systemic risk”

Pat Parkinson at the Federal Reserve Board noted to colleagues in an internal August 8 email that the systemic risks of the repo and derivatives markets demanded attention: “We have given considerable thought to what might be done to avoid a fire sale of tri-party repo collateral. (That said, the options under existing authority are not very attractive—lots of risk to Fed/taxpayer, lots of moral hazard.) We still are at the early stages of assessing the potential systemic risk from close-out of OTC derivatives transactions by an investment bank’s counterparties and identifying potential mitigants.”

The repo market was huge, but as discussed in earlier chapters, the global derivatives market dwarfed it. At this point in the crisis, the *notional value* of the derivatives market – that is, the conceptual quantity used to calculate payments, as opposed to the actual principal – was \$766 *trillion* at the end of June

¹⁵⁵⁸ Bankruptcy Examiner’s Report, pages 1496 and 1497.

¹⁵⁵⁹ Christopher Cox testimony before the House Financial Services Committee, April 20, 2010.

¹⁵⁶⁰ Federal Reserve, Press Release, July 7, 2008. The covered both bank holding companies and so-called Consolidated Supervised Entities that own securities firms. According to the Fed press release, the MOU “builds on and formalizes the long-standing cooperative arrangements between the SEC and the Board, as well as the more recent cooperation on matters including banking and investment banking capital and liquidity following the Board’s emergency opening of credit facilities to primary dealers.”

2008,¹⁵⁶¹ a number that can be an imperfect measure of gauging risk for some types of derivatives.¹⁵⁶²

The actual *gross market value* of all over-the-counter or OTC derivatives – those not traded on an exchange – was \$20.4 trillion at the end of June 2008.¹⁵⁶³ Gross market value measures the present value or replacement cost of outstanding OTC derivatives. It is also not a perfect measure of risk: derivatives counterparties can net down their gains against losses with each counterparty, and this *net current credit exposure* to each counterparty when totaled across all counterparties measures how much would be lost if all the other counterparties were to default today. Even this measure does not reflect completely the risk in the financial system. The amount of current credit exposure will change significantly if there is a change in market prices, such as a drop in the value of mortgage backed securities, a jump in commodity prices, or a default at a major firm. In such cases, the net current credit exposure can jump significantly. Indeed as the crisis erupted that figure did jump from \$2.67 trillion in June 2007 to \$3.86 trillion in June 2008, and would go on to hit \$4.56 trillion by the end of 2008.

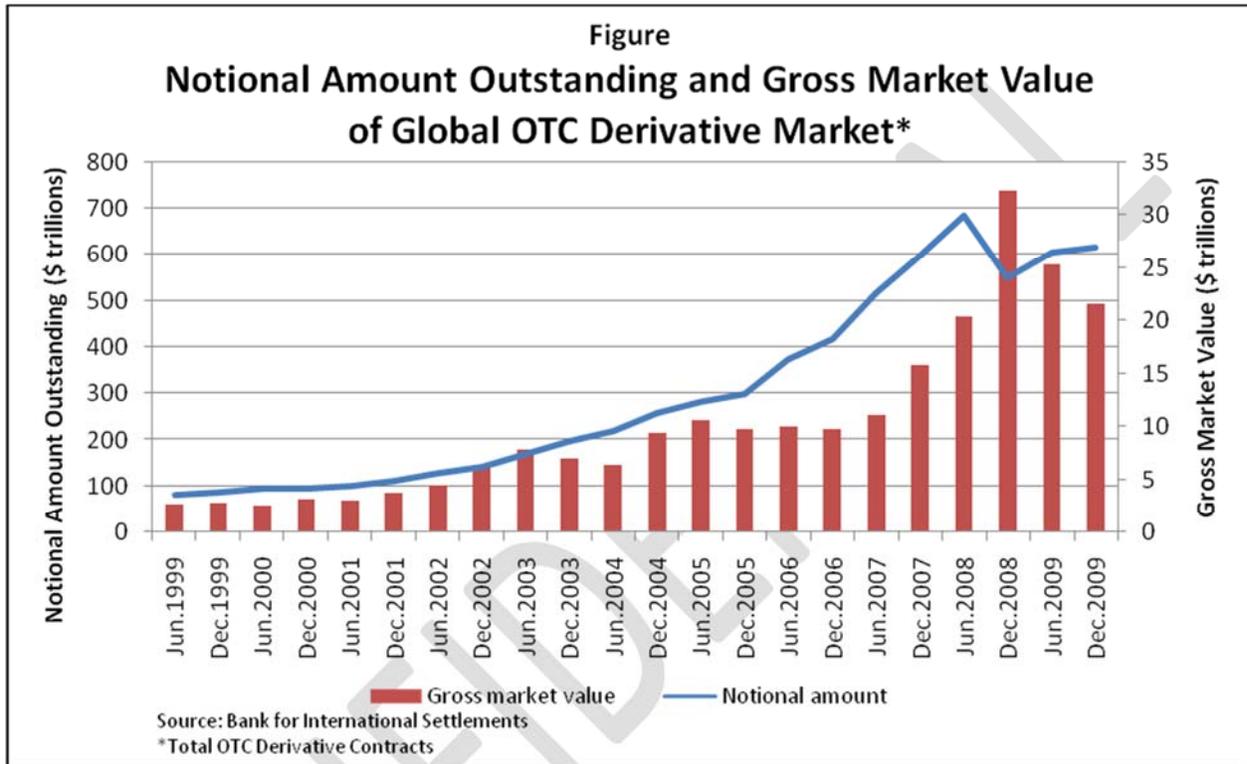
In short, there is no complete or perfect measure of risks arising from derivatives trading. As discussed in earlier chapters, this is due largely to the limited disclosure requirements for the major derivatives market participants, but it is also a result of the challenges in computing and reporting. The consequence—particularly during the crisis—was a heightened uncertainty about the overall effects of large price movements on system stability.

¹⁵⁶¹ This figure includes both exchange-traded and over-the-counter derivatives. Source: Bank for International Settlements.

¹⁵⁶² For example, in a simple interest rate swap, one party receives a fixed rate and the other a floating rate. If such a swap is calculated based on a notional principal of \$100 million, the fixed rate is 5%, and the floating rate is 4%, then the *net* payment from one party to the other would be the notional amount (\$100 million) times the difference between 5% and 4%, which would come to 1% or \$1 million. In this case, the counterparty faces the risk of not receiving the \$1 million payment and the risk that changing interest rates will change the amount of the payment; but the total notional amount is never at risk.

¹⁵⁶³ Source: Bank for International Settlements, *OTC derivatives market activity in the second half of 2007*, May 2008. Notional value reflects the potential exposure of an investor for some types of derivatives but not others. The market value is based on the updated market price and, in liquid markets, should be a closer approximation of an investor's exposure.

Given the limitations of these measures, they can offer some insight into the concentration of derivatives related risks to some of the largest financial firms.



This lack of transparency in OTC derivatives was not the only concern to regulators. At this point in the crisis they also worried about the interlocking relations that derivatives created among the small number of large financial firms that act as dealers or market makers in the derivatives business. As discussed earlier, trading volume, and the resulting counterparty and operational risks, are concentrated in a very few firms. Among U.S. commercial banks (for which the data was better than for the investment banks that were already sources of concern), JP

Morgan, Citibank, Bank of America, Wachovia, and HSBC accounted for 97% of all OTC derivatives.¹⁵⁶⁴

Table ZZZ1

Concentration of Derivatives Transactions

| | Top 5 Banks | | Other Banks | | All Banks | |
|-------------------------------|-------------|---------|-------------|---------|-----------|---------|
| | US\$ bn | Percent | US\$ bn | Percent | US\$ bn | Percent |
| Futures & forwards | 22,670 | 11.1 | 2,034 | 1.0 | 24,704 | 12.1 |
| Swaps | 132,513 | 65.1 | 3,090 | 1.5 | 135,602 | 66.6 |
| Options | 28,809 | 14.2 | 904 | 0.4 | 29,714 | 14.6 |
| Credit derivatives | 12,546 | 6.2 | 894 | 0.4 | 13,440 | 6.6 |
| Total | 196,538 | 96.6 | 6,922 | 3.4 | 203,460 | 100.0 |

Source: Data from OCC from Call Reports.

¹⁵⁶⁴ The banks that comprise the top five have changed over the years due to mergers and the recent rechartering of major broker-dealers like Goldman Sachs and Morgan-Stanley into bank holding companies. A historical chart would show similar degrees of concentration dating back for more than a decade.

Historically, and also at mid-year 2008, the current and potential exposure to derivatives at the top five US banks averaged three times greater than the capital they had on hand to meet regulatory requirements – that figure for the largest dealer was 430%, for the smallest of the five was about 600% and the figure would hit 1000% once the key broker-dealers switched to bank holding company charters. The risk was even higher at the investment banks. Later in the crisis, when Goldman Sachs changed its charter to become a bank holding company and began to report these figures, its derivatives exposure was more than 10 times its capital. Making the interconnectedness of this activity more important, the vast majority of derivatives was used for trading purposes, that is, for market making and proprietary trading, while very little was used for hedging.[cite, refer to earlier chapters with details]

Broad classes of OTC derivatives markets showed stress in 2008. By the summer of 2008, outstanding amounts had begun to decline in derivatives at varying maturities on foreign exchange, interest rates, equities, credit derivatives, and commodities.[cite] [Requires more explanation].

The Fed was concerned in part because derivatives counterparties had played an important role in the “run” on Bear. The novations by derivative counterparties away from Bear – and the rumored refusal by Goldman to accept Bear as a counterparty – were still a fresh memory across Wall Street. “The ability to novate ceased to exist and [this] was a key event in the demise of Bear Stearns,” Chris Mewbourne, portfolio manager at PIMCO, told the FCIC. [From MFR, need to confirm.]¹⁵⁶⁵ [We have data from DTCC on novation activity that will be added later and make clear reason why it matters.]

The Fed was also concerned about the numerous legal entities set up by the investment banks and large commercial bank holding companies – banks, financial companies, special purpose vehicles, many of them overseas – the complexities of winding them down was daunting. How would their various legal entities be affected in a crisis that affected the derivatives market? What was the umbrella bank’s legal responsibility to those smaller units, and how was its own status jeopardized by their problems? If one

¹⁵⁶⁵ FCIC interview with Chris Mewbourne, July 28, 2010.

subsidiary were to default, would other banks and institutions terminate their derivatives contracts with *other* subsidiaries operating under the same umbrella? In a follow-up internal email in August, the Fed's Pat Parkinson would identify these tough knots as "the place to start" in assessing systemic risk and looking for solutions.

Credit derivatives in particular were a serious source of concern. The Fed increased its focus on institutions outside its supervisory purview that posed potential systemic risk due to the credit protection that they offered through credit derivatives and similar products. Of greatest interest were the financial guarantors in many derivatives transactions: the monolines and American Insurance Group, the largest insurance company, which by itself had become the biggest backstop for the market in collateralized debt obligations or CDOs with little transparency and almost no regulation. [More on lack of regulation, and refer to detail in section II.]

In addition, the monolines had been hit first in the fall of 2007 when the credit rating agencies gave the companies a "negative outlook." This had jolted everyone – these companies had always enjoyed very high ratings, because they had never taken significant losses. "Zero-loss tolerance" was built into the business model. And they guaranteed roughly [\$60 billion] worth of structured products.¹⁵⁶⁶ When their credit ratings were downgraded, the value of *all* the assets they guaranteed, including municipal bonds and other securities, necessarily lost some value in the market, which affected the conservative institutional investors in those markets. In the vernacular of Wall Street, this is the "knock-on" effect; in the vernacular of Main Street, the domino effect; in the vernacular of the Fed, systemic risk.

The problems at AIG – still in its collateral battles with Goldman Sachs, but supervised by different agencies, the OTS and state insurance regulators – would not come into focus for the Fed until August.

¹⁵⁶⁶ Alistair Barr, Bond-Insurer Woes May Trigger More Write-Downs: Doubts on AAA ratings for Ambac, MBIA Spark Turmoil in Muni Bond Market, MarketWatch, Jan. 18, 2008, <http://www.marketwatch.com/story/bond-insurer-woes-may-trigger-more-write-downs-turmoil>.

Banks: “The markets were really, really dicey”

By the fall of 2007, signs of struggle were beginning to emerge among the commercial banks. In the fourth-quarter of 2007, commercial banks’ earnings declined to a 16-year low, driven by writedowns on mortgage related securities and CDOs and by record “loan loss” provisions, as borrowers had more and more difficulty meeting their principal and interest payments and even greater difficulty was anticipated.¹⁵⁶⁷ The net charge-off rate – the ratio of failed loans to total loans – rose to its highest level since 2002, when the economy was coming out of the post-9/11 recession.¹⁵⁶⁸ Earnings continued to decline as conditions worsened in 2008¹⁵⁶⁹ – at first, more for big banks than small banks, due in part to losses on their investment banking-type activities, including mortgage-backed securities and leveraged loans that had been originated in order to be securitized. Declines in the market values of these securities led to forced write-offs. But for many of the banks, the credit losses on their real estate loans would turn out to be even greater than these initial write-offs. And, as previously noted, several of the largest banks had felt compelled to provide support to off-balance sheet activities, such as sponsored money market funds and commercial paper programs. This support brought additional assets on the balance sheet – assets that were losing value fast. [add more detail on trouble in banking sector]

Supervisors had begun to downgrade the ratings of many smaller banks due to their high exposures in residential real estate construction, an industry that had virtually gone out of business as financing dried up in mid-2007. By the end of 2007, the FDIC had 76 banks, mainly smaller ones, on its “problem list,”

¹⁵⁶⁷ FDIC reporting for insured institutions, which represents the regulated banking and thrift industry overall. Federal Deposit Insurance Corporation, Quarterly Banking Profile, 2008, Volume 2, Number 1; Quarterly Banking Profiles are all located at <http://www2.fdic.gov/qbp/qbpSelect.asp?menuItem=QBP> (accessed October 4 and 5, 2010)

¹⁵⁶⁸ Federal Deposit Insurance Corporation, Quarterly Banking Profile, 2008, Volume 2, Number 2, pg 1

¹⁵⁶⁹ Federal Deposit Insurance Corporation, Quarterly Banking Profile, 2008, Volume 2, Number 3, pg 1

with combined assets of \$22 billion.^{1570,1571} (When large banks started to be downgraded in early 2008, they stayed off the FDIC’s “problem list” Supervisors rarely give the largest institutions the lowest supervisory ratings).¹⁵⁷²

The market for “nonconforming” mortgage securitizations (those that could not be sold to Fannie Mae or Freddie Mac) had also slowed to a halt in the fourth quarter of 2007. Not only did these nonconforming loans prove harder to sell, they also proved less attractive to keep on balance sheet as house price forecasts looked increasingly grim. Already, house prices had fallen between xx% and xx% for the year, depending on the measure. To keep their inventory of these problem loans from growing, banks and thrifts were less willing to originate nonconforming mortgages, first the subprimes, then the Alt-As. For example, Washington Mutual, the largest thrift, discontinued all remaining lending through its subprime mortgage channel during the fourth quarter of 2007. In the first quarter of 2008, IndyMac reported a 21% decline in loan production from the first quarter of 2007, because they stopped making nonconforming loans.¹⁵⁷³ In that quarter, real estate loans in the banking sector as a whole rose by the smallest quarterly increase since 2003.¹⁵⁷⁴

But those actions could not reduce the subprime and Alt-A exposure that these large banks and thrifts *already had*. And on these assets, the mark-downs continued in 2008. It came down to this: in 2007, supervisors had focused on ensuring that firms had access to the cash they needed to fund their operations – liquidity – but in 2008 they increasingly focused on solvency as well. They urged the banks to raise new capital, and many did. The commercial banks joined the investment banks in their intensified efforts to

¹⁵⁷⁰ “Problem” institutions are those institutions with financial, operational, or managerial weaknesses that threaten their continued financial viability, and are rated either a “4” or “5” under the Uniform Financial Institutions Rating System. Federal Deposit Insurance Corporation, Quarterly Banking Profile, 2008, Volume 2, Number 1, pg. 4.

¹⁵⁷¹ This compares with a low in 2005, at the height of the mortgage boom, of \$7 billion in problem assets. Federal Deposit Insurance Corporation, Quarterly Banking Profile, 2008, Volume 2, Number 2, pg 4.

¹⁵⁷² By 2009, the problem list would swell to 702 banks, with assets of \$403 billion.

¹⁵⁷³ Washington Mutual March 2008 Form 10-Q, pg 18; IndyMac Bancorp March 2008 Form 10-Q, pg 8 and 14

¹⁵⁷⁴ Federal Deposit Insurance Corporation, Quarterly Banking Profile, 2008, Volume 2, Number 2, pg 4

raise new capital from investors across the globe.¹⁵⁷⁵ In January 2008, Citigroup secured \$14 billion in capital from Kuwait, Singapore, Saudi Prince Alwaleed bin Talal, and others. In April, Washington Mutual raised \$7 billion from an investor group led by buyout firm TPG Capital, and Wachovia raised \$6 billion in capital at the turn of the year and then an additional \$8 billion in April 2008. This helped certain banks, but the general deterioration in credit quality of and its negative impact on earnings and liquidity concerned the rating agencies, overshadowing the capital-raising efforts. The downgrades of the banking sector increased.

Roger Cole, then-Director of the Division of Banking and Supervision at the Federal Reserve Board, told the FCIC, “The markets were really, really dicey during a significant part of this period, starting with August 2007.”¹⁵⁷⁶ The same was true for the thrifts. Michael Solomon, a risk management manager in the Office of Thrift Supervision, told the FCIC, “It was hard for businesses, particularly thrifts – small- and mid-size thrifts – to keep up with [downgrades in assets] and change their business models and not get stuck with the chair when the music stopped. They got caught. The rating downgrades started and by the time the thrift was able to do something about it, it was too late. Business models can’t keep up with what we saw in 2008.”¹⁵⁷⁷

Citigroup: “Time to come up with a new playbook”

As the commercial banks’ health worsened in 2008, examiners downgraded institutions of all sizes—in many cases after maintaining favorable ratings even into the beginning of 2008— and subjected several of the largest to enforcement actions that required fixing their risk-management processes. These ratings downgrades and enforcement actions came late in the day – often just as firms were on the verge of

¹⁵⁷⁵ Write-downs and credit-related losses, as tracked by Bloomberg, included provisions for loans losses, loss on sale of whole loans, mark-downs on subprime and Alt-A residential mortgage books held for sale and investment, and goodwill impairment.

¹⁵⁷⁶ Roger Cole MFR

¹⁵⁷⁷ Michael Solomon MFR

failure. In cases that the FCIC investigated, supervisors either did not identify the problems early enough or did not act forcefully enough to demand the necessary changes.

Citigroup is a good example. Supervisors at the Fed and the OCC finally downgraded the company and its main bank to “less than satisfactory” in April 2008 – five months after the firms’ announcement in November 2007 of billions of dollars in writedowns related to its mortgage-related holdings – and put the company under new enforcement actions in May and June. Only a year earlier, they had both *upgraded* the company, after lifting all remaining restrictions and enforcement actions related to the complex transactions that it structured for Enron and the actions of its subprime subsidiary CitiFinancial.. The New York Fed’s rating upgrade, delivered in its annual inspection report on April 9, 2007, had noted, “The risk management assessment for 2006 is reflective of a control environment where the risks facing Citigroup continue to be managed in a satisfactory manner. During 2006, all formal restrictions and enforcement actions between the Federal Reserve and Citigroup were lifted. Board and senior management remain actively engaged in improving relevant processes.”¹⁵⁷⁸

But the market disruption had jolted Citigroup’s supervisors as it had CEO Charles Prince and his senior management team. In November, 2007, the New York Fed led a team of international supervisors, the Senior Supervisors Group, to survey lessons learned from the financial crisis up to that point at 11 of the largest firms. Much of the toughest language was reserved for Citigroup. “The firm did not have an adequate, firm-wide consolidated understanding of its risk factor sensitivities,” supervisors wrote in an internal November 19 memo describing meetings with Citigroup management. “Stress tests were not designed for this type of extreme market event... Management had believed that CDOs and leveraged loans would be syndicated, and that the credit risk in super senior AAA CDOs was negligible... The magnitude of the correlation breakdown was not anticipated by the risk measures.”¹⁵⁷⁹ In their public

¹⁵⁷⁸ Federal Reserve Bank of New York, Letter to Charles Prince, April 9, 2007. FCIC-085296.

¹⁵⁷⁹ Federal Reserve Bank of New York, Federal Reserve Board, Office of the Comptroller of the Currency, SEC, UK FSA, Japan FSA, *Notes on Senior Supervisors’ Meetings with Firms*, November 19, 2007.

report, issued on March 6, 2008, the supervisors – without naming names – generally described practices that differentiated firms that suffered heavy losses during 2007 from those that avoided them.¹⁵⁸⁰

Looking back, two of the key problems at Citigroup in the run-up to the financial crisis were a lack of effective enterprise-wide risk management to monitor and control risks, and a lack of proper infrastructure and internal controls with respect to the creation of CDOs. The OCC, as supervisor of the national bank subsidiary, appears to have identified some of these issues as early as 2005, but did not effectively act to rectify them; the Fed, as supervisor of the holding company, appears to have missed them altogether. In particular, the OCC reviewed both the liquidity puts and the super-senior tranches as part of its reviews of the bank's compliance with the post-Enron enforcement action. In both cases, however, examiners failed to adequately understand the risks. For the issues it did spot, the OCC failed to take forceful action to require mandatory corrective action, and it relied upon management's assurances in 2006 that they would strive to meet the OCC's goals for improving risk management.

In contrast, documents produced to the FCIC by the New York Fed do not indicate that the examination staff there had any independent knowledge of the two core problems, enterprise wide risk management weakness and lack of controls in CDO creation. An evaluation of the New York Fed's supervision of Citigroup, conducted by examiners from other Reserve Banks – the December 2009 Operations Review of the New York Fed – concluded, “The supervision program for Citigroup has been less than effective. Although the dedicated supervisory team is well qualified and generally has sound knowledge of the organization, there have been significant weaknesses in the execution of the supervisory program. The team has not been proactive in making changes to the regulatory ratings of the firm, as evidenced by the double downgrades in the firm's financial component and related subcomponents at year-end 2007. Additionally, the supervisory program has lacked the appropriate level of focus on the firm's risk oversight and internal audit functions. As a result, there is currently significant work to be done in both of

¹⁵⁸⁰ Senior Supervisors Group, *Observations on Risk Management Practices during the Recent Market Turbulence*, March 6, 2008.

these areas. Moreover, the team has lacked a disciplined and proactive approach in assessing and validating actions taken by the firm to address supervisory issues.”¹⁵⁸¹

In January 2008, an OCC review of the breakdown in the CDO business noted that the risk in the unit had grown rapidly since 2006, after the OCC lifted the supervisory agreements associated with various control problems at Citigroup. In a letter to incoming CEO Vikram Pandit, the OCC expressed frustration that “with the removal of formal and informal agreements, the previous focus on risk and compliance gave way to business expansion and profits.”

In April, 2008, the Fed and OCC downgraded their overall ratings on the company and its largest bank subsidiary from “2” (satisfactory) to “3” (less than satisfactory), reflecting risk-management weaknesses that were now apparent to the supervisors after the losses the company had suffered in 2007. The Fed’s April 2008 report was candid in its recognition that the downgrades in ratings only *followed* rather than led the revelation of Citigroup losses that year, posted after record profits in 2005 and solid profits in 2006.¹⁵⁸²

Both Fed and OCC officials cited the Gramm Leach Bliley Act of 1999 as an obstacle that prevented each from obtaining a complete understanding of the risks assumed by large financial firms such as Citigroup. [Need to add a quote from Bernanke and Dugan public testimony, or the Spillenkothen paper.] Citigroup had many supervisors across the world; even the securitization businesses were dispersed across subsidiaries with different supervisors – including the Fed, OCC, SEC, OTS, and state supervisors.¹⁵⁸³

¹⁵⁸¹ Federal Reserve Board, Federal Reserve Bank of New York 2009 Operations Review.

¹⁵⁸²“The Assessment of Citigroup’s overall risk management has been downgraded from ‘satisfactory’ to ‘fair.’ It primarily reflects weaknesses in the firm’s setting and monitoring of its risk appetite and exposures that led to severe and unexpected losses...” Ibid., at FCIC-Citi-000202

¹⁵⁸³ Supervisory authority is based on legal entities –the OCC, FDIC, Fed, and state supervisors for banks; the OTS for thrifts; the SEC for securities firms and investment companies; the Commodity Futures Trading Commission for derivatives markets; and state insurance supervisors for insurance companies. The Fed is responsible for supervising companies that own a commercial bank, with some exceptions. The Gramm Leach Bliley Act hampered supervisors from looking beyond their legal entities into other areas of a large firm.

In May and June, 2008, Citigroup entered into “Memoranda of Understanding” with both the New York Fed and OCC to resolve the risk-management weaknesses that the financial crisis had uncovered. MOUs are nonpublic enforcement actions that supervisors use to compel bank managers to address problems that banks are unable or unwilling to resolve through the regular exam process.¹⁵⁸⁴ In the ensuing months, Fed and OCC officials said, they were satisfied with Citigroup’s compliance with their recommendations. Steve Manzari, the Senior Relationship Manager for Citigroup at the Federal Reserve of New York from April to September 2008, complimented Citigroup’s assertiveness in executing its regulators’ requests: aggressively replacing management, raising \$50 billion of capital investment in late 2007[need to confirm these numbers], and putting in place a number of much needed “internal fixes.” Manzari described this as “the supervisor’s traditional playbook.” However, Manzari continued, “Citi was trapped in what was a pretty vicious... systemic event” and “it was time to come up with a new playbook.”¹⁵⁸⁵ This would not be the end of Citigroup’s problems.

Wachovia: “The Golden West acquisition was a mistake”

At Wachovia, a 2007 end-of-year report showed that credit losses in its subsidiary Golden West’s portfolio of “pick-a-pay” adjustable rate, Option ARM mortgages were expected to rise to about 1% of the portfolio for 2008; in 2006, losses in this portfolio had been less than one-tenth of a percent. In hindsight, the higher estimate for 2008 was not high enough. The company would raise its estimate of the eventual losses on the portfolio to 9% by June and to 22% by September.

Facing these and other growing concerns, Wachovia raised \$5.8 billion in new capital in December 2007 and January 2008, and then another \$8 billion in April 2008. But problems

¹⁵⁸⁴ Informal enforcement actions such as MOUs are not legally enforceable; formal enforcement actions, such as the written agreements which Citigroup was under from 2005 to 2006, are. See 12 USC 1818(b).

¹⁵⁸⁵ Tape of interview with Steve Manzari and Dianne Dobbeck (part II) – ~42:00.

persisted. In April, Wachovia announced a loss of \$350 million for the first three months of the year. Depositors withdrew \$15 billion in the following weeks, and lenders continued to reduce their exposure to the troubled bank by reducing loan amounts, shortening terms, and increasing rates.¹⁵⁸⁶ By June, according to Angus McBryde, then Wachovia’s senior vice president for Treasury and Balance Sheet Management, management had launched a liquidity crisis management plan in anticipation of an even more adverse market reaction to second-quarter losses that would be announced in July.¹⁵⁸⁷

On June 2, Wachovia’s board ousted CEO Ken Thompson after eight years at the helm, 32 years at the bank overall.¹⁵⁸⁸ At the end of the month, the bank announced that it would stop originating Golden West’s “pick-a-pay” products and waive all fees and prepayment penalties associated with them.¹⁵⁸⁹ On July 22, as expected, Wachovia reported an \$8.9 billion second-quarter loss.¹⁵⁹⁰ The new CEO, Robert Steel, most recently an undersecretary of the Treasury serving Henry Paulson, announced a three-part plan to improve the bank’s financial condition: raise capital, cut the stock dividend, and lay off 10% to 12% of the staff. He told analysts: “In the short term, the entire organization is focused on protecting,

¹⁵⁸⁶ Wilson MFR at ___.

¹⁵⁸⁷ McBryde MFR at ___.

¹⁵⁸⁸ Thompson received a severance package worth approximately \$8.7 million in compensation and accelerated vesting of stock. In addition, Thompson negotiated himself three years of office space and a personal assistant at Wachovia’s expense. He had previously received more than \$21 million in salary and stock compensation in 2007 and more than \$23 million in 2006. Thompson made more than \$112 million in compensation from 2002 through 2008.confirm and cite to public filings

¹⁵⁸⁹ Cite

¹⁵⁹⁰ 7/22/08 Wachovia press release,
https://www.wachovia.com/foundation/v/index.jsp?vnextoid=c9956c772350f110VgnVCM200000627d6fa2RCRD&vgnnextfmt=default&key_guid=69817798ebdc110VgnVCM100000127d6fa2RCRD.

preserving and generating capital; reinforcing Wachovia's strong liquidity position; and reducing risk."¹⁵⁹¹

The rating agencies and supervisors ignored those reassurances. On the same day as the announcement, S&P downgraded the bank, and the Fed, after [years] of "satisfactory" ratings, downgraded Wachovia to "3" or "less than satisfactory." The Fed noted that 2008 projections showed losses could wipe out the recently raised capital. It estimated that the eventual credit losses on the Golden West mortgage portfolio would come to 9%; losses just in 2008 year could exceed \$3 billion, which could cause a further ratings downgrade. Budget projections showed minimal net income for the remainder of 2008.¹⁵⁹² The Fed therefore directed Wachovia to reevaluate and update its capital plans and liquidity management.¹⁵⁹³ Despite those consistently "satisfactory" ratings for Wachovia right up to the summer meltdown, the Fed now stated that many of Wachovia's problems were "long-term in nature and result[ed] from delayed investment decisions and a desire to have business lines operate autonomously."¹⁵⁹⁴

The Fed bluntly criticized the board and senior management for "an environment with inconsistent and inadequate identification, escalation and coverage of all risk-taking activities, including deficiencies in stress testing" and "little accountability for errors." It continued: "the market disruption revealed that Wachovia management did not completely understand the level of nonprime risk across the bank and the risk in certain nonbank investment, and that

¹⁵⁹¹ 7/22/08 Wachovia press release, https://www.wachovia.com/foundation/v/index.jsp?vgnextoid=c9956c772350f110VgnVCM200000627d6fa2RCRD&vgnnextfmt=default&key_guid=69817798ebbdcl10VgnVCM100000127d6fa2RCRD.

¹⁵⁹² 7/22/08 ROE, FCIC 134717-725, at 719-723.

¹⁵⁹³ 7/22/08 ROE, FCIC 134717-725, at 724.

¹⁵⁹⁴ 7/22/08 ROE, FCIC 134717-725, at 719.

management delayed fixing these known deficiencies. In addition, the board did not sufficiently question investment decisions.”¹⁵⁹⁵

Nonetheless, the Fed concluded that Wachovia’s liquidity was currently adequate to meet the funding needs of the bank and that management had minimized exposure to overnight funding markets throughout the market disruption.

On August 4, the OCC downgraded Wachovia Bank and assessing its overall risk profile as “high.”¹⁵⁹⁶ The OCC noted many of the same issues that the Fed did, and added particularly strong remarks about the acquisition of Golden West, blaming that mortgage portfolio and associated real estate foreclosures as the heart of Wachovia’s problem. The OCC noted that the board had “acknowledged that the Golden West acquisition was a mistake.”¹⁵⁹⁷

The OCC wrote that the market was focused on the company’s weakened condition and that some large fund providers had already limited exposure to Wachovia.¹⁵⁹⁸ Like the Fed, however, the OCC concluded that liquidity was adequate, unless events undermined market confidence.¹⁵⁹⁹ And, like the Fed, the OCC approved of the new management and a new, more hands-on oversight role for the Board of Directors.

¹⁵⁹⁵ 7/22/08 ROE, FCIC 134717-725, at 719-722.

¹⁵⁹⁶ 8/4/08 OCC letter and exam report. OCC15-00300870-903, at 874.

¹⁵⁹⁷ Report of Examination of Wachovia Corporation for the year 2007 at page 5.

¹⁵⁹⁸ 8/4/08 OCC ROE, OCC15-00300870-903, at 886.

¹⁵⁹⁹ 8/4/08 OCC ROE, OCC15-00300870-903, at 886.

Washington Mutual: “Management’s persistent lack of progress”

Washington Mutual or WaMu was the largest thrift with [XXXX] billion in assets at the end of 2007. At the time, 47% of the home loans on its balance sheet were “option ARMs,” similar to the product in which Golden West specialized. The reason WaMu liked option ARMs was simple: in 2006, in combination with other nontraditional mortgages such as subprime, these loans had generated returns up to eleven times greater than the returns on GSE-backed loans. But that was then. With the contraction of the private-label securitization market and the decline in the housing market by mid-2007, these previously highly profitable assets were suddenly toxic. WaMu was forced to write off \$1.9 billion in losses for the fourth quarter of that year and another \$1.1 billion in the first quarter of 2008, mostly related to that portfolio.

In response, the Office of Thrift Supervision, WaMu’s primary regulator, requested that the thrift address concerns about asset quality, earnings and liquidity, issues which OTS had raised in the past but had *not* been reflected in the thrift’s composite supervisory ratings. “It has been hard for us to justify doing much more than constantly nagging (okay, ‘chastising’) through ROE [Reports of Examination] and meetings, since they have not really been adversely impacted in terms of losses,” the OTS’s lead examiner at the company had commented in a 2005 e-mail. Indeed, the nontraditional mortgage portfolio had been performing very well through 2005 and 2006.

But with WaMu now taking losses, the OTS announced on February 27, 2008, a composite downgrade from “2” to “3,” or less than satisfactory. However, no formal enforcement actions were taken. In response, WaMu’s management promised to undertake “strategic initiatives,” including either finding a buyer or raising in new capital.

In fact, WaMu secured in April a \$7 billion investment from a consortium led by the Texas Pacific Group. However, the mortgage-related losses continued and, [on xxxx date], WaMu reported a \$3.3 billion loss in the second quarter. Given that news and the almost simultaneous failure of another major

thrift, IndyMac, on July 14, WaMu's depositors withdrew \$10 billion over the next two weeks. The Federal Home Loan Bank of San Francisco – which, as noted, had with the other 11 Federal Home Loan Banks historically served as a kind of lender of next-to-last resort to WaMu and others, a role that had expanded greatly in 2007 – began to limit WaMu's borrowing capacity. This development induced OTS to issue more downgrades in various assessment categories, while maintaining the composite rating at "3." Still, no formal enforcement actions were taken.

Meanwhile, as the insurer of many of WaMu's deposits, the FDIC had a stake in WaMu's condition, and it was not so generous in its assessment. It had already dropped its WaMu rating from "B/C" in early 2007 to "D" in March, 2008, indicating a "high level of concern."

The FDIC expressly disagreed with the OTS's decision to maintain the "3" composite rating, and recommended a "4" instead. The "4" would ordinarily have triggered a formal enforcement action, but none was coming. In an August 2008 interview, former FDIC Chairman William Isaac said, "OTS and FDIC had competing interests. OTS, as primary regulator, wanted to rehabilitate WaMu and keep it in business, while FDIC, on the other hand, as an insurer wanted to resolve the institution's problems as soon as possible to maintain the value of WaMu in order to reduce the cost of any failure." [will include information on FDIC's role as backup regulator, circumstances when FDIC was barred from exams, and disagreements on ratings between OTS and FDIC]

The Treasury and FDIC Inspectors General were very critical of OTS's supervision of Washington Mutual: "We concluded that OTS should have lowered WaMu's composite rating sooner and taken stronger enforcement action sooner to force WaMu's management to correct the problems identified by OTS. Specifically, given WaMu management's persistent lack of progress in correcting OTS-identified weaknesses, we believe OTS should have followed its own policies and taken formal enforcement action rather than informal enforcement action." [Cite.]

Supervisors: "We got pushback"

In these examples and others that the Commission studied, supervisors either missed or were late in identifying the mistakes of commercial banks and thrifts, or did not react strongly enough when they did identify them. In part, this failure reflects the nature of bank examination conducted during periods of financial calm. In addition to their role as enforcers of regulation, regulators acted in something akin to a consultant's role, working with banks to assess the adequacy of their systems. This role was, to a degree, a reflection of the supervisors' "risk-focused" approach, which came into being in the 1990s in an attempt to focus supervisors of the larger firms on those firms' most pressing risks. As stated in the OCC Large Bank Supervision Handbook from January 2010: "Under this approach, examiners do not attempt to restrict risk-taking but rather determine whether banks identify and effectively manage the risks they assume."¹⁶⁰⁰ As the crisis developed, supervisors shifted gears slowly in ramping up their enforcement role.

Senior supervisors told the FCIC it was difficult to express their concerns forcefully as financial institutions were generating record-level profits. For example, Roger Cole told the FCIC that supervisors did discuss issues such as whether banks were growing too fast and taking too much risk, but ran into pushback.¹⁶⁰¹ "Frankly a lot of that pushback was given credence on the part of the firms by the fact that – like a Citigroup was earning \$4 to \$5 billion a quarter. And that is really hard for a supervisor to successfully challenge. When that kind of money is flowing out quarter after quarter after quarter, and their capital ratios are way above the minimums, it's very hard to challenge."¹⁶⁰²

Supervisors also told the FCIC that they hesitated in some cases to take strong action for fear of aggravating a bank's already existing problems. For the large banks, the issuance of a formal, *public* supervisory action taken under the Federal banking statutes was a reflection of a severe regulatory assessment of the bank's risk practices, and it was rarely employed for banks determined to be going

¹⁶⁰⁰ OCC Large Bank Supervision Handbook, January 2010.

¹⁶⁰¹ Transcript of Roger Cole Interview with FCIC Staff, August 2, 2010, at 76-77.

¹⁶⁰² Transcript of Roger Cole Interview with FCIC Staff, August 2, 2010, at 77.

concerns. Richard Spillenkothen, the Fed's head of supervision until early 2006, attributed supervisory reluctance to "a belief that the traditional, nonpublic (behind-the-scenes) approach to supervision was less confrontational and more likely to induce bank management to cooperate; a desire not to inject an element of contentiousness into what was felt to be a constructive or equitable relationship with management; and a fear that financial markets would overreact to public actions, possibly causing a run." So supervisors preferred to err on the side of caution and keep communication with banks private. Spillenkothen argued that these were relevant concerns but that "at times they can impede effective supervision and delay the implementation of needed corrective action. One of the lessons of this crisis... is that the working presumption should be earlier and stronger supervisory follow up."¹⁶⁰³

Douglas Roeder, the OCC's Senior Deputy Comptroller for Large Bank Supervision from 2001 to 2010, agreed that bank and thrift regulators did not do a good job of intervening at key points in the run-up to the crisis.¹⁶⁰⁴ He said that regulators should have balanced their concerns about safety and soundness with the need to let markets work, and that – this time – the OCC may have failed to strike the right balance.¹⁶⁰⁵

¹⁶⁰³ Richard Spillenkothen, *Observations and perspectives of the Director of Banking Supervision and Regulation at the Federal Reserve Board from 1991 to 2006 on the performance of prudential supervision in the years preceding the financial crisis*, paper prepared for the FCIC, May 21, 2010.

¹⁶⁰⁴ Dugan MFR at ___.

¹⁶⁰⁵ Dugan MFR at ___.

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Part III, Chapter 6. The Failure of Fannie Mae and Freddie Mac

From the fall of 2007 until Fannie and Freddie were placed into conservatorship on September 7, 2008, government officials struggled to strike the right balance between the safety and soundness of the two government sponsored enterprises and their mission of supporting the mortgage market. The task at hand was critical, because the mortgage market was quickly deteriorating - – home prices were declining loan delinquencies were rising, and the values of mortgage securities held by Wall Street firms were plummeting as home prices declined. Lenders were more willing to refinance borrowers into new and affordable mortgages if the GSEs would purchase those new loans. An increase in mortgage purchases by the GSEs would improve the deteriorating market both for home owners and Wall Street, but leave the GSEs holding more risky loans on their already strained balance sheets.

The GSEs were highly leveraged companies – owning and guaranteeing \$5.3 trillion of mortgages with capital of less than 2%. Former Treasury Secretary Hank Paulson told the FCIC that after he was briefed on the GSEs upon taking office in June 2006, he believed they were “a disaster waiting to happen” that

they depended on “bullsh*t capital.”¹⁶⁰⁶ The situation was even worse by the fall of 2007 because the GSEs had continued to increase their purchases of riskier loans and securities, with those loans and securities now constituting multiples of their reported capital. Losses on these loans and securities were on the rise, leading the GSEs to report billions of dollars of net losses beginning in the third quarter of 2007, adding to concerns about their viability.

But it was widely accepted that it was imperative for the GSEs to provide liquidity to the mortgage market by purchasing and guaranteeing loans, given that no one else was. Without the GSEs, lenders would stop making loans and many homeowners would be unable to refinance their loans – loans that were re-pricing and costing more than many subprime and other borrowers could afford. Secretary Paulson told the FCIC that when the private mortgage securitization market essentially shut down in the summer of 2007, the key to “getting through the crisis was to limit the decline in housing, and the most effective thing you could do was to make sure there was funding for mortgages.”¹⁶⁰⁷ However, the GSEs were constrained in their ability to fund more loans by portfolio caps and a 30% capital surplus that were imposed on the companies by agreements with their regulator.

As each company reported billions of dollars in losses throughout 2007 and 2008, government officials removed limits on the GSEs’ growth and reduced the capital surplus so the companies could purchase and guarantee more loans, while also obtaining commitments from the GSEs to raise more capital. As the GSEs’ regulator, James B. Lockhart III testified before the FCIC, “from the fall of 2007 to the conservatorships, it was a tightrope with no safety net.”¹⁶⁰⁸ Unfortunately, the balancing act ultimately

¹⁶⁰⁶ Paulson MFR at 2, 7. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4826-8913-1271&open=Y>

¹⁶⁰⁷ Paulson MFR at 3. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4826-8913-1271&open=Y>

¹⁶⁰⁸ Transcript of FCIC April 4, 2010 Hearing at page 163. Online here: <http://fcic.gov/hearings/pdfs/2010-0409-Transcript.pdf>

failed and both companies were placed into conservatorship, costing the U.S. taxpayers \$148 billion so far.

“a good time to buy”

In an August 1, 2007 letter to Lockhart, director of the Office of Federal Housing Enterprises Oversight (“OFHEO”) Fannie Mae CEO Daniel Mudd sought immediate relief from the portfolio caps required by the consent agreement. “We have witnessed growing evidence of turmoil in virtually all sectors of the housing finance market,” Mudd wrote, and “the immediate crisis in subprime is indicative of a serious liquidity event impacting the entire credit market, not just subprime.”¹⁶⁰⁹ Lenders like Countrywide had been forced to hold onto loans they normally securitized as demand dried up, and smaller lenders had experienced liquidity crises and filed for bankruptcy. A number of lenders told Fannie that they would stop making loans if Fannie did not buy them.

With the mortgage market under stress, Mudd argued that Fannie Mae could provide additional liquidity if the cap was relaxed. “A moderate, 10 percent increase in the Fannie Mae portfolio cap would provide us with flexibility... and send a strong signal to the market that the GSEs are able to address liquidity events before they become crises.”¹⁶¹⁰

The consent agreement allowed OFHEO to lift the cap, Mudd argued, to address “market liquidity issues.” And remediation of the accounting and internal control deficiencies – conditions for removing the cap – was largely complete. Finally, the GSEs’ charter required Fannie to provide liquidity and stability to

¹⁶⁰⁹ 8/1/2007 Mudd letter to Lockhart, FM -COGR 00331060-64 at 60. On NetDocuments here: <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4831-0956-9800&open=Y>

¹⁶¹⁰ 8/1/2007 Mudd letter to Lockhart, FM -COGR 00331060-64 at 60. On NetDocuments here: <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4831-0956-9800&open=Y>

the secondary market, Mudd emphasized. “Ultimately,” Mudd concluded, “this request is about restoring market confidence that the GSEs can fulfill their stabilizing role in housing.”¹⁶¹¹

Fannie Mae executives also saw the market disruption as an opportunity to make money. With less competition, the GSEs could charge higher fees for guaranteeing mortgage backed securities and pay less for loans and securities they wanted to own, meaning they could theoretically produce a higher return.

Tom Lund, a long-time Fannie Mae executive who led the firm’s single family business, told the FCIC that the market moved in Fannie Mae’s favor after August 2007 as competitors dropped out of the market and as prices of loans and securities fell.¹⁶¹² Lund said that Fannie had “more comfort that the relationship between risk and price was correct after August.”¹⁶¹³ Robert Levin, the company’s chief business officer, recalled that “it was a good time to buy” following the August liquidity crisis.¹⁶¹⁴

On August 10, OFHEO notified Fannie that it would be premature to grant the request to increase the portfolio cap but would keep it under “active consideration.” Lockhart wrote that he would not authorize any changes because Fannie could still guarantee mortgages even if it couldn’t buy them, and because Fannie remained a “significant supervisory concern.” Many of the underlying reasons for the imposition of the caps remained unresolved, and the company had not fully remediated safety and soundness concerns. In addition, Lockhart noted that Fannie could not prudently address the problems in the subprime and Alt-A market, and Fannie’s charter did not permit it to address problems in the jumbo loan market – loans over Fannie’s conforming loan limit.¹⁶¹⁵ Progress had been made in remediating the

¹⁶¹¹ 8/1/2007 Mudd letter to Lockhart, FM -COGR 00331060-64 at 64. On NetDocuments here: <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4831-0956-9800&open=Y>

¹⁶¹² Thomas Lund interview with the FCIC, March 4, 2010, MFR at 8, available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4852-8365-0821&open=Y>

¹⁶¹³ Thomas Lund interview with the FCIC, March 4, 2010, MFR at 8, available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4852-8365-0821&open=Y>

¹⁶¹⁴ Robert Levin MFR at 9.

¹⁶¹⁵ 8/10/07 Lockhart letter to Mudd, FM-COGR_00320114-15. On Netdocuments here: <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4828-3268-0712&open=Y>

accounting and internal control deficiencies, Lockhart wrote, but much work remained. Fannie still had not filed financial statements for 2006 or 2007, “a particularly troubling issue in unsettled markets.”¹⁶¹⁶

As Lockhart testified to the FCIC, “it became clear by August 2007 that the turmoil was too big for the Enterprises to solve in a safe and sound manner.”¹⁶¹⁷ He was worried that allowing the GSEs to purchase more and riskier mortgages in a declining market would lead to even more losses. “They were fulfilling their mission,” Lockhart told the FCIC, “but they had no power to do more in a safe and sound manner. If their mission is to provide stability and lessen market turmoil, there was nothing in their capital structure” that would allow them to do so.¹⁶¹⁸

Lockhart had worried about the financial stability of the GSEs and OFHEO’s ability to regulate the behemoths from the day he became director in May 2006. Lockhart advocated reform for his largely toothless agency. “[T]he need for legislation was obvious as OFHEO was regulating two of the largest and most systematically important US financial institutions,” he told the FCIC. Yet, he noted, OFHEO wielded less regulatory authority than bank regulators. Lockhart, pushed for power to increase capital requirements and to limit growth. He sought authority over mission goals set by HUD and independent litigation authority outside the Department of Justice. His shopping list also included ultimate authority to put Fannie and Freddie into receivership – a power held all bank regulators - that would allow the government to liquidate a GSE if necessary. As it stood, OFHEO had the authority to place the GSEs in conservatorship that meant, for all intents and purposes, a government takeover, but OFHEO lacked funding to operate the GSEs as conservator making that authority impractical. The GSE system had to slip even further before OFHEO secured powers that Lockhart sought.

¹⁶¹⁶ 8/10/07 Lockhart letter to Schumer, -----

¹⁶¹⁷ Lockhart written testimony to the FCIC, <http://fcic.gov/hearings/pdfs/2010-0409-Lockhart.pdf>

¹⁶¹⁸ Lockhart written testimony at 12. <http://fcic.gov/hearings/pdfs/2010-0409-Lockhart.pdf>

“The only game in town”

Later in August 2007, the magnitude of the market disruption became even more evident when Countrywide, the largest mortgage originator in the U.S., failed to sell \$13 billion of loans, a crisis that forced Countrywide to draw down \$11.5 billion in back up credit and secure a \$2 billion injection from the Bank of America.

Speaking to the severity of the situation, Secretary Paulson told the FCIC that Fannie and Freddie were “more than anyone, were the engine we needed to get through the problem.” Or, as he put it, they were “the only game in town.”¹⁶¹⁹ Treasury assistant secretary David Nason agreed, telling the FCIC there was no liquidity in the market.¹⁶²⁰ He also recognized the tradeoff between the financial condition of the GSEs and the health of the housing market. “If Treasury or OFHEO had insisted that the GSEs stop taking risks, they would have completely halted the mortgage market,” Nason said.¹⁶²¹ “[Treasury and regulators] were faced with making the better of two bad choices.”¹⁶²²

Few doubted a role for Fannie and Freddie in resuscitating the housing market. The question was how to do it safely. Purchasing and guaranteeing risky-mortgage backed securities increased liquidity for mortgage lending and bolstered the overall market for mortgage-related securities. It also could result in further erosion to already thin levels of capital buffeted by losses tied to mortgages and mortgage securities. Lockhart acknowledged a fine line. “There’s a real tradeoff,” he testified. A tradeoff made all the more difficult by the current state of the GSEs’ balance sheets. The value of risky loans and securities built up over the last few years already swamped reported capital. By the end of 2007, guaranteed and

¹⁶¹⁹ Paulson MFR at 3.

¹⁶²⁰ 3/12/2010 Interview of David Nason, Tony Ryan, and Jeremiah Norton. MFR at 6.

¹⁶²¹ 3/12/2010 Treasury MFR at 4.

¹⁶²² 3/12/2010 Treasury MFR at 6.

portfolio mortgages with FICO scores less the 660 exceeded reported capital at Fannie Mae by more than seven-to-one; Alt-A loans and securities by more than six-to-one. Loans where borrowers did not provide full documentation amounted to more than ten times reported capital.

In mid-September, OFHEO relented and loosened Fannie's portfolio cap. It allowed Fannie to increase the amount of mortgage loans and securities it owned by 2% per year – a power that Freddie already had under its agreement with OFHEO.¹⁶²³ This adjustment and other measures were expected to allow the GSEs to provide greater assistance to subprime borrowers and others who might be having difficulty refinancing their mortgages in the current environment, without granting a free rein to rapidly expand the portfolio.¹⁶²⁴ OFHEO ruled out more dramatic increases “because the remediation process is not yet finished, many safety and soundness issues are not yet resolved, and the criteria in the Fannie Mae consent agreement and Freddie Mac's voluntary agreement have not been met.”¹⁶²⁵

Fannie and Freddie were becoming increasingly important pillars in the mortgage market as the year progressed. By the fourth quarter of 2007, they were purchasing 75 percent of new mortgages, nearly twice the level in 2006. With \$5 trillion in mortgages resting on razor thin capital, the GSEs were doomed if the mortgage market could not stabilize. According to Lockhart, “a withdrawal by Freddie Mac and Fannie Mae or even a drop in confidence in the Enterprises would have created a self-fulfilling credit crisis.”¹⁶²⁶

On October 11, Senator Charles Schumer introduced legislation in the Senate to lift portfolio limits on Fannie Mae and Freddie Mac by 10 percent, or \$150 billion, for six months. House Financial Services

¹⁶²³ 9/19/07 OFHEO press release at <http://www.fhfa.gov/webfiles/1562/91907OFHEOprovidesFlexonFNFREMortPorts.pdf>.

¹⁶²⁴ “OFHEO Provides Flexibility on Fannie Mae, Freddie Mac Mortgage Portfolios,” OFHEO news release, September 19, 2007. Lockhart written testimony at 13.

¹⁶²⁵ “OFHEO Provides Flexibility on Fannie Mae, Freddie Mac Mortgage Portfolios,” OFHEO news release, September 19, 2007, p. 1.

¹⁶²⁶ Lockhart written testimony at 13.

Chairman Barney Frank introduced companion legislation in the House of Representatives. The bills earmarked \$125 billion, or 83 percent of the portfolio increase, for subprime refinancing.¹⁶²⁷ No action was taken in either house. Federal Reserve Chairman Bernanke explicitly warned Congressman Frank that raising limits was “ill advised.”¹⁶²⁸ OFHEO Director James Lockhart opposed the measure, worrying that “there [is] a lot of credit risk out there that... [would] potentially hit their capital.”¹⁶²⁹

In November, Fannie reported a \$1.5 billion loss for the third quarter, and Freddie logged in with a \$2 billion loss, both driven by declines in the value of the loans and securities they owned and guaranteed.¹⁶³⁰ At the end of December 2007, Fannie reported \$44 billion of capital to absorb potential losses on \$879 billion of assets and \$2.2 trillion of guarantees on mortgage backed securities.¹⁶³¹ If losses on the company’s \$3.1 trillion of assets and guarantees topped 1.45%, Fannie would be insolvent. Freddie reported \$38 billion of capital to absorb potential losses on \$794 billion of assets and \$1.4 trillion of guarantees of mortgage backed securities so they would be insolvent if losses topped 1.7%. In short, the GSEs were highly leveraged with little capital to absorb losses. Moreover, there were serious questions about the validity of their “reported” capital.

“it’s a time game... be cool”

¹⁶²⁷ “Schumer to Offer New Legislation Expanding Fannie Mae’s and Freddie Mac’s Ability to Refinance Families on Brink of Foreclosure,” Schumer press release, October 11, 2007, available at http://schumer.senate.gov/new_website/record.cfm?id=286460&&year=2007& (accessed October 3, 2010)’ see also H.R. 3838 (110th Congress), S. 2169 (110th Congress), S. 2346 (110th Congress).

¹⁶²⁸ [Need to locate primary source]. “Fannie Mae to Be Allowed to Expand Its Portfolio,” Eric Dash, *New York Times*, September 20, 2007, available at http://www.nytimes.com/2007/09/20/business/20fannie.html?ref=fannie_mae (accessed October 3, 2010).

¹⁶²⁹ “Setting an OFHEO Plan, But Wishing Otherwise,” Steven Sloan, *American Banker*, December 21, 2007.

¹⁶³⁰ 11/20/07 Freddie press release at <http://www.freddiemac.com/news/archives/investors/2007/3q07er.html>; 11/9/07 Fannie Form 10-Q at <http://www.fanniemae.com/ir/pdf/earnings/2007/q32007.pdf>.

¹⁶³¹ 2007 Form 10-K.

With the mortgage market continuing to slide, the push to further loosen the GSEs' portfolio caps continued – now joined by efforts to reduce the 30% capital surplus and increase capital. On February 25, 2008, Senator Schumer urged OFHEO to lower the 30 percent capital surcharge and pressed OFHEO to justify its case for keeping the surcharge in place. Such a stringent capital requirement, Schumer wrote Lockhart, hampered Fannie's ability to provide financing in troubled times.¹⁶³²

Two days later, Fannie reported a \$3.6 billion net loss for the fourth quarter of 2007 and a \$2.1 billion net loss for the year, driven by write-downs and charges on the mortgage assets it owned and guaranteed.¹⁶³³ Mudd acknowledged that Fannie was “working through the toughest housing and mortgage markets in a generation” and that the “results for 2007 reflect the challenging conditions in the market we serve.” He also said Fannie was responding to the market's urgent need for liquidity and stability. Fannie's CFO reported that the company raised \$7.8 billion of preferred stock, had completed all 81 requirements of the consent agreement and was discussing reducing the 30% capital surplus with OFHEO. The next day, Freddie reported \$2.5 billion net loss for the fourth quarter and a \$3.1 billion net loss for the year, also driven by write-downs and charges on the mortgage assets it owned and guaranteed.¹⁶³⁴ Like Mudd, Freddie CEO Syron said that the company's results reflected the difficult market that Freddie was committed to providing liquidity to the market, and that Freddie had raised \$6 billion of preferred stock.

¹⁶³² The letter continued, “If you have decided that you will be keeping the capital surcharge in place... I would like an explanation as to why you think upholding that restriction outweighs the importance of providing capital relief that could better position the GSEs to provide rescue products for borrowers stuck in unaffordable loans.” Letter from Senator Charles E. Schumer to OFHEO Director James B. Lockhart III, February 25, 2008.

¹⁶³³ 2/27/08 press release at http://www.fanniemae.com/ir/pdf/sec/2008/form10k_newsrelease_022708.pdf.

¹⁶³⁴ 2/28/08 press release at <http://www.freddiemac.com/news/archives/investors/2008/2007er-4q07.html>.

Both companies reported they had filed current financial statements, a trigger for removing the portfolio caps. Lockhart issued a statement noting the “important milestone” and announced that OFHEO would remove the portfolio caps for both companies on March 1, 2008.”¹⁶³⁵ He also noted that because of the companies’ substantial progress in satisfying the requirements of their consent agreements, he would discuss a gradual decreasing of the 30 percent capital surplus with the companies. But he also stated that Fannie and Freddie were in a much better capital position to cope with significant losses in volatile markets because of the surcharge and recent preferred stock offerings.¹⁶³⁶ Mudd told the FCIC that his motives for wanting a reduction of the capital surplus were misconstrued. He understood that less capital would make Fannie riskier by usual benchmarks. But thinner capital, per se, was not his goal. Instead, he was afraid that if market upheaval caused Fannie to fall short of its capital target by one dollar, it would face a new consent order with new restrictions.¹⁶³⁷

On February 28, 2008, the day after OFHEO lifted the growth limits, the New York Fed weighed in. It confirmed that the mortgage market “improved modestly” after OFHEO removed the portfolio caps but that the 30 percent capital surcharge was a major binding constraint that prevented the GSEs from providing additional liquidity to the secondary mortgage market.¹⁶³⁸

Calls to ease the surcharge also came from the marketplace. Mike Farrell, the CEO of Annaly Capital Management, sent an email to Treasury Undersecretary Robert Steel warning that “a tipping point” loomed in the credit markets. “...we believe that we are nearing a tipping point... lack of transparency on

¹⁶³⁵ Lockhart 2/27/2008 Statement, online here: <http://www.fhfa.gov/webfiles/1493/22708statement.pdf>

¹⁶³⁶ “Statement of OFHEO Director James B. Lockhart,” Office of Federal Enterprise Oversight press release, February 27, 2008.

¹⁶³⁷ Mudd MFR at 21.

¹⁶³⁸ 2/28/08 email thread, UST-FCIC 0005070-71; included in chron on FCIC website.

pricing for virtually every asset class” and “a dearth of buyers” foreshadowed worse news, Farrell wrote. Removing the 30 percent capital surcharge and expanding the conforming loan limit – along with GSE reform legislation and additional capital raises – would make it possible for the GSEs to provide more stability to the markets. Farrell recognized that the GSEs might believe the return on capital – taking into account the raising of capital - would be insufficient but wrote “they will have to get past that and focus on fulfilling their charters” because “the big picture is that right now whatever is best for the economy and the financial security of America trumps the ROI for Fannie and Freddie shareholders.”¹⁶³⁹

Days before Bear Stearns collapsed, Steel reported to Mudd “encouraging” conversations about capital relief in conjunction with GSE reform legislation with two legislators, Senator Richard Shelby, the ranking member of the Senate Committee on Banking, Housing, and Urban Affairs; and Representative Barney Frank, the chairman of the House Financial Services Committee.¹⁶⁴⁰ He indicated that he intended to speak next with Senate Banking Committee Chairman Christopher Dodd.¹⁶⁴¹ Confident that the government desperately needed the GSEs to back up the mortgage market, Mudd proposed an “easier trade.” If regulators would eliminate the surcharge, Fannie Mae would agree to raise new capital in the future.¹⁶⁴² In a March 7 email to Fannie CBO Robert Levin, Mudd indicated that the 30% capital surplus might be reduced without *any trade*. “It’s a time game...whether they need us more...or if we hit the capital wall first. Be cool.”¹⁶⁴³

The next day, Treasury and White House officials received additional information about Fannie’s financial condition beyond the billions of dollars in losses reported the prior two quarters. On March 8,

¹⁶³⁹ 3/6/08 email thread, UST-FCIC 0005063-65; included in chron on FCIC website.

¹⁶⁴⁰ Emails between Robert K. Steel and Daniel Mudd, March 7, 2008, FM-COGR_00164314. Online here: http://fcic.gov/hearings/pdfs/2007-2008_Fannie_Mae_Timeline_and_Supporting_Documents.pdf

¹⁶⁴¹ Emails between Robert K. Steel and Daniel Mudd, March 7, 2008, FM-COGR_00164314. Online here: http://fcic.gov/hearings/pdfs/2007-2008_Fannie_Mae_Timeline_and_Supporting_Documents.pdf

¹⁶⁴² 3/6-7/08 email thread, FM-COGR_00164314-15; included in chron on FCIC website.

¹⁶⁴³ E-mail from Daniel Mudd to Robert Levin, March 7, 2008, FM-COGR_00164314.

subsequent to Fannie reporting its 2007 financial results, White House economist Jason Thomas sent Bob Steel at Treasury an alarming analysis of Fannie Mae's financial condition that claimed the company was masking its insolvency through various fraudulent accounting practices. The analysis resembled the content of a subsequent article published in Barron's on March 10.

Any realistic assessment of Fannie Mae's capital position would show the company is currently insolvent. Accounting fraud has resulted in several asset categories (non-agency securities, deferred tax assets, low-income partnership investment) being overstated, while the guarantee obligation liability is understated. These accounting shenanigans add up to tens of billions of exaggerated net worth.

Yet the impact of a tsunami of mortgage defaults has yet to run through Fannie's income statement and further annihilate its capital. Such grim results are a logical consequence of Fannie's dual mandate to serve the housing market while maximizing shareholder returns. In trying to do both, Fannie has done neither well. With shareholder capital depleted, a government seizure of the company is inevitable.¹⁶⁴⁴

Six days later, the government financed JP Morgan's takeover of the collapsing Bear Stearns. Secretary Paulson told the FCIC that in the wake of the Bear Stearns crisis, he wanted to calm the widespread fears in the marketplace and increase confidence in the mortgage market by having Fannie and Freddie raise capital. He contacted Steel with that message and Steel informed him that Treasury, OFHEO and the Fed were preparing plans to relax the GSEs' capital surcharges in exchange for assurances that the companies would raise new capital.

Steel also reported to Treasury colleagues that Treasury was being pressed to deliver a GSE plan and that the idea was to announce a "grand bargain of capital raise... relaxation of the capital surcharge," and a commitment to reform legislation. He also reported that William Dudley, then Executive Vice President

¹⁶⁴⁴ "Fannie Mae Insolvency and Its Consequences," UST-FCIC 0004973.

of the New York Fed, wanted to “harden” the implicit government guarantee of Freddie and Fannie.¹⁶⁴⁵ Steel wrote that Dudley “leaned on me hard” to make the guarantee explicit in conjunction with dialing back the surcharge and efforts to raise new capital. Steel worried about implications of a sweeping guarantee on the federal government’s bloated balance sheet. “I do not like that and it has not been part of my conversation with anyone else. I view that as a very significant move, way above my pay grade to double the size of the US debt in one fell swoop.”¹⁶⁴⁶

“The idea strikes me as perverse”

Regulators at OFHEO and the Treasury huddled with GSE executives to discuss lowering capital requirements if the GSEs would raise more capital. “The entire mortgage market was at risk,” Lockhart told the FCIC. “The key thing was that we demanded that they raise more capital and by doing that, we allowed them to do more business.”¹⁶⁴⁷

Pushing and tugging continued. Former Secretary Paulson told the FCIC that personal commitments to raise capital from Mudd and Richard Syron, his counterpart at Freddie Mac, cinched the deal. Just days earlier, CEO Richard Syron had announced in a quarterly call to investors on March 13th that his company would not raise new capital. Fannie Mae and Freddie Mac executives prepared a draft press release in advance of a discussion with Lockhart and Steel. It announced a reduction in the capital surcharge to 20

¹⁶⁴⁵ Email from Robert Steel to David Nason, Tony Ryan, Jeremiah Norton, Neel Kashkari, “GSEs,” March 16, 2008, UST-FCIC 0004934.

Online here: http://fcic.gov/hearings/pdfs/2007-2008_Fannie_Mae_Timeline_and_Supporting_Documents.pdf

¹⁶⁴⁶ Email from Robert Steel to David Nason, Tony Ryan, Jeremiah Norton, Neel Kashkari, “GSEs,” March 16, 2008, UST-FCIC 0004934. Online here: http://fcic.gov/hearings/pdfs/2007-2008_Fannie_Mae_Timeline_and_Supporting_Documents.pdf

¹⁶⁴⁷ See MFR, March 19, 2010, FCIC Staff Interview of James B. Lockhart III, pg 6

percent from 30 percent.¹⁶⁴⁸ Lockhart was not pleased; the draft lacked a statement affirming the commitment to raise additional capital, instead stating that the GSEs “planned” to raise additional capital “over time as needed.” It looked as if the GSEs were making the deal with fingers crossed. In an email to Steel and CEOs of both sponsored entities, Lockhart, who had favored directly linking the reduction in the surcharge to a simultaneous capital raise, wrote that “The idea strikes me as perverse, and I assume it would seem perverse to the markets that a regulator would agree to allow a regulatee to increase its very high mortgage credit risk leverage (not to mention increasing interest rate risk) without any new capital.” In the initial negotiations, the GSEs would raise \$2 of capital for each \$1 of reduction in the surplus. Frustrated, Lockhart wrote, “We seem to have gone from 2 to 1 right through 1 to 1 to now 0 to 1.” Despite Lockhart’s reservations, OFHEO announced the deal without material alteration on March 19. OFHEO agreed to ease the capital restraint; Fannie and Freddie pledged to “begin the process to raise significant capital,” not an explicit link or a concrete commitment.¹⁶⁴⁹ Paulson told the FCIC that the agreement was “a no-brainer.” He did not recall Lockhart ever calling it “perverse.”¹⁶⁵⁰

Market observers panned the deal. “We view any reduction [in capital] as a comment not only on the GSEs but on the burgeoning panic in Washington,” Graham Fisher analyst Joshua Rosner wrote in a report published the same day. “If this action results in the destabilizing of the GSEs, OFHEO will go from being the only regulator that prevented its charges from getting into trouble, to a textbook example of why regulators should be shielded from outside political pressure.”¹⁶⁵¹

¹⁶⁴⁸ Email from James Lockhart to Daniel H. Mudd, Robert Steel, and Dick Syron, “RE: announcement draft,” March 17, 2008, UST-FCIC 0004922-23.

¹⁶⁴⁹ “OFHEO, Fannie Mae and Freddie Mac Announce Initiative to Increase Mortgage Market Liquidity,” OFHEO news release, March 19, 2008.

¹⁶⁵⁰ Paulson MFR at 6.

¹⁶⁵¹ “OFHEO Got Rolled” March 19, 2008.

Fannie Mae would live up to its bargain by raising \$7.4 billion in preferred stock. Freddie Mac reneged. Executive vice president Donald Bisenius offered two reasons for backing out of the commitment to raise new capital. One, it diluted existing shareholders. “I’m sure [Fannie’s] investors are not very happy,” Bisenius told the FCIC. “Part two is...if you actually fundamentally believe you have enough capital to withstand even a fairly significant downturn in house prices, you wouldn’t raise capital.”¹⁶⁵²

Syron emphasized fidelity to shareholders – ironic given the fate that eventually befell them.¹⁶⁵³ “We would not be worse than any company in putting the interest of our shareholders first,” he told the FCIC. Lockhart saw a different spin. Syron’s public comments put “a good face on Freddie’s inability to raise capital.” Lockhart speculated that Syron was masking a different concern – lawsuits. “[Syron] was getting advice from his attorneys about the high risk of raising capital before releasing [quarterly earnings]...and our lawyers could not disagree because we know about their accounting issues,” Lockhart reported to the FCIC.¹⁶⁵⁴

“a safety net”

After progress in the tug-of-war to lower capital requirements, May brought more bad news. Fannie lost \$2.2 billion in the first quarter, exceeding its losses in all of 2007. It was hammered mainly by declining value of derivatives, securities and loans.¹⁶⁵⁵ Freddie Mac did better, but only comparatively. It lost \$151 million due to chiefly to “credit-related expenses,” meaning that loans and securities on its balance sheet

¹⁶⁵² Interview with Donald Bisenius, Executive Vice President, Freddie Mac, September 29, 2010, at minute 54:09.

¹⁶⁵³ David S. Hilzenrath, “Chief Says Freddie Won’t Raise Capital: Mortgage Financer Cites Responsibility to Shareholders, Won’t Increase Loan Capacity,” *Washington Post*, March 13, 2008; D04. See also Syron FCIC interview transcript.

¹⁶⁵⁴ Lockhart MFR at 7.

¹⁶⁵⁵ Fannie 5/6/08 earnings release.

were shedding value.¹⁶⁵⁶ Nevertheless, Fannie and Freddie remained “adequately capitalized” under the legal formula, even more so given the lower capital cushion recently agreed to by its regulator.

Even as the situation deteriorated, OFHEO rewarded Fannie Mae on June 9th for raising \$7.4 billion in new capital. It lowered the capital surcharge to 15 percent from 20 percent.¹⁶⁵⁷ Four days later OFHEO admonished Freddie Mac for continuing to grow its portfolio without raising capital, the condition for raising the portfolio lid. Lockhart warned that likely credit losses ahead raised “safety and soundness concerns” and that “aggressive” accounting practices might be understating losses and overstating earnings and capital.

June ended with spreading worries about solvency. During the month, Fannie’s stock price slid by 28 percent; Freddie’s stock price fell 35 percent. Both broke the \$20 threshold with farther to go. Market observers also measured risk by tracking the price to cover the cost of a Fannie default. In better times between 2004 and 2006, \$13,000¹⁶⁵⁸ would insure payment on \$10 million of debt. In May 2008 the price was \$47,700 and in June 2008 the price jumped again to \$66,000, remarkable given the implicit government backing they had historically enjoyed. Circumstances only went from bad to worse. In August, the Fannie and Freddie reported second quarter losses, \$2.3 billion and \$821 million respectively. More than \$8 billion of credit related expenses drove the losses.

¹⁶⁵⁶ “OFHEO Announces First Quarter 2008 Minimum and Risk-Based Capital Classification for Fannie Mae and Freddie Mac,” OFHEO news release, June 9, 2008, available at <http://www.fhfa.gov/webfiles/2155/1Q2008CapClass.pdf> (accessed October 4, 2008); “Fannie Mae Reports First Quarter 2008 Results; Announces Equity Offering to Increase Capital And an Expected Reduction in Common Stock Dividend,” Fannie Mae news release, May 6, 2008, available at http://www.fanniemae.com/media/pdf/newsreleases/q12008_release.pdf (accessed October 4, 2010).

¹⁶⁵⁷ “OFHEO Announces First Quarter 2008 Minimum and Risk-Based Capital Classification for Fannie Mae and Freddie Mac,” OFHEO news release, June 9, 2008, available at <http://www.fhfa.gov/webfiles/2155/1Q2008CapClass.pdf> (accessed October 4, 2008).

¹⁶⁵⁸ Bloomberg, Lp, Historical Prices, CFNMA1U5 Index

For the first time, investors began to question a fundamental precept. Fannie Mae and Freddie Mac had always enjoyed an asset that is hard to quantify, implicit full faith and credit of the U.S. government even after both entities became public companies owned by shareholders. The government simply could not let the \$5.3 trillion GSEs fail because they were the only entities providing liquidity to the mortgage market and because their failure would cause losses to owners of their debt and guaranteed mortgage-securities. In earlier times of stress, Uncle Sam had come to the rescue. It bailed out Fannie Mae when double-digit inflation wrecked its balance sheet in the early eighties; it came through in the mid eighties for another GSE in duress, the Farm Credit System. In the mid nineties, even a GSE-type organization, the Financing Corporation, got a helping hand.

The loss of faith by investors was visible in the yield on the GSEs' long term bonds. The difference between the rate that the GSEs paid on their debt and rates on Treasuries—a premium that reflects investors' assessment of risk—opened in 2007 to one half a percentage point. Low compared to other publicly-traded companies, but high for the ultra-safe GSEs. The spread rose 65% over the 2007 level by June 2008 and then by September 5, just before regulators parachuted in, had doubled from its 2007 level, making it difficult and costly for the GSES to fund their operations.¹⁶⁵⁹

In July and August 2008, Fannie was unable to raise sufficient cash in the repo market by borrowing against its own mortgage securities, resulting in a liquidity squeeze.¹⁶⁶⁰ Fannie's stock price dove to less than \$7 a share. As a result, Fannie asked the Federal Reserve for help.¹⁶⁶¹ Tim Clark, a senior advisor in the Federal Reserve Board's Division of Banking Supervision and Regulation, gave a bleak account to the

¹⁶⁵⁹ Bloomberg Historical Credit Curves

¹⁶⁶⁰ 8/26/2008, Confidential Memo from FHFA to Fannie Mae CEO Daniel Mudd, at 8.

¹⁶⁶¹ 8/26/2008, Confidential Memo from FHFA to Fannie Mae CEO Daniel Mudd, at 8.

FCIC of both GSEs' desperate need for liquidity. "Liquidity was just becoming so essential, so the Federal Reserve agreed to help provide it," Clark said.¹⁶⁶²

On July 13, the Federal Reserve in Washington authorized the New York Fed to extend emergency loans to the GSEs "should such lending prove necessary...to promote the availability of home mortgage credit during a period of stress in financial markets."¹⁶⁶³ As it turned out, Fannie and Freddie never tapped the emergency funding. They were government-run before it was needed.¹⁶⁶⁴ Had they needed funds, the Fed planned to use its authority under section 13(3) of the Federal Reserve Act to make them a loan secured by the GSEs' assets. In his FCIC testimony, Fed General Counsel Scott Alvarez said that invoking the clause was intended as a backstop measure. Authorizing 13(3) lending was "about having a safety net in the event the market locked up and [the GSEs] wouldn't have any access to liquidity," he told the FCIC.

On the same day, Treasury laid out a three-part legislative plan to strengthen the GSEs.¹⁶⁶⁵ Secretary Paulson proposed to temporarily increase lines of credit with the Treasury Department, confer authority on the Treasury to inject capital into the GSEs, and replaced OFHEO with the newly created Federal Housing Finance Agency (FHFA).¹⁶⁶⁶

¹⁶⁶² Timothy P. Clark (senior advisor, Division of Banking and Supervision, Federal Reserve Board), interview with the FCIC, February 23, 2010, MFR available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4837-5520-8453&open=Y>

¹⁶⁶³ "Board grants Federal Reserve Bank of New York the authority to lend to Fannie Mae and Freddie Mac should such lending prove necessary," Federal Reserve press release, July 13, 2008, available at <http://www.federalreserve.gov/newsevents/press/other/20080713a.htm> (accessed October 4, 2010).

¹⁶⁶⁴ Scott Alvarez (general counsel, Federal Reserve Board), interview with the FCIC, February 23, 2010, MFR available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4837-5520-8453&open=Y>

¹⁶⁶⁵ "Paulson Announces GSE Initiatives," U.S. Department of the Treasury press release HP-1079, July 13, 2008, available at <http://www.treas.gov/press/releases/hp1079.htm> (accessed October 4, 2010).

¹⁶⁶⁶ "Paulson Announces GSE Initiatives," U.S. Department of the Treasury press release HP-1079, July 13, 2008, available at <http://www.treas.gov/press/releases/hp1079.htm> (accessed October 4, 2010).

“This is basically a safety net,” Assistant Treasury Secretary Michelle Davis told the Los Angeles Times following the announcement.¹⁶⁶⁷ CEO Mudd also voiced confidence that assurance of liquidity would shore up the market.¹⁶⁶⁸ Freddie Mac CEO Syron echoed Mudd. “We are heartened by today’s announcement and steps outlined by the US department of the Treasury and the Federal Reserve Board... As Freddie Mac and OFHEO director Lockhart have affirmed, the company is adequately capitalized, has a large liquidity portfolio and access to the world’s debt markets.”¹⁶⁶⁹ Day by day, events would prove otherwise.

Paulson used colorful language to sell the proposal to the Senate Committee on Banking, Housing and Urban Affairs. Weak authority resembled a squirt gun, he warned. Wielding it during a crisis could not have more than the expected effect. Instead regulators needed “a bazooka” at their disposal. “You are not likely to take it out,” Paulson told legislators. “I just say that by having something that is unspecified, it will increase confidence. And by increasing confidence it will greatly reduce the likelihood it will ever be used.”¹⁶⁷⁰

Congress agreed. When President George Bush signed the Housing and Economic Recovery Act (HERA) of 2008 on July 30th, the massive, 2,654-page document included measures to reform the GSEs.¹⁶⁷¹ The law created the FHFA, an independent federal agency, as the primary regulator of Fannie Mae and

¹⁶⁶⁷ Walter Hamilton and Peter G. Gosselin. “Mortgage giants draw aid package; The plan to shore up Fannie and Freddie includes loans and stock purchases by the federal government.” The Los Angeles Times. July 14, 2008.

¹⁶⁶⁸ 7/13/08 Fannie Mae Press Release, <http://www.fanniemae.com/newsreleases/2008/4423.jhtml?p=Media&s=News+Releases>

¹⁶⁶⁹ 7/13/2008 Freddie Mac Press Release, http://www.freddiemac.com/news/archives/corporate/2008/20080713_statement.html .

¹⁶⁷⁰ Treasury Secretary Henry Paulson, testimony to the Senate Committee on Banking, Housing, and Urban Affairs, hearing on “Recent Developments in U.S. Financial Markets and the Regulatory Responses to Them,” July 15, 2008, available at http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_senate_hearings&docid=f:50410.wais (accessed October 4, 2010).

¹⁶⁷¹ Housing and Economic Recovery Act of 2008, Public Law 110-289 (110th Congress), July 30, 2008, available at http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_public_laws&docid=f:publ289.110.pdf (accessed October 4, 2010).

Freddie Mac. Though staffed by the same people from Lockhart down, FHFA had expanded authority over Fannie and Freddie's portfolios, capital levels, and compensation. And the law gave Treasury the "bazooka" Paulson sought – the ability to extend secured lines of credit to the GSEs, purchase their mortgage securities and to inject capital. These provisions along with an \$800 billion hike in the federal debt ceiling - to \$10.6 trillion - would provide necessary funds to operate the GSEs if they were placed into conservatorship.¹⁶⁷²

After the Federal Reserve Board consented in mid July to furnishing emergency loans, it directed Fed examiners and others from the Office of the Comptroller and the Currency (OCC) to evaluate the balance sheets it had agreed to stand behind. Timothy Clark who oversaw the week-long review for the Fed, told the FCIC that it was the first time they had access to information from the GSEs. He said that before the Fed authorized 13(3) lending and the passage of HERA, which made the Federal Reserve a "consultant" to the GSEs' regulator, "The GSEs [saw] the Fed as public enemy number one ... There was a battle between us and them," Clark said. "We would deal with OFHEO, which was also very guarded. So we did not have access to info until they wanted funding from us." Although the Fed and OCC personnel were at the GSEs and conferring with their executives, Syron and Mudd both told the FCIC that they did not know that until both entities were in conservatorship.¹⁶⁷³

The Fed and the OCC discovered that the problems were worse than expected and worse than what the FHFA had led them to believe. The Fed found that the GSEs were significantly under-reserved, Clark said, with huge potential losses and such uncertainty that they were operating in an unsafe and unsound

¹⁶⁷² "The Housing Bill," *New York Times*, July 27, 2008, available at http://www.nytimes.com/imagepages/2008/07/27/washington/20080727_CONGRESS.html (accessed October 4, 2010).

¹⁶⁷³ See, e.g. Mudd MFR at 11.

condition.¹⁶⁷⁴ The OCC also found reasons for concern. Susan Eckert, the Director for Retail Credit Risk, said that the OCC rejected forecasting methodologies that Fannie and Freddie relied on. Instead, it found insufficient reserves for future losses and identified significant problems in credit and risk management. Kevin Bailey, OCC deputy comptroller for regulatory policy, also told the FCIC that Fannie’s loan loss forecasting was problematic and that loan losses were understated. He also said that Fannie had overvalued deferred tax assets – without future profits, deferred tax assets had no value, Insufficient loan losses and overvalued deferred tax assets were alleged accounting improprieties included in the analysis sent to Treasury in March.

All told, the litany of understatements and shortfalls led Bailey to one conclusion. “[T]he GSEs were almost insolvent,” he reported at the time [ck]. Regulators also learned that Fannie was not charging off loans until they were delinquent for two years, a head-in-the-sand approach to financial stress. Banks are required to charge off loans once they were 180 days delinquent. For these and a litany of other errors and flawed methodologies, Fannie and Freddie earned rebukes. “Given the role of the GSEs and their market dominance,” the OCC report said, “they should be industry leaders with respect to effective and proactive risk management, productive analysis and comprehensive reporting. Instead they appear to significantly lag the industry in all respects.”¹⁶⁷⁵

It took three weeks to convince the FHFA there was a shortfall

¹⁶⁷⁴ Timothy P. Clark (senior advisor, Division of Banking and Supervision, Federal Reserve Board), interview with the FCIC, February 23, 2010, MFR available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4837-5520-8453&open=Y>

¹⁶⁷⁵¹⁶⁷⁵ Office of the Comptroller of the Currency, “Observations – Allowance Process and Methodology,” August 2008, OCC5-00076169-71, available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4850-9543-4245&open=Y>

Secretary Paulson told the FCIC that he learned of the Fed and OCC findings by August 15 but that it took him three weeks to convince Lockhart and the FHFA that there was a capital shortfall, that GSEs were not viable and needed to be placed under government control.¹⁶⁷⁶ Despite the findings of the Fed and OCC, on August 22 official FHFA letters informed Mudd and Syron that both entities were “adequately capitalized” based on financial information that was “certified and represented as true and correct by [GSE] management.”¹⁶⁷⁷ But Lockhart also emphasized that FHFA was “seriously concerned about the current level of Fannie Mae’s capital” if the housing market continued to deteriorate.¹⁶⁷⁸

Prospects for increasing capital grew gloomier. Fannie informed the Treasury on August 25th - and repeatedly told the FHFA - that it was infeasible to raise capital and the company was expected to report additional losses in the future driven by more credit related expenses and fair value write-down’s.¹⁶⁷⁹ Fannie’s “base-case” earnings forecast indicated substantial pressure on solvency and a “stressed” forecast indicated “capital resources will continue to decline.”¹⁶⁸⁰

By September 4, Lockhart and the FHFA agreed with Treasury that the GSEs needed to be placed into conservatorship. On that date, Syron and Mudd received blistering mid-year reviews by the FHFA. The opening paragraph of each letter informed the CEOs that their companies had been downgraded to “critical concerns” which reflected “critical safety and soundness concerns” and that “the critical unsafe

¹⁶⁷⁶ FCIC interview of Paulson.

¹⁶⁷⁷ 8/22/08 letters, no bates range.

¹⁶⁷⁸ Letter from Christopher H. Dickerson (FHFA Acting Deputy Director, Division of Enterprise Regulation) to Daniel H. Mudd (President and CEO of Fannie Mae), “Re: Notice of Proposed Capital Classification at June 30, 2008), August 22, 2008, available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4848-2699-8789&open=Y>

¹⁶⁷⁹ 9/4/08 letter to Mudd from Dickerson, at 11-13. (no bates range)

¹⁶⁸⁰ 9/4/08 letter to Mudd from Dickerson, at 13. (no bates range)

and unsound practices and conditions that gave rise to the Enterprise's existing condition, the deterioration in overall asset quality and significant earnings losses experienced through June 2008, as well as forecasted future losses, likely require recapitalization of the Enterprise."¹⁶⁸¹ A bad situation was expected to worsen. Regulators projected additional reserves and write-downs resulting in future net losses.¹⁶⁸² . Liquidity was a problem as neither company could ensure that it could raise sufficient funding

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The 21 page report sent to Fannie cited sweeping concerns, including failures by the Board and senior management; significant deterioration in the quality of mortgages and securities owned or guaranteed by the GSE; insufficient reserves; the almost exclusive reliance on short term funding; and the inability to raise additional capital. The FHFA specifically admonished management and the Board for "imprudent decisions" to "purchase or guarantee higher risk mortgage products" that contributed to a deterioration of Fannie's financial condition. The letter faulted Fannie for purchasing high risk loans to "increase market share, raise revenue and meet housing goals," and for its efforts to increase market share by putting the GSE in competition with Wall Street firms who purchased lower quality securities. FHFA, noting "a conflict between prudent credit risk management and corporate business objectives," found that these purchases of higher risk loans were predicated on relaxed underwriting and eligibility standards (such as accepting mortgages without full documentation). Using models that underestimated this risk, the GSE charged fees even lower than those estimated by these deficient models. FHFA determined that lower

¹⁶⁸¹ 9/4/08 letter to Mudd from Dickerson, at 1. (no bates range); 9/4/08 letter to Syron from Dickerson at 1 (no bates range)

¹⁶⁸² 9/4/08 letter to Mudd from Dickerson, at 1-3, . (no bates range); 9/4/08 letter to Syron from Dickerson at 1-3 (no bates range)

¹⁶⁸³ 9/4/08 letter to Mudd from Dickerson, at 2-3, 16-18; (no bates range); 9/4/08 letter to Syron from Dickerson at 2-3, 16-17 (no bates range).

fees were charged because “focus was improperly placed on market share and competing with Wall Street and [Freddie Mac].”¹⁶⁸⁴

Even after internal reports reflected problems in the mortgage market, Fannie continued to purchase and guarantee riskier loan products. FHFA reported that, “Despite signs in the latter half of 2006 and 2007 of emerging problems, management continued activity in risky programs, and maintained its higher eligibility program for Alt-A loans without establishing limits...”¹⁶⁸⁵ Private-label securities backed by Alt-A and subprime loans were also purchased.¹⁶⁸⁶ These purchased loans and securities were quickly declining in value, leading to reported losses by the GSE and predicted future losses—potentially even greater in FHFA’s analysis than the GSE’s estimates.

The FHFA also noted “increasing questions and concerns” with Fannie’s accounting. The GSE’s models used to forecast losses had not been independently validated or updated for several years. FHFA estimated that an up-to-date model would likely result in a “material increase” in losses.¹⁶⁸⁷ In addition, Fannie had reported considerable benefit from deferring tax payments to future profitable periods. The FHFA found that this benefit, with more reasonable projections of future performance, was significantly overstated.¹⁶⁸⁸

¹⁶⁸⁴ 9/4/08 letter to Mudd from Dickerson, at 5-7. (no bates range).

¹⁶⁸⁵ 9/4/08 letter to Mudd from Dickerson, at 5. (no bates range).

¹⁶⁸⁶ 9/4/08 letter to Mudd from Dickerson, at 6. (no bates range).

¹⁶⁸⁷ 9/4/08 letter to Mudd from Dickerson, at 9. (no bates range)

¹⁶⁸⁸ 9/4/08 letter to Mudd from Dickerson, at 10. (no bates range)

The 22 page report delivered to Freddie included similarly harsh assessments of the GSE's safety and soundness, but more severe criticisms of its management and the Board. In particular, the report noted a significant lack of market confidence which had "eliminated the ability to raise capital."¹⁶⁸⁹ The FHFA "lost confidence in the Board of Directors and the executive management team," holding it accountable for losses stemming from "a series of ill-advised and poorly executed decisions and other serious misjudgments." The regulator said it was unable to rely on Freddie's Board of Directors and management, particularly in light of widespread failures to resolve repeatedly communicated regulatory issues and criticism.¹⁶⁹⁰ [As one example, put in details re conduct of CFO]. In addition, FHFA said that Freddie's failure to raise capital despite their assurances "invited" the conclusion that the Board and CEO did not deal with the regulator "in good faith" when negotiating the reduction in the capital surcharge.¹⁶⁹¹

Like their assessment of Fannie, FHFA found that Freddie's unsafe and unsound practices included the purchase and guarantee of higher risk loan products in 2006 and 2007 in a declining market. In fact, even after the regulator told Freddie in 2006 that its purchases of subprime private-label securities had outpaced its risk management abilities, Freddie purchased \$22 billion of subprime securities each quarter until it failed.

FHFA also found that "aggressive" accounting cast doubt on the accuracy of Freddie's reported earnings and capital. Despite "clear signals" that losses on mortgage assets were likely, Freddie waited to record write-downs until the regulator threatened to issue a cease-and-desist order. Even then, one write-down was reversed "just prior to the issuance of the second quarter financial statements."¹⁶⁹² The regulator

¹⁶⁸⁹ 9/4/08 letter to Syron from Dickerson at 1 (no bates range).

¹⁶⁹⁰ 9/4/08 letter to Syron from Dickerson at 1-2. (no bates range).

¹⁶⁹¹ 9/4/08 letter to Syron from Dickerson at 7 (no bates range).

¹⁶⁹² 9/4/08 letter to Syron from Dickerson at 8 (no bates range).

concluded that rising delinquencies and credit losses would “result in a substantial dissipation of earnings and capital.”¹⁶⁹³

“They went from zero to three with no warning in between”

When interviewed by the FCIC, Mudd said that the regulator never communicated the kind of criticisms included in the September 4 letter. He said that the regulator’s “chronicling of the situation” at Fannie and Freddie on September 4 was “inconsistent with what you would consider better regulatory practice to be - like first warning: fix it; second warning: fix it; third warning: you’re out of here. Instead, they went from zero to three with no warning in between.”¹⁶⁹⁴ A review of the examination reports and other documents FHFA provided to the FCIC supports Mudd’s view in this specific respect. While OFHEO’s examination reports noted concerns with increasing credit risk and remediation of deficiencies required by the May 2006 consent agreement, they do not include the sweeping criticisms contained in the September 4 letter.

Two days after lowering the boom that designated Fannie and Freddie “critical concerns,” Mudd at Fannie and Syron at Freddie faced the loss of their companies to a government takeover. On September 6, FHFA Acting Deputy Director Chris Dickerson sent separate memos to Lockhart recommending that the FHFA be appointed conservator for each GSE. The facts supporting the recommendations were the same facts contained in the letters sent to Mudd and Syron two days earlier. Conservatorship was a government takeover intended to sustain operation, less drastic than receivership that often ends in complete liquidation of assets. Conservatorship conveyed all the powers of directors, officers and shareholders to

¹⁶⁹³ 9/4/08 letter to Syron from Dickerson at 8 (no bates range).

¹⁶⁹⁴ Mudd MFR at 25.

the conservator until Fannie and Freddie returned to “sound and solvent condition.”¹⁶⁹⁵ In the process, common and preferred investors saw their assets vanish.

Still, conservatorship was not a foregone conclusion. Secretary Paulson at Treasury, Chairman Bernanke at the Fed and Lockhart at FHFA met with Mudd, Syron, and their Boards to convince them to cede control.¹⁶⁹⁶ Essentially they faced a Hobson’s choice: take the horse available or none at all. “[T]hey had to voluntarily agree to a consent agreement,” Lockhart told the FCIC. The alternative, a hostile action, invited trouble and “nasty lawsuits,” Lockhart said. “So we made a...very strong case so the board of directors did not have a choice.”¹⁶⁹⁷ Paulson reminded the CEOs that he had authority to inject capital into the GSEs, but he would not do so unless they were in conservatorship.¹⁶⁹⁸

Mudd was “stunned and angry” when he heard the plan, according to Paulson.¹⁶⁹⁹ Tom Lund who ran Fannie Mae’s single family business told the FCIC that conservatorship came as a surprise to everyone.¹⁷⁰⁰ Robert Levin, Fannie Mae’s chief business officer, told the FCIC that he never saw government seizure coming. He never imagined, he said, that Fannie Mae was or might become

¹⁶⁹⁵ “Questions and Answers on Conservatorship,” Federal Housing Finance Agency, September 7, 2008, available at http://www.treas.gov/press/releases/reports/fhfa_consrv_faq_090708hp1128.pdf.

¹⁶⁹⁶ FCIC interview of Paulson; FCIC interview of Lockhart; Henry M. Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, Business Plus: New York, 2010, p. 8.

¹⁶⁹⁷ James Lockhart, FCIC hearing on “Subprime Lending and Securitization and Government-Sponsored Enterprises (GSEs) - Day 3,” April 9, 2010, p. 191, transcript at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4842-3608-2182&open=Y>

¹⁶⁹⁸ FCIC interview of Paulson; Henry M. Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, Business Plus: New York, 2010, p. 10.

¹⁶⁹⁹ FCIC interview of Paulson

¹⁷⁰⁰ Thomas Lund interview with the FCIC, March 4, 2010, at 9 MFR available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4852-8365-0821&open=Y>.

insolvent.¹⁷⁰¹ Interviewed in 2010, Mudd's anger persisted. "I did not think in any way it was fair for the government to have been in a position of being in the chorus for the company to add capital," he said, "and then to inject itself in the capital structure."¹⁷⁰² Herb Allison, whom Paulson chose to succeed Mudd, recalled a lot of emotion on Monday morning after the conservatorship was installed. "There was bewilderment, anger and tears," he told the FCIC.¹⁷⁰³

The conservatorship memoranda reiterated all the damning evidence contained in the letters two days earlier.¹⁷⁰⁴ Losses at Fannie Mae for the year were estimated to be between \$18 billion and \$50 billion.¹⁷⁰⁵ Freddie Mac's memorandum differed only in the details.¹⁷⁰⁶ Freddie's \$1 billion loss in the first six months was projected to end up between \$11 and \$32 billion by the end of the year.¹⁷⁰⁷

Although the boards had a choice, only assent was realistic. "We were going to agree to go in a conservatorship anyway," Syron told the FCIC. "[T]here was a very clear message that the [September 4] letter was there as a mechanism to bring about a result."¹⁷⁰⁸ Mudd agreed. "The purpose of the letter was

¹⁷⁰¹ Interview with Robert Levin, MFR at 16, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4827-8325-5813&open=Y>.

¹⁷⁰² MFR of Dan Mudd Interview, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4830-1191-5525&open=Y>

¹⁷⁰³ Herb Allison MFR at 1.

¹⁷⁰⁴ FHFA Memorandum from Christopher Dickenson to James B. Lockhart III, "Proposed Appointment of the Federal Housing Finance Agency as Conservator for the Federal National Mortgage Association," September 6, 2008, p. 2.

¹⁷⁰⁵ FHFA Memorandum from Christopher Dickenson to James B. Lockhart III, "Proposed Appointment of the Federal Housing Finance Agency as Conservator for the Federal National Mortgage Association," September 6, 2008, p. 29.

¹⁷⁰⁶ FHFA Memorandum from Christopher Dickenson to James B. Lockhart III, "Proposed Appointment of the Federal Housing Finance Agency as Conservator for the Federal Home Loan Mortgage Corporation," September 6, 2008, p. 3.

¹⁷⁰⁷ FHFA Memorandum from Christopher Dickenson to James B. Lockhart III, "Proposed Appointment of the Federal Housing Finance Agency as Conservator for the Federal Home Loan Mortgage Corporation," September 6, 2008, p. 29.

¹⁷⁰⁸ Dick Syron (former CEO of Freddie Mac), interview with the FCIC, August 31, 2010, transcript at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4851-6887-5783&open=Y>

really to force conservatorship,” he said.¹⁷⁰⁹ The day after the meetings with Treasury, the Fed and the FHFA, the boards of both companies voted for conservatorship.¹⁷¹⁰

Both CEOs were ousted, but the same dire problems persisted. As promised, the Treasury was prepared to support solvency in two direct ways. It would buy up to \$200 billion of senior preferred stock from the GSEs and extend them short-term secured loans. In addition, Treasury pledged to buy GSE mortgage backed securities from Wall Street firms and others until the end of 2009.¹⁷¹¹ Upfront, Treasury bought from each GSE \$1 billion in preferred stock with a 10 percent rate of interest. Each GSE also gave Treasury warrants to purchase common stock representing 79.9 percent of shares outstanding.¹⁷¹² Existing common and preferred shareholders were effectively wiped out. The decline in value of the preferred stock caused losses at many banks and contributed ten institutions failing and 35 becoming less than “well capitalized.”¹⁷¹³ [have asked FDIC for number of banks holding preferred shares and losses incurred]

Treasury officials believed placing the GSEs into conservatorship would help ease the financial crisis. Secretary Paulson told the FCIC that he was “naïve” enough to believe that the strains in the financial system were “all about the housing crisis.” He had thought that stabilizing the GSEs “might put a floor under the housing market decline, which might help out all financial institutions. That it might put out the fire.” He realized he was wrong the next day, telling the FCIC “the next day Lehman started to

¹⁷⁰⁹ Daniel Mudd, FCIC hearing on “Subprime Lending and Securitization and Government-Sponsored Enterprises (GSEs) - Day 3,” April 9, 2010, p. 38, transcript at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4842-3608-2182&open=Y>

¹⁷¹⁰ Henry M. Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, Business Plus: New York, 2010, p. 16.

¹⁷¹¹ CBO’s Budgetary Treatment of Fannie Mae and Freddie Mac, January 2010, at 6-7.

¹⁷¹² *Id.*

¹⁷¹³ 10/28/10 letter to Edelberg from Nash providing answers to follow-up questions from September 1, 2010 hearing.

go.”¹⁷¹⁴ Treasury Assistant Secretary Neel Kashkari agreed. “We thought that after we stabilized Fannie and Freddie that we bought ourselves some time. Maybe a month, maybe three months. But they were such profound interventions, stabilizing such a huge part of the financial markets, that would buy us some time. We were surprised that Lehman then happened a week later that Lehman had to be taken over or it would go into bankruptcy.”¹⁷¹⁵

The firms’ unexpected failure was a huge event in the country’s financial history and increased the magnitude of the crisis, Federal Reserve Governor Kevin Warsh and New York Fed general counsel Tom Baxter told the FCIC.¹⁷¹⁶ Warsh also told the FCIC that the decision to place them in government conservatorship was “a massive, underreported, underappreciated jolt to the system” and “caused investors to panic about the value of every asset, to reassess every portfolio.”¹⁷¹⁷

FHFA Director Lockhart put the decision of the GSEs’ conservatorship in the context of Lehman’s failure. As the investment bank’s balance sheet was about one fifth the size of Fannie Mae’s alone, he felt that the fallout from Lehman’s bankruptcy would have paled in comparison to a GSE failure.¹⁷¹⁸ He said, “We felt that if we let them fail, that what happened after Lehman would have been very small compared to these \$5.5 trillion institutions failing,”¹⁷¹⁹ Major holders of GSE securities included Chinese and Russian central banks that, between them, owned over half a trillion dollars of securities issued by Fannie and Freddie, to say nothing of the holdings by U.S. financial firms and investment funds. A 2005 Federal

¹⁷¹⁴ Henry Paulson MFR at 6, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4826-8913-1271&open=Y>).

¹⁷¹⁵ Kashkari interview at 55:25, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4813-8597-0695&open=Y>).

¹⁷¹⁶ See Tom Baxter MFR at 1 and Kevin Warsh MFR at ____.

¹⁷¹⁷ Warsh audio at 1:09:50.

¹⁷¹⁸ James Lockhart, FCIC hearing on “Subprime Lending and Securitization and Government-Sponsored Enterprises (GSEs) - Day 3,” April 9, 2010, p. 232, transcript at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4842-3608-2182&open=Y>

¹⁷¹⁹ James Lockhart, FCIC hearing on “Subprime Lending and Securitization and Government-Sponsored Enterprises (GSEs) - Day 3,” April 9, 2010, p. 232, transcript at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4842-3608-2182&open=Y>

Reserve study concluded that U.S. banks owned over \$1 trillion in GSE debt and securities, more than 150 percent of the banks' Tier 1 capital and 11 percent of their total assets at the time.¹⁷²⁰ [Have requested more recent numbers].

Testifying before the FCIC, Mudd claimed failure was all but inevitable. "In 2008, the companies had no refuge from the twin shocks of a housing crisis followed by a financial crisis," he said. "A monoline GSE structure asked to perform multiple tasks cannot withstand a multiyear 30% home price decline of a national scale, even without the accompanying global financial turmoil. The model allowed a balance of business and mission when home prices were rising. When prices crashed far beyond the realm of historical experience, it became 'The Pit and the Pendulum,' a choice between horrible alternatives."¹⁷²¹

"The worst run financial institution"

When interviewed by the FCIC more than a year after the GSEs were placed into conservatorship, FHFA officials were very critical of Fannie's management. John Kerr, the FHFA examiner (and an OCC veteran) in charge of Fannie examinations, minced no words. He labeled Fannie "the worst-run [ck] financial institution" he had seen in his 30 years as a bank regulator.¹⁷²² Scott Smith, who became Associate Director at FHFA after OFHEO was retired, concurred with Kerr. Fannie's forecasting capabilities were "pathetic" and "not particularly well thought out," lacking "a variety of stress scenarios."¹⁷²³ Both examiners noted Fannie's weak forecasting models that included hundreds of market

¹⁷²⁰ Board of Governors of the Federal Reserve System, "Stress Scenarios on Bank Exposures to Government Sponsored Enterprises (GSE) Debt," January 24, 2005; FCIC-121074-121093.

¹⁷²¹ Daniel Mudd written testimony at 2-3. <http://fcic.gov/hearings/pdfs/2010-0409-Mudd.pdf>

¹⁷²² MFR of FHFA Interview (Austin Kelly, Examination Specialist; Scott Smith, Associate Director; John Kerr, Senior Associate Director of Examination; Steve Corona, Examination Manager; Alfred Pollard, General Counsel) at 3. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4842-8435-4309&open=Y>

¹⁷²³ MFR of FHFA Interview at 3. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4842-8435-4309&open=Y>

simulations, but scarcely any that contemplated house price declines.¹⁷²⁴ To Austin Kelly, who joined OFHEO in November 2006 as an examination specialist, there was no relying on Fannie’s numbers because their “processes were a bowl of spaghetti.”¹⁷²⁵ Kerr and a colleague said that that they were struck by the fact that Fannie Mae, a multi-trillion dollar company employed “unsophisticated” technology, less tech-savvy than a community bank.¹⁷²⁶

Nonetheless, OFHEO’s communication to Fannie prior to the September 4 letter did not fully reflect these criticisms. And officials from the FHFA conceded that they made mistakes in their oversight of Fannie and Freddie. They paid too much attention to remediating various operational problems and did not react to increasing credit risk at Fannie. Lockhart told the FCIC that more resources should have been dedicated to credit risk embedded in fragile mortgage securities. Current FHFA acting director Edward DeMarco told the FCIC that it would not pass the “reasonable person test” to deny that OFHEO took its eye off the ball and focused on operational risk without paying sufficient attention to credit risk.”

Mudd and others apparently understood how OFHEO could have made mistakes. Mudd told the FCIC that the regulators skill levels were “developing but below average.”¹⁷²⁷ Former Housing and Urban Development Secretary, Henry Cisneros, expressed a similar view. “OFHEO,” Cisneros told the FCIC,

¹⁷²⁴ MFR of FHFA Interview at 4. <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4842-8435-4309&open=Y>

¹⁷²⁵ MFR of FHFA Interview at 3. <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4842-8435-4309&open=Y>

¹⁷²⁶ MFR of FHFA Interview at 3. <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4842-8435-4309&open=Y>

¹⁷²⁷ Mudd MFR at 25.

“was puny compared to what Fannie Mae and Freddie Mac could muster in their intelligence, their Ivy League educations, their rocket scientists in their place, their lobbyists, their ability to work the Hill.”¹⁷²⁸

The costs of the bailouts have been enormous and are projected to increase. Over 30 months through the second quarter of 2010, the two companies lost \$226 billion, wiping out \$71 billion of combined capital they reported at the end of 2007.¹⁷²⁹ The Treasury narrowed the gap with \$148 billion in support. The FHFA has estimated that costs through 2013 will range from \$221 billion to \$363 billion. The Congressional Budget Office has projected that the economic costs of the GSEs’ downfall, including the total financial cost of government support as well as actual dollar outlays, will reach \$389 billion by 2019.¹⁷³⁰

“that wasn’t done at my pay grade”

Trying to understand how the multibillion dollar bailout could have been avoided Fannie’s two most senior executives were asked at an FCIC hearing how the charter could have been changed to make the company more sound. Mudd, who made approximately \$65 million from 2000-2008, testified that “the thing that would have made the institution more sound or have produced a different outcome would have been for it to have become over time a more normal financial institution able to diversify, able to allocate capital, able to be long or short in the market, able to operate internationally. And if the trade for that would have been, you know, a cut in the so-called implicit ties with the government, I think that would

¹⁷²⁸ Henry Cisneros 10-13-10 FCIC interview (1 hr 44 min 25 sec on recording)

¹⁷²⁹ [http://en.wikipedia.org/wiki/List_of_countries_by_GDP_\(nominal\)](http://en.wikipedia.org/wiki/List_of_countries_by_GDP_(nominal))

¹⁷³⁰ Citation needed

have -- that would have been a better solution.”¹⁷³¹ CBO Robert Levin, who received approximately \$45 million from 2000-2008, did not have an answer. He testified that making such decisions “wasn’t done at my pay grade.”¹⁷³²

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¹⁷³¹ Transcript of 4/30/2010 FCIC Hearing at page 104. Online here: <http://fcic.gov/hearings/pdfs/2010-0409-Transcript.pdf>

¹⁷³² Transcript of 4/30/2010 FCIC Hearing at page 104. Online here: <http://fcic.gov/hearings/pdfs/2010-0409-Transcript.pdf>

CHAPTER CONCLUSIONS HERE

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Solvency should be a simple economic concept: if your assets are worth more than your liabilities, you are solvent; if they are not, you’re in danger of bankruptcy. In theory, it should not be that hard for any company to know which it is; nor should it be that hard for financial experts with access to the books. But on the afternoon of Friday, September 12, 2008, as experts from the biggest commercial and investment banks in the U.S. converged on the Wall Street offices of the Federal Reserve to ponder the fate of Lehman Brothers, they could not agree whether this 157-year-old investment bank was indeed solvent. Indeed, it would turn out that even the nature of what solvency meant was in question.

Only two days earlier, Lehman had reported shareholder’s equity – the bottom-line measure of solvency – of \$28 billion at the end of August. Over the previous nine months, the bank had reported \$6 billion of losses but raised more than \$10 billion in new money. As a result, its reported equity was actually higher than it had been a year earlier.

But this arithmetic reassured virtually no one outside the bank itself. Fed officials had been discussing Lehman's solvency for many months, and the stakes were very high. If the company was solvent, the central bank could consider providing extraordinary liquidity support – cash to tide it over. Cash that a solvent institution could pay back over time. If it was not, then the Fed would not consider such support. To resolve the question, the Fed would *not* rely on the reported \$28 billion in equity because there were questions whether Lehman was reporting its assets at their true market values and, even if they were, whether they could be sold at those values. As one New York Fed official had written to colleagues in July, “Balance-sheet capital isn't too relevant if you're suffering a massive run.”¹⁷³³ It's not relevant, because if there's a run on a firm and a firm has to raise cash in a fire sale of assets, capital can disappear almost overnight.

Such concerns swirled about the \$54 billion in real estate assets Lehman had on the books. None of the assembled bankers at the New York Fed that weekend believed that figure to be accurate: Lehman couldn't actually sell those assets for that amount. If they were worth half of what Lehman estimated (or if they were to lose half of the estimated value), then Lehman's \$28 billion in equity would be gone and the firm would be officially insolvent. And each of those scenarios was very conceivable, judging by market conditions over the previous twelve months. In a fire sale, some of those assets might sell for *less* than half their stated value. So for a firm whose assets were of questionable value and subject to market fears, solvency was in the eyes of the beholders – on that weekend, the dozens of bankers assembled by the New York Fed and Treasury. In their view, those real estate assets were worth \$15 to \$25 billion less than Lehman hoped and said they were. We have already reported the unreliable valuation methods Lehman

¹⁷³³ Email from Joseph Sommer to colleagues, New York Fed, July 13, 2008. FRB to LEH Examiner 001859-001860. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4817-6317-4151&open=Y>

used for much of those assets; the bankers had good reason for those doubts. At the high end of the assembled bankers' estimates, Lehman would be teetering on the brink.

“What does solvent mean?” That’s how JP Morgan CEO Jamie Dimon responded when the FCIC asked him if Lehman was solvent. “The answer is, I don’t know. I still could not answer that question.”¹⁷³⁴ JP Morgan’s Chief Risk Officer Barry Zubrow testified before the FCIC, “From a pure accounting standpoint, [Lehman] was solvent,” although “it obviously was financing its assets on a very leveraged basis with a lot of short-term financing.”¹⁷³⁵

Testifying before the FCIC, Lehman Brothers CEO Richard Fuld was, unsurprisingly, insistent on his firm’s financial health: “There was no capital hole at Lehman Brothers. At the end of Lehman’s third quarter, we had \$28.4 billion of equity capital.”¹⁷³⁶ In testimony before the FCIC, Fed Chairman Ben Bernanke disagreed: “I believe it had a capital hole.” He emphasized that New York Fed President Timothy Geithner, Treasury Secretary Henry Paulson, and SEC Chairman Christopher Cox all agreed that “it’s just way too big a hole. And my own view is it’s very likely that the company was insolvent, even, not just illiquid.” Others in the marketplace, such as Bank of America CEO Ken Lewis, who considered acquiring Lehman with government support that week, similarly had no doubts about Lehman’s insolvency. He told the FCIC that Lehman’s real estate assets and other assets were overvalued by \$60 to \$70 billion, a message he delivered to Paulson a few days before Lehman declared bankruptcy.¹⁷³⁷

¹⁷³⁴ FCIC interview with Jamie Dimon, October 20, 2010.

¹⁷³⁵ Zubrow, Too Big to Fail Hearing Transcript, Day 1 at 212.

¹⁷³⁶ Fuld, Too Big to Fail Hearing Transcript, Day 1 at 148.

¹⁷³⁷ Ken Lewis MFR at ___.

It had been quite a week; it would be quite a weekend. Economists, historians, and financiers will analyze and debate forever the details of the largest bankruptcy in American history, but nothing will change the basic facts: a consortium of banks would fail to agree on a rescue of Lehman Brothers, two last-minute merger deals would fall through, and the U.S. government would decide that it would not rescue this bank – for legal reasons, for political reasons, for practical reasons, and because, as Fed Chairman Ben Bernanke told the FCIC, “If we lent the money to Lehman, all that would happen would be that the run [on Lehman] would succeed, because it wouldn't be able to meet the demands, the firm would fail, and not only would we be unsuccessful but we would have saddled the taxpayer with tens of billions of dollars of losses.”¹⁷³⁸ [need to introduce consortium]

“Get more conservatively-funded”

After the demise of Bear Stearns in March 2008, most observers – including Bernanke,¹⁷³⁹ Paulson,¹⁷⁴⁰ Geithner,¹⁷⁴¹ and Cox – considered Lehman Brothers to be the next big worry among the four remaining large investment banks. Geithner said he was “consumed” with

¹⁷³⁸ Bernanke, Too Big to Fail Hearing Transcript, Day 2 at 22.

¹⁷³⁹ Bernanke told the Examiner that the Federal Reserve, the SEC and “markets in general” viewed Lehman as the next most vulnerable investment bank because of Lehman’s funding model. Bernanke did not believe that Fuld appreciated Lehman’s vulnerability, and believes that Fuld should have worked more aggressively to find ways to strengthen Lehman. Bernanke told the Examiner that he believed that Fuld was always more optimistic about Lehman’s condition than the markets were. Examiner’s Interview of Ben S. Bernanke, Dec. 22, 2009, at pp. 3-6.

¹⁷⁴⁰ Paulson told the Examiner that although he had concerns about Lehman in 2007 when he learned about the Archstone deal, he pressed Lehman “less hard” prior to the near collapse of Bear Stearns due to Lehman’s record 2007 results. After Bear Stearns’ near collapse, however, Paulson focused on Lehman as the most vulnerable investment bank. Paulson believes that Fuld heard what he wanted to hear and was more optimistic than he should have been. Paulson also told the Examiner that Fuld had “quixotic . . . ideas” about boosting market confidence, citing the removal of Callan, which Paulson thought could be viewed as more alarming than calming. Examiner’s Interview of Henry M. Paulson, Jr., June 25, 2009, at pp. 6-14.

¹⁷⁴¹ Geithner told the Examiner that, following Bear Stearns’ near collapse, he considered Lehman to be the “most exposed” investment bank. Examiner’s Interview of Timothy F. Geithner, Nov. 24, 2009, at p. 2. Geithner’s concerns about Lehman began in August 2007 and grew steadily into 2008. *Id.*

figuring out how to make Lehman “get more conservatively-funded.”¹⁷⁴² Fed Vice Chairman Donald Kohn told Bernanke that some institutional investors believed it was not a matter of *whether* Lehman would fail, but *when*.¹⁷⁴³ One set of numbers confirmed their doubts: On March 18, the day after JP Morgan announced its government-assisted acquisition of Bear Stearns, the market (through the mechanism of a credit default swap) put the cost of insuring \$10 million of Lehman’s five-year senior debt at \$310,000 annually; for Merrill Lynch, the cost was \$241,000; for Morgan Stanley, \$226,000; and for Goldman Sachs, \$165,000.¹⁷⁴⁴

The chief concerns were Lehman’s real estate-related investments and its short-term funding sources, including the commercial paper and repo markets. At the end of the first quarter, Lehman reported \$7.8 billion of commercial paper and \$197 billion of repos.¹⁷⁴⁵ There were also concerns about all the firm’s derivative contracts: more than two million of these [check].¹⁷⁴⁶ And of course there was the vivid memory of the Bear episode, which had illustrated the risks when the short-term lenders, hedge fund customers, and counterparties in derivatives contracts all lost confidence in the liquidity, much less the solvency, of a major investment bank.

Worried about widespread insolvency and illiquidity, Federal Reserve and SEC officials converged on Lehman Brothers--and the other investment banks--with two serious but related concerns. Did the companies have enough capital—*real* capital, after write-downs? And did they have access to sufficient liquidity – cash – to withstand a run such as the one that had taken

¹⁷⁴² Valukas Report at 8, n. 30.

¹⁷⁴³ Valukas Report at 615.

¹⁷⁴⁴ Bloomberg Lp Historical Prices CLEH1U5; CMER1U5; CMWD1U5; CGS1U5

¹⁷⁴⁵ 1Q08 Form 10-Q at 30 and 38.

¹⁷⁴⁶ 9/14/08 Lehman Board minutes, LBEX-AM 003932-39, at 34.

down Bear Stearns? Solvency and liquidity: both were essential, and of course they were related. If market participants such as money market funds, hedge funds, and investment banks believed Lehman's assets were worth less than their reported values, they would withdraw funds, demand more collateral, or lend Lehman less or not at all. Those actions, in turn, could require Lehman to sell assets at fire sale prices. That could wipe out liquidity virtually overnight. The Bear episode had demonstrated these dynamics.

“The SEC took the view that liquidity was paramount, but the Fed had more of an emphasis on capital-raising,”¹⁷⁴⁷ Erik Sirri, head of the Division of Trading and Markets at the SEC, told the FCIC. “Because the Fed had become the de facto primary regulator because of its [lending to Lehman Brothers and the other investment banks through its new lending facilities], its view prevailed. The SEC wanted to be collaborative, and so came to accept the Fed's focus on capital.”¹⁷⁴⁸

In fact, *both* problems had to be resolved. Bear's demise had precipitated Lehman's “first real financing difficulties” since the overall liquidity crisis began in 2007, Lehman Treasurer Paolo Tonucci told the FCIC.¹⁷⁴⁹ Over the two weeks following Bear's collapse, Lehman drew approximately \$2 billion daily in cash from the Fed's new lending facility, the Primary Dealer Credit Facility (PDCF).¹⁷⁵⁰ But the bank could not be seen as relying on that source for cash, which was considered a signal of funding problems. Indeed, an April 29, 2008, email between

¹⁷⁴⁷ Sirri MFR at 3. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4825-2512-3078&open=Y>

¹⁷⁴⁸ Sirri MFR at 3. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4825-2512-3078&open=Y>

¹⁷⁴⁹ Tonucci MFR at ___.

¹⁷⁵⁰ Specifically, Lehman drew \$1.6 billion on March 18, \$2.3 billion on March 19 and 20, \$2.13 billion on March 24, 25, 26, and \$2 billion on April 16. After its bankruptcy, Lehman drew \$28 billion, \$19.7 billion, and \$20.4 billion, on September 15, 16, and 17, until Barclays replaced the Fed in financing.

Treasury officials noted the concern expressed by Lehman's Chief Legal Officer Thomas Russo that the PDCF needed to be "implemented in a collaborative manner to avoid the stigma associated with discount window borrowing."¹⁷⁵¹ In March and April, Lehman used the PDCF seven times, borrowing about \$2 billion each time.

Lehman built up its liquidity pool, which included cash and easily-tradable securities, from \$34 billion at the end of February to \$45 billion at the end of May, but that was not good enough for the Fed and the SEC. As noted, Lehman performed worst among the four investment banks in the liquidity stress tests that the Fed and SEC conducted during the spring and summer of 2008.

Meanwhile, the company was also improving its capital position. First, Lehman's Board in January reversed its fateful decisions over the previous two years to aggressively increase real estate investments in the face of falling prices and rising losses. Now, Lehman would attempt to sell those investments. By the end of May, it had reduced real estate exposures – including residential and commercial real estate – from \$90 billion to \$71 billion. By the end of the summer it would be \$54 billion.¹⁷⁵² The second step was to raise new capital: \$4 billion of convertible preferred stock on April 4,¹⁷⁵³ \$1 billion in 10-year senior notes on April 30,¹⁷⁵⁴ \$2

¹⁷⁵¹ 04/29/08 Email from Mario Ugoletti, Treasury to Jeremiah Norton, Treasury, UST-FCIC 0029512 - UST-FCIC 0029514.

¹⁷⁵² 1Q08 Form 10-Q at 19; 2Q08 Form 10-Q at 24; 9/10/08 press release, attachments II and V.

¹⁷⁵³ LBHI 8-K (Apr. 4, 2008).

¹⁷⁵⁴ Lehman, Presentation to Lehman Brothers Board of Directors, Estimated April 2008 Financial Information (May 7, 2008), at p. 8 [LBHI_SEC07940_028014].

billion in 30-year subordinated notes and \$2.5 billion in 10-year senior notes on May 2,¹⁷⁵⁵ and \$4 billion of common stock and \$2 billion of convertible preferred stock on June 12.¹⁷⁵⁶

Treasury Undersecretary Robert Steel praised Lehman's June 12 capital raising efforts, publicly stating that Lehman was "addressing the issues."¹⁷⁵⁷ Similarly, Secretary Paulson told reporters on June 13 that "some" investment banks "have continued to make progress" in raising capital: "They've improved their funding and liquidity and they've strengthened their capital position."¹⁷⁵⁸

Other problems hovered around Lehman, however. Former CEO Richard Fuld would describe Lehman's main problem as one of market confidence, and he suggested that the company's image was damaged by investors taking a "short" position in Lehman, hoping that it would fail, even *helping* it to fail through a deterioration in confidence.¹⁷⁵⁹ "Bear went down on rumors and a liquidity crisis of confidence," Fuld told the FCIC.¹⁷⁶⁰ "Immediately thereafter, the rumors and the naked short sellers came after us."¹⁷⁶¹ At the time, Fuld believed the short-sellers had chosen the wrong target. In his view, Lehman was solid or, at the very least, an ideal merger partner for a larger financial institution. But just in case, Chief Legal Officer Russo, pressed the

¹⁷⁵⁵ Lehman, Presentation to Lehman Brothers Board of Directors, Estimated April 2008 Financial Information (May 7, 2008), at p. 8 [LBHI_SEC07940_028014].

¹⁷⁵⁶ LBHI 8-K (June 12, 2008).

¹⁷⁵⁷ See e-mail from Thomas A. Russo, Lehman, to Richard S. Fuld, Jr., Lehman (June 13, 2008) [LBHI_SEC07940_212723].

¹⁷⁵⁸ John Brinsley, "Paulson Says Investment Banks Making Progress in Raising funds," Bloomberg, June 13, 2008.

¹⁷⁵⁹ Fuld MFR at 9. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4830-5587-1751&open=Y>

¹⁷⁶⁰ Fuld MFR at 9. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4830-5587-1751&open=Y>

¹⁷⁶¹ Fuld MFR at 9. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4830-5587-1751&open=Y>

SEC (without success) to clamp down on the “naked” short selling of Lehman stock.¹⁷⁶² The SEC told the FCIC that it investigated these claims for more than two years and found no evidence Lehman’s stock price was manipulated.¹⁷⁶³ The SEC did not find many naked short sales, the issue Russo pressed the SEC to investigate, and found no evidence that individuals with short positions on Lehman spread false rumors to manipulate the stock price.¹⁷⁶⁴

On March 18, Lehman reported better than expected results for the first quarter of its fiscal year 2008, which ended in February: a net profit of \$489 million. The firm’s stock price jumped nearly 50%, to \$46.49. But investors and analysts quickly raised questions, especially concerning the reported value of those still dubious real estate assets. Portfolio.com called Lehman’s write-downs “suspiciously miniscule.”¹⁷⁶⁵ In a speech in May, David Einhorn of Greenlight Capital, who was short Lehman’s stock at that point, noted the bank’s large portfolio of commercial real estate loans and said, “There is good reason to question Lehman’s fair value calculations. Lehman could have taken many billions more in write-downs than it did. Lehman does not provide enough transparency for us to even hazard a guess as to how they have accounted for these items... I suspect that greater transparency on these valuations would not inspire market confidence.”¹⁷⁶⁶ [we are interviewing him soon]

¹⁷⁶² LBIX_SEC07540-212208; LBHI_SEC07940

¹⁷⁶³ Karpati and Shuler MFR, January 27, 2010, and, Questions and Chairman Schapiro Responses, January 21, 2010.

¹⁷⁶⁴ Karpati and Shuler MFR at 3.

¹⁷⁶⁵ Valukas report at 206, n. 708.

¹⁷⁶⁶ Transcript of Speech by David Einhorn, *Accounting Ingenuity*, Presentation to Ira W. Sohn Investment Research Conference, (May 21, 2008), at pages 3-4. Available at <http://www.foolingsomepeople.com/main/TCF%202008%20Speech.pdf>.

Three months later, on June 9, Lehman announced a preliminary \$2.8 billion net loss for its second quarter – the first net loss since it had become a public company in 1994. The share price was now back down to \$30. Three days later Lehman announced that President and Chief Operating Officer Joseph Gregory and Chief Financial Officer Erin Callan were being replaced—a management shake-up designed to rebuild investor confidence. Instead, the stock slumped to \$22.70. Other managers shuffled in and out of top positions, the very definition of instability. [cite example in FN]

“This is not sounding good at all”

After Lehman reported its final 2Q08 results on June 12, the New York Fed’s onsite monitor at Lehman, Kirsten Harlow, reported that there had been “no adverse information on liquidity, novations, terminations or ability to fund either secured or unsecured funds.”¹⁷⁶⁷ The announced liquidity numbers *were* better that season, as were the capital numbers.

Nevertheless, Lehman’s lenders and supervisors joined investors in their concerns. The next day, William Dudley, then-head of the New York Fed’s Markets Group and currently its President, emailed Bernanke, Geithner, Kohn and others that the PDCF lending facility should be extended because it “remains critical to the stability” of some of the investment banks-- particularly Lehman. “I think without the PDCF, Lehman might have experienced a full blown liquidity crisis.”¹⁷⁶⁸

¹⁷⁶⁷ Email from Kirsten Harlow, FRBNY, to Tim Geithner, FRBNY, et al. (June 16, 2008) [FCIC 155446]. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4852-3599-2327&open=Y>

¹⁷⁶⁸ Email from William Dudley, FRBNY, to Ben Bernanke, Federal Reserve, et al. (June 17, 2008) [FCIC 154463-154464]. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4810-7530-8295&open=Y>

On June 19, just one week after the earnings call, Harlow reported that Lehman was indeed having funding difficulties. Four financial institutions had “trading issues” with Lehman and had reduced their exposure to the firm, including one – Natixis, a French investment bank – that had already eliminated all activity with Lehman.¹⁷⁶⁹ JP Morgan reported that large pension funds and some smaller Asian central banks were reducing their exposures to Lehman and Merrill. And, Citigroup requested a \$3 to \$5 billion “comfort deposit” to cover the exposure it maintained through various services provided to Lehman, and settled for \$2 billion.¹⁷⁷⁰ In an internal memo, Citigroup’s Chief Risk Officer, Tom Fontana, wrote that “Loss of confidence [in Lehman] is huge at the moment.”¹⁷⁷¹ Tim Clark, a senior advisor at the Federal Reserve Board’s division of banking supervision and regulation, was short and direct: “This is not sounding good at all.”¹⁷⁷²

More bad news came on June 25, when the latest New York Fed liquidity stress test showed that Lehman would need \$15 billion in addition to the \$51 billion in its liquidity pool to survive a stress scenario that assumed the loss of all unsecured borrowings and varying amounts of secured borrowings. There were two problems with the way Lehman was funding itself. It had significantly increased its borrowings in the overnight commercial paper market, from \$3 billion at the end of November 2007 to \$8 billion at the end of May 2008. And it had increased its repo

¹⁷⁶⁹ Email from Tim Clark, Federal Reserve, to Kevin Coffey, Federal Reserve, et al. (June 20, 2008) [FCIC 155450-155451]. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4812-2630-3239&open=Y>

¹⁷⁷⁰ Citi provided a variety of clearing and settlement services for Lehman. Citi reduced its clearing/settlement lines to Lehman from \$20 billion to \$10-\$12 billion, and received a \$2 billion deposit from Lehman during the week of 6/12/08. See Valukas report 1224-1234.

¹⁷⁷¹ E-mail from Thomas Fontana, Citigroup, to Christopher M. Foskett, Citigroup, *et al.* (June 12, 2008) [CITI-LBHI-EXAM 00072923].

¹⁷⁷² Email from Tim Clark, Federal Reserve, to Kevin Coffey, Federal Reserve, et al. (June 20, 2008) [FCIC 155450-155451]. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4812-2630-3239&open=Y>

funding, particularly the portions that matured overnight and were collateralized by illiquid assets. Each of these circumstances was dangerous, as amply demonstrated in the repo run on Bear Stearns. As of mid-June, 62% of Lehman's liquidity was dependent on "non-traditional" securities like illiquid mortgage-related securities - which could not be financed with the PDCF and which investors were becoming increasingly reluctant to fund.

According to the Fed's report on the stress test, Lehman recognized that its liquidity position was vulnerable and was trying to reduce illiquid assets and extend maturities of its funding sources. But the concerns remained. Robert Hoyt, Treasury's General Counsel, wrote in a July 10 email that "the real problem is 70 billion of illiquid bonds, so I assume finding liquidity for them is the key."¹⁷⁷³ The next day he wrote that the Fed could provide Lehman liquidity, but should it refuse to, he questioned what authority the Treasury Department could exercise to minimize the effects of the bank's failure.¹⁷⁷⁴

On July 10, Federated, a large money market fund and "one of [Lehman's] very largest tri-party repo investors,"¹⁷⁷⁵ notified JP Morgan, Lehman's clearing bank in the tri-party repo market, that Federated would "no longer pursue additional business with Lehman," because JP Morgan was "unwilling to negotiate in good faith."¹⁷⁷⁶ According to Federated, JP Morgan had "become increasingly uncooperative, reneging on previous agreements regarding acceptable [contract] language... (e.g. refusing to accept cash as repo collateral, despite a statement in the document

¹⁷⁷³ Email from Robert Hoyt, Treasury (July 10, 2008) [UST-FCIC 00290097].

¹⁷⁷⁴ Email from Robert Hoyt, Treasury (July 11, 2008) [UST-FCIC 00290096].

¹⁷⁷⁵ 7/11/08 email from Patrick Parkinson to Pat White, FCIC-155481.

¹⁷⁷⁶ Email from Karl Mocharko, Federated, to Gail Shanley, Federated, et al. (July 10, 2008) [LBHI FCIC 0128796-0128802]. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4828-9377-7927&open=Y>

that says "Securities shall always include cash")."¹⁷⁷⁷ Dreyfus, another large money market fund and a Lehman tri-party repo investor, also pulled its repo line from Lehman. As of June 30, Federated had provided Lehman with \$900 million of repo funding and Dreyfus had provided it with \$395 million.¹⁷⁷⁸ Government officials did not know about Federated's specific comment, but they did learn the next day that those two major repo lenders were walking away from Lehman. Funding from other sources seemed to have held up under the pressure, but there was "lots of anxiety nonetheless."¹⁷⁷⁹

But what to do, *specifically*? One plan would provide cash to investment banks during the day, in the event that JP Morgan or the Bank of New York became unwilling or unable to take the intraday credit risk in their role as tri-party repo clearing banks. As described in the plan, which was sent to Geithner on July 11, 2008, repo investors or the clearing banks pulling away from providing credit "could be disastrous for the firm and also cast widespread doubt about the instrument as a nearly risk free, liquid overnight investment."¹⁷⁸⁰ But if the Fed provided tri-party repo financing without having a buyer for the firm, then that loan "would be a permanent addition to the government's balance sheet," and Treasury could have "little appetite for that."¹⁷⁸¹

Two other proposals by Lehman – to convert to a bank holding company or grant its Utah bank an exemption to federal law that would allow that bank to finance some of the holding

¹⁷⁷⁷ Email from Karl Mocharko, Federated, to Gail Shanley, Federated, et al. (July 10, 2008) [LBHI FCIC 0128796-0128802]. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4828-9377-7927&open=Y>

¹⁷⁷⁸ FCIC Money Market Fund Survey.

¹⁷⁷⁹ 7/11/08 email from Parkinson, FCIC-155480.

¹⁷⁸⁰ 7/11/08 Memo to Geithner, FCIC-155485-491; tab 14 to chron on FCIC website.

¹⁷⁸¹ 7/13/08 email thread, FCIC-155504-06.; tab 15 to chron on FCIC website.

company's assets – were rejected.¹⁷⁸² Geithner reportedly told Fuld his proposal for Lehman to become a bank holding company was “gimmicky” and “[could not] solve a liquidity/capital problem...”¹⁷⁸³

Another plan would follow the Bear Stearns model, in which the New York Fed had extended a \$30 billion loan to a new special-purpose vehicle that had then acquired Bear Stearns's illiquid assets.¹⁷⁸⁴ Dudley proposed that \$60 billion of Lehman's assets be held by such a vehicle, financed by \$5 billion of Lehman equity and a \$55 billion loan from the Fed. This would remove the illiquid assets from the market and avert a fire sale that could render Lehman insolvent.^{1785,}

¹⁷⁸⁶

“Playbook for an investment bank failure”

When Dudley floated that idea in July, the need for it was still somewhat speculative. By August, it was not. The Fed and Treasury began to discuss the possibility that Lehman would fail.¹⁷⁸⁷ In an August 8 email, Pat Parkinson, deputy research director at the Federal Reserve Board, described for his colleagues at the Fed and their peers at Treasury a “game plan” that would (1) identify activities of the firm that could have a significant adverse effect on financial markets and the economy if Lehman was liquidated under chapter 11 of the bankruptcy code, (2)

¹⁷⁸² McDade MFR at 17.

¹⁷⁸³ Valukas Report at 1498.

¹⁷⁸⁴ E-mail from Timothy F. Geithner, FRBNY, to William Dudley, FRBNY (July 7, 2008) [FRBNY to Exam. 034332] (quoting and responding to Dudley's proposal).

¹⁷⁸⁵ 7/15/08 email.

¹⁷⁸⁶ Email message from William Dudley to several recipients, including FRBNY President Timothy Geithner and Fed Governors Donald Kohn and Kevin Warsh, July 15, 2008, FCIC-154477, FRB to Exam. 000826.

¹⁷⁸⁷ See 8/8-19/08 email thread at FCIC-123343-47.

gather information to more accurately assess the potential effects of Lehman's failure, and (3) identify actions to mitigate risk for areas where the potential adverse effects were serious.¹⁷⁸⁸

The regulators had focused a great deal of attention on the tri-party repo market since the collapse of Bear. However, they now realized that they did not know nearly enough about the over-the-counter derivatives activities at Lehman and other investment banks. They never sought the needed data and it was not readily available in this non-transparent market.

Investment banks disclosed the total number of the millions of OTC derivative contracts, the total of multi-trillion dollar net exposures of the contracts, and the estimated market value, but—in a market with no regulation demanding such disclosure—they did not publicly report the terms of the contracts or the counterparties so there was no way to know who would be owed how much and when payments would have to be made. But officials were concerned that a request for this kind of information from Lehman would signal concern about Lehman.

Parkinson discovered a standing recommendation from the private-sector Counterparty Risk Management Policy Group to form a “default management group” composed of senior executives of major market participants to work with regulatory authorities to anticipate issues likely to arise in the event of a default of a major counterparty.¹⁷⁸⁹ Parkinson suggested accelerating the formation of this group while being careful not to suggest concerns about any particular market participant. Still, Parkinson's colleagues argued that the work of this group would exacerbate Lehman's problems. On August 15, Parkinson emailed New York Fed officials that he was worried that no sensible game plan could be formulated without more information.

¹⁷⁸⁸ See 8/8-19/08 email thread at FCIC-123343-47. <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4824-5176-0903&open=Y>

¹⁷⁸⁹ “CRMPG” was an acronym for the Counterparty Risk Management Policy Group,” an industry led group of large bank, broker-dealer and investor firms that was formed to discuss best practices and structural risks in the market.

¹⁷⁹⁰ He was informed that New York Fed officials had already met with Lehman to obtain derivative-related information and that the meeting had “caused a stir,” which in turn required assurances that requests for information would not be limited to Lehman.¹⁷⁹¹ But more information was needed.

New York Fed officials were also “very reluctant” to request the master agreements that would shed light on the derivative counterparties of Lehman’s many legal entities, because this request would also send a “huge negative signal.”¹⁷⁹² The formation of the industry group seemed “less provocative,” wrote a New York Fed official, but could still “spook the market.”¹⁷⁹³ Parkinson believed that forming the industry group was necessary but “not without risks.”¹⁷⁹⁴ He also recognized that unraveling the complex dependencies among the many Lehman subsidiaries and the counterparties in their respective deals would keep lawyers and accountants busy for a long time.¹⁷⁹⁵

On August 28, Treasury’s Steve Shafran informed Parkinson that Secretary Paulson agreed that collecting the OTC derivative information for contingency planning purposes was important.¹⁷⁹⁶

¹⁷⁹⁰ See 8/8-19/08 email thread at FCIC-123343-47. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4824-5176-0903&open=Y>

¹⁷⁹¹ See 8/8-19/08 email thread at FCIC-123343-47. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4824-5176-0903&open=Y>

¹⁷⁹² See 8/8-19/08 email thread at FCIC-123343-47. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4824-5176-0903&open=Y>

¹⁷⁹³ See 8/8-19/08 email thread at FCIC-123343-47. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4824-5176-0903&open=Y>

¹⁷⁹⁴ See 8/8-19/08 email thread at FCIC-123343-47. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4824-5176-0903&open=Y>

¹⁷⁹⁵ 8/19/08 email thread, FCIC-156050-054.

¹⁷⁹⁶ 9/05/08 email thread, FCIC-156055-057. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4811-4248-2695&open=Y>

It just had to be done in a way that minimized disruptions or concerns. A week later, on September 5, Parkinson circulated a draft letter that would request the information from Lehman CEO Richard Fuld. Timothy Geithner would ask Gerry Corrigan, a Goldman Sachs executive and former New York Fed President who led the Counterparty Management group, to coordinate the formation of the industry group to study the counterparty problem.¹⁷⁹⁷ In addition, Parkinson, Shafran, and others would create a “playbook for an investment bank failure” that “Secretary [Paulson] had been asking for.”¹⁷⁹⁸ Events during the following week would moot these efforts.

“I just can’t stomach us bailing out Lehman”

On September 4, executives from Lehman Brothers apprised executives at JP Morgan, given their role as Lehman’s main tri-party repo bank, about the third-quarter results that would be publicly announced two weeks later. The \$3.9 billion loss would reflect “significant asset write-downs.”¹⁷⁹⁹ The firm was also considering several steps to bolster capital, including a potential investment by Korean Development Bank, the sale of Lehman’s investment management division (Neuberger Berman), the sale of real estate assets, and the division of the company into a “good bank” and “bad bank” with private equity sponsors. The two investment banks also discussed JP Morgan’s concerns about Lehman’s repo collateral.

On Monday, September 8, over twenty New York Fed officials were notified of a meeting the next morning at 9:00 a.m. “to continue the discussion of near-term options for dealing with a

¹⁷⁹⁷ 9/05/08 email thread, FCIC-156055-057. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4811-4248-2695&open=Y>

¹⁷⁹⁸ 8/28/08-9/5/08 email thread, FCIC-156055-56, tab 26 to chron on FCIC website.

¹⁷⁹⁹ Email from Emil Cornejo, Lehman, to Janet Birney, Lehman, et al. (September 3, 2008) [LBHI FCIC 0133490-0133492]. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4836-1519-8215&open=Y>

failing nonbank.”¹⁸⁰⁰ They were provided a list documenting Lehman’s tri-party repo exposure at roughly \$200 billion. Before its collapse, Bear Stearns’ exposure had been only \$50 to \$80 billion. That math spoke for itself. The documentation further noted that 10 counterparties provided 80% of Lehman’s repo financing, and that intra-day liquidity provided by Lehman’s settlement banks could become a problem. Indeed, JP Morgan, Citigroup and Bank of America had all demanded more margin from Lehman to protect them from their exposures to Lehman, accompanied by the threat that they might “cut off Lehman if they don’t receive it.”¹⁸⁰¹

Throughout the summer Lehman had contacted numerous individuals and entities about a possible investment in the firm but no deal was ever completed. One of the potential investors was the Korean Development Bank which appeared to be the most likely candidate in early September. On Tuesday morning, news that there would be no infusion of funds from the Korean bank shook the market. Lehman had cast a wide net for new capital or a strategic partner throughout the summer and had come up empty. Lehman’s stock plunged 45%, its largest daily decline ever, and closed at \$7.79. Geithner directed his staff to “put together a quick ‘what’s different? what’s the same?’ list about LEH [Lehman] vs BSC [Bear Stearns], as well as about mid-March (then) vs. early Sept (now)” in preparation for his 3:00 p.m. call with Bernanke.¹⁸⁰² JP Morgan CEO Jamie Dimon, President Steven Black, and Chief Risk Officer Barry Zubrow met with Treasury Secretary Paulson and his staff, although Zubrow told the FCIC that he did not recall any discussion about Lehman at that meeting. At 10:14 a.m., the Fed’s Pat Parkinson emailed Treasury’s Steve Shafran about his concern that Lehman would announce further losses

¹⁸⁰⁰ 9/8/08 email thread, FCIC-155639-642.

¹⁸⁰¹ 9/8-9/9 email thread, FCIC-155639-47 at 47; also tab 29 to Lehman chron on FCIC website.

¹⁸⁰² 9/8-9/9 email thread, FCIC-155637-42 at 39.

the next week, might not be successful raising new equity, and that even though Lehman's liquidity position was not as bad as Bear's, Lehman was still vulnerable to a loss of confidence.¹⁸⁰³ Such circumstances might put pressure on the government to provide assistance to Lehman to prevent its failure.

At 5:00 p.m., Paulson convened a call with Cox, Geithner, Bernanke and Treasury staff "to deal with a possible Lehman bankruptcy."¹⁸⁰⁴ At 5:20 p.m., Treasury chief of staff Jim Wilkinson emailed Michelle Davis, the assistant secretary for public affairs at Treasury, to express his candid distaste for any possibility of government assistance: "We need to talk...I just can't stomach us bailing out Lehman... Will be horrible in the press don't u think."¹⁸⁰⁵

That same day—Tuesday—CEO Fuld agreed that Lehman would post \$3.6 billion of additional collateral to JP Morgan. As it turned out, the Lehman bankruptcy estate would claim that this action had been prompted by JP Morgan's improper threat to withhold intra-day funding in the repo market, if the additional collateral was not posted. Barry Zubrow told the FCIC that the primary impetus for the collateral request was his firm's growing derivative exposure to Lehman.¹⁸⁰⁶ Steven Black told the FCIC that he had requested \$5 billion in collateral and that

¹⁸⁰³ Email from Pat Parkinson, Federal Reserve Board, to Steve Shafran, Treasury (September 9, 2008) [UST-FCIC 0029680]. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4820-4214-0679&open=Y>

¹⁸⁰⁴ Henry Paulson, On the Brink, at 178; FCIC-154564.

¹⁸⁰⁵ Email from Jim Wilkinson, Treasury, to Michele Davis, Treasury (September 9, 2008) [UST-FCIC 0029964]. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4820-4214-0679&open=Y>

¹⁸⁰⁶ Zubrow MFR at 14. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4819-7085-2871&open=Y>

Lehman had agreed to post \$3.6 billion.¹⁸⁰⁷ Black said he did not believe that the request put undue pressure on Lehman.

On Tuesday night, executives of the two firms met again to discuss options for raising capital at Lehman's request. The JP Morgan group was not impressed. "[Lehman] sent the Junior Varsity," JP Morgan executives reported to Black.¹⁸⁰⁸ "They have no proposal and are looking to us for ideas/credit line to bridge them to the first quarter when they intend to split into good bank/bad bank."¹⁸⁰⁹ Black responded, "[L]et's give them an order for the same drugs they have apparently been taking to think we would do something like that."¹⁸¹⁰ The Lehman bankruptcy estate has a different view of the meeting. It claims that Black agreed to send over a JP Morgan due diligence team, following Jamie Dimon's suggestion that his firm might be willing to purchase Lehman preferred stock. Instead, JP Morgan sent over senior risk managers to probe into Lehman's confidential records and plans.

Later that night, JP Morgan demanded that Lehman execute amended agreements related to its tri-party repo services before Lehman preannounced its third quarter earnings, scheduled to be disclosed at 7:30 the next morning. The amendments required Lehman to provide additional guarantees, increased Lehman's potential liability, and gave JP Morgan additional control over Lehman bank accounts. Again, the Lehman bankruptcy estate argues that Lehman executed the

¹⁸⁰⁷ Steven Black Written Responses at 6. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4845-9898-2407&open=Y>

¹⁸⁰⁸ E-mail from Jane Buyers-Russo, JP Morgan, to Tim Main, JPMorgan (Sept. 9, 2008) [JPM-2004 0006361]. [Valukas FN 4203].

¹⁸⁰⁹ E-mail from John J. Hogan, JP Morgan, to Steven D. Black, JPMorgan (Sept. 9, 2008) [JPM-2004 0006362]. [Valukas FN 4204]

¹⁸¹⁰ E-mail from John J. Hogan, JP Morgan, to Steven D. Black, JPMorgan (Sept. 9, 2008) [JPM-2004 0006362]. [Valukas FN 4204]

agreements because JP Morgan executives led Lehman to believe that their bank would refuse to extend intra-day credit if the agreements were not executed. JP Morgan denies the charge. Steven Black told the FCIC, “JPMC never told Lehman that it would stop extending credit and clearing if the September Agreements were not executed before the markets opened on [Wednesday,] September 10, 2008.”¹⁸¹¹

Before the market opened on Wednesday, Lehman preannounced its \$3.9 billion third-quarter loss, including a \$5.6 billion write-down. Four hours after the 7:30 a.m. preannouncement, Treasury Assistant Secretary for Federal Finance Matthew Rutherford emailed colleagues that several large money funds were concerned and had reduced their exposure to Lehman. Rutherford said that there was not yet “a wholesale pull back of [repo] lines.”¹⁸¹²

“Close to the end game”

Geithner “seemed to think that Lehman would survive the weekend but [might] need some PDCF help Thursday or Friday.”¹⁸¹³ At the Federal Reserve, working groups were directed to “spend the next few hours fleshing out how a Fed-assisted BofA acquisition transaction might look, how a private consortium of preferred equity investors transaction might look, and how a Fed takeout of tri-party repo lenders would look.”^{1814 1815} That day, New York Fed Senior Vice President Patricia Mosser circulated her opinion on Bill Dudley’s request for “thoughts on how

¹⁸¹¹ Steven Black Written Responses at 6. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4845-9898-2407&open=Y>

¹⁸¹² 9/10/08 email, UST-FCIC 0029201.

¹⁸¹³ 09/10/08 email, FCIC-154786

¹⁸¹⁴ Email from Mark VanDerWeide, Federal Reserve, to Scott Alvarez, Federal Reserve (September 10, 2008) [FCIC-154786]. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4828-3763-6871&open=Y>

¹⁸¹⁵ 09/10/08 email, FCIC-154786

to resolve Lehman.”¹⁸¹⁶ She laid out three options: (1) find buyer at any price, (2) wind down Lehman’s affairs, and (3) bankruptcy. Regarding option one (find a buyer), Mosser said that it “should be done in a way that requires minimal temporary support. No more Maiden Lane LLCs and no equity position by Fed. Moral hazard and reputation cost is too high. If the Fed agrees to another equity investment, it signals that everything we did in March in terms of temporary liquidity backstops is useless. Horrible precedent; in the long run MUCH worse than option 3.”¹⁸¹⁷ Option 3, bankruptcy, would be a “mess on every level, but fixes the moral hazard problem.”¹⁸¹⁸

Wednesday night, a New York Fed official circulated a “Liquidation Consortium” game plan to colleagues. The plan was to convene in one room senior-level representatives of Lehman’s counterparties in the tri-party repo, credit-default swap, and over-the-counter derivatives markets—everyone who would be most adversely affected if Lehman failed – and to have them explore possible joint funding mechanisms to avert such a failure. Secretary Paulson would tell the participants they had until the opening of business in Asia the following Monday morning (Sunday night, New York time) to come up with a credible plan. Beforehand, the Fed would determine the maximum amount of assistance it might provide, but its willingness to provide any

¹⁸¹⁶ 9/10/08 email from Patricia Mosser (FRBNY) to Dudley (FRBNY), etc., re “thoughts on Lehman,” FRBNY to Exam. 047337-047339.

¹⁸¹⁷ 9/10/08 email from Patricia Mosser (FRBNY) to Dudley (FRBNY), etc., re “thoughts on Lehman,” FRBNY to Exam. 047337-047339. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4838-2733-2359&open=Y>

¹⁸¹⁸ 9/10/08 email from Patricia Mosser (FRBNY) to Dudley (FRBNY), etc., re “thoughts on Lehman,” FRBNY to Exam. 047337-047339. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4838-2733-2359&open=Y>

assistance at all would *not* be divulged to the consortium. Indeed, Paulson would tell the consortium that the government was willing to let Lehman fail.¹⁸¹⁹

On Thursday, an email from Susan McCabe, [titlek], to Bill Dudley and others, time-stamped 8:26 am, set the tone for the day: “It is not pretty, this is getting pretty scary and ugly again, Analysts, WSJ, CNBC all piling on talking about disappointment with LEH plan (wish they would stop)...They have much bigger counterparty risk than Bear did, especially in derivatives market, so the market is getting very spooked, nervous. Also have AIG, Wamu concerns. This is just spinning out of control again. Just fyi, this is shaping up as going to be a rough day.”¹⁸²⁰

Two hours later, Hayley Boesky, a senior New York Fed official, emailed colleagues that Lehman’s trades with counterparties were “extremely low” and its hedge fund customers were reducing their account balances. This was not yet a “full blown run,” but the firm’s “employees and clients all understand this is close to the end game.”¹⁸²¹ Bernanke was informed that “ratings downgrades could come quickly unless there was swift progress towards shoring up Lehman’s capital base.”¹⁸²² Such downgrades could prompt billions of dollars in collateral calls from derivative counterparties. An acquisition by a deep-pocketed buyer might be the most viable option, but JP Morgan and Bank of America might not have the capacity, given their recent acquisitions of Bear Stearns and Countrywide, respectively. But if Lehman failed, “it

¹⁸¹⁹ 9/10/08 email with attached liquidation consortium outline, FCIC-154768-773; tab 37 to chron on FCIC website.

¹⁸²⁰ Email from Susan McCabe, Goldman, to William Dudley, FRBNY, et al. (September 11, 2008) [FCIC-154785]. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4829-2980-9671&open=Y>

¹⁸²¹ Email from Hayley Boesky, FRBNY, to William Dudley, FRBNY, et al. (September 11, 2008) [UST-FCIC 0029573]. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4820-4214-0679&open=Y>

¹⁸²² Email from Rita Proctor, Federal Reserve, to Ben Bernanke, Federal Reserve (September 11, 2008) [FCIC-154787-154789]. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4829-2980-9671&open=Y>

would be a much more complex proposition to unwind their positions than it would have been to unwind the positions held by Bear Stearns,” because they were “nearly twice the size of Bear Stearns.”¹⁸²³

Systemic implications were noted – the increasing cost of protection of Merrill and Morgan debt in the credit default swap market indicated a Lehman failure could also cause those firms to default.

Former Bank of America CEO Ken Lewis told the FCIC that Treasury Secretary Paulson had called him on Wednesday, September 10, and asked him to take another look at Lehman as a possible acquisition, assuring Lewis that Fuld was ready to deal. Paulson and Geithner had arranged for Fuld and Lewis to discuss a possible acquisition in July but Fuld had not been interested in selling the entire firm at that time and no deal was struck. As a result, Lewis told Paulson that he was concerned that Fuld would not want to sell the entire company or not be willing to sell at a realistic price. Still, a team of Bank of America executives began reviewing Lehman’s books, and the next day, Fuld sounded optimistic about a deal. But, Bank of America determined that Lehman’s assets were overvalued by \$60 to \$70 billion, and Lewis told Paulson there would be no deal without government assistance. Undeterred, Paulson told Lewis—as he relayed events to the FCIC—to put on his “imagination cap” and try to figure out a way to do a deal. That kept the Bank of America executives working, but on September 12, Lewis called Paulson to repeat his assessment—no government support, no deal. Apparently Fuld had been kept out of the loop, as Lewis failed to return several messages from the Lehman CEO. Fuld

¹⁸²³ Email from Rita Proctor, Federal Reserve, to Ben Bernanke, Federal Reserve (September 11, 2008) [FCIC-154787-154789]. <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4829-2980-9671&open=Y>

starting calling Lewis at home. Lewis' wife told Fuld that Lewis would not come to the phone and to stop calling.¹⁸²⁴

Some market participants believed government action was required. At 10:46 a.m., Hayley Boesky forwarded an email from hedge fund manager Louis Bacon suggesting that the New York Fed could “attempt to stabilize or support the LEH situation by lending to LEH through the PDCF as a backstop until LEH works out its situation” or “facilitate a transaction by using the Maiden Lane structure that was set up for JP M/BSC in some way.”¹⁸²⁵ While Bacon proposed these and other suggestions for stabilizing the markets overall, he noted that “none of the above will fix the fundamental problem, which is too many bad assets that need to get off too many balance sheets.”¹⁸²⁶ Therefore, he wrote, “[I]t is time for the government to start seriously considering... some sort of vehicle, either prefunded by the government or backstopped with government money, that would purchase assets for once & for all off bank balance sheets.”¹⁸²⁷

At 1:40 p.m., the outline of a plan to create a “Lehman Default Management Group” was circulated. As Fed and Treasury officials had previously discussed, these Lehman counterparties and creditors would make plans in the event of Lehman's bankruptcy.¹⁸²⁸ They would agree to hold off on fully exercising their rights to close out their trades with Lehman; instead, they would establish a process to “net down” – meaning reduce - all exposures using a common

¹⁸²⁴ Lewis MFR at ___.

¹⁸²⁵ 09/11/08 email, UST-FCIC 0029425-428.

¹⁸²⁶ 09/11/08 email, UST-FCIC 0029425-428.

¹⁸²⁷ 09/11/08 email, UST-FCIC 0029425-428.

¹⁸²⁸ 09/11/08 email, FCIC-154818- 820.

valuation method.¹⁸²⁹ “Get ready for a Lehman bailout” was the message to Treasury’s Nason in an unrelated email a few minutes later.¹⁸³⁰

A little before midnight on Thursday, the New York Fed’s Boesky notified colleagues that panicked hedge funds had called to say that they were “expecting a full blown recession” and that there was a “full expectation that Leh goes, wamu and then ML.”¹⁸³¹ (Wamu: Washington Mutual. ML: Merrill Lynch.) They were “ALL begging, pleading for a large scale solution which spans beyond just LEH.”¹⁸³² Boesky compared the level of panic to Bear Stearns – “On a scale of 1 to 10, where 10 is Bear-Stearns-week-panic, I would put sentiment today at a 12.”¹⁸³³

At almost the same time, JP Morgan demanded that Lehman post another \$5 billion in cash “by the opening of business tomorrow in New York” or JP Morgan would “exercise our right to decline to extend credit to you...”¹⁸³⁴ JP Morgan CEO Dimon, President Black and CRO Zubrow had first made the request in a phone call earlier that evening to Lehman CEO Fuld, CFO Ian Lowitt and Treasurer Paolo Tonucci.¹⁸³⁵ Tonucci told the FCIC that he told the JP Morgan executives on the call that this was too much cash to mobilize. What was the justification for the demand? According to Tonucci, Dimon said the reasons for the demand

¹⁸²⁹ 09/11/08 email, FCIC-154818- 820.

¹⁸³⁰ 9/11/08 email; UST-FCIC 0029510; tab 43 to chron on FCIC website.

¹⁸³¹ 09/11/08 email, UST-FCIC 0029425.

¹⁸³² 09/11/08 email, UST-FCIC 0029425.

¹⁸³³ 9/11/08 – 9/12/08 email thread, UST-FCIC 0029425-28; tab 45 to chron on FCIC website.

¹⁸³⁴ E-mail from Jane Buyers-Russo, JPMorgan, to Paolo R. Tonucci, Lehman (Sept. 11, 2008)

[JPM-2004 0005411] (September 11, 2008 Notice attachment).

¹⁸³⁵ E-mail from Jane Buyers-Russo, JPMorgan, to Bryn Thomas, JPMorgan, et al. (Sept. 12, 2008) [JPM-2004 0050095] (“Jamie Dimon and Steve Black spoke with Fuld and Ian Lowitt last night.”).

didn't matter and that the problems Lehman had coming up with the money was not JP Morgan's problem. "They just wanted the cash. We made the point that it's too much cash to mobilize. There was no give on that. Again, they said 'that's not our problem, we just want the cash.'" ¹⁸³⁶ When Tonucci asked what's to keep you from asking for \$10 billion tomorrow, Dimon responded, "nothing, maybe we will." [cite]

Under normal circumstances, Tonucci would not have tolerated such treatment, but circumstances were far from normal. "JPM as 'clearing bank' continues to ask for more cash collateral. If we don't provide the cash, they refuse to clear, we fail..." was the message circulated in an email to Lehman executives on Friday. ¹⁸³⁷ So Lehman "delivered the \$5 billion in cash only by pulling virtually every unencumbered asset it could deliver." ¹⁸³⁸

JP Morgan's Black and Zubrow saw it differently. They told the FCIC that the previously posted \$3.6 billion of collateral by Lehman was "inappropriate" because it was "illiquid" and "could not be reasonably valued." ¹⁸³⁹ Moreover, they said the potential collateral shortfall was greater than \$5 billion. Lehman's CEO Richard Fuld told the FCIC he agreed to post the \$5 billion because JP Morgan said it would be returned to Lehman at the close of business the following day. ¹⁸⁴⁰

¹⁸³⁶ Paolo Tonucci MFR at ___.

¹⁸³⁷ Lehman Estate Complaint against JPMorgan, at 68 ("[O]n September 12, 2008, LBHI senior officers circulated via e-mail a 'Back-Up Contingency Plan,' wherein it was noted, 'JPM as 'clearing bank' continues to ask for more cash collateral. If we don't provide the cash, they refuse to clear, we fail'").

¹⁸³⁸ Lehman Estate Complaint against JPMorgan, at 71.

¹⁸³⁹ 08/27/10 Letter from counsel of Steven Black to Chris Sefer, par. 22; Written Statement of Barry Zubrow Before the Financial Crisis Inquiry Commission, Sept. 1, 2010, at 7.

¹⁸⁴⁰ Richard Fuld 8/24/10, MFR at 5.

The Lehman bankruptcy estate made the same allegation.¹⁸⁴¹ But the \$5 billion was never returned, despite repeated requests the following day and throughout the weekend.¹⁸⁴² This dispute is now the subject of litigation, with the Lehman bankruptcy estate suing JP Morgan to retrieve the \$5 billion--and the previously posted \$3.6 billion.¹⁸⁴³

Actually allowing Lehman Brothers to go bankrupt? Within the government, sentiments varied. Treasury chief of staff Wilkinson wrote in a Friday morning email that Secretary Paulson was going to New York to “sort through this Lehman mess” and that Wilkinson “can’t imagine a scenario where we put in govt money... we shall see.”¹⁸⁴⁴ That afternoon, Fed governor Kevin Warsh wrote, in response to a colleague’s hope that the Fed would not have to protect some of Lehman’s debt holders, “I hope we don’t protect anything!”¹⁸⁴⁵ An hour later, Fed Vice Chairman Kohn emailed Bernanke and Warsh that he had told the Federal Reserve regional bank presidents that there was a “strong predilection against [Fed/Gov’t involvement beyond liquidity position] by both Treas. and Fed ... but could give no 100% guarantees on what perception of situation would be Sunday evening.”¹⁸⁴⁶

¹⁸⁴¹ Lehman Estate Complaint against JPMorgan, at par. 70.

¹⁸⁴² Lehman Estate Complaint against JPMorgan, at par. 74.

¹⁸⁴³ Lehman Estate Complaint against JPMorgan, at par. 72.

¹⁸⁴⁴ 09/12/08, UST-FCIC 0029418-424.

¹⁸⁴⁵ 09/12/08, FCIC-154863.

¹⁸⁴⁶ 09/12/08, FCIC-154870-871.

On Friday, Federal Chairman Bernanke was taking no chances. He stayed behind in Washington, in case he had to convene the Fed's Board to exercise its emergency lending powers under 13(3) of the Federal Reserve Act.¹⁸⁴⁷

Early Friday evening, Treasury Secretary Paulson summoned the “heads of family” –Harvey Miller’s description of the CEOs from venerable Wall Street firms – to the New York Fed’s headquarters. He told them that a negotiated acquisition of Lehman would likely not occur before the Asian markets opened Monday. Paulson implied that there were two potential buyers: Bank of America and Barclays, although he knew at this point that BofA’s Lewis would not be interested without some \$60 to \$70 billion of government assistance to plug the hole he perceived in Lehman’s balance sheet. The people in the room needed to come up with a realistic set of options to help limit the potential damage to the system. A sudden and disorderly wind down could have broad adverse effects on the capital markets and pose the significant risk of a precipitous drop in asset prices, resulting in collateral calls, reduced liquidity: systemic risk. He could *not* offer the prospect of containing the damage if the executives were unable to fashion an orderly resolution of the current situation, which had been done in 1998 for Long Term Capital Management. He did offer the Fed’s help through regulatory approvals and access to existing lending facilities – consistent with the message to the Fed regional bank presidents relayed by Kohn earlier that day – but made it clear that the Fed would not provide “any form of extraordinary credit support.”¹⁸⁴⁸

¹⁸⁴⁷ Valukas Report at 618 (citing Examiner interview of Bernanke, at 9).

¹⁸⁴⁸ CITE.

As New York Fed general counsel Tom Baxter told the FCIC, Paulson made it clear there would be no government assistance, “not one penny.”¹⁸⁴⁹

H. Rodgin Cohen, a veteran Wall Street lawyer who has represented most of the major banks, including Lehman, told FCIC that the government’s “not one penny” posture was “playing a game of chicken.” Cohen stated, “I don’t know exactly what the government was thinking, but they were playing a game of chicken or poker or whatever. It was said on one occasion that it would be very politically difficult to rescue Lehman. There had been a lot of blowback after Bear Stearns. I believe the government thought that with respect to a game of chicken, it could persuade the private sector to take a big chunk” of Lehman’s liabilities.¹⁸⁵⁰ The Fed’s internal gameplan for the consortium confirmed Cohen’s view: “We should find a maximum number of how much we are willing to finance before the meeting starts, but not divulge our willingness to do so to the Consortium.”¹⁸⁵¹ Moreover, notwithstanding Paulson’s “not one penny” statement, the U.K.’s Chancellor of the Exchequer, Alistair Darling, said Paulson told him that “the FRBNY might be prepared to provide Barclays with regulatory assistance to support a transaction if it was required.”¹⁸⁵²

At that consortium meeting Friday night, Citigroup CEO Vikram Pandit asked if the group was also going to talk about AIG. Timothy Geithner said simply: “Let’s focus on Lehman.”¹⁸⁵³ Yet it

¹⁸⁴⁹ Thomas C. Baxter MFR at 18.

¹⁸⁵⁰ Cohen MFR at 4.

¹⁸⁵¹ 9/11/08 email attaching gameplan, FCIC-154768-773

¹⁸⁵² “Statement of the Financial Services Authority” before the Lehman Bankruptcy Examiner, par. 23.

¹⁸⁵³ Paulson, On the Brink, p. 188.

was hard to focus just on Lehman, as word spread that AIG, the trillion dollar insurance company, was also on the verge of collapse.

“Tell those sons of bitches to unwind”

What would happen if JP Morgan refused to provide intra-day credit for Lehman in the tri-party repo market on Monday morning – assuming Lehman was still in business but hadn’t been rescued? Was some kind of federal intervention necessary to protect the market from the fallout of a sudden default? The Fed had been considering this possibility since the summer. As Pat Parkinson noted, the fundamental problem was that even if Lehman filed for bankruptcy, the SEC would want Lehman’s broker-dealer to live on and would not want the Fed in its position as lender “grabbing tri-party collateral.”¹⁸⁵⁴ In any event, he concluded, “this now looks to me like a godawful mess.”¹⁸⁵⁵ Parkinson told the FCIC staff that Zubrow told him over the weekend that JP Morgan would not unwind Lehman’s repos on Monday if the Fed did not expand the types of collateral that could be financed through the PDCF lending facility.¹⁸⁵⁶ Earlier in the year, Parkinson had said that JP Morgan’s refusal to unwind would be unforgiveable.¹⁸⁵⁷ Now he told Geithner to “tell those sons of bitches to unwind.”¹⁸⁵⁸

By Friday, Bank of America dropped out of the running as a potential acquirer of Lehman Brothers.

¹⁸⁵⁴ 09/12/08 email, FCIC-155903.

¹⁸⁵⁵ 09/12/08 email, FCIC-155903.

¹⁸⁵⁶ Parkinson MFR at ___.

¹⁸⁵⁷ 07/13/08 email, FCIC-155512.

¹⁸⁵⁸ Parkinson MFR at ___.

In fact, it was negotiating an acquisition of Merrill Lynch, whose CEO John Thain told the FCIC that by Saturday morning, the group of executives reviewing Lehman's assets had estimated that they were overvalued by anywhere from \$15 to \$25 billion – an amount he had not believed the consortium executives would be willing to finance.¹⁸⁵⁹ That belief, along with the repeated warning from Paulson and Geithner that there would be no government assistance for Lehman, had made Thain believe that Lehman would fail. In turn, this failure could cause Merrill to fail, and so he had called Ken Lewis, the CEO of Bank of America. The two executives met later on Saturday at Bank of America's New York corporate apartment. After that meeting and subsequent meetings on Sunday, the two agreed that Bank of America would acquire Merrill for \$29 per share, payable in Bank of America stock.

On Saturday afternoon, the *Wall Street Journal* was still reporting that Bank of America might purchase Lehman.¹⁸⁶⁰ Or maybe Barclays would. The paper reported that the question of whether or not the government would provide assistance to a Lehman acquirer remained, even though Treasury and Federal Reserve officials made it clear to participants at the meeting that no government bailout should be expected and even though Bernanke said in April that “the financing we did for Bear Stearns is a one-time event that has never happened before, and I hope never happens again.”¹⁸⁶¹

The same day, Lehman's counsel provided the Fed with a document describing how Lehman's default on its obligations would “cause a cascade of defaults through to the subs which have

¹⁸⁵⁹ John Thain MFR at ___.

¹⁸⁶⁰ “Lehman Deal Could Come Soon As High-Level Talks Continue,” *Wall Street Journal*, Sept. 13, 2008, 5:49 p.m, available at <http://online.wsj.com/article/SB122132019771832253.html>

¹⁸⁶¹ “Lehman Deal Could Come Soon As High-Level Talks Continue,” *Wall Street Journal*, Sept. 13, 2008, 5:49 p.m, available at <http://online.wsj.com/article/SB122132019771832253.html>

large OTC deriv books.”¹⁸⁶² That is, it would trigger defaults in other credit facilities and in OTC derivative contracts and could also make it difficult to roll overnight repo.¹⁸⁶³ Later, Bernanke, Fed governor Kohn, Geithner and other senior Fed officials participated in a conference call to discuss the possibility of going “to Congress for other authorities,” something Geithner planned to “pitch.”¹⁸⁶⁴ [waiting on response from Fed to get additional information]. In addition, that night Fed officials were considering a “tri-party solution structure” that would _____ [waiting on information from the Fed] but Fed general counsel Alvarez cautioned others not to mention it to JPMC because he did not want to “suggest Fed willingness to give JPMC cover to screw L or anyone else.”¹⁸⁶⁵ By Saturday night, it appeared the parade of horrors that would result from a Lehman bankruptcy had been avoided. A deal had been reached. Barclays would purchase Lehman, excluding \$40 to \$50 billion of assets that would be financed by the private consortium (even though the bankers in the consortium estimated those assets were overvalued by \$15 to \$25 billion). Lehman President Bart McDade told the FCIC that on Saturday the private consortium was “vocally negative” about providing any financing for Lehman assets – consistent with what Thain told the FCIC - but by Sunday morning, the consortium agreed to provide financing for the \$40 to \$50 billion of assets Barclays was unwilling to purchase.¹⁸⁶⁶ McDade said that Michael Klein, an advisor to Barclays, had told him that Barclays was willing to purchase Lehman given the private consortium agreement to acquire and finance the \$40 to \$50

¹⁸⁶² 9/13/08 email, FCIC-155917-969.

¹⁸⁶³ 9/13/08 email, FCIC-155917-969.

¹⁸⁶⁴ 9/13/08 email thread, FCIC-154949-51; tab 58 to chron on FCIC website.

¹⁸⁶⁵ 9/13/08 email thread, FCIC-154966-97; tab 61 to chron on FCIC website.

¹⁸⁶⁶ McDade MFR at ___.

billion of assets.¹⁸⁶⁷ New York Fed general counsel Tom Baxter also told the FCIC that by Sunday morning, the private consortium had agreed to provide \$40 to \$50 billion of financing for the assets Barclays was unwilling to purchase and it seemed a deal would be completed.¹⁸⁶⁸

“This doesn’t seem like it is going to end pretty”

But on Sunday, things went terribly wrong. At eight a.m., Barclays CEO John Varley and President Robert Diamond told Paulson, Geithner and Cox that “the FSA had declined to approve the deal.”¹⁸⁶⁹ The issue boiled down to a “guarantee” – the New York Fed required Barclays to guarantee Lehman’s obligations from the sale until the transaction closed, similar to what JP Morgan had done for Bear Stearns in March. Under U.K. law, the guarantee required a Barclays shareholder vote, which could take 30 to 60 days. While the FSA could waive that requirement, the FSA asserted that such a waiver would be unprecedented, that it had not heard about this guarantee until Saturday night, and that Barclays did not really want to take on that obligation anyway: “[Barclays CEO] Varley advised [FSA Chief Executive] Hector Sants in a telephone conversation late that [Saturday] evening that because of the guarantee that the FRB NY was now asking for, it was unlikely that a suitable structure to purchase Lehman could be put in place which would satisfy his Board.”¹⁸⁷⁰

This new development led to heated calls between U.S. and U.K regulators.¹⁸⁷¹ Geithner pleaded with FSA Chairman Callum McCarthy to waive the guarantee, but McCarthy wanted the New

¹⁸⁶⁷ McDade MFR at ___.

¹⁸⁶⁸ Baxter MFR at ___.

¹⁸⁶⁹ Paulson, On the Brink, p. 207.

¹⁸⁷⁰ “Statement of the Financial Services Authority” before the Lehman Bankruptcy Examiner, par. 23.

¹⁸⁷¹ Paulson, On the Brink

York Fed to provide the guarantee instead of Barclays. Otherwise, according to the FSA, “Barclays would have had to provide a (possibly unlimited) guarantee, for an undefined period of time, covering prior and future exposures and liabilities of Lehman that would continue to apply including in respect of all transactions entered into prior to the purchase, even in the event the transaction ultimately failed.”¹⁸⁷²

For Treasury Secretary Henry Paulson, such a guarantee by the Fed was unequivocally out of the question.¹⁸⁷³ The guarantee could have put the Fed on the hook for tens of billions of dollars. If the run on Lehman continued despite the guarantee, Barclays’ shareholders would have rejected the acquisition, and the Fed would be in possession of an insolvent bank.

Tom Baxter told the FCIC that Barclays had known all along that the guarantee was required, because JP Morgan had to provide the same type of guarantee when it acquired Bear Stearns.¹⁸⁷⁴ Indeed, Baxter said he was “stunned” at this development. He believed the real reason Barclays said it could not guarantee Lehman’s obligations was because the U.K. government was uncomfortable with the transaction.¹⁸⁷⁵

Sunday morning, Treasury chief of staff Wilkinson emailed JP Morgan Investment Bank CEO Jes Staley that he was in a meeting with Paulson and Geithner and that things did not look good. He concluded, “[T]his doesn’t seem like it is going to end pretty.”¹⁸⁷⁶ In another note a little more than an hour later, he added that there would be no government assistance: “No way govt

¹⁸⁷² “Statement of the Financial Services Authority” before the Lehman Bankruptcy Examiner, par. 48.

¹⁸⁷³ Paulson MFR [check]

¹⁸⁷⁴ Baxter MFR at ___.

¹⁸⁷⁵ Baxter MFR at ___.

¹⁸⁷⁶ 09/14/08 email, UST-FCIC0029411-0416.

money is coming in...I'm here writing the usg coms plan for orderly unwind ... also just did a call with the WH and usg is united behind no money. No way in hell Paulson could blink now ... we will know more after this ceo mtg this morning but I think we are headed for winddown unless barclays deal gets untangled.”¹⁸⁷⁷

It did not. Henry Paulson tried a last-ditch pitch to his UK counterpart Alistair Darling, without success. Two years after the fact, Darling finally admitted that he vetoed the transaction: "Yeah I did. Imagine if I had said yes to a British bank buying a very large American bank which collapsed the following week.”^[1] Telling a British audience, “Everybody sitting in this room and your children and your grandchildren and their grandchildren would be paying for years to come.” The fact that Bank of America was out of the picture may have played a role in Darling’s decision: “I am not hostile to British banks taking over American banks or foreign banks but at the time of this crisis we knew Lehman was in deep trouble... My first reaction was ‘If this is such a good deal how come no American bank is going to go near it?’ ” So Darling concluded that Barclays taking on the guarantee, which could impact the British economy, was simply out of the question: “I spoke to Hank Paulson and said ‘Look, there’s no way we could allow a British bank to take over the liability of an American bank,’ which in effect meant the British taxpayer was underwriting an American bank.”¹⁸⁷⁸

¹⁸⁷⁷ 09/14/08 email, UST-FCIC0029411-0416.

^[1] “Darling Vetoed Lehman Bros Takeover,” UK Press Association, Oct. 9, 2010, available at <http://www.google.com/hostednews/ukpress/article/ALeqM5iNvKApcyKocLx0ngEQRVeDLy7sw?docId=N0183121286640567452A>

¹⁸⁷⁸ “Darling Vetoed Lehman Bros Takeover,” UK Press Association, Oct. 9, 2010, available at <http://www.google.com/hostednews/ukpress/article/ALeqM5iNvKApcyKocLx0ngEQRVeDLy7sw?docId=N0183121286640567452A>

With that decision in London, Lehman Brothers was, for all practical purposes, dead. As Lehman's counsel, Cohen, told the FCIC, "When Secretary Paulson came out of the meeting with Geithner and Cox, they called Lehman's president and me over and said, 'We have the consortium, but the British government won't do it. He did not want the U.S. cancer to spread to the U.K.'" ¹⁸⁷⁹ In disbelief, Cohen said, "I know somebody in the British government. I asked if I could make a call, and I called to see if we were hearing the right message, and [my friend] said that 'you are and there's nothing that you can do.'" ¹⁸⁸⁰

At around 1:00 p.m., Lehman's team, including President Bart McDade, CFO Ian Lowitt, Head of Principal Investing Alex Kirk, and others, reconvened at Lehman's offices to "digest what was obviously stark news." ¹⁸⁸¹ Upon arrival, they heard that the New York Fed would provide more flexible terms for the PDCF lending facility, including expanding the types of collateral that could be used by borrowers. ¹⁸⁸² Chief Legal Officer Thomas Russo and Kirk told the FCIC that Lehman executives participated in a conference call with Fed officials before deciding that it would be better for them to meet back at the New York Fed. ¹⁸⁸³ McDade, as well as Fuld – who, at this time, was left out of key negotiations and stayed in Lehman's building through the weekend – said this invitation to meet provided some hope. McDade, Kirk, Lowitt and Miller returned to the New York Fed building and met with the Fed's Tom Baxter, Bill Dudley, SEC's Erik Sirri, and others to discuss the expanded PDCF program. ¹⁸⁸⁴ McDade and Kirk said that the

¹⁸⁷⁹ Rodgin Cohen MFR at 7.

¹⁸⁸⁰ Rodgin Cohen MFR at 7.

¹⁸⁸¹ McDade MFR at 11.

¹⁸⁸² McDade MFR at ___.

¹⁸⁸³ Kirk MFR at ___; Russo MFR at ___.

¹⁸⁸⁴ McDade MFR at ___.

government officials – led by Baxter – made it clear they would not permit Lehman to borrow against the expanded types of collateral, as other firms could.¹⁸⁸⁵ The sentiment was clear but the reasons were vague, McDade told the FCIC.¹⁸⁸⁶ He said that the refusal to allow Lehman to provide the expanded types of collateral made the difference on Lehman being able to obtain funding to open for business on Monday.¹⁸⁸⁷

Baxter explained to the FCIC, however, that Lehman’s broker-dealer could borrow against the expanded types of collateral.¹⁸⁸⁸ Just not the holding company. A New York Fed email written at 2:15 pm on that Sunday, September 14, stated that Lehman’s counsel was informed of the expansion of PDCF-eligible collateral but that it would not be available to the broker-dealer if it filed for bankruptcy.¹⁸⁸⁹ The minutes of Lehman’s September 14 Board of Directors meeting reflect that the Fed rejected Lehman’s request for an even broader range of collateral to be eligible for PDCF financing and preferred that Lehman’s holding company – but not the broker-dealer – file bankruptcy and the broker-dealer “be wound down in an orderly fashion.”¹⁸⁹⁰ Warnings of “massive systemic risk” did not change the Fed’s position.¹⁸⁹¹ In a September 14 letter, the New York Fed informed Lehman Senior Vice President Robert Guglielmo that the broker-dealer could finance expanded types of collateral with the PDCF but that letter was not

¹⁸⁸⁵ McDade MFR at __; Kirk MFR at __.

¹⁸⁸⁶ McDade MFR at __.

¹⁸⁸⁷ McDade MFR at __.

¹⁸⁸⁸ Baxter MFR at __.

¹⁸⁸⁹ 10/15/10 letter to Edelberg from Baxter and attached exhibit 6.

¹⁸⁹⁰ 10/15/10 letter to Edelberg from Baxter and attached exhibit 5.

¹⁸⁹¹ 10/15/10 letter to Edelberg from Baxter and attached exhibit 5.

sent until 2:24 a.m. on September 15 – after Lehman had filed for bankruptcy.¹⁸⁹² Later that morning, Fed officials were unclear whether the broker-dealer could access the PDCF, as Mark Van Der Weide asked Fed general counsel Alvarez if he was “ok with the Lehman b/d accessing the PDCF today in light of its parent’s chapter 11 bankruptcy.”¹⁸⁹³ That got cleared up as the Lehman broker-dealer borrowed \$20 to \$28 billion each day over the next three days. [confirm #s]

As Kirk recounted to FCIC, during that Sunday meeting, government officials stepped out for an hour and came back to ask: “are you planning on filing bankruptcy tonight?”¹⁸⁹⁴ A surprised Harvey Miller retorted, “no one in the room was authorized to file the company, only the Board could, and the Board had to be called to a meeting and have a vote. There would be some lag time to put all the papers together to actually file it. There was a practical issue that you couldn’t get it done quickly.”¹⁸⁹⁵ Unmoved, government officials explained that directors of Lehman’s U.K. subsidiary – LBIE – would be personally liable if they did not file for bankruptcy by the opening of business Monday. As Kirk recounted, “[t]hey then told us ‘we would like you to file tonight. It’s the right thing to do, because there’s something else which we can’t tell you that will happen this evening. We would like both events to happen tonight.’”¹⁸⁹⁶ The second event referred to would turn out to be Bank of America’s announced acquisition of Merrill Lynch.

¹⁸⁹² 10/15/10 letter to Edelberg from Baxter and attached exhibits 2 and 8.

¹⁸⁹³ 9/15/08 email, FCIC-155027; tab 71 to chron on FCIC website.

¹⁸⁹⁴ Kirk MFR at 11.

¹⁸⁹⁵ Kirk MFR at 11.

¹⁸⁹⁶ Kirk MFR at 11.

“The only alternative was that Lehman had to fail”

Harvey Miller, Lehman’s bankruptcy counsel, responded that there must be an alternative, because filing for bankruptcy would be “tantamount to a financial Armageddon” because Lehman was a large firm, with operations around the world and more than 900,000 derivative contracts.¹⁸⁹⁷ Lehman had prepared a presentation that argued a Lehman bankruptcy would be catastrophic.¹⁸⁹⁸ It would take at least five years, cost \$8 to \$10 billion, and cause major disruptions in the U.S. and abroad.¹⁸⁹⁹

Baxter told FCIC, “I knew that the consequences were going to be bad; that wasn't an issue. And at one point [Harvey Miller] might have said ‘Armageddon,’ but of course he's going to say that because he's trying to lever the government into reconsidering whether it's going to rescue Lehman. And the answer was, ‘We were beyond that point.’”¹⁹⁰⁰ Baxter added that “Lehman was in denial at that point in time. There was no way they believed that this story ends with a Lehman bankruptcy, that they kept thinking that they were going to be bailed out by the taxpayer of the United States. And I’m not trying to convince you that that belief was a crazy belief because they had seen that happen in the Bear case.”¹⁹⁰¹ Baxter’s mission, however, was to “try to get them to understand that they weren't going to be rescued, and then focus on what their real options were, which were drift into Monday morning with nothing done and then have chaos break out, or alternatively file.”¹⁹⁰² He concluded, “from my point of view, first thing was to convince Harvey

¹⁸⁹⁷ Miller MFR at ___; Kirk told FCIC staff that he thought there were more than 1 million derivative contracts, see Kirk MFR at ___/

¹⁸⁹⁸ McDade MFR at ___.

¹⁸⁹⁹ McDade MFR at ___.

¹⁹⁰⁰ Baxter MFR at 30.

¹⁹⁰¹ Baxter MFR at 29.

¹⁹⁰² Baxter MFR at 29.

that it was far better to file than to go into Monday and have complete pandemonium break out. And then he had to have discussions with the Lehman Board because they had a fiduciary duty to resolve what was in the best interests of the company and its shareholders and other stakeholders.”¹⁹⁰³

McDade told the FCIC that the systemic concerns did not resonate with Baxter and the others; they didn’t seem to believe the predicted repercussions; they felt Lehman was just trying to prevent its own demise.¹⁹⁰⁴

“The only alternative was that Lehman had to fail,” Miller testified to the FCIC.¹⁹⁰⁵ He stated that Baxter would not provide any further details on the government’s plan for the fallout from bankruptcy, but assured him that the situation was under control: three press releases had been prepared for release the following day--Monday.¹⁹⁰⁶ [will briefly summarize releases] Then, Miller told the FCIC, Baxter told the Lehman delegation to leave.¹⁹⁰⁷ “[They] basically threw us out,” Miller said. Defeated, Kirk recounted that Lehman’s team responded along the lines, “we understand, we hear you, we will recommend to the Board to file if it’s the right thing for the country. We left the Fed early that evening and went back to Lehman.” As they left the building, Miller told his colleagues, “ ‘I don’t think they like us.’ ”¹⁹⁰⁸

¹⁹⁰³ Baxter MFR at 30.

¹⁹⁰⁴ McDade MFR at __.

¹⁹⁰⁵ Miller written testimony.

¹⁹⁰⁶ Miller MFR at __.

¹⁹⁰⁷ Miller MFR at __.

¹⁹⁰⁸ Miller MFR at __.

Miller continued: “We went back to the headquarters, and it was pandemonium—it reminded me of the run on the savings & loan in [the 1946 film] *It’s a Wonderful Life*. All of the paparazzi were around. There was a guy there in a Norse god uniform saying ‘Down with Wall Street.’ There was a stream of people coming into the building with suitcases to get their personal belongings because there was a rumor that the building wouldn’t open tomorrow. On the executive floor, people were milling around and the board was still there from the 1:30 meeting. Bart [McDade] filled them in, and the board members were stunned. Henry Kaufman, in particular, was asking “How could this happen in America?”¹⁹⁰⁹

The group informed the Board of Directors that the Barclays deal had fallen apart. The government had instructed the board to file for bankruptcy.¹⁹¹⁰ SEC Chairman Cox called.¹⁹¹¹ With Tom Baxter also on the line, Cox told the board that the situation was serious and required action.¹⁹¹² The board expressly asked Cox if he was directing them to file for bankruptcy. Cox and Baxter conferred for a few minutes, and then replied that the decision was the board’s to make.¹⁹¹³ The board again asked if Cox and Baxter were telling them to file for bankruptcy. Cox and Baxter conferred again, then replied that they believed the government’s position had been made perfectly clear at the meeting earlier in the day.¹⁹¹⁴

¹⁹⁰⁹ Miller MFR at

¹⁹¹⁰ Miller MFR at ___.

¹⁹¹¹ Miller MFR at ___.

¹⁹¹² Miller MFR at ___.

¹⁹¹³ Miller MFR at ___.

¹⁹¹⁴ Miller MFR at ___.

Following that call, McDade advised the board that Lehman would be unable to obtain funding without government assistance. The board voted to file for bankruptcy.¹⁹¹⁵

“There was never any doubt in our minds that [a Lehman bankruptcy] would be a calamity, catastrophe...”

Fed Chairman Bernanke told the FCIC that government officials understood a Lehman bankruptcy would be catastrophic.

We never had any doubt about that. It was going to have huge impacts on funding markets. It would create a huge loss of confidence in other financial firms. It would create pressure on Merrill and Morgan Stanley, if not Goldman, which it eventually did. It would probably bring the short-term money markets into crisis, which we didn't fully anticipate; but, of course, in the end it did bring the commercial paper market and the money market mutual funds under pressure. So there was never any doubt in our minds that it would be a calamity, catastrophe, and that, you know, we should do everything we could to save it.

“What's the connection between Lehman Brothers and General Motors?” he asked rhetorically at the FCIC hearing that focused on the “too-big-to-fail” issue. “Lehman Brothers' failure meant that commercial paper that they used to finance went bad, which meant that the Reserve Fund which held the Lehman commercial paper broke the buck, which meant there was a run in the money market mutual funds, which meant the commercial paper market spiked, which was a problem for General Motors.”

¹⁹¹⁵ Miller MFGR at ___.

“As the financial industry came under stress,” former Treasury Secretary Paulson told the FCIC, “investors pulled back from the market, and when Lehman collapsed, even major industrial corporations found it difficult to sell their paper. The resulting liquidity crunch showed that firms had overly relied on this short term funding and had failed to anticipate how restricted the commercial paper market could become in times of stress.”

The Lehman bankruptcy “was the spark that ignited the simmering economic crisis that began in 2007,” Miller testified to the FCIC.¹⁹¹⁶ He bluntly asserted that, “[t]he bankruptcy of Lehman was a catalyst for systemic consequences throughout the world. It fostered a negative reaction that endangered the viability of the financial system. As a result of failed expectations of the financial markets and others, a major loss of confidence in the financial system occurred.”¹⁹¹⁷

On the day Lehman filed for bankruptcy, the Dow plummeted more than 500 points, dissipating \$700 billion in value from retirement plans, government pension funds and other investment portfolios.]¹⁹¹⁸

By Wednesday, September 17, on the heels of Lehman’s failure and the bailout of AIG on Tuesday, the commercial paper market had contracted to the point of endangering major U.S. corporations’ liquidity. [cite] The viability of the remaining investment banks, such as Morgan Stanley and Goldman Sachs, was in question. [cite] Lehman’s failure pushed the financial world to the precipice: “the turmoil in financial markets intensified and quickly spread from credit and

¹⁹¹⁶ Written Testimony of Harvey R. Miller, Financial Crisis Inquiry Commission, at 11.

¹⁹¹⁷ *Id.* at 14.

¹⁹¹⁸ *Id.* at 18. *See also*, Financial crisis as Dow drops 504 points, About \$700 billion lost in a day; Treasury secretary tries to calm fears over U.S. economy, available at http://www.seattlepi.com/business/379274_meltdown16.html

money markets into the global financial system more broadly . . . With perceptions of counterparty risk rising, the benchmark US investment grade CDX credit default swap index jumped by 42 basis points on September 15 alone, and US high-yield spreads rose 118 basis points. Credit spreads in other major markets increased by similar amounts and continued to move in tandem with U.S. markets throughout the remainder of the period.”¹⁹¹⁹

As for Lehman itself, the bankruptcy affected about 8,000 subsidiaries and affiliates with \$600 billion in assets and liabilities, the firm’s more than 100,000 creditors and approximately 26,000 employees.¹⁹²⁰ Lehman was a party to over [xx] derivatives contracts - relating to approximately 1.7 million transactions.¹⁹²¹ It was a major player and counterparty in the \$57.3 trillion credit-default swap market; its failure triggered default clauses in those contracts, resulting in their termination.¹⁹²² It was also a major participant in hundreds of real estate and loan transactions worth billions of dollars.¹⁹²³ After the parent company filed, another 80 insolvency proceedings in 18 foreign countries followed.¹⁹²⁴ In the main bankruptcy proceeding, 66,000 claims – exceeding \$873 billion – have been filed against Lehman so far.¹⁹²⁵ Lehman’s bankruptcy “represents the largest, most complex, multi-faceted and far-reaching bankruptcy case ever filed

¹⁹¹⁹ I. Fender and J. Gytelberg, *Overview: Global Financial Crisis Spurs Unprecedented Policy Actions*. BIS Quarterly Review, Dec. 2008 at 4.

¹⁹²⁰ Written Testimony of Harvey R. Miller, Financial Crisis Inquiry Commission, at 11.

¹⁹²¹ *Id.* at 13.

¹⁹²² I. Fender and J. Gytelberg, *Overview: Global Financial Crisis Spurs Unprecedented Policy Actions*. BIS Quarterly Review, Dec. 2008 at 6.

¹⁹²³ Written Testimony of Harvey R. Miller, Financial Crisis Inquiry Commission, at 11.

¹⁹²⁴ *Id.* at 12.

¹⁹²⁵ *Cite.*

in the United States.”¹⁹²⁶ The costs of the bankruptcy administration are approaching \$1 billion; as of this writing, the proceeding is expected to last at least another two years.¹⁹²⁷ Lehman’s prediction that the bankruptcy would take five years was probably not that far off, if at all.

The international community placed the blame for all these developments squarely on the United States Government. As former Treasury Secretary Paulson recounts, at the G-7 ministerial meeting just weeks after Lehman collapsed, European ministers were “angry” at U.S. officials for Lehman’s failure and global impact: “Before the meeting both Ben [Bernanke] and [U.S. Treasury Under Secretary for International Affairs] Dave McCormick had warned me that the Europeans were angry about Lehman; many attributed their deepening problems to its failure.... [European Central Bank President Jean-Claude] Trichet, using uncharacteristically forceful language, [] said that U.S. officials had made a terrible mistake in letting Lehman fail, triggering the global financial crisis. Trichet was not alone in his sentiments – other ministers, including Nakagawa and Tremonti, pointed to the problems caused by Lehman in their opening remarks.”¹⁹²⁸

Bernanke stood his ground. In his testimony before the FCIC, Bernanke admitted that the Government’s decision to allow Lehman to fail “was both a legal consideration, [and] also a practical consideration.”¹⁹²⁹ From a legal standpoint, Bernanke explained that “we are not allowed to lend without a reasonable expectation of repayment. The loan has to be secured to the

¹⁹²⁶ *Cite.*

¹⁹²⁷ *Id.* at 15.

¹⁹²⁸ Henry M. Paulson, On the Brink, at p. 348.

¹⁹²⁹ FCIC Hearing on Too Big to Fail, September 2, 2010, available at <http://www.fcic.gov/hearings/pdfs/2010-0902-Transcript.pdf>

satisfaction of the Reserve Bank. Remember, this was before TARP. We had no ability to inject capital or to make guarantees.”¹⁹³⁰ A Sunday afternoon email from Bernanke to Fed Governor Warsh indicated that more than \$12 billion in capital assistance would have been needed to prevent Lehman’s failure – “In case I am asked: How much capital injection would have been needed to keep LEH alive as a going concern? I gather \$12B or so from the private guys together with Fed liquidity support was not enough.”¹⁹³¹

Although section 13(3) of the Federal Reserve Act allowed the Fed to extend emergency support to banks “in unusual and exigent circumstances,” practical considerations were also at play.¹⁹³² Specifically, Bernanke explained that Lehman had insufficient collateral and the Fed would have otherwise lent into a run: “[O]n Sunday night of that weekend, what was told to me was that—and I have every reason to believe—was that there was a run proceeding on Lehman, that is people were essentially demanding liquidity from Lehman; that Lehman did not have enough collateral to allow the Fed to lend it enough to meet that run.” Sure that “If we lent the money to Lehman, all that would happen would be that the run [on Lehman] would succeed, because it wouldn’t be able to meet the demands, the firm would fail, and not only would we be unsuccessful but we would have saddled the taxpayer with tens of billions of dollars of losses.” The Fed had no choice but to stand by as Lehman went under, Bernanke insisted.

¹⁹³⁰ 09/02/10 FCIC Hearing Transcript, at 22-23.

¹⁹³¹ 9/14/08 email, FCIC-155000; tab 67 to chron on FCIC website.

¹⁹³² 12 USC 343. As added by act of July 21, 1932 (47 Stat. 715); and amended by acts of Aug. 23, 1935 (49 Stat. 714) and Dec. 19, 1991 (105 Stat. 2386) (“In unusual and exigent circumstances, the Board of Governors of the Federal Reserve System, by the affirmative vote of not less than five members, may authorize any Federal reserve bank, during such periods as the said board may determine, at rates established in accordance with the provisions of section 14, subdivision (d), of this Act, to discount for any individual, partnership, or corporation, notes, drafts, and bills of exchange when such notes, drafts, and bills of exchange are indorsed or otherwise secured to the satisfaction of the Federal Reserve bank....”).

As Bernanke acknowledged to the FCIC, however, his explanation for not providing assistance to Lehman was not the explanation he provided days after the bankruptcy – that he believed the market was prepared for the event.¹⁹³³ In addition, while the Federal Reserve subsequently asserted that it did not have the legal ability to save Lehman, the authority to lend under section 13(3) is very broad. It does not require loans to be fully secured, but rather that they be “secured to the satisfaction of the Federal Reserve Bank.”¹⁹³⁴ Indeed, in March 2009, Federal Reserve General Counsel Alvarez concluded that requiring loans under 13(3) to be fully secured would “undermine the very purpose of section 13(3), which was to make credit available in unusual and exigent circumstances to help restore economic activity.”¹⁹³⁵

To Fuld and others, 13(3) provided a green light for government support. Although many ideas were discussed and dismissed by Fed officials in the chaotic days leading up to bankruptcy, the Fed did not furnish any written evidence for its determination that Lehman did not have sufficient collateral. Indeed, Fuld asserted to FCIC that “Lehman had adequate financeable collateral. [O]n September 12, the Friday night preceding Lehman’s bankruptcy filing, Lehman financed itself and did not need access to the Fed’s discount window. In addition, on that Monday, September 15, the day of the filing, Lehman Brothers Inc., the U.S. broker-dealer subsidiary, borrowed about \$50 billion from the New York Fed by pledging acceptable collateral. The Fed was paid back 100 cents on the dollar.” Fuld added, “What Lehman needed on that Sunday night was a liquidity bridge. We had the capital. Along with its excess available collateral, Lehman also could have used whole businesses as collateral -- such as its Neuberger

¹⁹³³ 9/23/08 Bernanke Testimony; 7/1/10 Hearing Transcript at ___ .

¹⁹³⁴ 12 U.S.C. § 343.

¹⁹³⁵ 3/9/09 Alvarez Memo, FCIC-133533-539.

Berman subsidiary -- as did AIG some two days later.” Fuld also rejected assertions about Lehman’s capital hole. He told FCIC, “As of August 31, 2008, two weeks prior to the bankruptcy filing, Lehman had...\$26.7 billion in equity capital. Positive equity of \$26.7 billion is very different from the negative \$30 or \$60 billion ‘holes’ claimed by some.” Moreover, the bank holding company status afforded Goldman Sachs and Morgan Stanley the week after Lehman’s bankruptcy would have saved Lehman, Fuld insisted.

The Fed chief discounted any bias against Lehman Brothers. The only real resolution short of bankruptcy had been to find a buyer: Said the Chairman, “When the potential buyers were unable to carry through--in the case of Bank of America, because they changed their minds and decided they wanted to buy Merrill instead; in the case of Barclays, because they didn’t really have the financial strength to do it and their regulator was not willing to go along-- we essentially had no choice and had to let it fail.”¹⁹³⁶

John Thain, who had taken over as CEO of Merrill Lynch in December 2007, following the dismissal of Stanley O’Neal and the massive losses that would also put this brand-name company on shaky footing, had made it through the Lehman weekend by negotiating a life-saving acquisition by Bank of America, once a possible suitor for Lehman. Thain blamed the failure to bail out Lehman on politicians and regulators who feared the political consequences of rescuing Lehman. “There was a tremendous amount of criticism of what was done with Bear Stearns so that JP Morgan would buy them,” Thain told the FCIC. “There was a criticism of bailing out Wall Street. It was a combination of political unwillingness to bail out Wall Street and a belief that there needed to be a reinforcement of moral hazard. There was never a

¹⁹³⁶ FCIC Transcript (Closed Session) of Ben Bernanke, Nov. 17, 2009, at 25.

discussion about the legal ability of the Fed to do this... There was never discussion to the best of my recollection that they couldn't. It was only that they wouldn't."¹⁹³⁷

Thain also told the FCIC that it was his opinion that "allowing Lehman to go bankrupt was the single biggest mistake of the whole financial crisis." He wished that he and the other Wall Street executives had tried harder to convince Paulson and Geithner to prevent Lehman's failure.

As I think about what I would do differently after that weekend would be to grab them and shake them that they can't let this happen. They were not very much in the mood to listen. They were not willing to listen to the idea that there had to be government support. The group of us should have shaken them and said that they could not do this, but we didn't and they were not willing to entertain this discussion.

FCIC staff asked Thain if he and the other executives explicitly said to Paulson, Geithner or anyone else, "You can't let this happen." Thain replied, "We didn't do it strongly enough. We said to them this will be bad, but it wasn't that 'you *have* to help.'"¹⁹³⁸

Another prominent member of that select group, JPMorgan CEO Jamie Dimon, was less fatalistic. He told FCIC, "I didn't think it was so bad... I hate to say that, but I thought it was almost the same on Monday if the government had saved Lehman, you still would have had terrible things happen. AIG was going to have those problems. You would still have the runs on the other banks. Whether Lehman itself got saved or not... the crisis would have unfolded along a different path, but it probably would have unfolded."¹⁹³⁹

¹⁹³⁷ John Thain MFR at ___.

¹⁹³⁸ Thain MFR at ___.

¹⁹³⁹ Dimon MFR at ___.

Fed General Counsel Alvarez and New York Fed General Counsel Baxter told the FCIC that there would have been questions either way “I think that if the Federal Reserve had lent to Lehman that Monday in a way that some people think – without adequate collateral and without other security to ensure repayment – this hearing and other hearings would have only been about how we wasted the taxpayers’ money.”¹⁹⁴⁰

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¹⁹⁴⁰ 9/1/10 FCIC Hearing transcript at 67; 10/15/10 Baxter letter to FCIC at 6.

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CHAPTER CONCLUSIONS HERE

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Part III, Chapter 8. The Failure and Bailout of AIG

Nine billion dollars cash is a lot of money, but as AIG executives and the Board looked over their balance sheet and pondered recent developments in the markets, they were almost certain that \$9 billion of liquidity at the holding company could not keep the company alive the following week. The AIG corporate empire could boast of nearly \$1 trillion in assets, but most of the *liquid* assets, including cash, were held by regulated insurance subsidiaries whose regulators did not allow the cash to flow freely “up” to the holding company, much less to its troubled subsidiaries such as AIG Financial Products. So the \$9 billion cash was all there was. The numbers on the other side of the balance sheet – the company’s liabilities, in particular those coming due in the near future – were much larger.

It was Friday, September 12, 2008. Earlier that day, AIG had been forced to retire \$1.4 billion of \$2.5 billion in maturing AIG commercial paper, because traditional investors – for example, the money market funds – no longer wanted to hold even short-term unsecured exposure to the risks posed by AIG. The following week, more than \$15 billion in commercial paper would come due. On another front, the repo lenders, who, unlike the unsecured holders of AIG commercial paper, had the comfort of holding collateral for their loans to AIG (\$9.7 billion in mostly overnight funding) were nonetheless becoming skittish, due to the perceived weakness of the company and the quality of most of the collateral for their loans: mortgage-related securities.

And on a third front, AIG had already put up billions of dollars in collateral to its credit default swap counterparties. These collateral calls had begun in July of 2007 with Goldman’s demand for \$1.8 billion. By June of 2008, the calls from Goldman and other counterparties including Societe Generale, Barclays, Merrill Lynch, and others had risen to \$15.7 billion, and AIG had posted a total of \$13.2 billion. By September 12, the calls increased to \$23.4 billion, and AIG’s collateral payments reached \$18.9 billion - including \$7.6 billion to Goldman - and it looked very likely that AIG would need to post tens of billions of dollars more in the near future. That same day, September 12, S&P had put the

company on “negative watch” and Moody’s had warned that it was likely to downgrade AIG's AA3 rating on the following Monday. AIG estimated that a downgrade by one rating agency would result in an additional \$10 billion in collateral calls. It would also trigger liquidity puts that AIG had written on commercial paper. That would require posting another \$4 to \$5 billion in collateral; if both agencies issued downgrades, yet another \$3 billion.

In short, AIG’s Financial Products subsidiary almost certainly needed to come up with at least \$17 billion in additional collateral very soon¹⁹⁴¹—half within two days, the other half within 10 days—and billions more to retire some or most of the commercial paper coming due the following week. The parent company’s \$9 billion would not be nearly enough. The money just wasn’t there.

Finally, on a fourth front, AIG’s securities lending business increasingly had become a source of financial strain. As a lender of securities, AIG received cash from the borrowers of these securities. Historically, securities lending counterparties provided AIG cash equal to between 100% and 102% of the market value of the securities they borrowed. But as the AIG subsidiary came to be viewed as a less reliable counterparty, it began to offer below-market terms to the borrowers – sometimes accepting cash that was only 90 percent of the market value of the securities borrowed. Furthermore, AIG had invested this cash in mortgage-related assets, which had largely declined in value. By the end of June 2008, AIG had taken \$74 billion in cash collateral and invested it in mortgage-related securities that had declined in value to \$59.5 billion.¹⁹⁴² By the end of August 2008, those securities had fallen even further in value and AIG, the parent company, had to provide \$3.3 billion to the struggling securities lending subsidiary. But this infusion was a far cry from the \$24 billion that counterparties were now demanding to make up for shortfall between the cash collateral that had been provided and the diminished value of the securities in which the subsidiary had invested.

¹⁹⁴¹ FCIC-AIG0021217 (notes of 9/12 Fed meeting)

¹⁹⁴² AIG 2Q08 Form 10-Q.

That Friday, AIG's Board dispatched a team led by Vice Chairman Jacob Frenkel, a leading economist in the United States and former Governor of the Bank of Israel, to meet with top officials at the New York Fed. The meeting included AIG Comptroller David Herzog, AIG Treasurer Bob Gender, AIG CFO Steve Bensinger and Alan Pryor, the EVP of AIG's Financial Services Division. As it happened, elsewhere in the building Treasury Secretary Paulson and New York Fed President Geithner were telling a consortium of Wall Street bankers that they had until the end of the weekend to work out a solution to prevent Lehman's bankruptcy and that there would be no government assistance. And now came this emergency visit on behalf of another famous but beleaguered American institution. "Bottom line," the New York Fed reported in its notes of that meeting, "[AIG's] Treasurer estimates that parent and [Financial Products] have 5-10 days before they are out of liquidity."¹⁹⁴³

AIG posed a simple question to the Fed: How does one go about obtaining an emergency loan under the Federal Reserve's 13(3) authority? Without such extraordinary support, there was no way this conglomerate with \$1 *trillion* in assets was going to make it through the following week.

"Current liquidity position is precarious"

The visit by AIG to the New York Fed may have been an emergency, but it should not have been a surprise. In March, as we have described, the Federal Reserve Bank had set up the Primary Dealer Credit Facility, in effect providing access to the Fed's discount window – traditionally a benefit available only to depository institutions – to investment banks that qualified as primary dealers (banks or securities broker-dealers that trade in government securities with the Fed); AIG was not a primary dealer. Over the summer, New York Fed officials had begun considering opening the discount window to an even broader set of large institutions that were systemically important, due to their size or significant role in key markets, such as commercial paper. That analysis led the regulators to look closely at two trillion-dollar holding companies, AIG and GE Capital. Both were large participants in the commercial paper market:

¹⁹⁴³ Federal Reserve Bank of New York, *AIG Meeting Notes*, September 12, 2008. FCIC-AIG0021217.

AIG with \$20 billion in outstanding commercial paper, GE Capital with \$90 billion. In August, the New York Fed set up an internal team to study how the two companies funded themselves and how they evaluated their liquidity risk.

The New York Fed had no prior supervisory or credit relationship with either company. Both companies owned small thrift subsidiaries with insured deposits. Owning those thrifts made the entire holding company subject to supervision by the Office of Thrift Supervision (OTS). That supervision, which was considered by the European Council to be equivalent to the SEC's consolidated supervision of investment banks and the Fed's supervision of bank holding companies, allowed AIG, GE, and other large U.S. corporations with small thrifts to continue to do business in Europe.

On August 11, New York Fed officials met with OTS officials to discuss AIG's operations.¹⁹⁴⁴ The OTS supervisors confirmed that "the primary reason" AIG had raised \$20 billion in new capital at the holding company level in May was "for liquidity purposes"; about \$7 billion of that new funding had already been used to support the Financial Products unit, leaving \$12 to \$13 billion in cash still on hand.¹⁹⁴⁵ The OTS was "generally comfortable with firm's current liquidity . . . [and] confident that the firm could access the capital markets with no problem if it had to."

The New York Fed did not share OTS's comfort level with AIG. In an August 14, 2008 analysis, Kevin Coffey, from the Financial Sector Policy and Analysis unit of the New York Fed, wrote that "despite raising \$20 billion of capital in May 2008, AIG is under increasing capital and liquidity pressure" and that AIG "appears to need to raise substantial longer term funds to address the impact of deteriorating asset

¹⁹⁴⁴ 8/14/08 meeting notes, FCIC-AIG0015409—10.

¹⁹⁴⁵ Kevin Coffey, Federal Reserve Bank of New York, *AIG-Meeting with OTS*, August 14, 2008. FCIC-AIG0021211.

values on its capital and available liquidity as well as to address certain asset/liability funding mismatches.”¹⁹⁴⁶

Coffey listed six areas of concern with AIG: (1) significant losses on investments, primarily in the domestic life insurance companies, (2) \$26.5 billion in mark-to-market losses on the \$80 billion credit default swap book and related margin calls, in response to which AIG had posted \$16.5 billion in collateral, (3) significant amounts of near-term liabilities, (4) commitments to purchase CDOs as a result of outstanding liquidity puts, (5) ratings-based triggers in derivative contracts that could result in significant collateral calls if AIG was downgraded, and (6) limited standby credit facilities to manage sudden cash needs.¹⁹⁴⁷ Coffey noted that Moody’s and S&P had highlighted earnings, capital and liquidity concerns following AIG’s 2008 second-quarter earnings release. The agencies warned that they would downgrade AIG if the company did not address their concerns.¹⁹⁴⁸

Four days later, Goldman Sachs issued a report to clients that echoed many of the concerns expressed in Coffey’s analysis. The report, entitled “Don’t buy AIG: potential downgrades, capital raise on the horizon,” warned that “we foresee \$9-\$20 billion in economic losses from [AIG’s] CDS book, which could result in larger cash outlays... resulting in a significant shift in the risk quality of AIG’s assets... Put simply, we have seen this credit overhang story before with another stock in our coverage universe, and foresee outcomes similar in nature but on a much larger scale.”¹⁹⁴⁹ And the reference to “another stock”? Goldman Sachs appears to be referencing the memory of Bear Stearns. A manager at the New York Fed emailed a copy of the Goldman report to Kevin Coffey and others. “The bottom line: large

¹⁹⁴⁶ 8/14/08 summary of drivers of potential earnings , capital and liquidity issues at AIG, FCIC-AIG0015389—390.

¹⁹⁴⁷ 8/14/08 summary of drivers of potential earnings , capital and liquidity issues at AIG, FCIC-AIG0015389—390.

¹⁹⁴⁸ 8/14/08 summary of drivers of potential earnings , capital and liquidity issues at AIG, FCIC-AIG0015389—390.

¹⁹⁴⁹ 8/18/2008 Goldman Sachs Company Update: American International Group (AIG): “Don’t buy AIG: potential downgrades, capital raise on the horizon.” SB-AIG-35697-712 (produced by New York Fed).

scale cash outflows and posting of collateral could substantially weaken AIG's balance sheet," he wrote.¹⁹⁵⁰

On September 9, the New York Fed's Danielle Vincente wrote that the situation had worsened. "AIG's current liquidity position is precarious and asset liability management appears inadequate given the substantial off balance sheet liquidity needs." She wrote that liquidating an \$835 billion securities portfolio to fund liabilities would result in substantial realized losses and "potentially" affect market prices. Borrowing against AIG's securities through the Fed's Primary Dealer Credit Facility (PDCF) might allow AIG to unwind its positions in an orderly manner while satisfying immediate cash needs, but Vincente questioned whether the PDCF was "necessary for the survival of the firm."¹⁹⁵¹ AIG's volatile funding sources, including \$9.7 billion of repos, \$75 billion of securities lending obligations, and \$15 billion of commercial paper, made the firm vulnerable to runs.¹⁹⁵² Off-balance sheet commitments – including collateral calls, contract terminations, liquidity puts and other commitments – could be as high as \$33 billion if AIG was downgraded.¹⁹⁵³ Yet, AIG had only \$4 billion of revolving credit facilities in addition to its \$12 to \$13 billion of cash on hand.¹⁹⁵⁴

The rating agencies waited to see how AIG would address its liquidity and capital needs. Market sentiment was that the rating agencies would require AIG to raise more capital to maintain its current ratings, but analysts were concerned about the extent of losses in AIG's credit default swaps and investment portfolios, rating agency actions and subsequent impacts on capital.¹⁹⁵⁵ Indeed, the August 18 Goldman analyst report on AIG concluded that AIG and the rating agencies were in denial about the

¹⁹⁵⁰ 8/18/2008 Ira Selig email to Kevin Coffey re: Goldman Report on AIG. SB-AIG-35695-712 at 695.

¹⁹⁵¹ <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4828-8725-0694&open=Y>

¹⁹⁵² 9/2/08 "AIG Liquidity and Access to the PDCF" summary, at AIG, FCIC-AIG0016236-239.

¹⁹⁵³ 9/2/08 "AIG Liquidity and Access to the PDCF" summary, at AIG, FCIC-AIG0016236-239.

¹⁹⁵⁴ 9/2/08 "AIG Liquidity and Access to the PDCF" summary, at AIG, FCIC-AIG0016236-239.

¹⁹⁵⁵ 9/2/08 "AIG Liquidity and Access to the PDCF" summary, at AIG, FCIC-AIG0016236-239.

extent of the losses and that AIG management was not prepared to deal with the magnitude of the problems facing the firm.¹⁹⁵⁶

If that was true in August, management was no longer in denial by early September. At the Friday, September 12, meeting at the New York Fed, AIG reported that it was “facing serious liquidity issues that threaten[ed] its survival viability,” and that a downgrade, which could occur after a rating agency meeting planned for September 15, would trigger billions of dollars in collateral calls, liquidity puts and other liquidity needs.¹⁹⁵⁷ Among the many problems that the delegation reported was that AIG’s stock was down significantly (shares hit a low of \$11.49 during the day, down from a closing price of \$17.55 on the day before), and credit default swap spreads had reached 14% during the day, indicating that protection on \$10,000,000 of AIG debt would cost approximately \$1,400,000, per year. They reported AIG was having problems rolling its commercial paper, having been able to roll only \$1.1 billion of \$2.5 billion that matured on September 12, with another \$15 billion coming due. They also reported that some banks were already pulling away and even refusing to provide secured repo funding. Most of the cash at AIG was “trapped” in regulated entities and was not available to meet liquidity needs. Assets on the books had declined in value and were illiquid. Borrowing against the high quality assets in the insurance subsidiaries was restricted. Raising capital was not viable. Offering to open AIG’s books for review, the delegation asked the Fed how AIG could obtain a loan under its section 13(3) authority.

Officials at the Federal Reserve Bank of New York knew that a failure of AIG would have dramatic, far-reaching consequences. On August 11, the OTS met with the New York Fed for a “long-sought meeting to open a dialogue with them about AIG.” [cite] On September 2, Danielle Vicente, an official at the Fed, prepared an analysis on AIG titled “AIG Liquidity and Access to the PDCF.” And, now at about 7:00 pm on Friday, September 12, Hayley Boesky, Director of Market Analysis at the New York Fed, updated Bill

¹⁹⁵⁶ 9/2/08 “AIG Liquidity and Access to the PDCF” summary, at AIG, FCIC-AIG0016236-239; 8/18/08 Goldman Report titled “Don’t Buy AIG: potential downgrades, capital raise on the horizon,” FCIC-AIG0015413-430.

¹⁹⁵⁷ 9/12/08 AIG Meeting Notes, FCIC-AIG0021217-218.

Dudley and others “More panic from [hedge funds]. Now focus is on AIG,” she wrote. “I am hearing worse than LEH. Every bank and dealer has exposure to them. . . Estimate I hear is 2 trillion balance sheet.”¹⁹⁵⁸

Shortly before midnight, New York Fed Assistant Vice President Alejandro LaTorre emailed Timothy Geithner, Bill Dudley, and other senior officials. “The key takeaway is that they are potentially facing a severe run on their liquidity over the course of the next several (approx 10) days if they are downgraded,” he wrote “Their risk exposures are concentrated among the 12 largest international banks (both U.S. and European) across a wide array of product types (bank lines, derivatives, securities lending, etc.) meaning [there] could be significant counterparty losses to those firms in the event of AIG’s failure.”¹⁹⁵⁹

On Sunday morning, September 14, Adam Ashcraft, an official at the New York Fed official, circulated a memo titled “Comment on possible 13-3 lending to AIG” to his colleagues discussing the effect of a threatened fire sale by AIG on asset markets. In his email, Ashcraft wrote that the “threat” by AIG to sell assets was “a clear attempt to scare policymakers into giving [AIG] access to the discount window, and avoid making otherwise hard but viable options: sell or hedge the CDO risk (little to no impact on capital), sell subsidiaries, or raise capital.”¹⁹⁶⁰

Later that day, LaTorre circulated an analysis captioned “Pros and Cons of Lending to AIG” to his colleagues at the New York Fed for a meeting at 2:30 pm that day. The “pros” included avoiding a messy collapse and dislocations in markets such as the commercial paper market. The staff noted that a collapse of AIG could have “spillover effect on other firms involved in similar activities (e.g. GE Finance)” and that AIG’s failure would “lead to \$1.8B increase in European bank capital requirements,”

¹⁹⁵⁸ FRBNYAIG00511 (from COP supporting documents, available online here: <http://cop.senate.gov/documents/frbny-documents.pdf>)

¹⁹⁵⁹ FRBNYAIG00509-510 (from COP supporting documents, available online here: <http://cop.senate.gov/documents/frbny-documents.pdf>)

¹⁹⁶⁰ 9/14/08 Ashcraft email to various individuals, FCIC-AIG0021566-67.

in other words, European banks that had been able to lower their credit risk – and, as a result, to lower their capital requirements – by buying credit default swap protection from AIG would find that protection worthless if AIG failed. AIG’s bankruptcy was likely to be messy because of its “non-trivial exotic derivatives book,” (which was part of a total \$2.7 trillion derivatives book with \$1 trillion concentrated in 12 large counterparties). The memo also noted that an AIG failure “could cause dislocations in CDS market...could leave dealer books significantly unbalanced.”¹⁹⁶¹

The “cons” of a bailout included a “chilling effect” on private sector solutions that were in the works for AIG, the possibility that the loan would not keep AIG afloat, “undermining efficacy of 13-3 lending as a policy tool,” an increase in moral hazard, the perception that it would be “incoherent” to lend to AIG and not Lehman if Lehman was perceived to be more systemic in nature, the possibility of assets being insufficient to cover the potential liquidity hole, and rewarding poor risk management practices cited by the rating agencies.¹⁹⁶²

The analysis stated “Without punitive terms, lending [to AIG] could reward poor risk management practices,” which included AIG’s unwillingness to sell or hedge some of its CDO risk.¹⁹⁶³ The analysis was forwarded to Geithner after the 2:30 meeting.

On Monday morning – after Lehman had declared bankruptcy – Fed officials had still not agreed that a federal loan to AIG was either necessary or prudent. That morning, Brian Peters, a Senior Vice President in the New York Fed’s Risk Management Group, sent an email to Federal Reserve Board and New York Fed officials including Patricia Mosser, Jim Mahoney, and Alejandro LaTorre, in which he wrote that “the private sector is and should be working on a resolution” and that AIG had “options (albeit unpleasant) to solve this themselves” but also noted that they needed to understand the exposures of banks

¹⁹⁶¹ FCIC-AIG0021203-204.

¹⁹⁶² FCIC-AIG0021203-204.

¹⁹⁶³ 9/14/08 Ashcraft email to various individuals, FCIC-AIG0021566-67.

and investment banks to AIG, stay in the information loop with AIG's regulators (the New York State Insurance Department and the UK's Financial Services Authority) and understand how the bankruptcy process would play out.¹⁹⁶⁴

But private-sector solutions including a credit facility of some sort from Goldman Sachs and JPMorgan, an immediate sale of assets, and an infusion of new capital from private equity firms had been under discussion for days if not weeks, but none had attracted serious takers. Documents produced by the New York Fed show no evidence that AIG actively pursued these options. The New York State Insurance Department had spent part of the weekend onsite at AIG considering whether AIG's insurance subsidiaries could and should be allowed to loan dedicated reserves to their holding company on an emergency basis. And, AIG had considered a fire sale of its insurance subsidiaries. But, these potential solutions would take too long.

On Monday afternoon, the rating agencies announced their new decisions, which were even worse than expected. All three rating agencies announced downgrades for AIG: S&P by three notches to A-, Moody's and Fitch by two notches to A2 and A, respectively. The downgrades triggered an additional \$13 billion in cash collateral calls. Goldman Sachs alone requested an additional \$2 billion.¹⁹⁶⁵ Total collateral demands from counterparties now totaled [\$32] billion, and AIG's total payouts increased to \$19.5 billion.¹⁹⁶⁶ AIG's stock price plummeted 61% to \$4.76, compared to a closing price of \$12.14 the previous Friday, a mere fraction of its all-time high of \$103.75.

After the markets closed, AIG informed the New York Fed that it was unable to access the short-term commercial paper market.¹⁹⁶⁷ Regulators spent the next several hours preparing for an 11:00 p.m.

¹⁹⁶⁴ 9/15/08 Peters email to various FRB and FRBNY officials, FCIC-AIG0017238-39.

¹⁹⁶⁵ GS-FCIC000000537-538

¹⁹⁶⁶ See AIG-FCIC00336716 (Tab 31 of the AIG/Goldman Sachs collateral call chronology available online here: <http://fcic.gov/hearings/pdfs/2010-0701-AIG-Goldman-supporting-docs.pdf>)

¹⁹⁶⁷ See Sarah Dahlgren MFR at ____.

teleconference with New York Fed President Timothy Geithner. Late that night, the Federal Reserve Board invoked Section 13(3) of the Federal Reserve Act to bail out a company for the second time since the beginning of the crisis. [will add discussion of other documents] As with Bear Stearns, the New York Fed, with the support of the U.S. Treasury, would come to the rescue of another brand-name financial institution.

On Tuesday morning, the Fed put a number on the table: \$85 billion would be loaned to allow AIG to meet its immediate funding obligations. The collateral would be the assets of the parent company and its primary non-regulated subsidiaries, and the stock of substantially all of the regulated subsidiaries.¹⁹⁶⁸ In its press release, the Fed stated that “a disorderly failure of AIG could add to already significant levels of financial market fragility and lead to substantially higher borrowing costs, reduced household wealth, and materially weaker economic performance.”¹⁹⁶⁹ By Wednesday, a share of AIG sold for \$1.99 at the day’s low. The previous eight years of prosperity for the company—a cumulative net profit of approximately \$66 billion from 2000-2007—would be dwarfed by the \$99.3 billion loss posted for this one year, 2008.

As it would turn out, the \$85 billion loan would soon prove to be insufficient. Treasury supplemented the \$85 billion with \$49.1 billion from Treasury under the Troubled Asset Relief Program (TARP). And, ultimately, total taxpayer funds committed to AIG reached \$182 billion, according to the Congressional Oversight Panel.

The decision to save AIG remains controversial for a number of reasons: its scale, its policy implications, and the payments that were made to AIG’s counterparties in the U.S. and abroad. A June 9, 2010 report by the Congressional Oversight Panel also faulted the government with deciding to bail out AIG too hastily. “The government failed to exhaust all options before committing \$85 billion in taxpayer funds... With AIG, the Federal Reserve and Treasury broke new ground. They put U.S. taxpayers on the line for

¹⁹⁶⁸ September 16, 2008 press release at <http://www.federalreserve.gov/newsevents/press/other/20080916a.htm>

¹⁹⁶⁹ September 16, 2008 press release at <http://www.federalreserve.gov/newsevents/press/other/20080916a.htm>.

the full cost and the full risk of rescuing a failing company,”¹⁹⁷⁰ the panel concluded. The Treasury Department defended its decision, and commented that the panel’s report “overlooks the basic fact that the global economy was on the brink of collapse and there were only hours in which to make critical decisions. The choices and tools available to the government were extremely limited and the potential outcomes deeply uncertain.”¹⁹⁷¹

“Like a gnat on an elephant”

Officials of the Office of Thrift Supervision have acknowledged failures in their oversight of AIG. In a March 18, 2009, congressional hearing, acting OTS Director Scott Polakoff testified that the supervisors failed to recognize the extent of liquidity risk of the Financial Products subsidiary’s CDS portfolio.¹⁹⁷² One examiner explained to the FCIC how he and his colleagues had missed \$78 billion of unhedged subprime credit default swap exposures, an amount that represented 100% of the Company’s *reported* capital (\$78.1 billion) as of June 30, 2008: “We were overwhelmed.”¹⁹⁷³ C.K. Lee, the Managing Director of the Complex and International Organizations division of the OTS which had direct supervisory responsibility for AIG and other conglomerate holding companies supervised by the OTS, admitted to the FCIC that the OTS did not fully appreciate the risks associated with the AIG’s credit default swaps. Former OTS Director John Reich told the FCIC that as late as September 2008, he had “no clue – no idea – what [AIG’s] CDS exposure was.”

Mike Finn, Director for the OTS’s Northeast region, said the legal framework for the OTS’s authority to regulate holding companies was to ensure the safety and soundness of the FDIC-insured institution subsidiary of AIG and not to focus on the potential impact of an uninsured subsidiary – like AIG

¹⁹⁷⁰ COP executive summary, online here: <http://cop.senate.gov/documents/cop-061010-report-execsummary.pdf>

¹⁹⁷¹ Bloomberg article, 6/10/10 at <http://www.bloomberg.com/apps/news?pid=20601103&sid=atVlzdaS.7Yc>

¹⁹⁷² Testimony, Scott M. Polakoff, Acting Director, Office of Thrift Supervision, March 18, 2009, .pg 6.

¹⁹⁷³ Cite

Financial Products – on AIG. Finn’s contention ignores the OTS’s responsibilities under the European Union’s Financial Conglomerates Directive – responsibilities the OTS sought starting in at least 2004. The FCD requires foreign companies doing business in Europe to have the equivalent of a “consolidated supervisor” in their home country. Starting in 2004, the OTS launched an effort to win approval by the FCD that it was fit to be AIG’s designated “home country consolidated supervisor.”¹⁹⁷⁴ In order to gain that approval, the OTS made the case that it had authority over the parent company as well as its subsidiaries. In 2005, the agency wrote that “OTS has supervisory authority to regulate the consolidated holding company structure for holding companies that control one or more thrift institutions. As such, AIG and its subsidiaries are subject to consolidated supervision by OTS... As part of its supervision, OTS will conduct continuous on-site reviews of AIG and its subsidiaries... While the primary focus of OTS’s review efforts will be on AIG’s financial services businesses, OTS has the statutory authority to look more broadly at any AIG business, including the unregulated businesses, to assess undue risks to the regulated financial services entities.”¹⁹⁷⁵ Yet even former Director Reich told FCIC staff that he did not understand his agency’s responsibilities under the European Union’s Directive. Reich said that he was never clear on what authority the OTS had over AIG Financial Products, which slipped through a “regulatory crack.”¹⁹⁷⁶

Further undermining the OTS’s claim that it did not have authority over AIG Financial Products is the fact that the OTS did in fact examine the subsidiary, albeit much too late to matter. OTS examiners argued that the exams took place with too little cooperation from Joe Cassano, head of the subsidiary. The examiner in charge of the review told FCIC staff that, “We had no cooperation from Cassano... [he] questioned our authority to examine FP... [so] we did not know about the CDS during the 2004-2005

¹⁹⁷⁴ See, e.g. “OTS MOU between Scott M. Albinson, Managing Director, OTS, and Daniele Nouy, Secrétaire général de la Commission Bancaire. See also, See MFR, April 28, 2010, C.K. Lee, OTS, Interview with FCIC Staff.

¹⁹⁷⁵ OTSAIG_EFILES00000237-78.

¹⁹⁷⁶ Transcript of FCIC interview of Jon Reich at ___.

period.”¹⁹⁷⁷ The OTS did not look carefully at the \$78 billion credit default swap portfolio guaranteed by the parent company, AIG. After completing a limited review of that portfolio in July 2007 and concluding that the risk of loss was too small to be measured, the OTS decided to put off a more in-depth review until 2008. The agency’s stated reason for the delay was limited time and staff resources. A few days after the July 2007 review, Goldman would demand \$1.8 billion from AIG Financial Products stemming from those credit default swaps with the collateral calls escalating throughout 2007 and 2008. In February 2008, AIG reported material weaknesses in its method for valuing its credit default swap positions and billions of dollars in losses. Yet, the OTS did not initiate a more in-depth review of the CDS book until September 2008. Former OTS Director of Conglomerate Operations Brad Waring confirmed the OTS decided to put off the CDS review into 2008 and admitted, “we did not follow up in 2008...in hindsight, it was the wrong decision.”¹⁹⁷⁸

The in-depth review of the credit default swap portfolio took place on September 2, 10 days before AIG went to the Federal Reserve seeking a rescue and seventeen months after the exam had been authorized. The OTS concluded its exam on October 17, a month after the AIG bailout. The agency determined that AIG’s credit default swap portfolio represented a concentration of risk to AIG with a notional amount amounting to 260% of capital as of June 2008.¹⁹⁷⁹

Reich told the FCIC that prior to 2008 AIG had not been a matter of great concern to OTS.¹⁹⁸⁰ He also acknowledged the agency had never fully understood the activities of the Financial Products unit, and thus had been incapable of regulating it. “At the simplest level...an organization like OTS cannot

¹⁹⁷⁷ MFR of FCIC staff interview of Joseph Gonzales.

¹⁹⁷⁸ See MFR, May 7, 2010, Brad Waring, Interview with FCIC Staff.

¹⁹⁷⁹ OTS Docket, H2984, September 2, 2008, AIG Financial Products, Targeted Review

¹⁹⁸⁰ See MFR, May 4, 2010, John Reich, Interview with FCIC Staff

supervise AIG, GE, Merrill Lynch, and entities that have world-wide offices... I would be the first to say that for an organization like OTS to pretend that it has total responsibility over AIG and all of its subsidiaries ...it's like a gnat on an elephant – there's no way.” Reich said that for the OTS to think that it was capable of regulating AIG was “totally impractical and unrealistic... I think we thought we could grow into that responsibility... but I think that was sort of pie in the sky dreaming. It wasn't realistic.”

Geithner agreed with Reich's conclusions, and told him so bluntly. Reich told FCIC staff about a phone call from Geithner in the aftermath of the AIG rescue. “About all I can remember is the foul language that I heard on the other end of the line,” Reich said.“You guys have handed me a bag of sh**t,” Reich recalled Geithner telling him. “He was not happy with OTS...I just listened.”¹⁹⁸¹

¹⁹⁸¹ See MFR, May 4, 2010, John Reich, Interview with FCIC Staff

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CHAPTER CONCLUSIONS HERE

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Part III, Chapter 9: The financial crisis of 2008

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Overview

September 15, 2008 – the bankruptcy of Lehman Brothers and the takeover of Merrill Lynch, followed the next day by the rescue of American Insurance Group – marked the beginning of the worst market disruption in post-war American history and an extraordinary “flight to quality.” Creditors and investors suspected that many other large financial institutions were on the edge of failure, and the Lehman bankruptcy proved that at least some of them would not have access to the federal government’s safety net.

Morgan Stanley CEO John Mack told the FCIC, “In the immediate wake of Lehman’s failure on September 15, Morgan Stanley and similar institutions experienced a classic ‘run on the bank,’ as investors lost confidence in financial institutions and the entire investment banking business model came under siege.”¹⁹⁸²

“The markets were very bad, the volatility, the illiquidity, some things couldn’t trade at all, I mean completely locked, the markets were in terrible shape,” JP Morgan CEO Jamie Dimon told the FCIC. “I

¹⁹⁸² John Mack, *Written submission of Morgan Stanley to the Financial Crisis Inquiry Commission*, January 2010.

was sitting in the same room I am sitting in right now thinking about how I'm going to deal with 20% unemployment... We could have survived it in my opinion, but it would have been terrible. I would have stopped lending, marketing, investing, comp, and probably laid off 20,000 people. And I would have done it in three weeks. You get companies starting to take actions like that, that's what a Great Depression is."¹⁹⁸³

Timothy Geithner, President of the New York Fed during the crisis, told the FCIC, "You had people starting to take their deposits out of very, very strong banks, long way removed in distance and risk and business from the guys on Wall Street that were at the epicenter of the problem. And that is a good measure, classic measure of incipient panic."¹⁹⁸⁴ [insert how many firms would have failed]

Fed Chairman Ben Bernanke told the FCIC, "As a scholar of the Great Depression, I honestly believe that September and October of 2008 was the worst financial crisis in global history, including the Great Depression. If you look at the firms that came under pressure in that period... only one, JP Morgan, was not at serious risk of failure," Bernanke said. "So out of maybe the 13, 13 of the most important financial institutions in the United States, 12 were at risk of failure within a period of a week or two."¹⁹⁸⁵

As it had on the weekend of Bear's demise, the Federal Reserve announced new measures on Sunday to make more cash available to investment banks and other firms. Yet again, it lowered its standards regarding the quality of the collateral that investment banks and other primary dealers could use to support their borrowing under the two repo support programs, the Primary Dealer Credit Facility (PDCF) and the Term Securities Lending Facility (TSLF), set up during the Bear Stearns crisis in the spring to provide back-up lending should the usual lenders become skittish.¹⁹⁸⁶ And it provided a temporary exception to its rules and allowed the investment banks and other financial companies to borrow cash from their insured depository affiliates, the very exception that they had denied Lehman 2 months earlier. The investment banks drew liberally on the Fed's lending programs. By the end of September, Morgan Stanley was getting by on \$96 billion of Fed-provided life support.¹⁹⁸⁷ [Will add Goldman Sachs when we get it.]

But the new measures did not quell the market panic the week following the Lehman bankruptcy and AIG rescue. Among the first participants to be directly affected were the money market funds and other institutions that held Lehman's \$4 billion in unsecured commercial paper and loaned to the company

¹⁹⁸³ FCIC interview with Jamie Dimon, October 20, 2010.

¹⁹⁸⁴ FCIC interview with Timothy Geithner, November 17, 2009.

¹⁹⁸⁵ FCIC interview with Ben Bernanke, November 17, 2009.

¹⁹⁸⁶ Specifically, the Fed broadened the PDCF to match the types of collateral that the two major clearing banks accepted in the tri-party repo system; previously, PDCF collateral had been limited to investment-grade debt securities. The Fed broadened the TSLF to include all investment-grade debt securities; previously, TSLF collateral had been limited to Treasury securities, agency securities, and AAA-rated mortgage-backed and asset-backed securities. The Fed also increased the frequency of TSLF auctions, to weekly instead of bi-weekly, and increased their size. Federal Reserve Board, Press Release, September 14, 2008.

¹⁹⁸⁷ Morgan Stanley Corporate Treasury Meeting with Federal Reserve, Sept 20, 2008. FCIC-MS0002790.

through the tri-party repo market.¹⁹⁸⁸ Investors pulled out of funds with known exposure to that jeopardy, including the Reserve Management Company's Reserve Primary Fund and Wachovia's Evergreen Investments.

Other parties with direct connections to Lehman included the hedge funds, investment banks, and investors who were on the other side of Lehman's many over-the-counter derivatives transactions. For example, Deutsche Bank, JP Morgan, and UBS together had over 150,000 outstanding trades with Lehman as of May 2008.¹⁹⁸⁹ Generally, the Lehman bankruptcy caused problems for these OTC derivatives counterparties that were apparent immediately. First, they had to recover collateral submitted to Lehman. Second, they had to recover cash if the total value of their trades with Lehman carried any net positive value not covered by collateral. Both of these processes were mired in bankruptcy proceedings, which delayed payment and resulted in losses. Third, many of their hedges were now void and left them exposed. They had to scramble to establish replacement contracts with new counterparties when there were few takers. By November 13, 2008, a special facility to unwind derivatives trades with Lehman had successfully terminated most of the 930,000 derivative contracts.¹⁹⁹⁰ Still by January, 2009, Lehman's counsel reported 18,000 derivatives contracts had not been terminated.¹⁹⁹¹ Banks have filed more than \$50 billion in claims for losses related to derivatives contracts with Lehman.¹⁹⁹²

All that was bad enough, but investors also pulled their money out of money market funds and other large cash pools that did *not* have direct Lehman exposure. The managers of these funds, in turn, pulled \$165 billion out of the commercial paper market in September and shifted billions of dollars of repo loans to safer collateral, further strapping investment banks and other finance companies, such as American Express and CIT, that depended on those short-term markets for their lending activities.¹⁹⁹³ "When the

¹⁹⁸⁸ Q3 2008 Preliminary Lehman Brothers Holdings Inc. Earnings, Conference Call, Sep. 10. 2008

¹⁹⁸⁹ Valukas report p.573

¹⁹⁹⁰ Debtors' Motion for an Order pursuant to Sections 105 and 365 of the Bankruptcy Code to Establish Procedures for the Settlement or Assumption and Assignment of Prepetition Derivatives Contracts, Lehman Brothers Holdings Inc., et al, No. 08-13555 (U.S. Bankr. Ct., S.D.N.Y. Nov. 13, 2008). [Docket No.1498] at p. 4.

¹⁹⁹¹ Debtors' Motion for an Order Approving Consensual Assumption and Assignment of Prepetition Derivatives Contracts, Lehman Brothers Holdings Inc., et al., No. 08-13555 (U.S. Bankr. Ct., S.D.N.Y. Jan. 16, 2009). [Docket No.2561] at p. 3.

¹⁹⁹² Spector, Mike, Wall Street Journal (May 4, 2010) p. C 1. [change cite to bankruptcy estate]

¹⁹⁹³ Taxable money market fund holdings of all types of taxable commercial paper decreased from \$671 billion at the end of August 2008 to \$505 billion at the end of September. Source: ICI/Crane data provided to the FCIC. The Bank of New York, in its role as triparty clearing bank, reported that Treasury-backed repos rose from \$195 billion (13%) to \$466 billion (27%) of their triparty business between March 31 and December 31, 2008. Source: Bank of New York data provided to the FCIC.

commercial paper market froze, all of the largest corporations in America thought that they would go under,” Harvey Miller, the bankruptcy attorney for the Lehman trust, told the FCIC.¹⁹⁹⁴

Concerns spread quickly to other financial institutions. Investors and uninsured depositors yanked tens of billions of dollars out of banks with possibly debilitating real estate exposures (Washington Mutual, Wachovia) in favor of those whose real estate exposure appeared manageable (Wells Fargo, JP Morgan). Hedge funds withdrew tens of billions of dollars of assets held in custody at the remaining investment banks (Goldman Sachs, Morgan Stanley, and even Merrill Lynch, as the just-announced Bank of America acquisition wouldn’t close for another three and a half months) in favor of large commercial banks with prime brokerage businesses (JP Morgan, UBS, Deutsche Bank), because the commercial banks had more diverse sources of liquidity – and larger bases of insured deposits – than did the investment banks. JP Morgan and the Bank of New York, the tri-party repo clearing banks, clamped down on their intraday exposures, demanding more collateral than ever from the remaining investment banks and other primary dealers. Many banks refused to lend to one another; the cost of interbank lending rose to unprecedented levels. [We will add a footnote with data.]

Simply put, the U. S. financial system had become very dependent upon liquidity that money market funds and others were now less willing to provide. The markets knew what this would mean, especially for the financial institutions. On Monday, September 15, the Dow Jones Industrial Average fell more than 500 points, or 4.4%, the largest single-day point drop since the 9/11 terrorist attacks; stocks of financial firms fell 10.6%. These drops would be exceeded on September 29 – the day Congress voted against providing extraordinary support to financial markets – when the Dow Jones fell 7.0% and financial stocks fell 16%.¹⁹⁹⁵ For the month, the S&P 500 would lose \$889 billion of its value, a decline of 9.1% – the worst month since September 2002.¹⁹⁹⁶

And specific institutions would take direct hits.

Morgan Stanley: “Now we’re the next in line”

With Bear Stearns swallowed whole by JP Morgan, with the weekend announcement of Merrill Lynch’s acquisition by Bank of America, and with Lehman Brothers in bankruptcy, only two large, independent investment banks remained standing on September 15, 2008: Goldman Sachs and Morgan Stanley. Alarmed by the speed with which the other three had met their fates, investors studied the two survivors very closely. But more so Morgan Stanley. On Monday, the cost of protecting \$10 million in Morgan Stanley debt through credit default swaps jumped to \$682,000 – from \$363,000 on Friday –

¹⁹⁹⁴ FCIC interview with Harvey Miller, Weil Gotshal, August 5, 2010.

¹⁹⁹⁵ S&P Financials index, September 15 and September 29, Bloomberg.

¹⁹⁹⁶ Bloomberg.

about double the cost for Goldman.¹⁹⁹⁷ “As soon as we come in on Monday, we’re in the eye of the storm with Merrill gone and Lehman gone,” John Mack, Morgan Stanley’s CEO, told the FCIC. “Now we’re the next in line.”¹⁹⁹⁸

Morgan Stanley officials had some reason for confidence. They had a liquidity pool on the previous Friday of more than \$130 billion – in fact, more than Goldman’s \$120 billion¹⁹⁹⁹ – and, like Goldman, Morgan Stanley had passed the Fed’s and SEC’s series of liquidity stress tests several months earlier. But on the Monday morning following the Lehman bankruptcy, the early market indicators were mixed. David Wong, Morgan Stanley’s Treasurer, heard early from his London office that several European banks – including Deutsche Bank, Royal Bank of Scotland, Calyon, and HSBC – were not accepting Morgan Stanley as a counterparty on derivatives trades.²⁰⁰⁰ But Wong called those banks and they agreed to keep their trades with Morgan Stanley, at least for the time being. This was a relief. Wong well knew that rumors of fleeing counterparties through novations had contributed significantly to the demise of Bear Stearns six months earlier.

Morgan Stanley’s lenders in the repo market, primarily the money market funds, did not immediately panic either. On Monday, only a few of them required slightly higher haircuts on the low-quality assets. “First glance: we don’t see haircuts going up at MS the way we did at LEH last week,” a Fed official emailed colleagues on Tuesday.²⁰⁰¹ Morgan Stanley did borrow \$4 billion cash from the Primary Dealer Credit Facility – its first use of the program since the spring. But this was a token loan –

¹⁹⁹⁷ One-year credit default swaps on Goldman rose to \$307,000 from \$176,000; Merrill’s fell to \$468,000 from \$632,000, as investors were reassured by the company’s coming investment from Bank of America.

¹⁹⁹⁸ FCIC interview with John Mack, November 2, 2010.

¹⁹⁹⁹ New York Fed. FCIC-BA-ML0006360.

²⁰⁰⁰ David Wong, email to Fed and SEC officials, September 15, 2008. FCIC-MS0002366.

²⁰⁰¹ FCIC-MS0002334

“not for need but to test,”²⁰⁰² as one New York Fed official emailed his colleagues.²⁰⁰³ By August, PDCF lending had fallen to zero from its peak of \$40 billion, so the program had sat unused for a month.

But the relative stability that Morgan Stanley was seeing on Monday did not hold for long. The first to run from the investment bank were its hedge fund customers. Prior to the financial crisis, it had typically been the prime brokers, like Morgan Stanley, who were worried about their credit exposures to the hedge funds. Now the roles were reversed, because the hedge funds understood Morgan Stanley could use the funds’ assets to supplement its own liquidity and borrowing. Morgan Stanley had to return those assets upon request, but what if all of its hedge fund customers wanted their credits back at the same time? A liquidity crunch. The Bear and Lehman episodes had revealed what happens when customers of a troubled prime brokerage have serious fears of their assets being frozen in bankruptcy proceedings.²⁰⁰⁴ Instead of providing a liquidity buffer as the market deteriorated, the investment banks’ hedge fund customers would push them into greater peril – demanding their money at just the time when investment banks were themselves in need.

On late Monday afternoon, the hedge funds’ requests began to roll in – about \$10 billion by the end of the day.²⁰⁰⁵ [From notes, need to check.] Late that night, Wong and other Morgan Stanley executives called Bill Brodows of the New York Fed at his home “to express their concern that MS had

²⁰⁰² New York Fed email to colleagues, FCIC-MS0002400.

²⁰⁰³ By October 1, 2008, primary dealers were borrowing \$147 billion through the PDCF. Board of Governors of the Federal Reserve Board, Accessed via The Federal Reserve Bank of St. Louis’ FRED database, Federal Reserve Bank Credit-Primary Dealer and other Broker-Dealer Credit (Discontinued Series) (WPDDF), data available at <http://research.stlouisfed.org/fred2/series/WPDF>

²⁰⁰⁴ One year later, the Senior Supervisors Group— a cross-agency task force looking back on the causes of the financial crisis, would write, “Before the crisis [at the investment banks post-Lehman], many broker-dealers considered the prime brokerage business to be either a source of liquidity or a liquidity-neutral business. As a result, the magnitude and unprecedented severity of events in September-October 2008 were largely unanticipated.” Senior Supervisors Group, *Risk Management Lessons from the Global Banking Crisis of 2008*, October 21, 2009, page 9.

²⁰⁰⁵ FCIC interview with David Wong, October 15, 2010.

experienced some adverse funding flows late in the day from prime brokerage accounts.²⁰⁰⁶ Brodows emailed this news to a colleague at 11:05 p.m. “They were preparing for a worsening on Tuesday.”²⁰⁰⁷

They—Morgan Stanley—were also expecting to borrow between \$10 or \$15 billion from the Primary Dealer Credit Facility. This would not be a test; this would be necessary, because the hedge funds’ run picked up speed overnight, with [\$7] billion pulled out of Morgan Stanley in the overseas markets. The money was destined for the bank-backed prime brokers, such as JP Morgan and UBS, which were seen as less susceptible to runs. [We will insert one sentence on inflows experienced by the bank-backed prime brokers.]

On Tuesday morning, Morgan Stanley released its earnings for the three months ended August 31, 2008: a profit of \$1.4 billion.²⁰⁰⁸ CEO John Mack told the FCIC that he decided to release the good news a day earlier than planned, but that this backfired: “One hedge fund manager said to me after the fact... that he thought pre-announcing earnings a day early was a sign of weakness. So I guess it was, because people certainly continued to short our stock or sell our stock.”²⁰⁰⁹ Wong told the FCIC, “After we announced our earnings on Tuesday, we were still in a reasonably good position, we were managing our funding, but there were other things that were happening that were beginning to affect our more sophisticated clients.” The hedge funds had withdrawn a total of [\$12] billion from Morgan Stanley on Monday and Tuesday; the run became a \$34 billion torrent on Wednesday, the day after AIG was bailed out and the day that “many of our sophisticated clients started to liquefy,” as Wong put it.²⁰¹⁰ Many of the hedge fund clients had the contractual capability to borrow more from Morgan Stanley’s prime brokerage

²⁰⁰⁶ FCIC-MS0002352

²⁰⁰⁷ FCIC-MS0002352

²⁰⁰⁸ <http://www.morganstanley.com/about/ir/shareholder/3q2008.pdf>

²⁰⁰⁹ FCIC interview with John Mack, November 2, 2010.

²⁰¹⁰ Email from Patrice Maher re: MS Liquidity Changes. FCIC-MS0002414

without needing to post collateral and many of them now sought to borrow more. The predictions that a \$10 to 15 billion loan would be required from the Fed's lending facility turned out to be low. On Thursday, Morgan Stanley borrowed \$26 billion.

These developments triggered the event that had troubled Fed policymakers over the summer: a dramatic increase in collateral calls by the two tri-party repo clearing banks, JP Morgan and Bank of New York. As had happened during the Bear episode, the two clearing banks became concerned about their *intraday* exposures to Morgan Stanley, Merrill Lynch, and Goldman Sachs, which had escaped serious scrutiny so far. As explained earlier, the Fed had set up the PDCF to provide *overnight* funding to investment banks and other primary dealers when repo lenders were skittish. On Sunday of the Lehman weekend, it had even lowered the bar on the collateral it would take for this overnight lending, predicting the Lehman announcement would create a liquidity squeeze for the other investment banks. But the PDCF lending mechanism was not envisioned to take the place of the intraday funding provided by the duopoly of JP Morgan and Bank of New York. Both of these clearing banks were now concerned that any one of the three remaining large independent investment banks might not make it through a given trading day, and neither bank wanted to accept the lower-quality collateral for their intraday loans that the Fed was accepting for its overnight loans. They would not make those loans without requiring bigger haircuts, which translated into requests for more collateral from the beleaguered borrowers.

“Big intraday issues at the clearing banks,” the SEC’s Matt Eichner told New York Fed colleagues in an email early Wednesday morning. “[T]hey don’t want exposure and are asking for cash/securities... Lots of desk level noise around MS and ML and taking the name. Not pretty.”²⁰¹¹

“Taking the name” is Wall Street parlance for accepting a counterparty on a trade. The other firms were increasingly wary of the investment banks as counterparties. On Thursday, the “desk level noise” erupted with a bang when the Bank of New York requested \$3 billion in collateral from Morgan

²⁰¹¹ FCIC-MS0002337.

Stanley to augment the \$5 billion that the investment bank already had on deposit. [Will check this; Morgan says it was never more than \$5 billion.] And New York Fed officials reported that JP Morgan was “thinking” about requesting \$2.8 billion on top of the \$2.2 billion on deposit.²⁰¹² According to the Fed’s on-site examiner at Citigroup, a banker from that firm had said, “Morgan [Stanley] is the ‘deer in the headlights’ and having significant stress in Europe. It’s looking like Lehman did a few weeks ago.”²⁰¹³

Commercial paper markets also seized up for Morgan Stanley. From Friday, September 12 to the end of September, the firm’s outstanding commercial paper had fallen nearly 40%, and it had rolled over only \$20 million. By comparison, Morgan Stanley rolled over about \$240 million on average *every day* in the last two weeks of August.²⁰¹⁴

On Saturday, Morgan Stanley executives briefed the New York Fed on the situation.²⁰¹⁵ By this time, the firm had a total of \$33 billion in PDCF funding from the Fed.²⁰¹⁶ For the week, the liquidity pool at the Morgan Stanley parent company had dropped precipitously, from a strong base of \$130 billion on the Friday before Lehman’s bankruptcy to \$55 billion one week later – still a lot of money, but the trend was clear and disturbing. Repo lenders had pulled another \$31 billion over the course of the week, but the biggest run – and the biggest stress for the health of Morgan Stanley – had been the \$86 billion the hedge funds had pulled from Morgan’s prime brokerage.²⁰¹⁷ That run had vastly exceeded the company’s most

²⁰¹² FCIC-MS0002339.

²⁰¹³ FCIC-MS0002435.

²⁰¹⁴ MS Liquidity & Financing activity report to the New York Federal Reserve, FCIC-MS0002536, MS0003346, MS0003291.

²⁰¹⁵ Morgan Stanley Corporate Treasury, *Meeting with Federal Reserve*, FCIC-MS0002526. Cover email, FCIC-MS0002525

²⁰¹⁶ Morgan Stanley Corporate Treasury Meeting with Federal Reserve, Sept 20, 2008. FCIC-MS0002531.

²⁰¹⁷ Morgan Stanley Corporate Treasury *Meeting with Federal Reserve*, Sept 20, 2008. FCIC-MS0002535.

severe stress-test scenario only one month earlier. The good news was that the stress-test assumptions about other sources of liquidity had proven fairly accurate.²⁰¹⁸

During the week, Goldman Sachs had encountered a parallel run of similar magnitude. Its liquidity pool had fallen from about \$120 billion the previous Friday to \$57 billion on Thursday. Lloyd Blankfein, Goldman's CEO, told the FCIC, "We had tremendous liquidity through the period. But there were systemic events going on, and we were very nervous. If you are asking me what would have happened but for the considerable government intervention, I would say we were in—it was a more nervous position that we would have wanted in. We never anticipated the government help. We weren't relying on those mechanisms...I felt good about it, but we were going to bed every night with more risk than any responsible manager should want to have, either for our business or for the system as a whole—risk, not certainty," Blankfein said.²⁰¹⁹ [We have requested data from Goldman about their use of the PDCF and TSLF, the Fed's two liquidity programs, and about their liquidity problems to make direct comparisons with what we know about Morgan Stanley. [Will note that they received government assistance as crisis went on.] Fed Chairman Bernanke told the FCIC that the Fed believed the run on Goldman that week could lead to its failure. "[Like JP Morgan,] Goldman Sachs also protected themselves quite well. They had a lot of capital, a lot of liquidity. But being in the investment banking category rather than the commercial banking category, when that huge funding crisis hit all the investment banks, even Goldman Sachs, we thought there was a real chance that they would go under."²⁰²⁰

²⁰¹⁸ In the flight to quality, UBS alone picked up between \$20 and \$30 billion in prime brokerage accounts from Morgan Stanley during the week. FCIC-MS0002600. JP Morgan picked up \$30 to \$40 billion, mostly from former Morgan and Goldman clients. FCIC-MS0002782

²⁰¹⁹ Lloyd Blankfein, FCIC hearing, Panel 1, January 13, 2010. <http://fcic.gov/hearings/pdfs/2010-0113-Transcript.pdf>.

²⁰²⁰ Bernanke's session with the commission.

On Sunday, September 21, both Morgan Stanley and Goldman Sachs applied to the Federal Reserve Board to become bank holding companies. “In my 30 year history, [Goldman and Morgan Stanley] had consistently fought that happening – [after Lehman,] those franchises saw that they were next unless they did something drastic. That drastic thing was becoming bank holding companies,” Tom Baxter, New York Fed General Counsel, told the FCIC.²⁰²¹

By becoming bank holding companies, the two companies gained the immediate benefit of emergency access to the federal discount window for terms of up to 90 days, much longer than the overnight loans for investment banks allowed under the PDCF.²⁰²² The Fed had liberalized these terms following the runs on Bear Stearns. The Fed, in tandem with the Department of Justice, approved the bank holding company applications on an extraordinarily expedited basis, waiving the standard five-day antitrust waiting period.²⁰²³ Morgan Stanley instantly converted its \$39 billion industrial loan company into a national bank, subject to OCC supervision, and Goldman converted its \$25 billion industrial loan company into a New York chartered state member bank, subject to New York and Fed supervision. The Fed would immediately begin to supervise each of these bank holding companies. Mack, the Morgan Stanley CEO, said he and Goldman’s Blankfein had spoken during the week about the costs and benefits of their two companies becoming bank holding companies. He said the final decision to apply had less to do with explicit support from the Fed’s discount window – the investment banks already had unprecedented access to that, thanks to the Fed’s special liquidity programs – and more to do with the perception of being financial sound and systemically important. “I think the biggest benefit is it would show you that you’re important to the system and the Fed would not make you a holding company if they

²⁰²¹ FCIC interview with Tom Baxter, April 30, 2010.

²⁰²² Federal Reserve Discount Window Payment System Risk, “Getting Started”, Last updated 11/17/2009, <http://www.frbdiscountwindow.org/started.cfm?genid=12&desc=Getting%20Started&url=started.cfm>

²⁰²³ The switch to bank holding company status required a simple charter change. Both Morgan and Goldman already owned banks that they had chartered as industrial loan companies, a type of bank that is allowed to accept FDIC-insured deposits without having any Fed supervision over their bank’s parent or other affiliated companies.

thought in a very short period of time you'd be out of business," Mack told the FCIC. "I think it was really signaling more than anything else... It sends a signal that these two firms are going to survive."²⁰²⁴

To *further* reassure the markets, both companies announced significant new equity investors. Warren Buffett pumped \$5 billion into Goldman Sachs and Mitsubishi UFJ pumped \$9 billion into Morgan Stanley. Mack said the Mitsubishi investment came in the nick of time; he had been waiting all weekend for confirmation when, at around 4:00 or 4:30 on Sunday afternoon, he got a phone call from Paulson, Bernanke, and Geithner. "They said basically they wanted me to sell the firm," Mack told the FCIC. Less than an hour, Mitsubishi called to confirm its investment and the regulators backed off.²⁰²⁵

So there was some good news over the weekend, but more bad news on Monday—for Morgan Stanley. The run continued. In addition to the hedge fund withdrawals and the collateral calls from tri-party clearing banks, the repo lenders themselves were less willing to lend to Morgan Stanley, no matter what the haircut. Wong recalled, "There was a shrinkage in the lending provided by repo lenders. Increasingly, a decreasing number were willing to do new repos. Increasingly in that week in subsequent weeks, the existing repos, they were starting to contract. Everybody was. They just couldn't lend anymore." [From notes, need to check audio.]

[Will add a comment on what was going on with TARP at the time.]

By the end of September, Morgan Stanley's liquidity pool had drained to a mere \$55 billion;²⁰²⁶ for comparison, Lehman's liquidity pool had been \$34 billion three days prior to its bankruptcy, and Bear's had fallen from \$18 billion to [\$2] billion during its last week as an independent company.²⁰²⁷ [We

²⁰²⁴ FCIC interview with John Mack, November 2, 2010.

²⁰²⁵ FCIC interview with John Mack, November 2, 2010.

²⁰²⁶ FCIC-MS0002435.

²⁰²⁷ Lehman IB Update, internal Federal Reserve Bank of New York document. FRBNY to Exam. 023440

are checking Morgan Stanley data and have requested info from Goldman.] And Morgan Stanley's liquidity depended critically upon the roughly \$100 billion of support it was receiving from the Fed's special lending facilities for investment banks.

Reserve Primary Fund: "Breaks the buck"

One of the first and most dramatic casualties of the Lehman bankruptcy was the Reserve Primary Fund, which had more than three-quarters of a billion dollars invested in Lehman's commercial paper. The Primary Fund was the world's first money market fund, established in 1971 by Reserve Management Company. The fund had traditionally invested in very conservative assets, primarily government securities and bank certificates of deposit. For years, the Primary Fund had enjoyed the highest possible ratings from Moody's and S&P for safety and liquidity. This was not unusual—conservatively run money market funds would typically receive the highest ratings—but Reserve Management's promotional materials highlighted the achievement.²⁰²⁸

In March, 2006, the Fund had advised investors that it had "slightly underperformed rivals, owing to a more conservative and risk-[averse] manner of investing – for example, the Reserve Funds do not invest in commercial paper."²⁰²⁹ But not for long. Immediately after the publication of this statement, the investment strategy quietly but dramatically changed. Within 18 months, commercial paper accounted for one-half of all Reserve Primary assets. The higher yields paid by these riskier investments generated higher returns for Fund shareholders and pulled in billions of new dollars from investors.²⁰³⁰ In each of the three years preceding the collapse of Lehman, the Reserve Primary Fund was recognized as the fastest

²⁰²⁸ SEC Complaint at paragraph 35.

²⁰²⁹ "A Money-Fund Manager's Fateful Shift," WSJ (December 8, 2008). [will find primary source]

²⁰³⁰ SEC Complaint at paragraph 36.

growing money market fund complex in the U.S. In the year ending August 2008, the fund's assets more than doubled, by far the highest growth among the 25 largest money market fund families.²⁰³¹

This seemed like good news, but did Reserve Primary Fund investors really understand the risks of investing in a fund that put their money into commercial paper issued by Lehman Brothers, Merrill Lynch, and Washington Mutual, as well as asset-backed commercial paper that indirectly invested in subprime and Alt-A residential mortgage-backed securities? Until two days before Bear Stearns's near-collapse in March, the Reserve Primary Fund had also loaned the bank money via the overnight repo market. Portfolio Manager Michael Luciano told the FCIC that he had been comfortable with the risk because the collateral for their loans was held by a third-party clearing bank. Nevertheless, he had pulled this repo funding after Bear CEO Alan Schwartz's appearance on CNBC in the company's final days. Luciano and other managers then reviewed and reconsidered their exposures to other financial institutions in the short-term commercial paper and repo markets. But Bear had been a second-tier investment bank and it had been rescued, so Luciano (and many other professional investors) had plausibly assumed that Goldman and Lehman, both much larger and posing greater apparent systemic risks, would also be deemed too big to fail.²⁰³² The federal government would save the day or at least find a buyer, Luciano believed.²⁰³³

On September 15, the day Lehman Brothers filed for bankruptcy, the Primary Fund was holding \$785 million in Lehman commercial paper and medium-term notes, which amounted to 1.2% of the fund's total assets of \$62.4 billion. That morning, the fund's Board consulted with its financial analysts and decided, in light of the Lehman bankruptcy filing, that the Lehman debt should be valued at 80 cents on the dollar.²⁰³⁴ That devaluation and billions of dollars of redemption requests meant that the Primary

²⁰³¹ Crane Data News Archives (September 12, 2008).

²⁰³² FCIC interview with The Reserve Primary Fund management, March 25, 2010, p. 3.

²⁰³³ FCIC interview with The Reserve Primary Fund management, March 25, 2010, p. 3.

²⁰³⁴ SEC Complaint at paragraph 58.

Fund's net asset value (NAV) fell below \$0.995 per share.²⁰³⁵ The Fund would therefore be unable to pay back all investors without recognizing losses. The nation's first mutual fund had become the first fund since 1994 to "break the buck" – a death knell for any money market fund.²⁰³⁶ That morning, even as the Board was reaching this valuation decision, the fund was flooded with redemption requests totaling \$10.8 billion.²⁰³⁷ These redemption requests were honored by State Street, the fund's custodian bank, largely through an existing overdraft facility.

Despite assurances from the fund's investment advisors, Bruce Bent, Sr. and Bruce Bent II, that it was committed to maintaining a \$1.00 NAV,²⁰³⁸ an additional \$47 billion in redemption requests came in that day and over the next few days. None were honored after State Street stopped providing the overdraft facility at 10:10 am on September 15.²⁰³⁹ Senior representatives of the firm reportedly described State Street's action as "the kiss of death" for the Primary Fund, and noted that the fund was "screwed" unless "something magical happens."²⁰⁴⁰ There were apparently no other lines of credit or credit support facilities available to the fund. It was not until October 30, 2008, that investors in the fund began to receive a portion of their investments back.

Meanwhile the 80-cent estimate for Lehman's commercial paper had already proved to be aggressively optimistic. After the market closed on Tuesday, Reserve announced that the "value of debt

²⁰³⁶ The Community Bankers US Government Fund broke the buck in 1994, paying investors 96 cents per share. Community Bankers was the first failure in the then 23-year history of money funds and the last failure until the Primary Reserve Fund failed 14 years later. The Community Bankers fund, unlike Primary Reserve, was solely an institutional money fund, thus failure of the fund would not directly affect individual retail investors.

²⁰³⁷ SEC Complaint at paragraph 3, 59.

²⁰³⁸ SEC Complaint at paras. 88 through 113.

²⁰³⁹ The Primary Fund, "Plan of Liquidation and Distribution of Assets," pg. 2 (December 3, 2008).

²⁰⁴⁰ SEC Complaint at para. 101.

securities issued by Lehman Brothers Holdings, Inc. ... and held by the Primary Fund has been valued at zero effective 4:00PM New York time today. As a result, the NAV of the Primary Fund, effective as of 4:00PM, is \$0.97 per share.”²⁰⁴¹ Four days later, the fund sought SEC permission to officially suspend redemptions. [will include interviews with investors that ran the fund if available]

Other funds exposed to Lehman suffered similar losses, but, unlike the Reserve Primary Fund, they were propped up by their respective sponsors. On Monday, Evergreen Investments, Wachovia’s asset management unit, announced that it would support as needed the three Evergreen mutual funds that held about \$540 million in Lehman paper. On Wednesday, the Bank of New York announced support for its various funds that held Lehman paper, including the \$22 billion Institutional Cash Reserves fund and four of its trademark Dreyfus money market funds. In the end, the Bank of New York would end up taking an after-tax charge of \$425 million because of this decision.²⁰⁴²

The run on the mutual funds even hit those with no direct Lehman exposure. Putnam Investments, for example. On Wednesday, its \$12 billion Prime Money Market fund, which held no Lehman paper at all, was hit with a wave of redemption requests from institutional investors. (The fund’s minimum investment was \$10 million.) Unable to liquidate assets quickly enough to meet the demands, and apparently fearful that honoring the requests from those who ran for the exits first could risk losses for those investors left behind, it stopped honoring redemption requests altogether. One week later, Federated Investors acquired Putnam’s Prime Money Market Fund and combined it with its Prime Obligations Fund.

²⁰⁴¹ SEC Complaint, paragraph 121. The SEC notes at paragraph 119 that the Primary Fund likely broke the buck prior to 11:00am on September 16 due to the redemption requests and the valuation of Lehman’s debt. Paragraph 120 notes that RMCI announced on November 26, 2008 that, due to an administrative error, its NAV should have been calculated as \$0.99 between 11:00am and 4:00pm on September 16.

²⁰⁴² BNY Mellon Press Release, “The Bank of New York Mellon Provides Support to Its Clients; Support Agreements Will Be Created for Investors in Funds Impacted by Lehman Bankruptcy” (September 24, 2008).

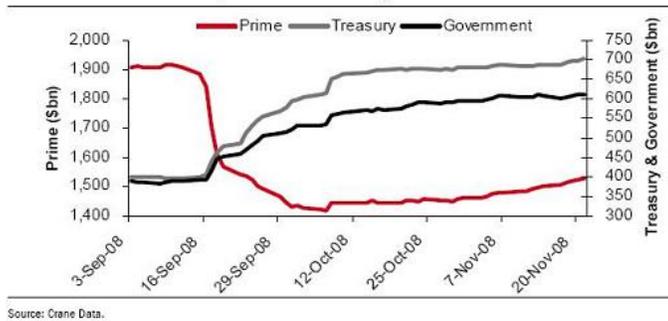
Within one week of the Lehman bankruptcy, investors in prime money market funds (funds that invest in commercial paper, certificates of deposit, and other highly-rated short term debt) had withdrawn \$300 billion; within three weeks, they had pulled out another \$150 billion. Most of that money went straight into money market funds that held *only* Treasury and Government securities.²⁰⁴³ Those funds had such an inflow of funds that they had to turn people away.²⁰⁴⁴ In this flight to quality, money market funds and other investors bid up the prices of the last remaining class of assets that were perceived to be safe. In fact, the yield on four-week U.S. Treasuries fell close to 0%.

Actual dollar losses incurred by the funds and their investors were relatively small. Nevertheless, their impact was significant and best demonstrated by the degree and extent of direct support and commitments that these funds required from their sponsors. Over the next two years, 62 money market funds received financial assistance from their sponsors and from the U.S. government. Thirty-six were based in the U.S., 26 in Europe. All this effort in order not to break the buck.

²⁰⁴³ Investment Company Institute, “Weekly Total Assets and Number of Money Market Mutual Funds,” 2008. While non-government funds lost \$435 billion during the period September 10 through October 1, 2008, government funds – investing in Treasuries and GSE debt – increased by \$357 billion.

²⁰⁴⁴ A New York Fed official emailed colleagues, “Generally the market is locked up and investors are moving to Treasury funds (flight to quality), but these funds are no longer taking additional funds (lack of Treasury securities).” FCIC-MS0002594.

Figure 3. Major Shift Within Taxable Institutional and Retail Money Market Fund Assets Away From Prime Funds as Panic Spread and the Resulting Government Intervention

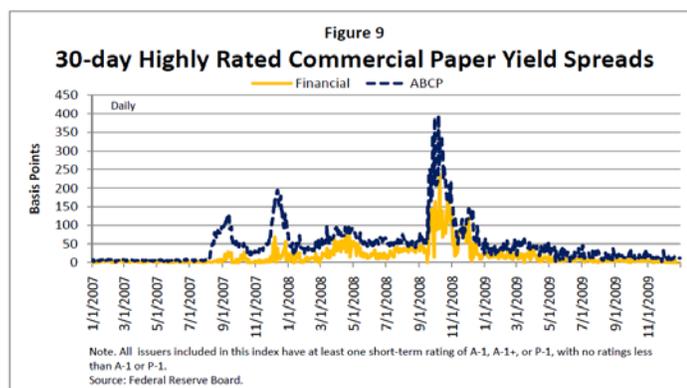


Meanwhile, as shown in Figure ##, the immediate migration of more than \$450 billion out of the money market funds created havoc in the commercial paper market, where those funds were the major lenders. It was now simply out of the question for many funds to hold unsecured commercial paper from any large financial institution: investors wanted no part of the next Reserve Primary Fund, and money market managers wanted no part of the next Lehman. Within one month of that bankruptcy, money market funds' combined investments in commercial paper fell from 24% to 17% percent of total fund assets. This drop in investor demand drove up the yields on commercial paper dramatically, from around 2% to 8% – an unprecedented rapid increase that in turn created problems for the borrowers in the commercial paper market, particularly financial companies such as GE Capital, CIT, American Express, and Deere & Company. Financial commercial paper accounted for almost 90% of the \$1.5 trillion commercial paper market. Many borrowers that did not enjoy the top A1/P1 short-term credit ratings were unable to find anyone willing to take their business, and almost all the commercial paper that could be sold to investors had overnight maturity.

“You had a broad-based run on commercial paper markets,” Timothy Geithner, then President of the New York Fed and currently Treasury Secretary, told the FCIC. “And so you

faced the prospect of some of the largest companies in the world and the United States, losing the capacity to fund and access those commercial paper markets.²⁰⁴⁵

As shown in the following chart, the cost of commercial paper borrowing for financial firms and non-financial firms spike in mid-September, surpassing previous highs in 2007.



Thus, three decades of easy borrowing for those with top-rated credit in a very liquid market disappeared almost overnight. The Federal Reserve and U. S. Treasury reacted almost that quickly to eliminate some of the uncertainty for the money market funds. On Friday, September 19, Treasury announced a program to provide—for a fee – eligible money market funds with a guaranty that Treasury would support the \$1 net asset value.²⁰⁴⁶ The program did not cover those funds, notably the Reserve Primary Fund, that had already broken the buck prior

²⁰⁴⁵ Timothy Geithner, FCIC hearing on The Shadow Banking System, May 6, 2010, p.135 of transcript.

²⁰⁴⁶ <http://www.ustreas.gov/press/releases/hp1147.htm>. President George W. Bush approved the use of existing authorities by Secretary Henry M. Paulson, Jr. to make available as necessary the assets of the Exchange Stabilization Fund (“ESF”) for up to \$50 billion to guarantee payments to support money market mutual funds. The Exchange Stabilization Fund was established by the Gold Reserve Act of 1934, with the objective of stabilizing the value of the dollar in the depths of the Depression. It authorized the Treasury Secretary, with the approval of the President, “to deal in gold, foreign exchange, and other instruments of credit and securities” to promote international financial stability. Over the years, the ESF has principally served that function, although it was also used to provide a rescue facility for Mexico in 1995. <http://www.treas.gov/offices/international-affairs/esf/>.

to September 19. This new program had an immediate impact, slowing the run on money market funds.

On September 19, the Fed launched another program to relieve the logjam in the asset-backed commercial paper market, a critical source of funding for credit cards, auto loans, and commercial loans, and other corporate and consumer credit.²⁰⁴⁷ Money market mutual funds wanted to raise cash to honor redemptions, meaning they wanted to sell their now illiquid inventory of asset-backed commercial paper but could only sell that paper at a loss. The new program with a long name – Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility – but shorter acronym (AMLF) was designed to solve this problem. It provided loans to banks to purchase high-quality commercial paper assets from the money market funds that wanted to sell them. In its first two weeks, this program lent \$150 billion for commercial paper purchases.²⁰⁴⁸ Though its usage rapidly declined over the next couple months, it was critical part of the government response to stop the run on money market funds.

OTC derivatives: “A grinding halt”

Trading in the over-the-counter derivatives markets declined as investors grew more concerned about counterparty risk and as hedge funds and other market participants exited or reduced their positions. But, following Lehman’s bankruptcy, many of these markets slowed to a crawl, and in some cases, there was no market at all—no trades whatsoever. Worst hit was the market for derivatives based on subprime and Alt-A, or nonprime, mortgages. Recall the ABX index, the Dow Jones Index of sorts for the nonprime securitization market, which firms had come to rely on to value their nonprime assets. Trading on this index became very thin, so index values weren’t particularly informative. So, what was a valid

²⁰⁴⁷ <http://www.federalreserve.gov/newsevents/press/monetary/20080919a.htm>

²⁰⁴⁸ [http://www.research.stlouisfed.org/fred2/graph/?chart_type=bar&s\[1\]\[id\]=WABCMMF](http://www.research.stlouisfed.org/fred2/graph/?chart_type=bar&s[1][id]=WABCMMF)

price for these assets? There were no real answers. “Price discovery” was—even more than it had been under normal market conditions—a guessing game, and we have seen how this unpleasant game had played out over the preceding months, as all the major financial firms, including Bear Stearns, AIG, Goldman Sachs, JP Morgan, and so many others struggled to value mortgage-related securities.

“The OTC derivatives markets came to a grinding halt [after Lehman’s bankruptcy], jeopardizing the viability of every participant regardless of their direct exposure to subprime mortgage-backed securities,” hedge fund manager Michael Masters, CEO of Masters Capital Management, told the FCIC.²⁰⁴⁹ “Furthermore, when the OTC derivatives markets collapsed, participants reacted by liquidating their positions in other assets those swaps were designed to hedge.”

The fall in trading volume fed upon itself and had implications beyond valuing mortgage securities. Derivatives had been used to manage all manners of risk—the risk that currency exchange rates would fluctuate, the risk that interest rates would rise or fall, the risk that asset prices would move. The efficiency of managing these risks with derivatives relied on liquidity in derivatives markets so that positions could be adjusted daily, with little cost. But, in the fall of 2008, everyone wanted to reduce exposure to everyone else. There was a rush for the exits. Participants worked to get out of existing trades. And, everyone was worried about the risk inherent in the next trade, so there often was *not* a next trade. It was a vicious circle of justifiable caution and inaction.

In the absence of a liquid derivatives market and efficient price discovery, every firm’s risk management analysis became more expensive and difficult. The usual hedging mechanisms, including using derivatives to hedge movements in interest rates and commodity prices, were impaired. You wanted to trade at a loss to get out of a losing position? There might not have been a buyer.²⁰⁵⁰

²⁰⁴⁹ Michael Masters, transcript of FCIC hearing, June 30, 2010.

²⁰⁵⁰ In describing these market developments, it should be borne in mind that due to shortcomings in transparency, lack of reporting requirements and limited data collection by third-parties, it is difficult to document the various market trading problems that emerged during the crisis.

Imagine a financial firm with an asset that pays a floating interest rate. That firm might hold a derivative that swaps the floating interest payments for fixed payments. Now, consider that interest rates moved unexpectedly in the fall of 2008 – for example, the interest rate at which highly-rated corporations borrowed– spiked during September 2008. A firm might want to dump its current interest rate swap for a different one, but no one is willing to take the other side of that new contract. This firm has two problems – it has an interest rate swap it doesn't want and it can't enter into an interest rate swap that it does want.

Several measures show the lack of liquidity in derivatives markets. First, market activity across in a broad range of derivatives declined. From the summer of 2008 to the end of the year, outstanding amounts of derivatives contracts on foreign exchange rates, interest rates, equities, credit derivatives, and commodities all fell, often at an annual rate greater than the increase of the preceding two years. These declines followed strong average growth in the outstanding amounts in these contracts over the preceding two years. The declines after the summer of 2008 are all the more remarkable in that they defy historical precedent. Markets had become more volatile, which historically had meant *more* derivatives trading, not *less*. Indeed, this was the only significant contraction over a six month period in global outstanding OTC derivatives since the BIS began keeping statistics. Just as with the fixed interest payments for the hypothetical firm above, when unexpected things happen in markets, firms usually turn to the derivatives markets in greater numbers. And, yet, derivatives activity contracted, demonstrating the degree of uncertainty and fear in the markets.

Figure 2

Growth in Outstanding Amounts (annual rate)

| | June '06 to June '08 | June '08 to Dec '08 |
|-----------------------------------|----------------------|---------------------|
| Total OTC Contracts | 35% | -36% |
| Foreign Exchange Contracts | | |
| Total FX contracts | 29% | -51% |
| Maturity of one year or less | 21% | -49% |
| Maturity between 1 and 5 yrs | 35% | -28% |

| | | |
|--|-----|------|
| Maturity over 5 years | 79% | -78% |
| Interest Rate Contracts | | |
| Total IR contracts | 32% | -29% |
| Maturity of one year or less | 30% | -1% |
| Maturity between 1 and 5 yrs | 21% | -31% |
| Maturity over 5 years | 49% | -50% |
| Equity Contracts | | |
| Total Equity contracts | 23% | -63% |
| Maturity of one year or less | 32% | -72% |
| Maturity between 1 and 5 yrs | 10% | -54% |
| Maturity over 5 years | 32% | -46% |
| Credit Derivatives | | |
| All counterparties (gross) | 71% | -45% |
| Hedge funds, SPVs, Other | 58% | -75% |
| All Commodities but precious metals | | |
| All instruments | 45% | -90% |

Source: BIS

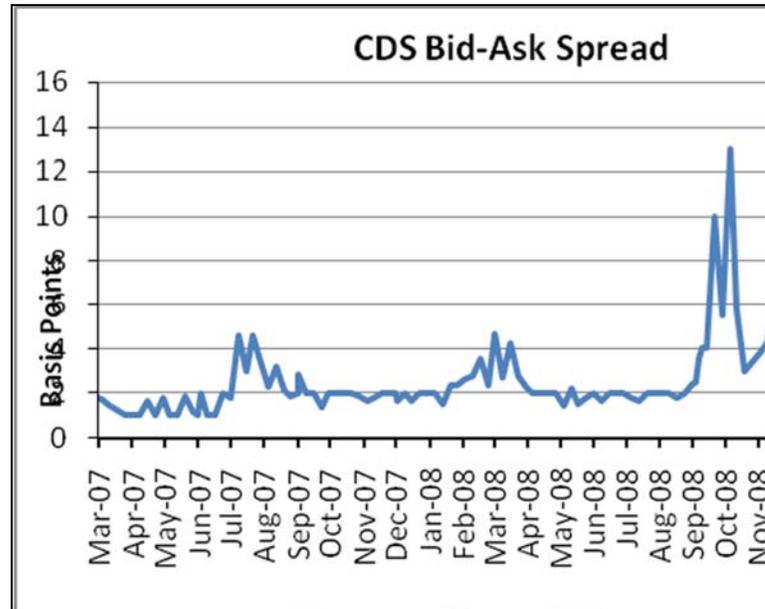
Another measure of the lack of liquidity in derivatives markets was the higher prices charged by dealers to enter into contracts. Dealers bear additional risks when markets are illiquid, and they passed the cost of those risks onto market participants. The cost is evident in the increased spread between the price at which dealers were willing to buy contracts (the bid price) and the price at which they were will to sell them (the ask price). This is referred to as the bid-ask spread, which confusingly is actually reported as the ask price less the bid price. In essence, dealers lay off derivative positions they enter into and earn money by the small difference between the bid and the ask price. The spread goes up – the ask price goes up relative to the bid price — when markets are illiquid. Typically, the risk of not being able to sell a position is very low for a dealer. As markets became less liquid during the crisis, however, dealers worried that they might be saddled with unwanted exposure. As a result, dealers would charge more, or raise their ask price, for new contracts, and the spread would rise. In addition, they would offer less for new contracts, or lower their bid price, because they were fearful of being in contracts with uncredit-worthy counterparties. While data on these spreads are limited, a firm called Markit does report the

spreads on credit default swaps, shown in the chart. The spreads rose sharply during the crisis, likely reflecting the dynamic above as well as disruptions owing to increasing concerns that large firms were in danger of failing. In the end, the increase in the spread in these contracts meant that the cost of a firm hedging its exposure to the potential default of an asset or another firm rose with the higher ask price from the dealer. The cost of risk management rose just as the risks themselves had risen.

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Figure 1

Bid-Ask Spread in Speculative Grade CDS



* Source: Markit

Washington Mutual: “It’s yours”

In the eight days after Lehman’s bankruptcy, depositors pulled \$16.7 billion out of Washington Mutual, the largest thrift in the country.²⁰⁵¹ Just two months earlier, in July, WaMu had experienced a similar run that cost \$10 billion in deposits,²⁰⁵² following the failure of IndyMac Bank in Pasadena, California – up to that point, the largest failure of any thrift ever.²⁰⁵³ As with the failure of Lehman, the failure of WaMu caught government officials unprepared for the fallout. And, once again, a decision to let a financial institution fail when others had been saved would bring panic to the markets as well as more government intervention.

²⁰⁵¹ OTS 08-046A, “OTS Fact Sheet on Washington Mutual Bank”, pg. 3

²⁰⁵² FDIC, Confidential Problem Bank Memorandum, September 8, 2008, pg 2

²⁰⁵³ OTS 08-029, July 11, 2008, “OTS Closes IndyMac Bank and Transfers Operations to FDIC”

Investors, counterparties, knowledgeable depositors, and regulators had been concerned about WaMu since the crisis began, because of its poor mortgage underwriting standards and its exposures to the inherently dicey pay option adjustable rate mortgages. On July 22, when WaMu reported a net loss of \$3.3 billion for the second quarter, Moody's lowered its rating of WaMu's senior unsecured debt to Baa3, the lowest-tier investment grade rating.²⁰⁵⁴ On September 11, just as the Lehman and AIG episodes were coming to a head, Moody's downgraded the company's senior unsecured debt rating to junk status – meaning.²⁰⁵⁵ Moody's cited "WAMU's reduced financial flexibility, deteriorating asset quality, and expected franchise erosion."²⁰⁵⁶ WaMu disagreed. "We believe that Moody's decision to reduce the ratings of Washington Mutual, Inc. to below investment grade is inconsistent with the company's current financial condition."²⁰⁵⁷

As explained in Chapter 5, the OTS and FDIC could not agree on WaMu's financial soundness – the FDIC believing it should be rated a "4", meaning unsatisfactory, and the OTS believing it should be rated a "3", meaning only some degree of concern.²⁰⁵⁸ FDIC Chairman Sheila Bair underscored the difficulties that FDIC had with OTS, telling the FCIC that, "our examiners, much earlier, were very

²⁰⁵⁴ Bloomberg

²⁰⁵⁵ Bloomberg

²⁰⁵⁶ September 11, 2008, Moody's Investors Service, "Moody's cuts WaMu's ratings; outlook negative"

²⁰⁵⁷ September 11, 2008, Washington Mutual Inc., Investor Relations, Seattle, WA

²⁰⁵⁸ On April 9, 2010, the Offices of Inspector General for Department of the Treasury and Federal Deposit Insurance Corporation completed a report (No. EVAL-10-002) entitled, Evaluation of Federal Regulatory Oversight of Washington Mutual Bank.²⁰⁵⁸ Section 38(k) of the Federal Deposit Insurance Act requires the Inspector General to conduct a material loss review (MLR) of the causes of the failure and primary federal regulatory supervision when the failure causes a loss of \$25 million to the DIF or 2 percent of an institution's total assets at the time the FDIC was appointed receiver. Because the FDIC facilitated a sale of WAMU to JPMorgan Chase & Co without incurring a material loss to the DIF, an MLR is not statutorily required. However, given WAMU's size, the circumstances leading up to WAMU's sale, and non-DIF losses, such as the loss of shareholder value, the Inspectors General of the Department of the Treasury and FDIC believed that an evaluation of OTS and FDIC actions could provide important information and observations as the Administration and the Congress consider regulatory reform. OIG Report Located at <http://www.fdicoin.gov/reports10/10-002EV.pdf>, pgs 2-6

concerned about the underwriting quality of WaMu's mortgage portfolio, and we were actively opposed by the OTS in terms of going in and letting our [FDIC] examiners do loan-level analysis."²⁰⁵⁹

The OTS eventually decided that the thrift could likely not "pay its obligations and meet its operating liquidity needs" and regulators seized the bank on September 25, appointing the FDIC as the receiver.²⁰⁶⁰ WaMu thus became the largest insured depository institution to fail in U.S. history – bigger than IndyMac, bigger than the notorious failures of the S&L crisis of the late 1980s and early 1990s. On that same day, JP Morgan acquired WaMu's banking operations from FDIC and, on the following day, WaMu's parent company (now minus the thrift) filed for Chapter 11 bankruptcy protection.²⁰⁶¹

FDIC officials told the FCIC that they knew WaMu was in trouble and thus had time to arrange a transaction with JP Morgan.²⁰⁶² So did JP Morgan CEO Jamie Dimon. He told the FCIC that his bank was already examining WaMu's assets for purchase when Sheila Bair called him and asked, "Would you be prepared to bid on WaMu?" "I said yes we would," Dimon recalled. "She called me on Tuesday [September 30] and said we are going to put it up for sale... 'I am going to have a team come in and tell you the bidding procedures.' We put in our bid...she called me up literally the next day and said – 'It's yours' ... I thought there was another bidder, by the way, the whole time, otherwise I would have bid a dollar – not [\$1.8 billion], but we wanted to win."²⁰⁶³

²⁰⁵⁹ August 18, 2010, Memorandum for Record, FCIC interview of FDIC Chairwoman Bair, pg 2; August 18, 2010, Audio Transcripts at 11:00 to 11:21 minutes.

²⁰⁶⁰ OTS 08-046A, "OTS Fact Sheet on Washington Mutual Bank", pg. 3

²⁰⁶¹ September 26, 2008, Bankruptcy Petition #08-12229-MFW; September 27, 2008, "Washington Mutual Lists \$8 billion debt in bankruptcy", Bloomberg, Jef Feeley and Steven Church; U.S. Senate Permanent Subcommittee on Investigations, April 13, 2010, Opening Statement of Senator Carl Levin, pg. 4

²⁰⁶² July 16, 2010, Memorandum for Record, FCIC interview of FDIC Staff, pg 7; July 16, 2010, Audio Transcripts at 26:38 to 27:11 minutes.

²⁰⁶³ October 20, 2010, FCIC Interview with Jamie Dimon, Audio Transcript, 54:10 -55:15 minutes

A subsequent review by Treasury’s Inspector General concluded that WaMu failed primarily because of management’s pursuit of a high-risk lending strategy that included poor underwriting standards and inadequate risk controls. The Inspector General criticized the OTS for knowing about the problems but failing to correct them.²⁰⁶⁴ It also reported that the FDIC did not charge WaMu sufficient deposit insurance premiums that reflected the risks identified by the FDIC because the premiums were based on the OTS’s ratings.²⁰⁶⁵ According to the U.S. Senate’s Permanent Subcommittee on Investigations, WaMu failed for a number of reasons, including high-risk mortgage lending and securitization, poor loan underwriting standards, weak risk management and internal controls, compensation programs that incited loan production over loan quality, and lax regulatory oversight.²⁰⁶⁶

Nevertheless, the FDIC insurance fund came out of the WaMu bankruptcy whole. So did the uninsured depositors as well as, of course, the insured depositors.²⁰⁶⁷ But, unsecured creditors incurred losses, which created panic among uninsured creditors of other struggling banks, particularly Wachovia. Chairman Bair characterized the resolution of WaMu as “successful.” And, when asked whether letting the unsecured creditors take losses was the right decision, she responded, “I absolutely do think that was the right decision... WaMu was not a well run institution.”²⁰⁶⁸ The FDIC’s decision to close WaMu fail—indeed the FDIC never contemplated invoking the systemic risk exception – would be hotly debated. Federal Reserve General Counsel Scott Alvarez agreed with Bair that “there should not have been intervention in Wamu.”²⁰⁶⁹ But Neel Kashkari, assistant secretary of the Treasury under Paulson, told the

²⁰⁶⁴ April 9, 2010, Offices of Inspector General, Report No. EVAL-10-002, Pg 4

²⁰⁶⁵ April 9, 2010, Offices of Inspector General, Report No. EVAL-10-002, Pg 4

²⁰⁶⁶ April 13, 2010, Permanent Subcommittee on Investigations, Hearing on Wall Street and the Financial Crisis: The Role of High-Risk Home Loans; April 16, 2010, (Part 2) Hearing on Wall Street and the Financial Crisis: The Role of Bank Regulators).

²⁰⁶⁷ “JP Morgan acquires banking operations of Washington Mutual” PR 85-2008, FDIC.

²⁰⁶⁸ FCIC hearing

²⁰⁶⁹ FCIC hearing

FCIC about Treasury's reaction to the decision, "And we were saying that's great, we can all be tough, and we can be so tough that we plunge the financial system into the Great Depression. And so, I think, in my judgment that was a mistake...at that time, the economy was in such a perilous state, it was like playing with fire."

Wachovia: "In the front of the dominoes as the dominoes fell"

The day after the WaMu meltdown, investors and depositors began to desert Wachovia Bank, the fourth-largest commercial bank in the U.S.²⁰⁷⁰ This was a "silent run," silent in that it was the work of uninsured depositors and unsecured creditors and their computers, not lines of depositors standing outside the doors.

Wachovia was the largest holder of option ARMs, the product that had helped to bring down WaMu and Countrywide. "The failure of WaMu thus raised creditor concern about the health of Wachovia," Fed General Counsel Scott Alvarez told the FCIC. Chairman Bernanke, Alvarez and others told the FCIC that the failure of WaMu triggered a run on Wachovia, although Alvarez also noted that failure of the TARP legislation to pass in Congress the day after WaMu failed also spooked markets. He said, "The day after the failure of WaMu, Wachovia Bank depositors accelerated the withdrawal of significant amounts from their accounts. In addition, wholesale funds providers withdrew liquidity support from Wachovia. It appeared likely that Wachovia would soon become unable to fund its operations."²⁰⁷¹ In contrast, Bair suggested to the FCIC that the failure of WaMu "was basically a non-event... it didn't even make the news...If anything, I think [the WaMu failure] helped the system rather than hurt it."²⁰⁷²

²⁰⁷⁰ Westerkamp MFR

²⁰⁷¹ The Acquisition of Wachovia Corporation by Wells Fargo & Company" prepared testimony by Scott G. Alvarez, General Counsel, Board of Governors of the Federal Reserve System before the Financial Crisis Inquiry Commission, September 1, 2010.

²⁰⁷² Bair MFR

David Wilson, the OCC examiner in charge at Wachovia, had a different point of view, telling the FCIC, “The whole world changed” for Wachovia after WaMu’s failure. However, concerns had been escalating since September 9, when Merrill Lynch analyst Ed Najarian downgraded Wachovia to “underperform.”²⁰⁷³ Najarian wrote that the company’s credit weakness was driven by deterioration in its option ARM portfolio, as well as by its commercial loan portfolio. On September 11, Robert Steel, who had left his post as Undersecretary of Treasury to become Wachovia’s CEO in July 2008, and other Wachovia executives met senior Federal Reserve Board officials to ask for an exemption from rules that banned using deposits from the insured bank to meet liquidity needs at the holding company.²⁰⁷⁴ The Fed did not respond affirmatively; its staff believed that Wachovia’s cash position was strong and that this requested relief was a “want” rather than a “need.”²⁰⁷⁵

Daily conference calls starting on Monday, September 15, the day Lehman filed for bankruptcy protection, changed the Fed’s mind. Wachovia *did* need help, as the markets trembled and depositors had started to withdraw their money. On September 19, the Fed supported the request to use the deposits of the subsidiary bank to bail out, in effect, the holding company.²⁰⁷⁶ On Saturday, September 20, Wells Fargo Chairman Richard M. Kovacevich told Steel that Wells might be interested in acquiring the besieged bank, and the two agreed to speak later in the week.²⁰⁷⁷ That same day, Federal Reserve Board Governor Kevin Warsh suggested that Steel also talk to Goldman Sachs.²⁰⁷⁸ This was easily arranged

²⁰⁷³ Cite

²⁰⁷⁴ These rules, embodied in Section 23A of the Federal Reserve Act (FRA), limit the support that a depository institution can provide to related companies in the same corporate structure; these rules are aimed at protecting FDIC-insured depositors from activities that occur outside of the bank itself. Fed Powerpoint deck at 15; 23A Exemptions have the effect of funding affiliate, non-bank assets within the Federal safety net of insured deposits and is a method to effectively create liquidity for the parent company and/or key affiliates (bank liquidity is reduced as a result) during times of market stress.

²⁰⁷⁵ Fed Powerpoint deck, at 15.

²⁰⁷⁶ Fed Powerpoint deck, at 16.

²⁰⁷⁷ Steel MFR at ___.

²⁰⁷⁸ Steel MFR at ___.

because Steel was a former vice chairman of Goldman, but the ensuing conversations were short. Goldman was not interested.²⁰⁷⁹

Throughout the following week, Steel told the FCIC, it became increasingly clear that Wachovia needed to merge with a stronger financial institution. The day after WaMu's failure on September 25, the run began in earnest. By noon on Friday,, creditors were refusing to roll over the bank's short-term funding²⁰⁸⁰ and were even asking that longer-term funding be paid off before its maturity date.²⁰⁸¹ Wholesale customers demanded that Wachovia redeem their brokered certificates of deposit and other debt.²⁰⁸² The FDIC's John Corston testified that Wachovia lost \$5.7 billion of deposits and \$1.1 billion of commercial paper and repos.²⁰⁸³ By the end of the day on Friday, September 26, 2008, Wachovia told the Fed that worried creditors had requested that Wachovia repay \$50 billion to \$60 billion in debt prior to maturity, roughly half of its long-term debt. Wachovia "did not have to pay these funds from a contractual basis (they had not matured), but would have difficulty [borrowing from these lenders] going forward given the reluctance to repay early," Richard Westerkamp, the Richmond Fed's examiner at Wachovia, told the FCIC.²⁰⁸⁴ "As the day progressed, some liquidity pressure intensified as financial institutions began declining to conduct normal financing transactions with Wachovia," Steel testified to the FCIC.²⁰⁸⁵

²⁰⁷⁹ Steel MFR at ___.

²⁰⁸⁰ Wachovia was unable to roll \$1.1 billion of asset-backed commercial paper that Friday. 9/29/08 FDIC Memo at 2.

²⁰⁸¹ Wilson MFR at ___.

²⁰⁸² Westerkamp MFR at 4.

²⁰⁸³ Corston 9/1/10 FCIC testimony at 4; FCIC-Wachovia 000545-46.

²⁰⁸⁴ [Rich Westerkamp email to FCIC, November 2, 2010. Westerkamp said that the estimate of early redemption requests was based on a phone conversation with officials in Wachovia's Treasury department, describing their conversations with investors; the figures were never verified.](#)

²⁰⁸⁵ Testimony of Robert K Steel, Former CEO of Wachovia Corporation, Financial Crisis Inquiry Commission, September 1, 2010.

That Friday, the value of Wachovia's 10-year bonds fell from 73 cents to 29.3 cents on the dollar, and the cost of buying protection on \$10 million of Wachovia debt jumped from \$571,000 to almost \$1,400,000 annually. In one day, Wachovia's stock price dropped 27%, wiping out \$8 billion in market value.²⁰⁸⁶ Comptroller of the Currency John Dugan, whose agency regulated Wachovia's commercial bank subsidiary, sent FDIC Chairman Sheila Bair a short and alarming email: Wachovia's liquidity was unstable.²⁰⁸⁷ Steel used a more colorful analogy, telling the FCIC that "Wachovia was in the front of the dominoes as the dominoes fell."²⁰⁸⁸

Government officials were concerned about the implications of a Wachovia failure and were not prepared to let Wachovia open for business on Monday without a deal in place and announced to the markets.²⁰⁸⁹ The Fed's Alvarez told the FCIC, "Markets were already under considerable strain after the events involving Lehman Brothers, AIG, and WaMu... There were fears that the failure of Wachovia would lead investors to doubt the financial strength of other organizations in similar situations, making it harder for those institutions to raise capital."²⁰⁹⁰

²⁰⁸⁶ In an FCIC interview, FDIC Chairman Sheila Bair said she does not believe that the failure of Washington Mutual triggered the near failure of Wachovia. Rather she attributed the near failure of Wachovia to market reactions to the failure of Lehman the week before. She described the WaMu failure as a "non-event" that was covered "below the fold" on the front page of newspapers when it happened. In contrast, [who?] described the abrupt failure of Washington Mutual as "the day the world changed" for retail banks and the catalyst for a run on Wachovia Bank the following day that resulted in Wachovia's near failure. [FDIC interviews in DC – add color]

²⁰⁸⁷ Interview with FDIC Chairman Sheila Bair, August 18, 2010. Request copy of email from FDIC.

²⁰⁸⁸ Check quote. Interview with Wachovia CEO Robert Steel, August 18, 2010 at 3. Quote is good

²⁰⁸⁹ Bair MFR August 18, 2010 at 4; Steel MFR August 18, 2008 at 10; and FDIC Staff (Cave, Wigand, Warren and Courston) MFR July 16, 2008 at 13.

²⁰⁹⁰ "The Acquisition of Wachovia Corporation by Wells Fargo & Company" prepared testimony by Scott G. Alvarez, General Counsel, Board of Governors of the Federal Reserve System before the Financial Crisis Inquiry Commission, September 1, 2010.

By Friday, Citigroup had joined Wells Fargo as a possible bidder for Wachovia. In fact, the two had emerged as the only possible bidders. Wachovia entered into confidentiality agreements with each of them on Friday; the two suitors immediately began their due diligence investigations.²⁰⁹¹

The key question early on was whether the government would provide assistance. Citigroup never considered making a bid that did not require such assistance. Wells Fargo was initially interested in purchasing all of Wachovia without FDIC assistance.²⁰⁹² Such assistance would require the first-ever application of the “systemic risk exception” written into the FDIC Improvement Act of 1991, a law passed in response to the crisis in the savings and loan industry in the 1980s. This law requires that failing banks be dismantled at the least cost to the FDIC unless the FDIC, the Federal Reserve Board, and the Treasury agree that a company’s collapse poses a risk to the entire financial system. Over the weekend, officials at the three pertinent federal agencies hurriedly considered the systemic risks that would result if the FDIC did not intervene and creditors and uninsured depositors suffered losses.

The signs were discouraging. Based on the withdrawals of the prior week, an internal analysis by the FDIC and OCC predicted that Wachovia could face up to \$115 billion of additional cash outflows the following week – including, most prominently, \$42 billion of further deposit outflows, \$12 billion of outflows from corporate deposit accounts, and \$30 billion of outflows from retail brokerage customers. To handle those outflows, Wachovia had only \$17 billion in cash and cash equivalents, although the FDIC and OCC estimated the company had collateral that it could use to raise another \$86 billion through the Fed’s discount window, the repo market, and the Federal Home Loan Banks. But, even if it successfully accessed all of those sources, it would have only \$103 billion to cover the potential \$115 billion outflow.²⁰⁹³ And the analysis indicated that the cash outflow could be even higher.

²⁰⁹¹ FCIC interview with Robert Steel, [DATE].

²⁰⁹² FCIC interview with Robert Steel, [DATE].

²⁰⁹³ 9/29/08 FDIC Memo at 2, 4-5.

During the weekend – as Paulson and Bernanke pressed Congressional leaders to back an unprecedented rescue plan for the financial sector – the Federal Reserve argued that Wachovia should be saved, with government assistance if necessary. Its analysis focused on counterparties and “interdependencies” with other large market participants.²⁰⁹⁴ Mutual funds, including Dreyfus, Federated Investors, PIMCO, Fidelity, Vanguard, Columbia Management and Morgan Stanley, held \$66 billion of Wachovia debt, which the Fed concluded represented “significant systemic risk” and could lead to another “break-the-buck” scenario, as had just happened the previous week to the Reserve Primary Fund, thanks to all the Lehman commercial paper it held. The Fed feared that liquidations of the mutual fund assets could cause short-term funding markets to “virtually shut down.”²⁰⁹⁵ Moreover, the Fed argued that broker-dealers owned \$39 billion of Wachovia’s \$191 billion debt and deposits, and the “investment banking sector was already weak and exposed to low levels of confidence.” [will add additional detail] These banks were already in danger of becoming “even more reliant on Federal Reserve support programs, such as PDCF, to support operations in the event of a Wachovia [-led] disruption.”

Finally, on top of all the other considerations, the Fed staff argued that the “worsening of the financial turmoil that would result from a least-cost solution of Wachovia Bank NA would further undermine business and household confidence.” Reduced liquidity at banking organizations would cause banks to “become even less willing to lend to businesses and households...[T]hese effects would contribute to weaker economic performance, higher unemployment, and reduced wealth.”²⁰⁹⁶ Treasury Secretary Paulson had recused himself from the decision because he had formerly worked with Wachovia CEO Steel at Goldman Sachs, but other members of the Treasury had “vigorously advocated the

²⁰⁹⁴ Cite

²⁰⁹⁵ 9/28/08 Memo to the Board of Governors of the Federal Reserve System (no bates numbers), at 6-7.

²⁰⁹⁶ Memo to the Board of Governors of the Federal Reserve System (no bates numbers), September 28, 2008, at 7.

transaction.²⁰⁹⁷ White House Chief of Staff Josh Bolten called FDIC Chairman Bair on Sunday to express the White House's support for a systemic risk exception.²⁰⁹⁸

At about 6:00 p.m. on Sunday, Kovacevich told Steel that he wanted more time to review Wachovia's assets, particularly its commercial real estate holdings, and could not make an unassisted bid before Monday. Wells Fargo and Citigroup came to the table with their proposals, both predicated on FDIC assistance. Wells offered to cover the first \$2 billion of losses on a pool of \$127 billion worth of assets and then share 80% of subsequent losses, if they grew large enough, capping the FDIC's losses at \$20 billion.²⁰⁹⁹ Citigroup wanted the FDIC to cover losses on a different, and larger, pool of \$312 billion worth of assets. Citigroup, though, would cover the first \$30 billion of losses and an additional \$4 billion a year for three years, and it would give the FDIC \$12 billion in preferred stock and warrants; FDIC would cover any additional losses above \$42 billion.²¹⁰⁰

FDIC staff expected Wachovia's losses to be between \$35 billion and \$52 billion. Based on that analysis and the particulars of the offers, they estimated that the Wells proposal would cost the FDIC between \$5.6 billion and \$7.2 billion, whereas the Citigroup proposal would cost the FDIC nothing.²¹⁰¹ Late Sunday night, Wachovia submitted its own proposal, this one stipulating that the FDIC provide assistance directly to the bank, allowing it to survive as a stand-alone entity. The FDIC would provide credit protection on \$200 billion of loans, with Wachovia absorbing the first \$25 billion in losses and the FDIC potentially incurring

²⁰⁹⁷ Interview with Sheila Bair, chairman of the FDIC, August 18, 2010; Minutes from the meeting of the FDIC board of directors, September 29, 2008, 6:04am, p. 56404.

²⁰⁹⁸ Interview with Sheila Bair, chairman of the FDIC, August 18, 2010.

²⁰⁹⁹ 9/29/08 FDIC Memo at 8.

²¹⁰⁰ 9/29/08 FDIC Memo at 8. Statement of John Corston on Systemically Important Institutions and the Issue of "Too Big to Fail" before the FCIC, September 1, 2010 at 10.

²¹⁰¹ 9/29/08 FDIC Memo at 8.

losses on the balance of the \$200 billion portfolio. Offsetting that risk, Wachovia proposed that the FDIC receive \$10 billion in preferred stock and warrants on common shares.²¹⁰²

The first question to be resolved was whether the federal government should help at all. With the White House, Treasury, and the Fed in support of invoking the systemic risk exception, only the FDIC board needed to weigh in. Its top officials debated the best course at a board meeting early on Monday morning, September 29²¹⁰³ – at 6:00 a.m., in fact, which reflected the pressure to resolve the bank’s fate before the markets opened. Preparing for the meeting, the FDIC staff had pulled an all-nighter. In that meeting, FDIC Associate Director Miguel Browne hewed closely to the analysis prepared by the Federal Reserve Bank of Richmond: Wachovia’s failure risked too many dominoes falling in too many directions hurting too many people, including American taxpayers. He also raised concerns about global implications that could hurt confidence in the dollar. Chairman Sheila Bair expressed a reluctance to provide government aid to intervene in the private financial markets.²¹⁰⁴ Office of Thrift Supervision Director John Reich, who served on the FDIC board, also hesitated, saying, “[T]here’s a lot that I don’t know, unfortunately.”²¹⁰⁵

Bair described her reservations about approving Citigroup’s proposed acquisition of Wachovia during the FDIC board meeting on September 29. “Well, I think this is, you know...one option of a lot of not-very-good options..... I have acquiesced in that decision based on the input of my colleagues, and the fact the statute gives multiple decision makers a say in this process. I’m not completely comfortable with

²¹⁰² 9/29/08 FDIC Memo at 8.

²¹⁰³ In TBTF, Sorkin (497) wrote that before the September 29, 2008 FDIC Board meeting, New York Federal Reserve Governor Geithner and other officials had a conference call with Bair (Paulson recused himself) during which Geithner urged Bair to help Citigroup acquire Wachovia by guaranteeing some of its potential losses. *Geithner countered that allowing the FDIC to take over Wachovia would have the effect of wiping out shareholders and bond holders, which, he was convinced, would only spook the markets. He was still furious with Bair for the way she had abruptly taken over Washington Mutual, which had had a deleterious effect on investor confidence.*

²¹⁰⁴ Transcript from the meeting of the FDIC board of directors, September 29, 2008, at 21-22.

²¹⁰⁵ Transcript from the meeting of the FDIC board of directors, September 29, 2008, at 15.

it but we need to move forward with something, clearly, because this institution is in a tenuous situation.” She continued by stating that “whether it’s the best resolution I don’t know.”²¹⁰⁶

To sway Bair and Reich, Treasury ultimately agreed to take the unusual step of funding all government losses from the proposed transaction.²¹⁰⁷ Absent this express commitment from the Treasury, the FDIC would have been the first to bear losses out of its Deposit Insurance Fund, with Treasury stepping in to help only once that Fund was depleted.²¹⁰⁸ As of September 30, 2008, the fund held about \$34.6 billion.²¹⁰⁹ According to the minutes of the meeting, Bair thought it was “especially important” that Treasury agreed to fund losses, given that “it has vigorously advocated the transaction.”²¹¹⁰

After just 30 minutes consideration, the FDIC board passed a resolution to support government assistance in the acquisition of Wachovia, concluding that such assistance would “mitigate the serious adverse effect on economic conditions or financial stability that would be caused by [Wachovia’s] failure.”²¹¹¹ The resolution also identified the winning bidder: Citigroup, whose bid the FDIC analysts had determined would cost the Treasury and FDIC nothing.²¹¹² Chairman Bair publicly announced the decision before the markets opened on Monday: “This action was necessary to maintain confidence in the banking industry given current financial market conditions.”²¹¹³ Bair told FCIC staff, “It was the fog of

²¹⁰⁶ Federal Deposit Insurance Corporation Board of Directors Meeting 9/29/2008. Transcript available here: <http://fcic.gov/hearings/pdfs/2010-0901-Wachovia-Package.pdf>

²¹⁰⁷ Minutes from the meeting of the FDIC board of directors, September 29, 2008, 6:04am, p. 56404.

²¹⁰⁸ Minutes from the meeting of the FDIC board of directors, September 29, 2008, 6:04am, p. 56404.

²¹⁰⁹ Third Quarter 2008 CFO Report to the FDIC Board, November 21, 2008, at 1, available at http://www.fdic.gov/about/strategic/corporate/cfo_report_3rdqtr_08/0908_CFO_Report.pdf

²¹¹⁰ Minutes from the meeting of the FDIC board of directors, September 29, 2008, 6:04am, p. 56404.

²¹¹¹ FDIC Board Resolution at 2. It was stated in the resolution that the assistance could be “in the form of loans to, deposits in, the purchase of assets or securities of, the assumption of liabilities of, guarantees against loss to, or contributions to the Banks or their acquirer.”

²¹¹² Bair MFR at 6.

²¹¹³ FDIC Press Release, 9/29/08.

war. The system was highly unstable. Who was going to take the chance that Wachovia would have a depository run on Monday? The Fed and the White House had already made clear that they would support a systemic-risk determination.”

The Wachovia board quickly voted to accept Citigroup’s bid. An agreement-in-principle was entered into by Wachovia, Citigroup, and the FDIC setting forth the basic terms of the transaction,²¹¹⁴ and Wachovia and Citigroup executed an Exclusivity Agreement prohibiting Wachovia from, among other things, negotiating with other potential acquirers.²¹¹⁵

Hours later, the U.S. House of Representatives voted down the \$700 billion rescue package for the financial system that Paulson and Bernanke had been vigorously promoting for the past week.²¹¹⁶ In the ensuing stock market sell-off, Wachovia’s stock was particularly hard hit, falling 82% to \$1.84.²¹¹⁷ For the day, the S&P financials index fell by 16%.²¹¹⁸

Wachovia and Citigroup negotiated the final package throughout the week. They were under tremendous pressure from the regulators and the markets to conclude the transaction before the following Monday, but the deal was complicated because Citigroup was not acquiring the holding company, just the bank, and Citigroup wanted to change some of the original terms.²¹¹⁹ And then came a surprise: On Thursday morning, October 2, Wells Fargo returned to the table and made a competing bid to buy the entire Wachovia entity for \$7 a share –a 600% premium over the \$1 per share Citigroup bid. This deal

²¹¹⁴ Steel MFR at ___; *See also* Affidavit of Robert K. Steel, dated 10/5/08, filed in Wachovia Corp. v. Citigroup, Inc., Case No. 08-cv-085093-SAS (United States District Court, Southern District of New York) at 3-4 and exhibit A attached thereto.

²¹¹⁵ Steel MFR at ___.

²¹¹⁶ Eric Martin, “US Stocks Plunge After House Votes Against Bailout Plan,” Bloomberg News (September 29, 2008).

²¹¹⁷ Charley Blaine and Elizabeth Strott, “Dow drops 778 as bailout bill fails,” MSN Money (September 29, 2008).

²¹¹⁸ Bloomberg terminal report for S&P financials index for relevant time period.

²¹¹⁹ FCIC Interview with Sheila Bair, August 18, 2010, MFR at 7.

was characterized by Wells Fargo as requiring no financial assistance from the Treasury, FDIC, Federal Reserve or any other government agency.²¹²⁰

There was, of course, a lot of speculation over the timing of Wells Fargo's new proposal, centered on IRS Notice 2008-83, an administrative ruling issued just two days earlier by the Treasury Department. This ruling allowed an acquiring company to write off the losses of an acquired company *immediately*, rather than spreading those losses over time. Wells Fargo told the SEC, however, that the notice "was itself not a major factor" in its decision to bid for Wachovia without direct government assistance, and permitted the bank to reduce taxable income by \$3 billion in the first year following the acquisition rather than reducing taxable income by \$1 billion per year for three years.²¹²¹ That contention was echoed by former Wells Fargo Chairman Richard Kovacevich, who told FCIC investigators that the new bid reflected additional due diligence, as he had told Wachovia CEO Steel at the time.²¹²² But Kovacevich told FDIC Chairman Bair that the tax change was a factor that led to Well's new bid.²¹²³

Three days after accepting Citigroup's federally assisted bid, Wachovia's board now convened in emergency session to discuss putting it aside in favor of Wells Fargo's amended bid. Again, the hour revealed the pressure: 11:00 p.m. The Wachovia board voted unanimously to approve the deal.

Early, early Friday morning—about 3:00 a.m.—Wachovia CEO Steel, General Counsel Jane Sherburne, and FDIC Chairman Bair called Citigroup CEO Vikram Pandit to inform him that Wachovia

²¹²⁰ Wells Fargo Press Release, *Wells Fargo, Wachovia Agree to Merge: Creating Premier Coast-To-Coast Financial Services Franchise Without Government Assistance*. October 3, 2008, page 1.

²¹²¹ 11/17/08 letter to SEC, WF_WACH-003799.

²¹²² Correspondence from Lawrence S. Makow, Wachtell, Lipton, Rosen & Katz, to Matt McNair, Division of Corporation Finance, SEC, November 17, 2008, at 3. WF-WACH-003797 to 3826, at 3799. ; Kovacevich MFR at ___.

²¹²³ Bair audio at ___.

had signed a definitive merger agreement with Wells Fargo.²¹²⁴ Steel read from prepared notes. Pandit was stunned. “It was an understatement [to say] that he was disappointed,” Steel told the FCIC.²¹²⁵ Somehow, Pandit had not gotten wind of the Wells Fargo bid, much less the news that it had been accepted and finalized. He thought Citigroup and Wachovia already had a deal.²¹²⁶ After Steel and Sherburne dropped off the phone call, Pandit asked Bair if Citigroup could keep its original loss-sharing agreement if it matched Wells’s \$7 a share bid. Bair said no, reasoning that the FDIC was not going to stand in the way of a private deal. Nor was it the role of the agency to help Citi in a bidding war. She also told the FCIC that she was concerned then about Citigroup’s own viability if it acquired Wachovia for that price.²¹²⁷ “In reality, we didn’t know how unstable Citigroup was at that point,” Chairman Bair said. “Here we were selling a troubled institution... with a troubled mortgage portfolio to another troubled institution... I think if that deal had gone through, Citigroup would have had to have been bailed out again.”²¹²⁸ Kashkari disagreed. He felt that the highest priority was to transfer the risk of banks’ troubled assets from the financial system to the government. Citigroup’s FDIC-assisted acquisition would have removed potential losses on \$270 billion of assets from the financial system by transferring those potential losses to the FDIC.²¹²⁹

Later Friday morning, Wachovia announced the deal with Wells Fargo with the blessing of the FDIC. In the press release, Kovacevich said that “[t]his agreement won’t require even a penny from the

²¹²⁴ Steel MFR at __; *See also* Affidavit of Robert K. Steel, dated 10/5/08, filed in Wachovia Corp. v. Citigroup, Inc., Case No. 08-cv-085093-SAS (United States District Court, Southern District of New York) at 7.

²¹²⁵ FCIC interview with Robert Steel, August 10, 2010, page 16.

²¹²⁶ Steel MFR at __. On Monday October 6, Citigroup sued Wells and Wachovia for \$60 billion, alleging interference with Citigroup’s bid in violation of the exclusivity agreement.

²¹²⁷ Bair MFR at 8.

²¹²⁸ FCIC interview with Sheila Bair, August 18, 2010.

²¹²⁹ Kashkari audio at __.

FDIC.”²¹³⁰ Steel added that the “deal enables us to keep Wachovia intact and preserve the value of an integrated company, without government support.”²¹³¹ Citigroup’s stock plummeted 18% that day and another 23% in the following week.

On Monday, September 29, Citigroup filed suit to enjoin the Wells Fargo acquisition of Wachovia, but would not be able to stop the deal²¹³² The Wells Fargo acquisition would close at midnight on December 31, 2008, for \$7 per share. Wachovia’s 129-year history as an independent company was over.

As for IRS Notice 2008-83, it was repealed in 2009. The Treasury’s Inspector General later conducted an investigation of the circumstances of the issuance of the Notice. The IG reported that the purpose of the Notice was to encourage strong banks to acquire weak banks by removing limitations on the use of tax losses.²¹³³ The IG said the Notice may have been an improper changing of the tax code by the Treasury Department, an act that the Constitution reserves to the Congress.²¹³⁴ A House of Representative conference report estimated that the repeal of the Notice saved about \$7 billion of tax revenues over 10 years; Wells and two other banks that acquired troubled institutions before the repeal are still entitled to the benefits of the Notice.²¹³⁵ However, the Wells controller, Richard Levy, told the FCIC

²¹³⁰ Wells Fargo Press Release, *Wells Fargo, Wachovia Agree to Merge: Creating Premier Coast-To-Coast Financial Services Franchise Without Government Assistance*. October 3, 2008, page 4.

²¹³¹ Wells Fargo Press Release, *Wells Fargo, Wachovia Agree to Merge: Creating Premier Coast-To-Coast Financial Services Franchise Without Government Assistance*. October 3, 2008, page 4.

²¹³² Cite

²¹³³ Delmar MFR at __; 9/3/09 Delmar Memo.

²¹³⁴ Delmar MFR at __; 9/3/09 Delmar Memo.

²¹³⁵ Delmar MFR at __; 9/3/09 Delmar Memo.

that Wells has not as yet recognized any benefits from the Notice because it has not had taxable income to offset.²¹³⁶

TARP: “comprehensive approach”

In the ten days after the Lehman bankruptcy, the Federal Reserve had provided more than \$100 billion to investment banks and commercial banks through the PDCF lending facility alone, trying to quell the storms in the repo markets.²¹³⁷ In addition, the Fed had lent more than \$174 billion to primary dealers through the Term Securities Lending Facility.²¹³⁸ On September 19, the Treasury Department announced its temporary guarantee of money market mutual funds, and the Federal Reserve unveiled its newest liquidity facility, the one with the long name: Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF).²¹³⁹ In its first two weeks, this program backed \$150 billion of commercial paper purchases.

By the end of September, in the six-plus months after the Bear Stearns meltdown, the Federal Reserve’s balance sheet had grown by 67% to \$1.5 trillion in assets, largely due to the bank’s various

²¹³⁶ Levy stated that in 2009, the year after the merger, Wells Fargo actually had a consolidated loss that didn’t let the company recognize any of the \$3 billion due to other tax laws, not related to section 382. Levy said the company’s 2010 results are not complete so he did not yet know whether they will be able to claim any of the \$3 billion. FCIC interview with Richard Levy, [date].

²¹³⁷ “H.4.1: Factors Affecting Reserve Balances of Depository Institutions and Condition Statement of Federal Reserve Banks,” September 18, 2008, available at <http://www.federalreserve.gov/releases/h41/20080918/h41.pdf>; September 24, 2008, available at <http://www.federalreserve.gov/releases/h41/20080925/h41.pdf>. This figure includes credit extended through the Primary Dealer Credit Facility and credit extended to certain other broker-dealers.

²¹³⁸ “H.4.1: Factors Affecting Reserve Balances of Depository Institutions and Condition Statement of Federal Reserve Banks,” September 24, 2008, available at <http://www.federalreserve.gov/releases/h41/20080925/h41.pdf>.

²¹³⁹ “Treasury Announces Guaranty Program for Money Market Funds,” Treasury Department press release hp-1147, September 19, 2008, <http://www.treas.gov/press/releases/hp1147.htm>; “Federal Reserve Board announces two enhancements to its programs to provide liquidity to markets,” Federal Reserve Board press release, September 19, 2008, <http://www.federalreserve.gov/newsevents/press/monetary/20080919a.htm>.

financing programs.²¹⁴⁰ These *ad hoc* measures were straining the government's resources. The Fed's lender-of-last-resort toolkit was running empty; the liquidity backstops had provided billions of dollars to investment banks with adequate collateral, but they had not resuscitated the struggling repo, commercial paper, and other financial markets. The hundreds of billions of extraordinary support provided to markets as well as individual firms was proving not to be enough to stabilize the financial markets and wobbling financial institutions.

Chairman Ben Bernanke testified about the importance of creating a formal mechanism to support the flailing financial system: "The Federal Reserve would like to get out of dealing with some of these crises we have been dealing with because there is no broader authority, no broader support, and we prefer to get back to monetary policy, which is our function, our key mission."²¹⁴¹

On Thursday, September 18, Secretary Paulson, Chairman Bernanke, and SEC Chairman Christopher Cox met with Democratic and Republican leadership from the House and Senate to discuss the mounting crisis and lay out their proposal for responding to it. In a statement the following day, Paulson declared that the fragility of the financial system required a "comprehensive approach."²¹⁴²

The Federal Reserve and Treasury proposed to purchase the toxic mortgage-related assets that were weighing down the balance sheets of the banks and that were the "underlying weakness in [the]

²¹⁴⁰ H.4.1: Factors Affecting Reserve Balances of Depository Institutions and Condition Statement of Federal Reserve Banks, value of total assets increased from \$899 billion on March 13, 2008 to \$1.499 trillion on October 2, 2008.

²¹⁴¹ Ben Bernanke, remarks before the Senate Committee on Banking, Housing, and Urban Affairs, hearing on "Turmoil in U.S. Credit Markets: Recent Actions Regarding Government-Sponsored Entities, Investment Banks, and Other Financial Institutions," September 23, 2008, transcript p. 78, available at http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_senate_hearings&docid=f:50414.wais.pdf

²¹⁴² "Statement by Secretary Henry M. Paulson, Jr. on Comprehensive Approach to Market Developments," Department of the Treasury press release hp-1149, September 19, 2008, available at <http://www.treas.gov/press/releases/hp1149.htm>.

financial system.”²¹⁴³ To this end, in the early hours of Saturday, September 20—the same weekend Goldman Sachs and Morgan Stanley applied to become bank holding companies and thus help their own precarious positions, as described above—the Treasury Department sent Congress a draft proposal of the legislation for the Troubled Assets Relief Program (now universally known by its acronym, TARP). The modest length of that document—just three pages—belied its unprecedented significance. It would give Treasury the authority to spend as much as \$700 billion to purchase the toxic assets, or more than one-quarter of the total revenue of the federal government in the 2007 fiscal year.²¹⁴⁴ And it would raise the public debt ceiling to \$11.315 trillion.²¹⁴⁵

Initial reaction to the plan was not promising. At a Senate Banking Committee hearing on the following Tuesday, Chairman Christopher Dodd observed: “This proposal is stunning and unprecedented in its scope—and lack of detail, I might add.”²¹⁴⁶ Ranking Member Richard Shelby added, “There are very few details in this legislation. . . . Rather than establishing a comprehensive, workable plan for resolving this crisis, I believe this legislation merely codifies Treasury’s ad hoc approach.”²¹⁴⁷ Many

²¹⁴³ “Statement by Secretary Henry M. Paulson, Jr. on Comprehensive Approach to Market Developments,” Department of the Treasury press release hp-1149, September 19, 2008, available at <http://www.treas.gov/press/releases/hp1149.htm>.

²¹⁴⁴ “The Nation by the Numbers: A Citizen’s Guide, *Summary of the FY 2007 Financial Report of the U.S. Government*,” Department of the Treasury and the Government Accountability Office, p. 3, available at <http://www.gao.gov/financial/fy2007/07frusg.pdf>.

²¹⁴⁵ “Text of Draft Proposal for Bailout Plan,” *New York Times*, September 20, 2008, available at <http://www.nytimes.com/2008/09/21/business/21draftend.html>

²¹⁴⁶ Senator Christopher J. Dodd, remarks before the Senate Committee on Banking, Housing, and Urban Affairs, hearing on “Turmoil in U.S. Credit Markets: Recent Actions Regarding Government-Sponsored Entities, Investment Banks, and Other Financial Institutions,” September 23, 2008, transcript p. 3, available at http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_senate_hearings&docid=f:50414.wais.pdf

²¹⁴⁷ Senator Richard C. Shelby, remarks before the Senate Committee on Banking, Housing, and Urban Affairs, hearing on “Turmoil in U.S. Credit Markets: Recent Actions Regarding Government-Sponsored Entities, Investment Banks, and Other Financial Institutions,” September 23, 2008, transcript p. 6, available at http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_senate_hearings&docid=f:50414.wais.pdf

members of Congress said they were reluctant to provide the Treasury Department with extraordinary powers to bail out banks whose actions contributed to the crisis.

Paulson and Bernanke used strong language in making their case. Paulson told the Senate Banking Committee, “Of course, we all believe that the very best thing we can do is make sure that the capital markets are open and that lenders are continuing to lend. And so that is what this overall program does, it deals with that.”²¹⁴⁸ Bernanke told the Joint Economic Committee on Wednesday, September 24, “I think that this is the most significant financial crisis in the post-War period for the United States, and it has in fact a global reach... I think it is extraordinarily important to understand that, as we have seen in many previous examples of different countries and different times, choking up of credit is like taking the lifeblood away from the economy.”²¹⁴⁹ He told the House Financial Services Committee on the same day, “People are saying, ‘Wall Street, what does it have to do with me?’ That is the way they are thinking about it. Unfortunately, it has a lot to do with them. It will affect their company, it will affect their job, it will affect their economy. That affects their own lives, affects their ability to borrow and to save and to save for retirement and so on.”²¹⁵⁰

Over the course of the week, Washington Mutual failed and Wachovia suffered a debilitating run. Throughout the weekend, as Wachovia negotiated a rescue, Secretary Paulson and members of his staff met with members of Congress from both houses and both political parties to negotiate the details of the program.²¹⁵¹ By Sunday evening, September 28, the lead negotiators—Senator Judd Gregg and

²¹⁴⁸ Henry Paulson, Treasury Secretary, September 23, 2008, Senate Banking Committee hearing on Turmoil in the U.S. Credit Markets: Recent Actions Regarding Government Sponsored Entities, Investment Banks, and Other Financial Institutions, transcript.

²¹⁴⁹ Ben Bernanke, Federal Reserve chairman, 9-September 24-08, 2008, Joint Economic Committee hearing on the economic outlook, transcript.

²¹⁵⁰ Ben Bernanke, Federal Reserve chairman, 9-24-08 House Financial Services Committee hearing on The Future of Financial Services: Exploring Solutions for the Market Crisis, transcript

²¹⁵¹ Henry M. Paulson, Jr., *On the Brink*, New York: Business Plus, 2010, pp. 285-317.

Representative Roy Blunt for the Republicans, and Senator Christopher Dodd and Representative Barney Frank for the Democrats—had agreed on the outlines of a deal.²¹⁵²

Senator Mel Martinez, a former HUD Secretary and then a Florida Republican Senator serving on the Senate Banking Committee, told FCIC staff of a meeting with Paulson and Bernanke that Sunday. “I just remember thinking, you know, Armageddon,” he told the FCIC. “The thing that was the most frightening about it is that even with them asking for extraordinary powers, that they were not at all assured that they could prevent the kind of financial disaster that I think really was greater than the Great Depression...And obviously to a person like myself I think you think, ‘Wow, if these guys that are in the middle of it and hold the titles that they hold believe this to be as dark as they’re painting it, it must be pretty darned dark.’”²¹⁵³

Nevertheless, on Monday, and just hours after Citigroup had announced its proposed government-assisted acquisition of Wachovia, the House of Representatives rejected the TARP bill by a vote of 205 to 228.²¹⁵⁴ The markets also had a vote: The Dow Jones Industrial Average quickly plunged 778 points on Monday, almost 7% – its largest single-day fall since 1987.²¹⁵⁵

In observance of Rosh Hashanah, Congress did not convene on Tuesday or Wednesday, but when the holiday ended at sundown on Wednesday, the Senate came to order. In the two days since the House vote, TARP supporters set about giving the bill broader appeal,²¹⁵⁶ including a temporary increase in the

²¹⁵² “Pelosi Statement on Bipartisan Legislation to Address Crisis in Financial Markets,” press release, September 28, 2008, <http://www.speaker.gov/newsroom/pressreleases?id=0846>; “Gregg Comments on ‘Dramatic Progress’ in Market Stabilization Plan Negotiations,” press release, September 28, 2008, <http://gregg.senate.gov/news/press/release/?id=96a38e8f-bcc7-419e-987e-adeb87b036ca>

²¹⁵³ FCIC interview with Mel Martinez, September 28, 2010.

²¹⁵⁴ “Final Vote Results for Roll Call 674,” House of Representatives Office of the Clerk, September 29, 2008, <http://clerk.house.gov/evs/2008/roll674.xml>

²¹⁵⁵ Dow Jones Industrial Average data.

²¹⁵⁶ The language creating TARP was drafted under the title “Emergency Economic Stabilization Act of 2008” and was coupled with several other legislative efforts to entice members of Congress to pass the bill, including the

cap on FDIC's deposit insurance from \$100,000 to \$250,000 per customer account.²¹⁵⁷ Senate leadership from both parties strongly supported the bill, with Minority Leader Mitch McConnell declaring: "The situation we find ourselves in is serious, it is urgent, and failing to act now could have devastating consequences for our nation's economy."²¹⁵⁸ Majority leader Harry Reid said, "[G]iven the situation, supporting this legislation is the only way to make the best of a crisis and return our country to a path of economic stability, prosperity and growth."²¹⁵⁹

On Wednesday evening, the Senate voted by a margin of 74 to 25 to pass the legislation.²¹⁶⁰ Two days later, on Friday, October 3 – the same day that Wachovia announced its acquisition by Wells Fargo – the House accepted the new deal, 263 to 171. President Bush signed the 169-page legislation that afternoon. The stated goal of the TARP legislation (officially, the Emergency Economic Stabilization Act of 2008) was to restore liquidity to the financial markets by providing "authority for the Federal Government to purchase and insure certain types of troubled assets for the purposes of providing stability to and preventing disruption in the economy and financial system and protecting taxpayers." The act allocated the \$700 billion in three waves: the first \$250 billion would be available immediately, the next \$100 billion required presidential certification that it was needed, and the final \$350 billion would be

"Energy Improvement and Extension Act of 2008," the "Extenders and Alternative Minimum Tax Relief Act of 2008," the "Mental Health Parity and Addiction Equity Act of 2008," and the "Heartland and Hurricane Ike Disaster Relief Act." Public Law 110-343.

²¹⁵⁷ Pub. L. No. 110-343, sec. 135(a)(1) (October 3, 2008). Congress originally said that the cap would revert to \$100,000 at the beginning of 2010, but Congress later extended the deadline through the end of 2013.

²¹⁵⁸ "McConnell: Senate Will Act to Protect Main Street," Senator Mitch McConnell press release, October 1, 2008, http://mcconnell.senate.gov/public/index.cfm?p=PressReleases&ContentRecord_id=465b6f87-bbba-4194-99a9-36a15463cf8b&ContentType_id=c19bc7a5-2bb9-4a73-b2ab-3c1b5191a72b&Group_id=0fd6ddca-6a05-4b26-8710-a0b7b59a8f1f&MonthDisplay=10&YearDisplay=2008

²¹⁵⁹ "Reid: Now is the Time for Action to Help Families Struggling to Keep their Jobs and Homes," Senator Harry Reid press release, October 1, 2008, http://reid.senate.gov/newsroom/pr_100108_Time_to_aid_nv_families.cfm

²¹⁶⁰ U.S. Senate Roll Call votes, H.R. 1424, October 1, 2008, http://www.senate.gov/legislative/LIS/roll_call_lists/roll_call_vote_cfm.cfm?congress=110&session=2&vote=00213

released—if Congress did not pass a measure of disapproval—within 15 days after Treasury submitted a plan for this final expenditure.^{2161,2162}

Despite the bill’s passage, the markets continued to deteriorate. On Monday, October 6, the Dow closed below 10,000 for the first time in four years, and by the end of the week it had declined almost 1,900 points, or 18%, since its peak in October 2007.²¹⁶³ The spread between the interest rate at which banks lend to one another and interest rates on Treasuries—an important indicator of their overall confidence—ballooned to an all-time high.²¹⁶⁴ And, the dollar value of commercial paper outstanding, which both financial and nonfinancial companies used to fund themselves, had fallen by \$264 billion in the month between Lehman’s failure and TARP’s enactment, as this market continued to seize up.²¹⁶⁵

Even firms that had survived the previous disruptions in the commercial paper markets now felt the strain. For example, GE Capital [insert detail]. [Immelt’s calls to Geithner in week before]. On October 7, to ease the persistent, debilitating problems in this critical funding market, the Fed created yet another emergency program, the Commercial Paper Funding Facility , to purchase short-term—up to three months—secured and unsecured commercial paper directly from eligible issuers..²¹⁶⁶ There was a certain irony here. Four days after the passage of the controversial legislation designed to move the

²¹⁶¹ Pub. L. No. 110-343, sec. 115 (October 3, 2008).

²¹⁶² Pub. L. No. 110-343, sec. 2 (October 3, 2008).

²¹⁶³ Dow Jones Industrial Average data

²¹⁶⁴ Cite to LIBOR-OIS spread

²¹⁶⁵ COMPOUT data series from the Federal Reserve Bank of St. Louis, Federal Reserve Economic Data, data points from September 10, 2008 and October 8, 2008.

²¹⁶⁶ “Board announces creation of the Commercial Paper Funding Facility (CPFF) to help provide liquidity to term funding markets,” Federal Reserve press release, October 7, 2008.

<http://www.federalreserve.gov/newsevents/press/monetary/20081007c.htm> . The CPFF complemented the Fed’s other commercial paper program, the AMLF, which was created shortly after the Reserve Primary Fund broke the buck. While the AMLF was targeted toward money market mutual funds, the CPFF aimed to create liquidity for qualified commercial paper issuers.

government's response away from the *ad hoc* reactions of the past six months, here was one more *ad hoc* reaction. And more irony: the Treasury Department was already rethinking the TARP program. For starters, the best way to structure the program was not obvious. Exactly which assets should qualify? How would the government determine a fair price in such an illiquid market? And, would firms holding these assets sell them at a fair price if doing so would reveal them to be insolvent? Did the very nature of buying assets demand overpaying? The details of implementing the complicated troubled asset purchases would take time to figure out, and the Treasury wanted to bring stability to the deteriorating markets as soon as possible. [quote Lazear]

Most importantly, Treasury and Fed officials now felt that financial firms needed to be recapitalized. So the Treasury changed course and decided that it would use its first expenditure of TARP funds to directly purchase equity in financial institutions.²¹⁶⁷ These capital investments would deal with the problem at hand directly: improving firms' balance sheets. This shift in tactics was permissible under a clause in the legislation that allowed the Secretary of the Treasury, in consultation with the Chairman of the Federal Reserve, to purchase financial instruments – including stock – if such purchases were deemed necessary to promote financial market stability. The change did raise the challenge, both of perception and practicality, that the government was now becoming a stakeholder in Wall Street firms.

On Sunday, October 12, Paulson, Bernanke, FDIC Chair Bair, Comptroller of the Currency Dugan, and New York Fed President Geithner met to discuss the new approach.²¹⁶⁸ After agreeing to the terms of the capital injections, the regulators selected a small group of major financial institutions to whom they would immediately offer capital. The initial nine recipients were the four major commercial bank holding companies (Bank of America, Citigroup, JP Morgan, and Wells Fargo), the three remaining investment banks (Goldman Sachs, Morgan Stanley, and Merrill Lynch, which was set to be acquired by

²¹⁶⁷ Phillip Swagel, "The Financial Crisis; An inside view."

²¹⁶⁸ Paulson's calendar for October. <http://www.treas.gov/foia/reading-room/docs/PaulsonCalendar/2008/Oct%202008.pdf>

Bank of America), and two important clearing and settlement banks (Bank of New York and State Street). Together, these nine institutions held more than \$11 trillion in assets, or approximately 75% of all of the assets in U.S.-owned banks.²¹⁶⁹ Later that day, Secretary Paulson summoned the chief executives of the nine firms to a meeting the next day in Washington.

On Monday, October 13—Columbus Day—an executive from each of the designated institutions arrived at the Treasury Department at 3:00 p.m.: Ken Lewis from Bank of America, Robert Kelly from Bank of New York, Vikram Pandit from Citigroup, Lloyd Blankfein from Goldman Sachs, Jamie Dimon from JP Morgan, John Thain from Merrill Lynch, John Mack from Morgan Stanley, Ronald Logue from State Street, and Richard Kovacevich from Wells Fargo. Representing the government were the same officials who had gathered the previous morning: Paulson, Bernanke, Bair, Dugan, and Geithner.

Paulson explained to the executives that the Treasury Department had set aside \$250 billion in TARP funds to purchase equity in financial institutions. Specifically, under the newly formed Capital Purchase Program (CPP), Treasury would purchase a type of equity known as senior preferred stock that would pay a 5% dividend for the first five years and 9% thereafter, as an incentive to the companies to pay the government back in a timely manner.²¹⁷⁰ Participating firms would also have to issue warrants to the Treasury Department and agree to abide by certain standards for executive compensation and corporate governance.²¹⁷¹

²¹⁶⁹ “Emergency Capital Injections Provided to Support the Viability of Bank of America, Other Major Banks, and the U.S. Financial System,” Office of the Special Inspector General for the Troubled Asset Relief Program, SIGTARP-10-001, October 5, 2009, http://www.sig tarp.gov/reports/audit/2009/Emergency_Capital_Injections_Provided_to_Support_the_Viability_of_Bank_of_America..._100509.pdf. Data as of June 30, 2008.

²¹⁷⁰ SIGTARP Initial Report to Congress, http://www.sig tarp.gov/reports/congress/2009/SIGTARP_Initial_Report_to_the_Congress.pdf.

²¹⁷¹ “Treasury Announces TARP Capital Purchase Program Description,” Treasury Department press release HP-1207, October 14, 2008, <http://www.treas.gov/press/releases/hp1207.htm>

The regulators had already decided to allocate half of TARP's existing funds to the nine critical firms whose executives were assembled that day: \$25 billion for Citigroup, JP Morgan, and Wells Fargo; \$15 billion for Bank of America; \$10 billion for Merrill Lynch, Morgan Stanley, and Goldman Sachs; \$3 billion for Bank of New York Mellon; and \$2 billion for State Street.²¹⁷²

Although the capital came with restrictions, the terms were intended to be attractive to financial institutions to motivate them to participate.²¹⁷³ For example, as Paulson put it in an FCIC hearing, “we didn't want it to look or be like a nationalization” of the banking sector; as a result, the capital injections took the form of non-voting stock. As former Assistant Treasury Secretary Phillip Swagel noted: “[T]here is no authority in the United States to force a private institution to accept government capital.”

Paulson emphasized the importance of the banks' participation to provide confidence to the system. He recalled, he told the CEOs what would happen if they declined the capital: “If you don't take [the capital] and sometime later your regulator tells you that you are undercapitalized... you may not like the terms if you have to come back to me.”²¹⁷⁴

All nine firms agreed to participate in the program. “They made a coherent, I thought, a cogent argument about responding to this crisis, which, remember, was getting dramatically worse. It wasn't leading to a run on some of the banks but it was getting worse in the marketplace,” JP Morgan CEO Jamie Dimon told the FCIC.²¹⁷⁵

²¹⁷² SIGTARP Initial Report to Congress, http://www.sig tarp.gov/reports/congress/2009/SIGTARP_Initial_Report_to_the_Congress.pdf.

²¹⁷³ Paulson testimony, Shadow Banking Hearing; Phillip Swagel, “The Financial Crisis: An Inside View,” *Brookings Papers on Economic Activity*, Spring 2009 conference draft, p. 33-4 (emphasis added), available at http://www.brookings.edu/economics/bpea/~media/Files/Programs/ES/BPEA/2009_spring_bpea_papers/2009_spring_bpea_swagel.pdf

²¹⁷⁴ Henry M. Paulson, Jr., *On the Brink*, New York: Business Plus, 2010, p. 365.[look for different citation]

²¹⁷⁵ FCIC interview with Jamie Dimon.

The day after the firms accepted the TARP funds, the government announced another government effort to shore up capital markets. The FDIC's new Temporary Liquidity Guarantee Program addressed the market's "lack of confidence" in banks by temporarily guaranteeing certain senior debt for all FDIC-insured institutions and some holding companies.²¹⁷⁶ This program also provided for deposit insurance for all transaction accounts.²¹⁷⁷ Because of the risk to the taxpayers, this measure had required the Fed, FDIC, and Treasury to declare a "systemic risk exception," as they had done two weeks earlier to facilitate the since-aborted Citigroup-Wachovia acquisition.

If the performance of financial stocks on October 14 was any indication, the markets were initially pleased with the government's decision to recapitalize the nine companies. Citigroup, Merrill Lynch, Bank of America, and State Streets' stocks were all up 15% to 17% from the day before, and Morgan Stanley closed with a 21% increase. However, the Dow Jones Industrial Average fell 8% for the day. And, despite the initial bump from the program's announcement, most of the stock prices of the nine beneficiaries resumed their steady slide within days of the program's creation.

After the inaugural capital injections, the Treasury Department opened the Capital Purchase Program to other qualifying "healthy" and "viable" financial institutions.²¹⁷⁸ Interested parties would submit an application to the appropriate federal regulator—the Fed, FDIC, OCC, or OTS—which gave

²¹⁷⁶ "U.S. Government Actions to Strengthen Market Stability," Treasury Department press release HP-1209, October 14, 2008, <http://www.treas.gov/press/releases/hp1209.htm>. At the end of October, 2010, total TLGP-guaranteed debt outstanding was \$319 billion; the biggest beneficiaries were GE Capital (\$83 billion), Citigroup (\$60 billion), JP Morgan (\$40 billion), Bank of America (\$33 billion), Morgan Stanley (\$25 billion), and Goldman Sachs (\$20 billion). Source: Bloomberg.

²¹⁷⁷ At its highest point in May 2009, the TLGP guaranteed \$346 billion in debt outstanding. <http://www.fdic.gov/regulations/resources/tlgp/reports.html>. "FDIC Announces Plan to Free Up Bank Liquidity," FDIC press release, October 14, 2008, <http://www.fdic.gov/news/news/press/2008/pr08100.html>

²¹⁷⁸ "Factsheet on Capital Purchase Program," "FinancialStability.gov," updated October 3, 2010, <http://www.financialstability.gov/roadtostability/CPFactsheet.htm>

qualifying applications to the Treasury Department for final approval.²¹⁷⁹ Eligible financial institutions included state-chartered or federal-chartered banks as well as bank holding companies.²¹⁸⁰ This capital was offered under the same terms the systemically critical nine banks received.²¹⁸¹ The program was intended not only to restore confidence in the banking system, but also to provide banks with sufficient capital to fulfill their “responsibilities in the areas of lending, dividend and compensation policies, and foreclosure mitigation.”²¹⁸² Nonetheless, no hard and strict lending requirements would be attached.

Indeed, much about TARP and the way it was implemented would be widely criticized, including how few strings were attached to the money. One source of controversy was the level of lending done by participating institutions. Paulson described the program at an FCIC hearing: “The whole reason for designing the program was so many banks would take it, would have the capital, and that would lead to lending. That was the whole purpose.” However, TARP did not involve lending requirements. As Paulson stated, “Right after we announced it we had critics start saying, ‘You’ve got to force them to lend.’” This was something the Treasury Secretary said he couldn’t see how to do, although Paulson did allow that the program could have been more effective in this regard.²¹⁸³ Another source of controversy was the program’s provisions on compensation. The initial proposed program had none. The eventual passage of TARP was made easier by the addition of executive compensation restrictions for participating financial institutions. These limitations would become more strict over the life of the program and eventually, the

²¹⁷⁹ “Factsheet on Capital Purchase Program,” “FinancialStability.gov,” updated October 3, 2010, <http://www.financialstability.gov/roadtostability/CPFactsheet.htm>

²¹⁸⁰ Troubled Asset Relief Program: Capital Purchase Program Transactions for October 28, 2008, through September 25, 2009, and Information on Financial Agency Agreements, Contracts, Blanket Purchase Agreements, and Interagency Agreements Awarded as of September 18, 2009 (GAO-10-24SP, October 2009), an e-supplement to GAO-10-16, <http://www.gao.gov/special.pubs/gao-10-24sp/index.html>

²¹⁸¹ Interim Assistant Secretary for Financial Stability Neel Kashkari Remarks at the SIFMA Summit on the TARP,” Treasury Department press release, HP-1262, November 10, 2008, <http://www.treas.gov/press/releases/hp1262.htm>

²¹⁸² “Remarks by Secretary Henry M. Paulson, Jr. on Financial Rescue Package and Economic Update,” Treasury Department press release HP-1265, November 12, 2008, <http://www.treas.gov/press/releases/hp1265.htm>.

²¹⁸³ Paulson testimony, Shadow Banking Hearing.

Office of the Special Master for TARP Executive Compensation was created to review the appropriateness of compensation packages among TARP recipients.

The program's creators worried from its inception that participation would be viewed as a sign of distress, making financial firms hesitant to apply for funds. They also were concerned that as a result of program restrictions and scrutiny of participants, financial firms would prove more reluctant to participate and more anxious to pay back TARP funds quickly. Paulson had initially hoped that thousands of banks would participate, but in the end, "We had about 700 – not quite – take the money."

The same legislation that created TARP created two government bodies charged with the program's oversight: the Congressional Oversight Panel (COP) and the Office of the Special Inspector General for the Troubled Asset Relief Program (SIGTARP). Both bodies are tasked with overseeing the massive program, insuring its transparency, efficiency and effectiveness.²¹⁸⁴

By the end of the year, the TARP's Capital Purchase Program had allocated almost \$188 billion.²¹⁸⁵ Ultimately, the Treasury Department provided \$205 billion to 707 financial institutions through the CPP.²¹⁸⁶

With \$250 billion allocated to the Capital Purchase Program, Treasury set aside much of the TARP's remaining \$450 billion to provide additional financial aid for specific financial institutions, including AIG (\$40 billion plus a \$30 billion lending facility), Citigroup (\$20 billion plus loss guarantees), and Bank of America (\$20 billion), as discussed below. [We will note other programs such as PPIP that used TARP programs and provide a table of TARP usage.] On December 19, it established

²¹⁸⁴ <http://cop.senate.gov/about/> and <http://www.sig tarp.gov/>

²¹⁸⁵ "Troubled Asset Relief Program Transactions Report For Period Ending December 31, 2008: Capital Purchase Program," U.S. Treasury Department Office of Financial Stability, <http://www.financialstability.gov/docs/ CPP/001-05-08CPPChart.pdf>

²¹⁸⁶ "Factsheet on Capital Purchase Program," "FinancialStability.gov," updated October 3, 2010, <http://www.financialstability.gov/roadtostability/ CPPfactsheet.htm>

the Automotive Industry Financing Program, a subset of TARP, to support the faltering domestic auto industry. Through this program, Treasury made extensive investments in and loans to auto and auto finance companies, including General Motors, GMAC, Chrysler, and Chrysler Financial. In total, Treasury invested \$81 billion of TARP funds in the automotive industry.²¹⁸⁷ On January 12, 2009, President Bush notified Congress that he did not intend to access the second half of the \$700 billion in TARP funds to “ensure that such funds are available early for the next administration.”²¹⁸⁸ He indicated that he had “no intention of allocating additional funds from the remaining \$350 billion.”²¹⁸⁹

As of September, 2010—two years after TARP’s creation--Treasury had allocated \$395 billion of the authorized \$700 billion. Of that amount, \$204 billion had been repaid, \$185 billion remained outstanding and \$3.9 billion in losses had been incurred.²¹⁹⁰ Over \$55 billion of the outstanding funds were in the Capital Purchase Program, and seven of the eight banks that initially participated in the CPP (with Bank of America and Merrill Lynch counting as one entity), had fully repaid the government for its investment.²¹⁹¹ The government still had an investment in Citigroup, owning 12.4% of the company’s

²¹⁸⁷ “Troubled Asset Relief Program Transactions Report For Period Ending October 15, 2010: Capital Purchase Program,” U.S. Treasury Department Office of Financial Stability, <http://www.financialstability.gov/docs/transaction-reports/10-19-10%20Transactions%20Report%20as%20of%2010-15-10.pdf>

²¹⁸⁸ “SIGTARP: Initial Report to the Congress,” Office of the Special Inspector General for the Troubled Asset Relief Program, February 6, 2009, http://www.sig tarp.gov/reports/congress/2009/SIGTARP_Initial_Report_to_the_Congress.pdf

²¹⁸⁹ “SIGTARP: Initial Report to the Congress,” Office of the Special Inspector General for the Troubled Asset Relief Program, February 6, 2009, http://www.sig tarp.gov/reports/congress/2009/SIGTARP_Initial_Report_to_the_Congress.pdf

²¹⁹⁰ “September Oversight Report: Assessing the TARP on the Eve of Its Expiration,” Congressional Oversight Panel, September 16, 2010, p. 27, <http://cop.senate.gov/documents/cop-091610-report.pdf>

²¹⁹¹ “September Oversight Report: Assessing the TARP on the Eve of Its Expiration,” Congressional Oversight Panel, September 16, 2010, p. 27, <http://cop.senate.gov/documents/cop-091610-report.pdf>; “Troubled Asset Relief Program: Two Year Retrospective,” Office of Financial Stability, October 2010, p. 26, http://www.financialstability.gov/docs/TARP%20Two%20Year%20Retrospective_10%2005%2010_transmittal%20letter.pdf.

common stock.²¹⁹² Treasury also held large stakes in GM (61% of the outstanding common stock), Ally Financial (formerly known as GMAC; 56%), and Chrysler (9%).²¹⁹³ Additionally, \$47.5 billion of TARP funds remained invested in AIG in addition to the \$xx billion loaned by xx.²¹⁹⁴ [

[Overall, with the addition of TARP, a total of \$xx trillion had been allocated to the financial system and financial institutions in various emergency programs. Will include significant explanations and charts (example below). Data and charts will focus on system-wide help and institution specifics where available. The explanations will show that TARP was one of many programs.]

These stats and the table below are from SIGTARP's October 26, 2010 quarterly report to Congress (pp. 45, 52-53):

http://www.sig tarp.gov/reports/congress/2010/October2010_Quarterly_Report_to_Congress.pdf

TARP Obligations, Expenditures, and Obligations Available for Expenditure

| <u>Program Name</u> | <u>Obligation</u> | <u>Expenditure</u> | <u>Available to be Spent</u> |
|--|-------------------|--------------------|------------------------------|
| Capital Purchase Program (CPP) (Bank of America, Bank of New York Mellon, Citigroup, Goldman Sachs, JPMorgan, Merrill Lynch, Morgan Stanley, State Street, Wells Fargo, and 698 other financial institutions) | \$204.9 | \$204.9 | \$0.0 |
| Targeted Investment Program (TIP) (Bank of America, Citigroup) | \$40.0 | \$40.0 | \$0.0 |

²¹⁹² “Troubled Asset Relief Program: Two Year Retrospective,” Office of Financial Stability, October 2010, p. 18, http://www.financialstability.gov/docs/TARP%20Two%20Year%20Retrospective_10%2005%2010_transmittal%20letter.pdf; “Treasury Announces Plan to Continue to Sell Citigroup Common Stock,” Treasury Department press release, October 19, 2010, http://www.financialstability.gov/latest/pr_10192010.html.

²¹⁹³ “Troubled Asset Relief Program: Two Year Retrospective,” Office of Financial Stability, October 2010, p. 15, http://www.financialstability.gov/docs/TARP%20Two%20Year%20Retrospective_10%2005%2010_transmittal%20letter.pdf

²¹⁹⁴ “Troubled Asset Relief Program: Two Year Retrospective,” Office of Financial Stability, October 2010, p. 51, http://www.financialstability.gov/docs/TARP%20Two%20Year%20Retrospective_10%2005%2010_transmittal%20letter.pdf

| | | | |
|---|----------------|----------------|---------------|
| Asset Guarantee Program (AGP) (Bank of America, Citigroup) | \$5.0 | \$0.0 | \$0.0 |
| Systemically Significant Failing Institutions (SSFI) (AIG) | \$69.8 | \$47.5 | \$22.3 |
| Automotive Industry Financing Program (AIFP) (Chrysler, Chrysler Financial, General Motors, GMAC (now Ally Financial)) | \$81.8 | \$79.7 | \$2.1 |
| Home Affordable Modification Program (HAMP) | \$45.6 | \$0.6 | \$45.0 |
| Public-Private Investment Program (PPIP) | \$22.4 | \$14.2 | \$8.2 |
| Term Asset-Backed Securities Loan Facility (TALF) | \$4.3 | \$0.1 | \$4.2 |
| Unlocking Credit for Small Businesses (UCSB) | \$0.4 | \$0.2 | \$0.2 |
| Community Development Capital Initiative (CDCI) | \$0.6 | \$0.6 | \$0.0 |
| | \$474.8 | \$387.8 | \$82.0 |

Source: Table 2.1 of SIGTARP Quarterly Report to Congress, October 26, 2010. Obligation figures as of October 3, 2010 and expenditure figures as of September 30, 2010

AIG: “We needed to stop the sucking chest wound in this patient”

On November 10, the government announced that the \$85 billion New York Fed loan to American Insurance Group would be restructured using TARP funds.²¹⁹⁵ AIG had already drawn a large amount from the original \$85 billion to meet liquidity demands, including posting collateral to counterparties to the company’s credit default swap and securities lending businesses. Now, using TARP

²¹⁹⁵ “Treasury to Invest in AIG Restructuring Under the Emergency Economic Stabilization Act,” Treasury Department press release hp-1261, November 10, 2008, <http://www.treas.gov/press/releases/hp1261.htm>

funds, the Treasury purchased \$40 billion of preferred stock in AIG.²¹⁹⁶ As with the Capital Purchase Program, in return for the equity provided, the Treasury received warrants from AIG and secured restrictions on dividends and executive compensation.²¹⁹⁷

On the same day, the New York Fed created two special purpose vehicles, Maiden Lane II and Maiden Lane III, to hold AIG's assets associated with securities lending and credit default swaps, respectively.²¹⁹⁸ (The Fed had created the first Maiden Lane vehicle in March to take \$28 billion in assets off the balance sheet of Bear Stearns.) The next month, the New York Fed loaned Maiden Lane II \$19.8 billion so that it could purchase mortgage-backed securities from AIG life insurance company subsidiaries, which in turn paid the funds to securities lending counterparties. Because AIG—with federal assistance now in hand – had already paid out about \$24 billion, those counterparties received a total of \$43.7 billion.²¹⁹⁹ These payments are reflected in the following chart.

²¹⁹⁶ “Federal Reserve Board and Treasury Department announce restructuring of financial support to AIG,” Federal Reserve press release, November 10, 2008, <http://www.federalreserve.gov/newsevents/press/other/20081110a.htm>

²¹⁹⁷ “SIGTARP: Initial Report to the Congress,” Office of the Special Inspector General for the Troubled Asset Relief Program, February 6, 2009, p. 61, http://www.sig tarp.gov/reports/congress/2009/SIGTARP_Initial_Report_to_the_Congress.pdf

²¹⁹⁸ FRBNY 11/10/08 press release at <http://www.federalreserve.gov/newsevents/press/other/20081110a.htm>; FRBNY 12/16/08 press release at http://www.newyorkfed.org/markets/rmbs_terms.html.

²¹⁹⁹ FRBNY 12/16/08 press release at http://www.newyorkfed.org/markets/rmbs_terms.html.

| Payments to AIG Securities Lending Counterparties from 9/18/08 – 12/12/08 (S in billions) | |
|--|---|
| Institution | Payments to Counterparties by U.S. Securities Lending |
| Barclays | \$7.0 |
| Deutsche Bank | 6.4 |
| BNP Paribas | 4.9 |
| Goldman Sachs | 4.8 |
| Bank of America | 4.5 |
| HSBC | 3.3 |
| Citigroup | 2.3 |
| Dresdner Kleinwort | 2.2 |
| Merrill Lynch | 1.9 |
| UBS | 1.7 |
| ING | 1.5 |
| Morgan Stanley | 1.0 |
| Societe Generale | 0.9 |
| AIG International Inc. | 0.6 |
| Credit Suisse | 0.4 |
| Paloma Securities | 0.2 |
| Citadel | 0.2 |
| Total | \$43.7⁽¹⁾ |

| Sources of Funding | |
|--|---------------|
| Maiden Lane II | \$19.5 |
| FRBNY Senior Secured Facility | 17.2 |
| AIG Funded | 7.0 |
| Total Related to Securities Lending | \$43.7 |

1) Amounts may not total due to rounding

The New York Fed also loaned Maiden Lane III \$24.3 billion (and AIG invested \$5 billion). That money went to buy CDOs from AIG Financial Products' counterparties.²²⁰⁰ The CDOs had a face value of \$62.1 billion, which AIG Financial Products had insured through its credit default swaps.²²⁰¹ Because AIG had already paid \$35 billion in collateral, the payments from Maiden Lane III to those counterparties made them whole on their credit default swap purchases. A condition of this transaction was that AIG waive of its legal claims against those counterparties.²²⁰² These payments are reflected in the chart below.

²²⁰⁰ FRBNY 11/10/08 press release at <http://www.federalreserve.gov/newsevents/press/other/20081110a.htm>.

²²⁰¹ FRBNY 12/3/08 press release at http://www.newyorkfed.org/markets/aclf_terms.html. \$27.1 billion was paid to 16 counterparties and \$2.5 billion was paid to AIGFP as an adjustment to reflect overcollateralization.

²²⁰² Citation and more detail.

| AIG Counterparty | Maiden Lane III Payment | Collateral Payments Posted (as of 11/7) | Total |
|--------------------------------------|--------------------------------|--|--------------|
| Société Générale | 6.9 | 9.6 | 16.5 |
| Goldman Sachs | 5.6 | 8.4 | 14.0 |
| Merrill Lynch | 3.1 | 3.1 | 6.2 |
| Deutsche Bank | 2.8 | 5.7 | 8.5 |
| UBS | 2.5 | 1.3 | 3.8 |
| Calyon | 1.2 | 3.1 | 4.3 |
| Deutsche Zentral-Genossenschaftsbank | 1.0 | 0.8 | 1.8 |
| Bank of Montreal | 0.9 | 0.5 | 1.4 |
| Wachovia | 0.8 | 0.2 | 1.0 |
| Barclays | 0.6 | 0.9 | 1.5 |
| Bank of America | 0.5 | 0.3 | 0.8 |
| The Royal Bank of Scotland | 0.5 | 0.6 | 1.1 |
| Dresdner Bank AG | 0.4 | 0.0 | 0.4 |
| Rabobank | 0.3 | 0.3 | 0.6 |
| Landesbank Baden-Wuerttemberg | 0.1 | 0.0 | 0.1 |
| HSBC Bank, USA | 0.0* | 0.2 | 0.2 |
| Total | 27.1** | 35.0 | 62.1 |

Source: SIGTARP analysis of AIG and FRBNY data

In March, 2009, the New York Fed announced that AIG had created two special purpose vehicles to hold shares of two of its foreign life insurance businesses, AIA and Alico, to facilitate their separation and to restructure their obligations to the New York Fed.²²⁰³ The Fed retained \$25 billion in preferred equity in these vehicles, and the Fed loan to AIG was further reduced by that amount.²²⁰⁴

Goldman Sachs received \$14 billion in payments from Maiden Lane III related to the credit default swaps it had purchased from AIG. During the FCIC's January 13, 2010 hearing, Goldman CEO Lloyd Blankfein testified that Goldman Sachs would not have lost any money if AIG failed. Blankfein explained the Goldman purchased credit protection to cover the difference between the amount of collateral it demanded from AIG and the amount of collateral paid by AIG.²²⁰⁵ Documents submitted to the FCIC by Goldman after the hearing do show that the firm purchased credit protection, although much

²²⁰³ FRBNY 3/2/09 Circular No. 12079 at <http://www.newyorkfed.org/banking/circulars/12073.html>.

²²⁰⁴ 4/29/10 slides produced by the FRBNY. NO BATES NUMBER AVAILABLE

²²⁰⁵ Transcript of 1/13/10 hearing at __.

of that protection came from financially unstable companies, including Citibank (\$402.3 million), which itself had to be propped up by the government, and Lehman Brothers (\$174.8 million), which was bankrupt by the time AIG was rescued.²²⁰⁶ It is by no means certain that those companies could have paid Goldman if AIG had failed. [In the Derivatives hearing, Viniar could not remember who these counterparties were but maintained that these trades were collateralized. Additional information being collected from Goldman on this subject will be inserted here.]

In addition, the \$14 billion of credit default swap protection Goldman purchased from AIG was part of Goldman's "matched book," meaning that Goldman sold the \$14 billion of credit default swap protection purchased from AIG to Goldman's own clients.²²⁰⁷ Goldman Sachs provided information to the FCIC indicating that the \$14 billion received was paid to its clients. Nonetheless, the federal assistance provided through Maiden Lane III benefited Goldman because Goldman was still required to post collateral to its counterparties, regardless of whether or not it received payments from AIG, and regardless of whether or not the companies that sold Goldman protection on AIG were able to pay.

Further, Goldman also produced documents to the FCIC that showed it received \$3.4 billion from AIG related to credit default swaps on CDOs that were not part of Maiden Lane III. Of that \$3.4 billion, \$1.9 billion was received after, and thus made possible by, the federal bailout of AIG. And, most of the total \$3.4 billion - \$2.9 billion - was for proprietary trades (trades made solely for Goldman's benefit, rather than on behalf of a client) related to Goldman's Abacus CDOs. That is, unlike the \$14 billion Goldman received from AIG on trades where Goldman owed the money to its own counterparties, Goldman retained this \$2.9 billion..

The fact that AIG's counterparties did not incur any losses on their investments - that AIG, once it was backed by the government, paid their claims at 100% of face value - has been criticized by

²²⁰⁶ July 14, 2010 submission at GS MBS 00000038855.

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many.²²⁰⁸ In April 2009, 27 members of Congress requested that the TARP Special Inspector General provide them with data regarding AIG's counterparty payments.²²⁰⁹

In light of these concerns, the TARP Special Inspector General conducted a review of counterparty transactions and released its findings in November 2009. The report criticized the NY Fed for failing to obtain concessions from AIG's counterparties, even the 2% concession agreed to by UBS.²²¹⁰ With the exception of UBS, the Inspector General said, the top eight counterparties insisted on 100% coverage because: (1) concessions "would mean giving away value and voluntarily taking a loss, in contravention of their fiduciary duty to their shareholders," (2) they had a "reasonable expectation" that AIG would not default on further obligations, given the government assistance, (3) costs already incurred to protect against a possible AIG default "would be exacerbated if they were paid less than par value" and (4) they were "contractually entitled" to receive the par value of the CDS contracts.²²¹¹ The Special Inspector General found that after considering the counterparties' reasons, New York Fed officials recommended to Tim Geithner, then president of the New York Fed, that the Maiden Lane III transactions move forward without haircuts, because obtaining those concessions from all the counterparties would have been impractical.²²¹²

Notwithstanding the reasons cited for the counterparties' unwillingness to agree to concessions, the Special Inspector General's report was highly critical of the New York Fed's negotiations. From the outset, the New York Fed was poorly prepared to assist AIG, according to the November 2009 report.

²²⁰⁸ SIGTARP Report, April 2, 2009 at http://sigtarp.gov/reports/audit/2009/EM_Review_of_Payment_of_Counterparty_Claims_Settled_by_AIG.pdf

²²⁰⁹ SIGTARP Report, April 2, 2009 at SIGTARP Report, April 2, 2009 at http://sigtarp.gov/reports/audit/2009/EM_Review_of_Payment_of_Counterparty_Claims_Settled_by_AIG.pdf

²²¹⁰ SIGTARP Report November 17, 2009, page 15-16 at http://sigtarp.gov/reports/audit/2009/Factors_Affecting_Efforts_to_Limit_Payments_to_AIG_Counterparties.pdf

²²¹¹ SIGTARP Report November 17, 2009, page 15-16 at http://sigtarp.gov/reports/audit/2009/Factors_Affecting_Efforts_to_Limit_Payments_to_AIG_Counterparties.pdf

²²¹² SIGTARP Report November 17, 2009, page 18 at http://sigtarp.gov/reports/audit/2009/Factors_Affecting_Efforts_to_Limit_Payments_to_AIG_Counterparties.pdf

When a private sector solution failed, the New York Fed was caught without a “contingency plan” on September 16. To avoid AIG’s failure, the New York Fed therefore hastily agreed to the \$85 billion bailout on substantially the same terms that the private sector group contemplated, despite its many problematic features, including an “onerous” interest rate, which made additional government support inevitable.²²¹³ “In other words, the decision to acquire a controlling interest in one of the world’s most complex and most troubled corporations was done with almost no independent consideration of the terms of the transaction or the impact that those terms might have on the future of AIG,” according to the Special Inspector General’s November 2009 report.²²¹⁴

Further, the Special Inspector General concluded that the New York Fed’s attempts to win concessions from AIG’s counterparties failed because of the Fed’s own failed negotiating strategy. The November 2009 report concluded that the New York Fed’s strategy²²¹⁵ “led directly to a negotiating strategy... that had little likelihood of success”²²¹⁶ and resulted in a transfer of “billions of dollars of cash from the Government to AIG’s counterparties, even though senior policy makers contend that assistance to AIG’s counterparties was not a relevant consideration.”²²¹⁷

The Congressional Oversight Panel, created in 2008 to review the financial bail-out, also criticized the government’s rescue of AIG. In a June 2010 report, the Oversight Panel contended that the

²²¹³ SIGTARP Report November 17, 2009, page 28, at http://sigtarp.gov/reports/audit/2009/Factors_Affecting_Efforts_to_Limit_Payments_to_AIG_Counterparties.pdf

²²¹⁴ SIGTARP Report November 17, 2009, page 28, at http://sigtarp.gov/reports/audit/2009/Factors_Affecting_Efforts_to_Limit_Payments_to_AIG_Counterparties.pdf

²²¹⁵ The Special Inspector General characterized three components of the New York Fed’s strategy: (1) insistence on treating all AIG counterparties the same way, meaning that if one counterparty refused to agree to concessions, the Fed would not require concessions from other counterparties; (2) refusal to exert regulatory pressure on the counterparties to force concessions; and, (3) unwillingness to threaten an AIG bankruptcy to gain more leverage over counterparties in negotiations.

²²¹⁶ SIGTARP Report November 17, 2009, page 29, at http://sigtarp.gov/reports/audit/2009/Factors_Affecting_Efforts_to_Limit_Payments_to_AIG_Counterparties.pdf

²²¹⁷ SIGTARP Report November 17, 2009, Summary, at http://sigtarp.gov/reports/audit/2009/Factors_Affecting_Efforts_to_Limit_Payments_to_AIG_Counterparties.pdf

\$180 billion-plus bail-out continued to have a “poisonous” effect on capital markets.²²¹⁸ Specifically, the report pointed out that the government’s failure to require “shared sacrifice” among AIG’s creditors effectively altered the relationship between the government and the markets, and signaled an implicit “too big to fail” guarantee for certain firms.²²¹⁹ The report said that the government should only have offered to extend credit to AIG if AIG had negotiated discounts with its financial counterparties.²²²⁰ Treasury and Fed officials countered that such a discount would have led to an instant ratings downgrade, which would have precipitated, in turn, a run on AIG.²²²¹

New York Fed officials told the FCIC that they had very little bargaining power with the counterparties, because they were protected by the terms of the credit default swap contracts and because the counterparties knew the government could not let AIG fail after providing the \$85 billion loan. “Through October, AIG was trying to negotiate with counterparties,” New York Fed General Counsel Tom Baxter told the FCIC. “They tried, and they failed completely. Counterparties said ‘we got the collateral, the contractual rights, you’ve been rescued by the Fed, Uncle Sam’s behind you, why would we let you out [of the contracts]?’” When the rating agency deadline loomed in November, the Fed had few choices. “We’ve rescued AIG in a public way, and we’re approaching counterparties and seeking some type of concession. Could we threaten an AIG bankruptcy?” Baxter said. “We weren’t going to put it into bankruptcy six weeks after saving it. And then the question was, should we have used our regulatory power to leverage counterparties. From my view, that would have been completely inappropriate, an abuse of power, and not something we were willing to even contemplate.”²²²² Sarah Dahlgren, who was in charge of the Maiden Lane III transaction at the New York Fed, agreed that the

²²¹⁸ COP AIG Report, 6/10/10 at pages 10 and 140.

²²¹⁹ COP AIG Report, 6/10/10 at page 167.

²²²⁰ COP AIG Report, 6/10/10 at pages 8 and 102 .

²²²¹ Financial Times article, 6/10/10 at <http://www.ft.com/cms/s/0/ec881516-742d-11df-87f5-00144feabdc0.html>

²²²²MFR of FCIC 4/30/2008 Interview with Tom Baxter, at 5. On NetDocs here:
<https://vault.netvoyage.com/neWeb2/goId.aspx?id=4847-3468-8006&open=Y>

government could not have threatened bankruptcy. “Once the Government made the decision to intervene, our view was that you couldn’t *not* continue to support AIG and risk the credibility of the United States,” she said. “There was a financial meltdown and... the credibility of the United States Government was on the line.”²²²³ The TARP Special Inspector General acknowledged that the New York Fed “felt ethically restrained from threatening an AIG bankruptcy because it had no actual plans to carry out such a threat,” and that it was “uncomfortable interfering with the sanctity of counterparties’ contractual rights with AIG,” which were “certainly valid concerns.”²²²⁴

Geithner has also defended the Maiden Lane transactions, saying he was confident that full reimbursement was “absolutely” the right decision.²²²⁵ In an interview with CNBC on January 14, 2010, Geithner explained, “We did it in a way that I believe was not just least cost to the taxpayer, best deal for the taxpayer, but helped avoid much, much more damage than would have happened without that.”²²²⁶ More recently, in response to the Congressional Oversight Panel’s report, the Treasury Department – now headed by Geithner– commented that the report “overlooks the basic fact that the global economy was on the brink of collapse and there were only hours in which to make critical decisions. The choices and tools available to the government were extremely limited and the potential outcomes were deeply uncertain.”²²²⁷ The Federal Reserve expressed similar views, stating: “We respectfully disagree with the

²²²³ MFR of FCIC 4/30/08 Interview with Sarah Dahlgren at 6, on NetDocs here: <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4833-5895-6294&open=Y>

²²²⁴ SIGTARP Report November 17, 2009, page 29, at http://sigtarp.gov/reports/audit/2009/Factors_Affecting_Efforts_to_Limit_Payments_to_AIG_Counterparties.pdf

²²²⁵ 1/20/10 Business Week article at <http://www.businessweek.com/news/2010-01-20/aig-100-cents-fed-deal-driven-by-france-belied-by-french-banks.html>.

²²²⁶ 1/20/10 Business Week article at <http://www.businessweek.com/news/2010-01-20/aig-100-cents-fed-deal-driven-by-france-belied-by-french-banks.html>.

²²²⁷ Bloomberg article, 6/10/10 at <http://www.bloomberg.com/apps/news?pid=20601103&sid=atVlzdaS.7Yc>

view that there were any better alternatives that were workable in the extreme circumstances of the time – in the middle of the worst financial panic in modern history.”²²²⁸

New York Fed officials who orchestrated the Maiden Lane transactions vigorously defended their approach. They explained to the FCIC that threats to AIG’s survival continued after the \$85 billion loan on September 16 – a ratings downgrade would have been imminent without a more permanent solution to the problems in AIG’s securities lending and credit default swap portfolios.²²²⁹ Sarah Dahlgren explained that “if you don’t fix the [securities] lending or the CDOs, [AIG would] blow through the \$85 billion. So we needed to stop the sucking chest wound in this patient,”²²³⁰ she said. “It wasn’t just AIG – it was the financial markets. It felt like looking into the abyss. Looking at AIG just showed how bad the market was. It kept getting worse and worse and worse. The problems were building and building and building because the markets were getting worse and worse and worse. All of the write-downs on [AIG’s] other assets and other sources of its investments really took a pounding with the markets.”²²³¹

Maiden Lane III was “an incredibly elegant answer” to those problems, Baxter told the FCIC.²²³² The transaction, Baxter said, stopped the “hemorrhage” coming from AIG Financial Products, which was paying collateral to counterparties by drawing on the \$85 billion government loan.²²³³ Plus, because

²²²⁸ Financial Times article, 6/10/10 at <http://www.ft.com/cms/s/0/ec881516-742d-11df-87f5-00144feabdc0.html>

²²²⁹ See, e.g. MFR of FCIC 4/30/2008 Interview with Tom Baxter, at 5. On NetDocs here: <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4847-3468-8006&open=Y>; MFR of FCIC 4/30/08 Interview with Jim Mahoney at 6. On NetDocs here; <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4826-3760-1542&open=Y>; MFR of 4/30/08 FCIC Interview with Michael Alix at 2, on NetDocs here: <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4823-9243-2390&open=Y>

²²³⁰ MFR of FCIC 4/30/08 Interview with Sarah Dahlgren at 2, on NetDocs here: <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4833-5895-6294&open=Y>

²²³¹ MFR of FCIC 4/30/08 Interview with Sarah Dahlgren at 6, on NetDocs here: <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4833-5895-6294&open=Y>

²²³² MFR of FCIC 4/30/2008 Interview with Tom Baxter, at 5. On NetDocs here: <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4847-3468-8006&open=Y>

²²³³ MFR of FCIC 4/30/2008 Interview with Tom Baxter, at 5. On NetDocs here: <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4847-3468-8006&open=Y>

Maiden Lane III got the CDOs underlying the credit default swaps, “as value comes back in those CDOs, that’s value that is going to be first used to pay off the Fed loan... the likely outcome of Maiden Lane III is that we’re going to be paid in full,” he said.²²³⁴ Shari Leventhal, an attorney at the New York Fed, said that “everyone gets hung up on concessions, and really they were just a little piece.”²²³⁵ She said that the government had not simply made a commitment to provide \$85 billion on September 16, but rather made “a commitment to stabilize the company. There was a commitment to support AIG. Even without the explicit parameters being set. Breaking that commitment had systemic implications of its own.”²²³⁶

While TARP’s Special Inspector General found that many of the New York Fed’s concerns were valid, they came at a high cost. “[T]here is no question that the *effect* of FRBNY’s decisions – indeed the very *design* of the federal assistance to AIG – was that tens of billions of dollars of Government money was funneled inexorably and directly to AIG’s counterparties,” the report concluded. “Stated another way, by providing AIG with the capital to make [payments to counterparties], Federal Reserve officials provided AIG’s counterparties with tens of billions of dollars they likely would have not otherwise received had AIG gone into bankruptcy.”²²³⁷

Citigroup: “Let the world know that we will not pull a Lehman”

On October 3, 2008, the day Wachovia announced that it had rejected Citigroup’s bid in favor of the one from Wells Fargo, Citigroup’s stock fell 18%. Within a week, it plummeted 43%. Future CFO Edward “Ned” Kelly III, who served as an in-house advisor to CEO Vikram Pandit during the negotiations for government assistance, told the FCIC, “Having agreed to do the deal was a recognition

²²³⁴ MFR of FCIC 4/30/2008 Interview with Tom Baxter, at 6. On NetDocs here: <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4847-3468-8006&open=Y>

²²³⁵ MFR of 4/30/08 Interview of Michael Alix.

²²³⁶ MFR of 4/30/08 Interview of Sarah Dahlgren.

²²³⁷ SIGTARP Report November 17, 2009, page 30, at . Emphasis in original.

on our part that we needed it. And if we needed it and didn't get it, what did that imply for the strength of the firm going forward?"²²³⁸ Many investors also shared this view.

Roger Cole, then-Director of the Federal Reserve Board's Division of Banking Supervision and Regulation, also saw the failed acquisition attempt as a turning point, the moment "when Citi really came under the microscope." Cole told the FCIC, "It was regarded as an indication of bad management at Citi that they lost the deal, and had it taken away from them by a smarter, more astute Wells Fargo team. And then here's an organization that doesn't have the core funding that we were assuming that they would get by that deal."²²³⁹

The announcement on October 14 that Citigroup would participate in TARP with the other "systemically critical" firms buoyed its stock price 18% for the day, closing at \$18.62, but even the promise of a \$25 billion capital infusion did not guarantee prolonged optimism. Two days later, Citigroup announced a disappointing \$2.8 billion net loss for the third quarter, concentrated in losses on subprime and Alt-A mortgages, commercial real estate investments, and structured investment vehicle (SIV) write-downs.²²⁴⁰ The banks' stock would fall 17% in the following week, and on November 12 it hit single digits for the first time since 1996.²²⁴¹

Kelly told the FCIC that the market's unease was driven by press speculation that the company's board had lost confidence in senior management.^{2242,2243} On November 19, the company announced the

²²³⁸ FCIC interview with Edward J. "Ned" Kelly III, March 3, 2010, p. 3.

²²³⁹ FCIC interview of Roger Cole, August 2, 2010, transcript available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4818-6335-0791&open=Y>

²²⁴⁰ "Citi Reports Third Quarter Net Loss of \$2.8 Billion, Loss Per Share of \$0.60," Citigroup press release, October 16, 2008, <http://www.citigroup.com/citi/press/2008/081016a.htm>

²²⁴¹ Citigroup's adjusted close was \$9.83 on December 18, 1996 and \$9.62 on November 12, 2008 (Yahoo Finance).

²²⁴² FCIC interview with Edward J. "Ned" Kelly III, March 3, 2010, p. 5.

²²⁴³ A November 13 *New York Times* article quoted one market commentator saying, "Citi doesn't have a credible management team, they don't have a credible board." Eric Dash, "Worst May Be Yet to Come for Citigroup," *New*

value of the SIVs had fallen by \$1.1 billion since it had released its third-quarter earnings. Citigroup was therefore going to bring the remaining \$17.4 billion in off-balance sheet SIV assets onto its books, further feeding pessimism about its situation. Investors promptly clipped another 24% off the value of the stock—Citigroup’s largest single-day drop since the stock market crash in October 1987.²²⁴⁴ Two days later,, the stock was trading at \$3.76, its lowest close since the financial crisis began..²²⁴⁵ By now, the bank’s credit default swap spreads had widened to more than 500 basis points, indicating that financial intermediaries were charging a steep \$500,000 annually to insure \$10 million in Citigroup debt against default.²²⁴⁶ According to Kelly, these developments threatened to become a self-fulfilling prophesy for the bank. “[Investors] look at those spreads and say, ‘Is this some place I really want to put my money?’ And that’s not just in terms of wholesale funding, that’s people who also have deposits with us at various points... And to the extent that funding gets displaced, that aggravates liquidity issues that may persist.”²²⁴⁷

The firm’s various regulators watched the stock price, the daily liquidity, and all the other numbers with alarm. The FDIC was particularly troubled that investors were calling the bank and asking

York Times, November 13, 2008. A *Wall Street Journal* article the same day suggested that Citigroup’s board was considering replacing its chairman. David Enrich and Robin Sidel, “Citi Directors Mull Replacing Chairman,” *Wall Street Journal*, November 13, 2008.

²²⁴⁴ The adjusted close price of Citigroup’s stock fell 23.22% on October 19, 1987 and 23.5% on November 19, 2008 (Yahoo Finance).

²²⁴⁵ Memorandum to the FDIC Board of Directors from James R. Wigand and Herbert J. Held re recommendation for systemic risk determination for Citigroup, November 23, 2008, p. 5, available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4811-7343-7191&open=Y>.

²²⁴⁶ Memorandum to the FDIC Board of Directors from James R. Wigand and Herbert J. Held re recommendation for systemic risk determination for Citigroup, November 23, 2008, available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4811-7343-7191&open=Y>.

²²⁴⁷ FCIC interview with Edward J. “Ned” Kelly III, March 3, 2010, p. 19.

about its solvency.²²⁴⁸ On Friday, November 21, Britain’s Financial Services Authority (FSA) imposed a \$6.4 billion cash “lock-up” to protect Citigroup’s London-based broker-dealer. FDIC examiners knew this would be “very damaging” to the bank’s liquidity and worried that the FSA or other foreign regulators might impose additional cash requirements the following week.²²⁴⁹ By the close of business Friday, there was widespread concern that if the U.S. government failed to act, Citigroup might not survive; its liquidity problems had reached “crisis proportions.”²²⁵⁰ Among the regulators at the FDIC and the Fed, there was no debate. The bank had too many creditors and investors, and trading counterparties had too much exposure to Citigroup and its thousands of subsidiaries and affiliates in more than 100 countries: the company was the very definition of “systemic risk.”²²⁵¹ Looking back on the Fed’s view of Citigroup early in the crisis, Fed Chairman Bernanke told the FCIC, “We were looking at this firm and saying, ‘Citigroup is not a very strong firm, but it’s only one firm and the others are okay,’ but not recognizing that that’s sort of like saying, ‘Well, four out of your five heart ventricles are fine, and the fifth one is lousy.’ They’re all interacted, they all connect to each other; and, therefore, the failure of one brings the others down.”²²⁵²

The FDIC’s Arthur Murton emailed colleague Michael Krimminger on November 22: “Given that the immediate risk is liquidity, the way to address that is by letting counterparties know that they will

²²⁴⁸ Email from Mark D. Richardson to John H. Corston, Jason C. Cave, *et. al.*, subject: “RE: CONFIDENTIAL – Citigroup – Deterioration of Stock Price and CDS Spreads,” November 20, 2008, available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4827-7611-9303&open=Y>.

²²⁴⁹ Email from Mark D. Richardson to John H. Corston, Jason C. Cave, *et. al.*, subject: “11-21-08 Citi Liquidity call notes,” November 21, 2008, available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4837-8301-4407&open=Y>.

²²⁵⁰ Memorandum to the FDIC Board of Directors from James R. Wigand and Herbert J. Held re recommendation for systemic risk determination for Citigroup, November 23, 2008, p. 5, available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4811-7343-7191&open=Y>.

²²⁵¹ Memorandum to the FDIC Board of Directors from James R. Wigand and Herbert J. Held re recommendation for systemic risk determination for Citigroup, November 23, 2008, p. 5, available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4811-7343-7191&open=Y>.

²²⁵² FCIC interview with Ben Bernanke, November 17, 2009.

be protected both at the bank and holding company level... [T]he main point is to let the world know that we will not pull a Lehman.”²²⁵³

Krimminger, the FDIC chairman’s special advisor for policy, agreed: “At this stage, it is probably appropriate to be clear and direct that the US government will not allow Citi to fail to meet its obligations.”²²⁵⁴

Citigroup’s own calculations suggested that a drop in deposits of just 7.2% would wipe out its cash surplus.²²⁵⁵ Throughout the previous week, nervous depositors had been pulling their money out of the bank.²²⁵⁶ If that trend continued, the company could expect a 2% outflow of deposits *per day*.²²⁵⁷ In sum, absent a large and immediate injection of funds, Citigroup’s coffers would be empty before the week ended.²²⁵⁸ Meanwhile, Citigroup executives remained convinced that the company was fundamentally sound, and the market’s loss of confidence was panic-driven. CEO Vikram Pandit argued, “This was not a fundamental situation, it was not about the capital we had, not about the funding we had at that time, but

²²⁵³ Email from Arthur J. Murton to John V. Thomas, Michael H. Krimminger, *et. al.*, subject: “RE: Proposed Conduit,” November 22, 2008. [Emphasis added] available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4824-7452-2631&open=Y>

²²⁵⁴ Email from Michael H. Krimminger to Arthur J. Murton, John V. Thomas, *et. al.*, subject: “RE: Proposed Conduit,” November 22, 2008, available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4824-7452-2631&open=Y>.

²²⁵⁵ Memorandum to the FDIC Board of Directors from James R. Wigand and Herbert J. Held re recommendation for systemic risk determination for Citigroup, November 23, 2008, p. 6.

²²⁵⁶ Letter from Citigroup Deputy General Counsel Michael S. Zuckert to Professor Elizabeth Warren, Chair of the Congressional Oversight Panel, June 10, 2010, p. 4, available at http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_senate_hearings&docid=f:56805.pdf, p. 96.

²²⁵⁷ Memorandum to the FDIC Board of Directors from James R. Wigand and Herbert J. Held re recommendation for systemic risk determination for Citigroup, November 23, 2008, p. 6.

²²⁵⁸ Memorandum to the FDIC Board of Directors from James R. Wigand and Herbert J. Held re recommendation for systemic risk determination for Citigroup, November 23, 2008, p. 9.

with the stock price where it was... perception becomes reality.”²²⁵⁹ All that was needed, Citigroup argued, was for the government to expand access to existing liquidity facilities.²²⁶⁰ “People were questioning what everything was worth at the time. . . . [T]here was a flight not just to quality and safety, but almost a flight to certainty,” Kelly, Pandit’s advisor at the time, told the FCIC.²²⁶¹

The FDIC dismissed Citigroup’s request for the government to simply expand existing programs, concluding that any “incremental liquidity” gained from the liquidity facilities could be quickly eliminated by the deposits flooding out the door.²²⁶² On Sunday, November 23, the FDIC staff presented its board with a proposal to again make a systemic risk recommendation to Treasury. Following the September approval of FDIC assistance in the Citigroup-Wachovia acquisition and the October creation of the Temporary Liquidity Guarantee Program, this November vote would be the third time the FDIC had recommended invoking the systemic risk exception under the FDIC Improvement Act.²²⁶³ As with the other struggling institutions—Bear Stearns, Fannie Mae, Freddie Mac, Lehman Brothers, and Wachovia—regulators had decided that a proposed resolution had to be announced over the weekend to buttress investor confidence by the opening of the markets on Monday.²²⁶⁴ The failure of Citigroup “would significantly undermine business and household confidence,” FDIC staff wrote. Regulators were

²²⁵⁹ Vikram Pandit, testimony before the Congressional Oversight Panel, hearing on “Citigroup and the Troubled Asset Relief Program,” March 4, 2010, p. 79, http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_senate_hearings&docid=f:56805.pdf

²²⁶⁰ Memorandum to the FDIC Board of Directors from James R. Wigand and Herbert J. Held re recommendation for systemic risk determination for Citigroup, November 23, 2008, p. 6.

²²⁶¹ FCIC interview with Edward J. “Ned” Kelly III, March 3, 2010, p. 10.

²²⁶² Memorandum to the FDIC Board of Directors from James R. Wigand and Herbert J. Held re recommendation for systemic risk determination for Citigroup, November 23, 2008, p. 6.

²²⁶³ “Federal Deposit Insurance Act: Regulators’ Use of Systemic Risk Exception Raises Moral Hazard Concerns and Opportunities Exist to Clarify the Provision,” Government Accountability Office, GAO-10-100, April 2010, p. 2, <http://www.gao.gov/new.items/d10100.pdf>

²²⁶⁴ Memorandum to the FDIC Board of Directors from James R. Wigand and Herbert J. Held re recommendation for systemic risk determination for Citigroup, November 23, 2008, p. 9.

also concerned that the macroeconomic effects of a Citigroup failure would undermine the impact of the recently-implemented Capital Purchase Program under TARP.²²⁶⁵

Treasury agreed to provide Citigroup with an additional \$20 billion in TARP funds in exchange for preferred stock with an 8 percent dividend.²²⁶⁶ This brought the company's government tab up to \$45 billion. The bank also received \$19.5 billion in capital benefits related to its issuance of preferred stock and the government's guarantee of certain assets.²²⁶⁷ Under this guarantee, Citigroup and the government would identify a \$306 billion pool of assets around which a protective "ring fence" would be placed. In effect, this was a loss-sharing agreement between Citigroup and the federal government. Citigroup's Kelly, who helped negotiate the deal, told the FCIC, "There was not a huge amount of science in coming to that [\$306 billion] number."²²⁶⁸ The deal was structured to "give the market comfort that the catastrophic risk has been taken off the table."²²⁶⁹ When the terms of the ring-fence were finalized in

²²⁶⁵ Department of the Treasury response to Congressional Oversight Panel, Questions for the Record, p. 3, hearing on "Citigroup and the Troubled Asset Relief Program," March 4, 2010, http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_senate_hearings&docid=f:56805.pdf p. 3, p. 44

²²⁶⁶ Department of the Treasury response to Congressional Oversight Panel, Questions for the Record, p. 3, hearing on "Citigroup and the Troubled Asset Relief Program," March 4, 2010, http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_senate_hearings&docid=f:56805.pdf p. 3, p. 44

²²⁶⁷ "Citi Adds \$40 Billion of Capital Benefit through Agreement with U.S. Treasury, Federal Reserve, and FDIC," Citigroup press release, November 24, 2008, <http://www.citigroup.com/citi/press/2008/081124a.htm>. In total, Citigroup received almost \$40 billion in capital benefits from the November 2008 government assistance. Half of the capital benefits were from Treasury's \$20 billion TARP investment in Citigroup preferred stock. \$16 billion of the capital benefits were derived from a change in the risk weighting of the ring-fenced assets. With their government guarantee, the \$301 billion of assets in the ring fence had their risk weights reset to 20 percent, which gave Citigroup \$16 billion in capital relief. In addition, Citigroup issued Treasury and the FDIC \$7 billion in preferred stock as payment for the guarantee on the ring fence. The issuance of this preferred stock increased capital, after accounting for the insurance feature of the arrangement, by \$3.5 billion in capital for Citigroup.

²²⁶⁸ FCIC interview with Edward J. "Ned" Kelly III, March 3, 2010, p. 39.

²²⁶⁹ FCIC interview with Edward J. "Ned" Kelly III, March 3, 2010, p. 23.

January 2009, the guaranteed pool, which primarily contained loans and residential and commercial mortgage-backed securities, was adjusted to \$301 billion.²²⁷⁰

Under the agreement, Citigroup assumed responsibility for the first \$39.5 billion in losses on the ring-fenced assets. The federal government would assume responsibility for 90% of all losses above that number. Should these losses actually materialize, Treasury would absorb the first \$5 billion using TARP funds, the FDIC would absorb the next \$10 billion from the Deposit Insurance Fund (for which it had needed the systemic risk exception), and the Fed would absorb the balance. In return, Citigroup agreed to grant the government \$7 billion in preferred stock, and warrants that gave the government the option to purchase an additional 254 million shares at \$10.61 a share (at the time the stock was trading at \$3.76).²²⁷¹ Based on its analysis of the quality of the protected assets, FDIC staff projected that the Deposit Insurance Fund would not incur any actual losses.²²⁷²

The bank, the Treasury, the Fed, and the FDIC staff signed off on the deal. At 10 p.m. Sunday, the FDIC Board held a conference call to consider the proposed assistance to endorse emergency measures on behalf of a struggling institution. There was little debate during the conference call. OTS Director John Reich – who served on the board – did question why similar relief had not been granted to OTS-supervised thrifts that had failed earlier in the crisis. “There isn’t any doubt in my mind that this is a systemic situation,” he said. “In hindsight, I think there have been some systemic situations prior to this one that were not classified as such. The failure of IndyMac pointed the focus to the next weakest institution, which was WaMu, and its failure pointed to Wachovia, and now we’re looking at Citi and I wonder who’s next. I hope that all of the regulators, all of us, including Treasury and the Fed, are looking

²²⁷⁰ “November Oversight Report: Guarantees and Contingent Payments in TARP and Related Programs,” Congressional Oversight Panel, November 6, 2009, p. 21-22, <http://cop.senate.gov/documents/cop-110609-report.pdf>

²²⁷¹ “Joint Statement by Treasury, Federal Reserve, and the FDIC on Citigroup,” Treasury press release HP-1287, November 23, 2008.

²²⁷² Transcript of FDIC Board of Directors meeting, closed session, November 23, 2008, p. 14.

at these situations in a balanced manner, and I fear there has been some selective creativity exercised in the determination of what is systemic and what's not and what's possible for the government to do and what's not."²²⁷³

The FDIC Board approved the proposal late Sunday night. The announcement beat the opening bell, and the markets responded positively, with Citigroup's stock price soaring almost 58% and closing at \$5.95. With Citigroup stabilized, the markets shifted their focus to the next domino in line.

The ring fence stayed in place until December 2009, at which time Citigroup terminated the government guarantee in tandem with its repayment of the \$20 billion in TARP funds.²²⁷⁴ At the time of publication, Treasury still held 3.6 million shares of Citigroup common stock in connection with the company's participation in the Troubled Asset Relief Program; it has announced it has plans to sell 1.5 million shares by the end of 2010.²²⁷⁵

Bank of America: "A shotgun wedding"

On September 15, 2008, as Lehman declared bankruptcy, Bank of America announced the acquisition of Merrill Lynch—a combination that would create the world's largest brokerage and cement Bank of America's position as the United States' largest depository institution.²²⁷⁶ Given the share prices of the two companies at the time, the purchase price was about \$50 billion.

²²⁷³ Transcript of FDIC Board of Directors meeting, closed session, November 23, 2008, p. 28.

²²⁷⁴ "Troubled Asset Relief Program: Two Year Retrospective," Office of Financial Stability, October 2010, p. 26, http://www.financialstability.gov/docs/TARP%20Two%20Year%20Retrospective_10%2005%2010_transmittal%20letter.pdf

²²⁷⁵ "Treasury Announces Plan to Continue to Sell Citigroup Common Stock," Treasury press release, October 19, 2010, http://www.financialstability.gov/latest/pr_10192010.html

²²⁷⁶ "Bank of America Buys Merrill Lynch Creating Unique Financial Services Firm," Bank of America press release, September 15, 2008, <http://mediaroom.bankofamerica.com/phoenix.zhtml?c=234503&p=irol-newsArticle&ID=1390130&highlight=>; "Federal Reserve Order Approving Bank of America Corporation Acquisition of a Savings Association and an Industrial Loan Company," November 26, 2008, <http://www.federalreserve.gov/newsevents/press/orders/orders20081126a1.pdf>.

But the deal was not set to close until the first of the year. During the interim period, the companies continued to operate as separate entities, pending shareholder and regulatory approval.²²⁷⁷ Consequently, on October 13, the CEOs of both companies—John Thain from Merrill Lynch and Ken Lewis from Bank of America—represented their companies separately to discuss participation in the TARP Capital Purchase Program with Paulson, Bernanke, Bair, and Cox.²²⁷⁸ The government proposed investments of \$15 billion in Bank of America and \$10 billion in Merrill Lynch under this capital infusion program, with the understanding that Bank of America would receive the full \$25 billion (the maximum allowed) when its acquisition of Merrill Lynch was complete.²²⁷⁹

For the third quarter of 2008, Bank of America reported net income of \$1.18 billion, while Merrill Lynch reported a net loss of \$5.2 billion.²²⁸⁰ In its October 16 earnings press release, Merrill Lynch described write downs related to its CDO positions and other real estate-related securities and assets affected by the “severe market dislocations.”²²⁸¹ In an investor conference call that day, CEO John Thain explained that Merrill’s strategy was to clean house. It now held less than \$1 billion in ABS CDOs

²²⁷⁷ “Bank of America Buys Merrill Lynch Creating Unique Financial Services Firm,” Bank of America press release, September 15, 2008, <http://mediaroom.bankofamerica.com/phoenix.zhtml?c=234503&p=irol-newsArticle&ID=1390130&highlight=>

²²⁷⁸ “Emergency Capital Injections Provided to Support the Viability of Bank of America, Other Major Banks, and the U.S. Financial System,” Special Inspector General for the Troubled Asset Relief Program, October 5, 2009, p. 20, http://www.sig tarp.gov/reports/audit/2009/Emergency_Capital_Injections_Provided_to_Support_the_Viability_of_Bank_of_America..._100509.pdf

²²⁷⁹ “Emergency Capital Injections Provided to Support the Viability of Bank of America, Other Major Banks, and the U.S. Financial System,” Special Inspector General for the Troubled Asset Relief Program, October 5, 2009, p. 20, http://www.sig tarp.gov/reports/audit/2009/Emergency_Capital_Injections_Provided_to_Support_the_Viability_of_Bank_of_America..._100509.pdf

²²⁸⁰ “Bank of America Announces Third Quarter Earnings and Capital Raising Initiatives,” Bank of America press release, October 6, 2008, <http://mediaroom.bankofamerica.com/phoenix.zhtml?c=234503&p=irol-newsArticle&ID=1390147&highlight=>; “Merrill Lynch Reports Third Quarter 2008 Net Loss from Continuing Operations of \$5.1 Billion,” Merrill Lynch press release, October 16, 2008, <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4835-8738-6119&open=Y>

²²⁸¹ Merrill Lynch & Co., Inc. Press Release, October 16, 2008 at 1.

and no Alt-A positions at all on its trading books.²²⁸² “We’re down to \$295 million in subprime on our trading books,” Thain said. “We cut our non-U.S. mortgage business positions in half.”²²⁸³

The Federal Reserve Board granted regulatory approval of the acquisition on November 26, affirming that the acquisition “can reasonably be expected to produce benefits to the public... that outweigh possible adverse effects.”²²⁸⁴ The Federal Reserve further noted that both Bank of America and Merrill Lynch were well capitalized and would remain so after the merger, and that Bank of America “has sufficient financial resources to effect the proposal.”²²⁸⁵ Shareholders for both companies approved the acquisition on Friday, December 5.²²⁸⁶

A little over a week later, as Ken Lewis—Bank of America CEO at the time—told the FCIC, the bank had begun having second thoughts about the acquisition. In what would become a subject of controversy, Lewis testified to Congress he had not learned that Merrill Lynch’s fourth quarter losses had “accelerated pretty dramatically” until December 14.²²⁸⁷ Merrill Lynch’s after-tax losses for the quarter had been projected at approximately \$5 billion in mid-November; the projection grew to approximately

²²⁸² Merrill Lynch & Co., Inc. Transcript of Earnings Call, October 16, 2008, <http://seekingalpha.com/article/100250-merrill-lynch-amp-co-inc-q3-2008-earnings-call-transcript>

²²⁸³ Merrill Lynch & Co., Inc. Transcript of Earnings Call, October 16, 2008 at 2.

²²⁸⁴ “Federal Reserve Order Approving Bank of America Corporation Acquisition of a Savings Association and an Industrial Loan Company,” November 26, 2008, <http://www.federalreserve.gov/newsevents/press/orders/orders20081126a1.pdf>.

²²⁸⁵ “Federal Reserve Order Approving Bank of America Corporation Acquisition of a Savings Association and an Industrial Loan Company,” November 26, 2008, <http://www.federalreserve.gov/newsevents/press/orders/orders20081126a1.pdf>.

²²⁸⁶ “Merrill Lynch & Co. and Bank of America said Friday that their shareholders approved its merger with Bank of America,” MarketWatch, December 5, 2008, <http://www.marketwatch.com/story/merrill-bank-of-america-holders-approve-merger>

²²⁸⁷ Ken Lewis, deposition *In Re: Executive Compensation Investigation: Bank of America – Merrill Lynch*, February 26, 2009, p. 9, available from House Oversight Committee, p. 135 of http://frwebgate.access.gpo.gov/cgi-bin/useftp.cgi?IPaddress=162.140.64.184&filename=54877.pdf&directory=/disca/wais/data/111_house_hearings

\$7 billion by December 3, then to \$9 billion by December 9.²²⁸⁸ On December 14, Bank of America learned that Merrill Lynch’s losses had increased to \$12 billion after tax. [explain increases]

In a January conference call, Lewis and CFO Joe Price told investors that the bank had not been aware of the extent of Merrill Lynch’s fourth quarter losses at the time of the shareholder vote.²²⁸⁹ “[I]t wasn’t an issue of not identifying the assets. It was that we did not expect the significant deterioration, which happened in mid to late December that we saw.”²²⁹⁰ Despite these claims, whether or not Bank of America knew about the losses before that December 5 shareholder vote remains an issue of contention. Merrill’s Thain told the FCIC that Merrill Lynch provided daily profit and loss reports to Bank of America and that Bank of America should have known about losses as they happened.²²⁹¹ The SEC later brought an enforcement action against Bank of America, charging the company with failing to disclose approximately \$9.5 billion of known and expected Merrill Lynch losses before the December 5 shareholder vote.²²⁹² According to the SEC’s complaint, these insufficient disclosures deprived shareholders of material information that would have been critical to their ability to fairly evaluate the

²²⁸⁸ Timothy J. Mayopoulous, former general counsel of Bank of America, testimony to House Oversight Committee, “Bank of America and Merrill Lynch: How Did a Private Deal Turn into a Federal Bailout? Part IV” November 17, 2009, p. 26, 30, 32 of http://frwebgate.access.gpo.gov/cgi-bin/useftp.cgi?IPaddress=162.140.64.184&filename=55995.pdf&directory=/diska/wais/data/111_house_hearings

²²⁹¹ John Thain interview with the FCIC, September 17, 2009, p. 38, transcript available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4845-6051-7895&open=Y>

²²⁹² SEC Complaint against Bank of America, Jan. 12, 2010, pg. 3 (available at <http://sec.gov/litigation/complaints/2010/comp21377.pdf>).

merger.²²⁹³ Bank of America ultimately paid \$150 million to settle the SEC’s action in February 2010.

²²⁹⁴ On December 17, Lewis called Treasury Secretary Paulson to inform him that Bank of America was considering invoking the material adverse change (MAC) clause of the merger agreement, which would allow the company to exit or renegotiate the terms of the acquisition.²²⁹⁵ Lewis explained to the FCIC, “[T]he severity of the losses were high enough that we should at least consider a MAC... The acceleration, we thought, was beyond what should be happening. And then secondly, you had a major hole being created in the capital base with the losses—that dramatically reduced [Merrill Lynch’s] equity.”²²⁹⁶

After hearing from Lewis, Paulson asked to speak in person about the issue, and Lewis flew from North Carolina to Washington that afternoon for a meeting at the Federal Reserve.²²⁹⁷ At the meeting,

²²⁹³ SEC Complaint against Bank of America, Jan. 12, 2010, pg. 3 (available at <http://sec.gov/litigation/complaints/2010/comp21377.pdf>).

²²⁹⁴ Final Consent Judgment As to Defendant Bank of America, Feb. 4, 2010 (available at <http://sec.gov/litigation/litreleases/2010/boaexanotice.pdf>); Memorandum of Plaintiff Securities and Exchange Commission In Support of Entry of Proposed Consent Judgment, Feb. 4, 2010 (available at <http://sec.gov/litigation/litreleases/2010/boasupportingbrief.pdf>).

²²⁹⁵ Ken Lewis, deposition *In Re: Executive Compensation Investigation: Bank of America – Merrill Lynch*, February 26, 2009, p. 10, 34, available from House Oversight Committee, p. 136, 143 of http://frwebgate.access.gpo.gov/cgi-bin/useftg.cgi?IPaddress=162.140.64.184&filename=54877.pdf&directory=/diska/wais/data/111_house_hearings

²²⁹⁶ Ken Lewis, interview with the FCIC, audio file part 2 of 2, 47:35 and 49:15, audio available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4850-7813-0695&open=Y>

²²⁹⁷ Ken Lewis, deposition *In Re: Executive Compensation Investigation: Bank of America – Merrill Lynch*, February 26, 2009, p. 34, 38, available from House Oversight Committee, p. 143, 147 of http://frwebgate.access.gpo.gov/cgi-bin/useftg.cgi?IPaddress=162.140.64.184&filename=54877.pdf&directory=/diska/wais/data/111_house_hearings

representatives from Treasury and the Federal Reserve—including Secretary Paulson and Chairman Bernanke—asked Lewis to “stand down” on invoking the clause while they considered the situation.²²⁹⁸

Paulson and Bernanke concluded that an attempt by Bank of America to invoke the MAC clause “was not a legally reasonable option.”²²⁹⁹ They believed that Bank of America would be ultimately unsuccessful in its pursuit of the clause, and that doing so would lead to litigation, which would likely end in Bank of America still having to acquire a considerably weaker Merrill Lynch. Moreover, Bernanke thought the market would be wary of Bank of America’s leadership going forward: “[A]n attempt to invoke the [clause] after 3 months of review, preparation, and public remarks... [would cast doubt on] the due diligence and analysis done by the company, its capability to consummate significant acquisitions, its overall risk management processes, and its judgment of its management.” The two officials also believed that invoking the clause would lead to a “broader systemic crisis” that would result in further deterioration at Bank of America and Merrill Lynch.²³⁰⁰

Neither Merrill Lynch nor its CEO, John Thain, was informed that Bank of America was considering invoking the MAC clause. Lewis told the FCIC that he didn’t contact Merrill Lynch about the

²²⁹⁸ Ken Lewis, deposition *In Re: Executive Compensation Investigation: Bank of America – Merrill Lynch*, February 26, 2009, p. 42, available from House Oversight Committee, p. 151 of http://frwebgate.access.gpo.gov/cgi-bin/useftp.cgi?IPaddress=162.140.64.184&filename=54877.pdf&directory=/diska/wais/data/111_house_hearings; Henry Paulson, testimony, House Committee on Oversight and Government Reform, “Bank of America and Merrill Lynch: How Did a Private Deal Turn into a Federal Bailout? Part III” July 16, 2009, p. 22 of http://frwebgate.access.gpo.gov/cgi-bin/useftp.cgi?IPaddress=162.140.64.184&filename=55765.pdf&directory=/diska/wais/data/111_house_hearings

²²⁹⁹ Henry Paulson, testimony, House Committee on Oversight and Government Reform, “Bank of America and Merrill Lynch: How Did a Private Deal Turn into a Federal Bailout? Part III” July 16, 2009, p. 23 of http://frwebgate.access.gpo.gov/cgi-bin/useftp.cgi?IPaddress=162.140.64.184&filename=55765.pdf&directory=/diska/wais/data/111_house_hearings

²³⁰⁰ Ben Bernanke, House Committee on Oversight and Government Reform, “Bank of America and Merrill Lynch: How Did a Private Deal Turn into a Federal Bailout? Part II” June 25, 2009, p. 18, transcript: http://frwebgate.access.gpo.gov/cgi-bin/useftp.cgi?IPaddress=162.140.64.184&filename=55102.pdf&directory=/diska/wais/data/111_house_hearings

situation because he didn't want to create an "adversarial relationship" if it could be avoided.²³⁰¹ When Thain later found out that Bank of America had contemplated the MAC clause, he was skeptical that they would have been successful: "[O]ne of the things we negotiated very heavily was the Material Adverse Change clause. [It] specifically excluded market moves... [and] pretty much nothing happened to Merrill in the fourth quarter other than the market move."²³⁰²

A few days after the meeting at the Federal Reserve, on Sunday, December 21, Paulson informed Lewis that invoking the clause would demonstrate a "colossal loss of judgment" by the company.²³⁰³ Paulson reminded Lewis that the Federal Reserve had the legal authority to replace Bank of America's management and Board if they embarked on "destructive" strategy that had "no reasonable legal basis."²³⁰⁴ Bernanke later told his general counsel: "though we did not order Lewis to go forward, we did indicate that we believed that going forward [with the clause] would be detrimental to the health (safety

²³⁰¹ Ken Lewis, interview with the FCIC, audio file part 2 of 2, 53:00, audio available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4850-7813-0695&open=Y>

²³⁰² John Thain interview with the FCIC, September 17, 2009, p. 38, transcript available at <https://vault.netvoyage.com/neWeb2/goId.aspx?id=4845-6051-7895&open=Y>

²³⁰³ Henry Paulson, testimony, House Committee on Oversight and Government Reform, "Bank of America and Merrill Lynch: How Did a Private Deal Turn into a Federal Bailout? Part III" July 16, 2009, p. 19 of http://frwebgate.access.gpo.gov/cgi-bin/useftp.cgi?IPaddress=162.140.64.184&filename=55765.pdf&directory=/diska/wais/data/111_house_hearings

²³⁰⁴ Henry Paulson, testimony, House Committee on Oversight and Government Reform, "Bank of America and Merrill Lynch: How Did a Private Deal Turn into a Federal Bailout? Part III" July 16, 2009, p. 25 of http://frwebgate.access.gpo.gov/cgi-bin/useftp.cgi?IPaddress=162.140.64.184&filename=55765.pdf&directory=/diska/wais/data/111_house_hearings; 12 U.S.C. § 1818(e) states that "Whenever the appropriate Federal banking agency determines that any institution-affiliated party has, directly or indirectly... engaged or participated in any unsafe or unsound practice in connection with any insured depository institution or business institution; or committed or engaged in any act, omission, or practice which constitutes a breach of such party's fiduciary duty; [and] by reason of the violation, practice, or breach... such insured depository institution or business institution has suffered or will probably suffer financial loss or other damage; [or] the interests of the insured depository institution's depositors have been or could be prejudiced... and such violation, practice, or breach... demonstrates willful or continuing disregard by such party for the safety or soundness of such insured depository institution or business institution, the appropriate Federal banking agency for the depository institution may serve upon such party a written notice of the agency's intention to remove such party from office or to prohibit any further participation by such party, in any manner, in the conduct of the affairs of any insured depository institution.

and soundness) of his company.”²³⁰⁵ Rep. Edolphus Towns of New York would later refer to the Bank of America and Merrill Lynch merger as “a shotgun wedding.”²³⁰⁶

Lewis decided to “deescalate” the situation, explaining that, when the Secretary of the Treasury and the Chairman of the Federal Reserve says that invoking the MAC would cause systemic risk, “then it obviously gives you pause.”²³⁰⁷ At a Board meeting on December 22, Lewis relayed the conversations to his Directors, explaining that (1) the Federal Reserve and Treasury Department believed that a failed acquisition would pose systemic risk and would lead to removal of management and the Board, and (2) the government would provide assistance “to protect [Bank of America] against the adverse impact of certain Merrill Lynch assets,” although such assistance could not be provided in time for merger’s close on January 1, 2009.²³⁰⁸ The Board decided not to exercise the clause and to go forward with the acquisition as planned, with the understanding that the government’s assistance would be “fully documented” by the time fourth quarter earnings were announced in mid-January.²³⁰⁹ In his interview with the FCIC, Lewis justified the decision to go forward with the acquisition: “[O]bviously if [the MAC

²³⁰⁵ Email from Chairman Ben Bernanke to General Counsel Scott Alvarez, “Re: Fw: BAC,” December 23, 2008, available from House Oversight Committee, p. 73 of http://frwebgate.access.gpo.gov/cgi-bin/useftp.cgi?IPAddress=162.140.64.184&filename=55102.pdf&directory=/diska/wais/data/111_house_hearings

²³⁰⁶ Representative Edolphus Towns, House Committee on Oversight and Government Reform, “Bank of America and Merrill Lynch: How Did a Private Deal Turn into a Federal Bailout?” June 11, 2009, p. 2, transcript: http://frwebgate.access.gpo.gov/cgi-bin/useftp.cgi?IPAddress=162.140.64.184&filename=54877.pdf&directory=/diska/wais/data/111_house_hearings

²³⁰⁷ Ken Lewis, interview with the FCIC, audio file part 2 of 2, 50:10, audio available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4850-7813-0695&open=Y>

²³⁰⁸ Minutes of a Special Meeting of Board of Directors of Bank of America Corporation, December 22, 2008, BAC-ML-NYAG00003874, available from House Oversight Committee, p, 183 of http://frwebgate.access.gpo.gov/cgi-bin/useftp.cgi?IPAddress=162.140.64.184&filename=54877.pdf&directory=/diska/wais/data/111_house_hearings

²³⁰⁹ Minutes of a Special Meeting of Board of Directors of Bank of America Corporation, December 30, 2008, BAC-ML-NYAG00003879, available from House Oversight Committee, p, 188 of http://frwebgate.access.gpo.gov/cgi-bin/useftp.cgi?IPAddress=162.140.64.184&filename=54877.pdf&directory=/diska/wais/data/111_house_hearings

clause] actually would cause systemic risk to the financial system, then that's not good for Bank of America. Which is finally the conclusion that I came to and the Board came to."²³¹⁰

The merger was completed on January 1, 2009, with no hint of government assistance. By the time the acquisition became official, because of the particulars of the deal the announced purchase price of \$50 billion was down to \$19 billion, thanks to the decline in the stock prices of the two companies over the preceding three months.²³¹¹

On January 9, Bank of America gained \$10 billion in capital from the TARP Capital Purchase Program allocated to Merrill Lynch (to add to the \$15 billion of Capital Purchase Program funds it had received in October 2008). In addition to the Capital Purchase Program funds, it was also a "substantial user" of the Fed's various liquidity programs.²³¹² The holding company and its subsidiaries had already borrowed \$55 billion through the Term Auction Facility. It had also borrowed \$15 billion under the Fed's Commercial Paper Funding Facility and \$20 billion under the FDIC's debt guarantee program. And newly acquired Merrill Lynch had borrowed another \$21 billion from the Fed's two Bear Stearns-era repo-support programs. Even with the use of these programs, the regulators worried that Bank of America would experience liquidity problems if the fourth-quarter earnings were weak.

The analysis was simple: Sixty-seven percent of Bank of America's repo and securities lending funding – a total of \$384 billion – was rolled on an overnight basis.²³¹³ The Merrill Lynch "legacy"

²³¹⁰ Ken Lewis, interview with the FCIC, audio file part 2 of 2, 50:18, audio available at <https://vault.netvoyage.com/neWeb2/gold.aspx?id=4850-7813-0695&open=Y>

²³¹¹ Bank of America agreed to purchase Merrill in an all-stock transaction. The exchange ratio was 0.8595 Bank of America shares for every Merrill Lynch share, resulting in a purchase price of \$50 billion based on the September 12, 2008 closing prices. The price ultimately declined to approximately \$19 billion at closing due to the decline of Bank of America's stock price.

²³¹² Memo from FRB and OCC staff to Rick Cox, FDIC, "Bank of America Corporation (BAC) Funding Vulnerabilities and Implications for Other Financial Market Participants," January 10, 2009, p. 3.

²³¹³ Memo from FRB and OCC staff to Rick Cox, FDIC, "Bank of America Corporation (BAC) Funding Vulnerabilities and Implications for Other Financial Market Participants," January 10, 2009, p. 2

businesses also funded \$144 billion on an overnight basis.²³¹⁴ A one-notch downgrade in the new Bank of America's credit rating would contractually obligate the posting of \$10 billion in additional collateral; a two-notch downgrade would require another \$3 billion.²³¹⁵ Although the company remained adequately capitalized from a regulatory standpoint, its tangible common equity was low and was likely to fall under 2 percent given the stressed market conditions.²³¹⁶ Low levels of tangible common equity – the most basic measure of capital – worried the market, which had recently seemed to take the view that the capital measures accepted by regulators were not sufficient in the midst of the crisis.

The regulators wanted to be ready to announce the details of government support in conjunction with Bank of America's disclosure of the company's fourth quarter performance. Indeed, the Treasury Department, Federal Reserve, and FDIC had been working since late December to discuss the shape that the potential assistance might take.²³¹⁷ On January 15, the Federal Reserve and the FDIC, after "intense" discussions, agreed on the term sheet²³¹⁸ and the FDIC Board had a conference call at 10 p.m. to vote on a systemic risk determination for Bank of America. This vote came not quite two months after the Board had come together at the same hour on a Sunday night to consider similar action for Citigroup.²³¹⁹ The

²³¹⁴ Memo to the FDIC board of directors from Mitchell Glassman, Sandra Thompson, Arthur Murton, and John Thomas, subject: Bank of America, January 15, 2009, p. 8.

²³¹⁵ Memo from FRB and OCC staff to Rick Cox, FDIC, "Bank of America Corporation (BAC) Funding Vulnerabilities and Implications for Other Financial Market Participants," January 10, 2009, p. 4.

²³¹⁶ Memo to the FDIC board of directors from Mitchell Glassman, Sandra Thompson, Arthur Murton, and John Thomas, subject: Bank of America, January 15, 2009, p. 9.

²³¹⁷ Sheila C. Bair, FDIC Chairman, testimony before the House Oversight Committee, "Bank of America and Merrill Lynch: How Did a Private Deal Turn into a Federal Bailout? Part V," December 11, 2009, http://oversight.house.gov/images/stories/Hearings/Committee_on_Oversight/121109_Boa-ML/TESTIMONY-Bair.pdf

²³¹⁸ Sheila C. Bair, FDIC Chairman, testimony before the House Oversight Committee, "Bank of America and Merrill Lynch: How Did a Private Deal Turn into a Federal Bailout? Part V," December 11, 2009, p. 3, http://oversight.house.gov/images/stories/Hearings/Committee_on_Oversight/121109_Boa-ML/TESTIMONY-Bair.pdf

²³¹⁹ Transcript of the closed meeting of the FDIC board of directors, January 15, 2009.

staff's analysis of this emergency involving Bank of America, now the country's second-largest bank holding company and its largest holder of insured deposits (over 10% of the nation's deposits), was essentially the same as it had been for Citigroup. Again, the FDIC board voted unanimously to approve the systemic risk recommendation.^{2320,2321}

Treasury would use TARP funds to purchase \$20 billion of Bank of America preferred stock with an 8% dividend.²³²² The bank and the three pertinent government agencies—Treasury, the Fed, and the FDIC-- would designate an asset pool of \$118 billion, primarily from the former Merrill Lynch portfolio, upon which the four entities would share losses.²³²³ This was analogous to the “ring fence” in the Citigroup agreement. In this case, Bank of America would be responsible for the first \$10 billion in losses on the pool, and the government would cover 90% of any additional losses.²³²⁴ Should the government losses materialize, Treasury would cover 75%, up to a limit of \$7.5 billion, and the FDIC 25%, up to a limit of \$2.5 billion.²³²⁵ Any additional losses would be 90%-covered by the Fed.²³²⁶

²³²⁰ Memo to the FDIC board of directors from Mitchell Glassman, Sandra Thompson, Arthur Murton, and John Thomas, subject: Bank of America, January 15, 2009, p. 6.

²³²¹ The FDIC found: “Liquidity pressure may increase to critical levels following the announcement of fourth quarter 2008 operating results that are significantly worse than market expectations. Market reaction to BAC's operating results may have systemic consequences given the size of the institution and the volume of counterparty transactions involved. Without a systemic risk determination... significant market disruption may ensue as counterparties lose confidence in BAC's ability to fund ongoing operations.... [Economic developments] point to a clear relationship between the financial market turmoil of recent months and impaired economic performance that could be expected to worsen further if BAC and its insured subsidiaries were allowed to fail. Such an event would significantly undermine business and consumer confidence.” Memo to the FDIC board of directors from Mitchell Glassman, Sandra Thompson, Arthur Murton, and John Thomas, subject: Bank of America, January 15, 2009, p. 13-14.

²³²² “Treasury, Federal Reserve and the FDIC Provide Assistance to Bank of America,” FDIC press release, January 16, 2009.

²³²³ “Bank of America Earns \$4 Billion in 2008,” Bank of America press release, January 16, 2009.

²³²⁴ “Bank of America Earns \$4 Billion in 2008,” Bank of America press release, January 16, 2009.

²³²⁵ Memo to the FDIC board of directors from Mitchell Glassman, Sandra Thompson, Arthur Murton, and John Thomas, subject: Bank of America, January 15, 2009, p. 3. This 25/75 split was agreed to because, for the ring

* *

The next morning, Bank of America disclosed that Merrill Lynch had recorded a \$15.3 billion net loss on real estate-related write-downs and charges.²³²⁷ In the same earnings announcement, the company acknowledged the \$20 billion TARP capital investment and \$118 billion ring fence that the government had provided.²³²⁸ Despite the government's support, Bank of America's stock closed down almost 14% from the day before.

The January 16 announcement of the term sheet for the ring fence did not represent a final agreement, and over the next several months, Bank of America worked with its regulators to identify the assets that would be included in the pool.²³²⁹ On May 6, Bank of America asked to exit the ring fence deal, explaining that the company had determined that losses would not exceed the \$10 billion that Bank of America was required to cover in its first-loss position.²³³⁰ Although the company was eventually allowed to terminate the deal, it was required to compensate the government for the benefits it received from the market's perception that the government would insure its assets. On September 21, Bank of

fence, 25 percent of the assets were from depository institutions and 75 percent were not. See Transcript of the closed meeting of the FDIC board of directors, January 15, 2009, p. 18.

²³²⁶ Memo to the FDIC board of directors from Mitchell Glassman, Sandra Thompson, Arthur Murton, and John Thomas, subject: Bank of America, January 15, 2009, p. 3.

²³²⁷ 1/16/09 Press Release at 1.

²³²⁸ "Bank of America Earns \$4 Billion in 2008," Bank of America press release, January 16, 2009, <http://mediaroom.bankofamerica.com/phoenix.zhtml?c=234503&p=irol-newsArticle&ID=1390193&highlight=>

²³²⁹ Sheila C. Bair, FDIC Chairman, testimony before the House Oversight Committee, "Bank of America and Merrill Lynch: How Did a Private Deal Turn into a Federal Bailout? Part V," December 11, 2009, http://oversight.house.gov/images/stories/Hearings/Committee_on_Oversight/121109_Boa-ML/TESTIMONY-Bair.pdf

²³³⁰ "Emergency Capital Injections Provided to Support the Viability of Bank of America, Other Major Banks, and the U.S. Financial System," Office of the Special Inspector General for the Troubled Asset Relief Program, SIGTARP-10-001, October 5, 2009, p. 29, http://www.sig tarp.gov/reports/audit/2009/Emergency_Capital_Injections_Provided_to_Support_the_Viability_of_Bank_of_America..._100509.pdf

America agreed to pay a \$425 million termination fee: \$276 million to the Treasury Department, \$57 million to the Federal Reserve, and \$92 million to the FDIC.²³³¹

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²³³¹ “Emergency Capital Injections Provided to Support the Viability of Bank of America, Other Major Banks, and the U.S. Financial System,” Office of the Special Inspector General for the Troubled Asset Relief Program, SIGTARP-10-001, October 5, 2009, p. 29, http://www.sig tarp.gov/reports/audit/2009/Emergency_Capital_Injections_Provided_to_Support_the_Viability_of_Bank_of_America..._100509.pdf

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CHAPTER CONCLUSIONS HERE

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Part IV: The Aftershocks

Part IV, Chapter I: The Economy After the Crisis

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The tremors from the upheaval in the financial system rumbled through the U.S. economy. What followed was the longest and deepest recession in generations, with a nationwide credit squeeze, the evaporation of \$17 trillion in household wealth, and 10% unemployment. With the housing bubble deflated, families that had counted on rising housing values for cash and retirement security were anchored to mortgages that exceeded the declining value of their homes. They ratcheted back on spending, cumulatively putting the brakes on economic growth—the classic “paradox of thrift,” expounded on almost a century ago by John Maynard Keynes.

In the aftermath of the panic, when credit was tightened if not frozen for financial institutions, other firms found that cheap, easy credit was gone for them, too. It was tougher to borrow to meet payrolls and to expand inventories; businesses that had neither credit nor customers trimmed costs and fired employees. Still today, credit availability is tighter than it was prior to the crisis.

Without jobs, people could no longer afford their houses. Yet, even if moving meant better job prospects, they were stuck with houses they could not sell. Millions of families fell behind on their mortgage

payments, and entered foreclosure. Others simply walked away from their devalued properties, returning the keys to the banks. The surge in foreclosed and abandoned properties dragged home prices down even more, sinking the value of surrounding real estate in neighborhoods across the country. Even those who stayed current on their mortgages found themselves yanked into the storm.

Towns that had adjusted over several years to an influx of new homeowners now saw homeowners, jobs, and tax revenue vanish. With dwindling resources, these communities were saddled with the municipal debt they had taken on in part to expand services for a growing population. Sinking housing prices upended local budgets that relied on property taxes. Problems associated with abandoned homes called for more police and fire protection.

At FCIC hearings around the country, regional experts testified that the local impact of the crisis has been severe. During the fall of 2008, for example, banks in Sacramento had stopped lending and potential borrowers retreated, said Clarence Williams, president of the California Capital Financial Development Corporation. Bankers still complain to him not only that demand from borrowers has fallen off, but also that making new loans could subject bankers to increased regulatory scrutiny. In September 2010, when the FCIC held its Sacramento hearing, that region's once-robust construction industry still languished. "Unless we begin to turn around demand, unless we begin to turn around the business situation, the employment is not going to increase here in the Sacramento area, and housing is critical to it. It is a vicious circle," Williams testified.²³³²

Effects of the financial crisis have been felt in individual U.S. households and businesses, big and small, and also around the world. Policymakers on the state, national, and global levels are still grappling with the aftermath, as are homeowners and lenders who are still trying to untangle the complications dogging the foreclosure process.

The Household Sector: "I'm Not Eating. I'm Not Sleeping."

The recession officially began in December 2007. By many measures, the job market effects were the worst on record, given the speed and breadth of the falloff in jobs; the rise of the ranks of underemployed

²³³² Financial Crisis Inquiry Commission, official transcript, Bakersfield hearing pp. 258-260. Quote being paraphrased as bankers complain is "The banks are saying 'We're not lending because of two things, 1) There is not demand, and 2) if we make some of these loans, the regulators are going to classify them. We go to the regulators and they say that's not so.'"

workers; and the long stretches of time that millions of Americans were and still are surviving without work. The economy shed 3.6 million jobs in 2008 – the largest annual drop since recordkeeping began in 1940. By December 2009, the United States had lost another 4.7 million jobs.²³³³ Through November 2010, the economy had gained nearly 1 million jobs, putting only a small dent in the declines.

The underemployment rate—unemployed workers who are actively looking for jobs; those with part-time work who would prefer full-time jobs; and individuals who need jobs and say they are too discouraged to search—increased from 8.8% in December 2007 to 13.7% in December 2008, reaching 17.4% in October 2009. This was the highest level since calculations for that labor category began in 1994. The length of time individuals spent unemployed spiked from 7.9 weeks in June 2008, to 18.2 weeks in June 2009, reaching 25.5 weeks in June 2010. Fifty-nine percent of all job seekers, according to the most recent government statistics, searched for work for at least 15 weeks before being hired.²³³⁴ The labor market is harsh across the board, but especially so among black workers, who face a 15.7% jobless rate, almost twice that for white workers; younger workers, with unemployment of 27.1%; and Hispanics, at 12.6%. And the impact has been especially severe in certain professions: unemployment in construction, for instance, climbed to 19% in 2009, and averaged 20.8% during the first 10 months of 2010.²³³⁵

Real Gross Domestic Product, the nation's measure of economic output adjusted for inflation, fell 4% at an annual rate in the third quarter of 2008 and then 6.8% in the fourth quarter. After falling again in the first half of 2009 and then modestly growing in the second half, average GDP for the year was 2.6% lower than GDP in 2008, its biggest drop since 1946.²³³⁶ Looking at the GDP data, Ed Lazear, chairman of the Council of Economic Advisers to President Bush during the crisis, told the Commission about his views on the link between the financial crisis and today's economic problems, saying "I think most of it had to do with investment...Panic in the financial markets and tightness in financial markets that persisted

²³³³ Bls.gov Total nonfarm payroll employment. Annual figures are December to December.

²³³⁴ See Labor Department Bureau of Labor Statistics, monthly household data on unemployed persons by duration of unemployment, seasonally adjusted. Table A-12, Nov. 5, 2010.

²³³⁵ U.S. Labor Department Bureau of Labor Statistics, unemployment data, 2000-Oct. 2010.

²³³⁶ Bea.gov.

through 2009 prevented firms from investing in the way that they otherwise would, and I think that slows the rehiring of workers and still continues to be a problem in labor markets.”²³³⁷

In June 2009, the nation officially tiptoed out of the recession that had begun seventeen months earlier.²³³⁸ The good news still had not reached many of the 26.4 million Americans who lost their jobs and who continue looking for work in late 2010. “I’m looking for permanent employment, but it’s hard to find,” Jeannie McDermott of Bakersfield told the FCIC. She started a business refilling printer ink cartridges, but in a tight economy, she didn’t earn enough to make a living. She said she had been searching for a full-time job since 2008.²³³⁹

U.S. households felt the effects of the financial crisis not only in the job market, but also in their net worth and their access to credit. Of the \$17 trillion lost from 2007 to the first quarter of 2009 in household net wealth—the difference between what households own and what they owe—about \$7 trillion was due to declining house prices. As a point of reference, GDP was \$14.4 trillion in 2008.²³⁴⁰ The painful drop in asset values followed a \$14 trillion run-up in household debt from 2000 to 2007. With the gains in home prices and, to a lesser degree, stock prices, households’ net wealth had reached a peak of \$66 trillion in the second quarter of 2007. The collapse of the housing and stock markets erased all but \$4.5 trillion of the gains—while household debt remained near historic highs, exceeding even those levels reached in 2006. As of the third quarter of 2010, despite firmer stock and housing prices and a decline in household borrowing, household net worth totaled \$53.5 trillion, a 15.9% drop-off from the summit just three years earlier.²³⁴¹ And, reflecting the decline in home prices, a quarter of households with mortgages owe more on their loans than their homes are worth.

Nationwide, home prices dropped [XX%] from their peak in 2006 to their low point early in 2009.²³⁴² Because 69 percent of households owned a home before the financial crisis, and housing represents the

²³³⁷ FCIC interview with former CEA chairman Ed Lazear, Nov. 10, 2010, audio time stamp at 1:02:46.

²³³⁸ Define recession

²³⁴⁰ Federal Reserve Flow of Funds Statistical Release, Table B-100, Balance Sheet of Households and Nonprofit Organizations, Sept. 17, 2010.

²³⁴¹ U.S. Treasury statement by Alan B. Krueger, assistant secretary for economic policy and chief economist, May 3, 2010; Federal Reserve “Balance Sheet of Households and Nonprofit Organizations,” March 12, 2009.

²³⁴² Use CoreLogic number

single most important asset for most of these homeowners, these declines have been especially debilitating. Borrowing via home equity loans or cash-out refinancing has ebbed.²³⁴³

At an FCIC hearing in Bakersfield, California, Marie Vasile explained how her family relocated 40 miles away to a rental house because her husband was ill. Their old home languished on the market, losing value. Eventually, she and her husband found buyers willing to take their house in a “short sale,” where the price was less than the mortgage owed. But with the lender responding slowly to approve that deal, they risked losing the sale and then going into foreclosure. “To top this all off,” Vasile told commissioners, “my husband is in the position of possibly losing his job ... because of the financial situation we're in. So not only do I have a house that I don't know what's happening to, I don't know if he's going to have a job come December. This is more than I can handle. I'm not eating. I'm not sleeping.”²³⁴⁴

Serious mortgage delinquencies—payments that are 90 days or more late—have spread since the crisis. In 2007, industrial and auto industry states had the most delinquencies, with Ohio and Indiana leading the list, posting rates of 5.9 percent and 5.6 percent, respectively. Among regions, the east-north-central states (Ohio, Indiana, Illinois, Wisconsin, and Michigan) had the highest rate, topping 5 percent, more than twice the rate seen seven years earlier. By mid-2010, the good news was that these states fared no worse; the bad news, they fared no better. Other regions had no good news at all—especially what have been called the “sand states,” where the housing crisis was the worst. The mid-2010 delinquency rate for Florida was 20.1%; Nevada, 18.9%; Arizona, 11.9%; and California, 11.3%.

The data company CoreLogic identified the top 25 housing markets with the worst records of “distressed” sales, which include short sales, that is, sales at less than the loan balance, and sales of foreclosed properties. Las Vegas led the list in mid-2010, with more than 60% of all home sales. “The state was overbuilt and some 100,000 jobs were predicated on a level of growth and consumer spending that seemed to evaporate almost overnight,” Jeremy Aguero, an economic and marketing analyst who follows the Nevada economy, testified to the commission.²³⁴⁵

The performance of the stock market in the wake of the crisis also reduced wealth. The Standard and Poor’s 500 Index fell by a third in 2008—the largest single-year decline since 1974—as big institutional

²³⁴³ CoreLogic Inc., national housing and sales data examined at the request of the FCIC.

²³⁴⁴ FCIC hearing, Bakersfield, Calif., Sept. 7, 2010, pp. 244-251.

²³⁴⁵ FCIC hearing, Las Vegas, Nev., Sept. 8, 2010.

investors moved to Treasury securities and other investments they perceived as safe. While the stock market has recovered somewhat, the S&P 500 is still about [20% below] where it was at the start of 2008.²³⁴⁶ Individuals feel these effects not only in their current budgets, but also in their prospects for retirement. By one calculation, assets in retirement accounts such as 401(k)s lost \$2.8 trillion, or about a third of their value, between September 2007 and December 2008.²³⁴⁷ And stock prices worldwide plummeted more than 40% in 2008, compared with gains of close to 21% in 2006, and a rebound of nearly 31 percent in 2009, according to the MSCI World index stock fund, representing a collection of 1,500 global stocks.²³⁴⁸

The financial market fallout also jeopardized some public pension plans—many already stretched coming into the crisis. In Colorado, state budget officials warned that losses of \$11 billion could cause the Public Employees Retirement Association plan, which covers 450,000 public workers, lawmakers, teachers, and local government employees, to go bust in two decades. The state cut retiree benefits to adjust for the losses.²³⁴⁹ Montana’s public pension funds lost \$2 billion, or a fourth of their value, in the nine months following the 2008 downturn, in part because of investments in complex Wall Street securities.²³⁵⁰

Even before the fall of 2008, consumer confidence had been on a downward slope for months. The Conference Board reported in June 2008 that its measure of confidence fell to the lowest point since January and February of 1992. By the fall of 2008, confidence had plummeted to a severe new low; 10

²³⁴⁶ S&P Index was 1467.97 at 1/2/08 open; it was 1184.38 at 11/1/10 close. (per google finance)

²³⁴⁷ Mauricio Soto, “How is the Financial Crisis Affecting Retirement Savings?”, Urban Institute. Available at <http://www.urban.org/publications/901206.html>

²³⁴⁸ MSCI Inc.; Credit Suisse reported in its 2009 Investments Yearbook that when stocks hit bottom in November 2008, the MSCI World index had fallen 55%, a loss in dollar terms around the world of \$21 trillion, or \$21,000 for every man, woman and child then living in the leading industrial countries, according to Credit Suisse.

²³⁴⁹ Associated Press, “Colorado Pension Program on Its Way to Recovery after Landmark Legislation: Auditors,” Aug. 16, 2010.

²³⁵⁰ Articles in The Billings (Montana) Gazette, May 18, 2009, and Aug. 11, 2010. Separately, the Montana Board of Investments, which invests \$12.4 billion in state and local pension funds, trust funds, insurance funds, state agency cash funds, and local government funds, wrote to the FCIC June 1, 2010, to criticize the rating agencies Moody’s and Standard & Poor’s, stating, “The Board would not have purchased these [17 specifically identified securities] Vehicles without the over-inflated ratings published by the rating agencies. On its face, it seems preposterous for the rating agencies to have suggested that these complex, exotic creations were as risk-free as U.S. Government Bonds.”

months passed before it climbed back to the anemic level of June 2008. In February 2010, it dropped again to the lowest level since 1983, and has remained stubbornly bleak.²³⁵¹

“We find nobody willing to make a decision; nobody willing to take a chance, because of the uncertainty in the economic environment, and that goes for both the state and the federal levels,” commercial real estate developer and appraiser Gregory Bynum testified at the Bakersfield hearing.²³⁵²

With the dramatic loss in wealth and job insecurity playing a role, households have cut back on debt. Total credit-card debt expanded every year for two decades until it peaked at \$989 billion at the end of 2008. Two years later, it had fallen 18% to \$814 billion.²³⁵³ Also playing an important role, since 2008, banks have tightened lending standards, reduced lines of credit on credit cards and increased fees and interest rates. In the third quarter of 2008, 67% of banks tightened standards on credit cards compared with the preceding quarter. In the fourth quarter, 59% tightened, meaning that many banks tightened further.²³⁵⁴ In fact, a significant number of banks tightened credit card standards quarter after quarter until the summer of 2009. Only in the latest surveys have even a small numbers of banks begun to loosen standards.

The culmination of the decline in financial resources for households, the tightening of lending standards, and a lack confidence has been large cuts in spending. Consumer spending, which makes up more than two-thirds of GDP, fell roughly 3-1/2% at an annual rate in the second half of 2008 and then fell again in the first half of 2009. Gains since then have been modest. Spending on cars and trucks fell by an extraordinary [40] percent between the end of 2007 and the spring of 2009, in part because available consumer financing deteriorated.²³⁵⁵

The Business Sector: “Loans to Small Businesses Are Especially Vital”

²³⁵¹ Consumer Confidence graphic and monthly average table, 2008-2018, www.tradingeconomics.com

²³⁵² FCIC testimony, Bakersfield field hearing, Sept. 7, 2010, transcript p. 100.

²³⁵³ Federal Reserve Consumer Credit September 2010 report, released Nov. 5, 2010.
<http://www.federalreserve.gov/Releases/g19/current/>

²³⁵⁴ The Federal Reserve’s Senior Loan Officer Survey
<http://www.federalreserve.gov/boarddocs/SnLoanSurvey/201011/default.htm>

²³⁵⁵ Source? Karen Pence Dan Vine & someone, Ron has cite

When the financial panic hit in September 2008, business financing dried up. Firms that could roll over their commercial paper faced higher interest rates and shorter terms. Firms that couldn't roll over their paper relied on old-fashioned financing—bank loans—or used their own cash reserves. Large firms, analysts said at the time, turned to their cash balances like “squirrels storing nuts.”²³⁵⁶ Their long-term plans suddenly underwent re-evaluation, and although these credit markets have recovered somewhat, the effects of those decisions persist.

As for the banks, by mid-2007 they had begun to restrict access to credit even for large and medium businesses. The Federal Open Market Committee noted this tightening when it announced on September 18 that it was cutting the federal funds rate that year. Immediately after the Lehman bankruptcy, firms such as Marriott Corp., Delta Airlines, and Duke Energy drew down their existing lines of credit because they worried about getting shut out of credit markets.²³⁵⁷

Without access to credit, with cash reserves dwindling, and with great uncertainty about the economy, corporations laid off workers or cut their investments, reducing potential productivity improvements and inhibiting growth. A survey of chief financial officers found 81% of U.S. companies had reduced capital investment and technology spending.²³⁵⁸ News headlines chronicled the problems: Scarce capital forced mid-size biotechnology firms to cut investments and shutter offices, while firms including Caterpillar, Home Depot, Corning and John Deere laid off employees as the recession took hold.²³⁵⁹ Some businesses could not cover payrolls and the financing of inventory.

The introduction of the Commercial Paper Funding Facility in October 2008, under which the Federal Reserve loaned money to non-financial entities, allowed the commercial paper market to resume functioning at more normal rates and terms. Even with the central bank's help, nearly 70% of banks had tightened credit standards and lending in the fourth quarter of 2008.²³⁶⁰ [INSERT DETAIL FROM FEDERAL RESERVE RELEASES]

²³⁵⁶ CFO Magazine, “Keeping Cash Safe,” by Vincent Ryan, June 1, 2008,

²³⁵⁷ Forbes 10/7/08 “Revolver at the Heads” by Liz Moyer.

²³⁵⁸ “The real effects of financial constraints: Evidence from a financial crisis” Murillo Campello, John Graham, and Campbell Harvey

²³⁵⁹ Cites to News reports

²³⁶⁰ Federal Reserve Senior Loan Officer Opinion Survey for fourth quarter of 2008.

And small businesses? Because small businesses employ nearly 40% of the country's private sector workforce, "loans to small businesses are especially vital to our economy," Federal Reserve Board Governor Elizabeth Duke told Congress early in 2010.²³⁶¹ Unlike the larger firms, which had come to rely on capital markets for borrowing, these companies had generally obtained their credit from traditional banks, other financial institutions, non-financial companies, or personal borrowing by owners. The financial crisis disrupted all these sources, making credit scarcer and more expensive.

In a survey of small businesses by the National Federation of Independent Business in 2009, 14% of respondents said credit was "harder to get." That compares with 9% in 2008 and a previous peak, at 11%, during the credit crunch of 1991.

Fed Chairman Ben Bernanke said in a July 2010 speech that getting a small-business loan was still "very difficult." He also noted that banks' loans to small businesses dropped from more than \$710 billion in the second quarter of 2008 to less than \$670 billion²³⁶² in the first quarter of 2010.²³⁶³

Another factor –hesitancy to take on more debt in an anemic economy – is certainly behind some of the small business lending statistics. C. R. Cloutier, president and CEO of Midsouth Bank in Lafayette, Louisiana, speaking on behalf of the Independent Community Bankers of America, told the FCIC, "Community banks are willing to lend, that's how banks generate a return and survive. However, quality loan demand is down. ... I can tell you from my own bank's experience, customers are scared about the economy climate and are not borrowing. Credit is available but businesses are not demanding it."²³⁶⁴

Even so, surveys and anecdotal evidence suggested that creditworthy borrowers with a desire to get loans face tighter credit from the banks than before the crisis. Historically, banks charged a 2 percentage point

²³⁶¹ Federal Reserve Governor Elizabeth Duke testimony, "Small Business Lending," before the House Committee on Financial Services and Committee on Small Business, Feb. 26, 2010

²³⁶² According to Bernanke footnote: "Data are from the Federal Financial Institutions Examination Council (FFIEC) Consolidated Reports of Condition and Income (Call Report), where loans to small businesses, as stated in the reporting forms FFIEC 031 and 041, schedule RC-C, part II, are defined as loans with original amounts of \$1 million or less that are secured by nonfarm nonresidential properties or are commercial and industrial loans, plus loans with original balances of \$500,000 or less that are secured by farmland or are for agricultural production."

²³⁶³ "Restoring the Flow of Credit to Small Business," Chairman Ben S. Bernanke at the Federal Reserve Meeting Series: "Addressing the Financing Needs of Small Businesses," Washington, D.C., July 12, 2010.

²³⁶⁴ Testimony of C.R."Rusty" Cloutier to the FCIC, January 13, 2010

premium over their funding costs on business loans, but that premium hit 3 points by year-end 2008 and continued to widen into 2009, raising the costs of borrowing.²³⁶⁵

Small businesses' access to credit also had a direct connection to the housing market, as many business owners tapped the equity built up during the boom with low-interest home equity loans. Seventeen percent of small employers with a mortgage refinanced it specifically to capitalize their businesses.²³⁶⁶ As housing prices declined, this option was reduced or pulled altogether by the lenders. "We've exhausted all our life savings," explained Jerry Jost, who told the FCIC he borrowed against his home to help his daughter start a bridal dress business in Bakersfield several years ago. When the economy collapsed, Jost lost his once-profitable construction business, and his daughter's customers walked away from the wedding dresses they could no longer afford. The Jost family is piled high in debt while struggling to find steady work and reliable incomes.²³⁶⁷

Credit card loans, another source of financing for small businesses, also became more stringent. In the Fed's April 2010 Senior Loan Officer Survey, a majority of banks indicated that their standards for approving credit-card accounts for small businesses were tighter than "the longer-run average level that prevailed before the crisis." Banks had continued to tighten their terms on business credit card loans to small firms, for both new and existing accounts, at the end of 2009. But the August 2010 update of the Fed survey showed the first positive signs since the end of 2006 that banks were easing up on underwriting standards for small firms.²³⁶⁸

Independent finance companies were also constrained, having often funded themselves by issuing commercial paper. Business finance company CIT Group Inc. was one such firm. Even with \$2.3 billion in additional capital support from the federal TARP program, CIT filed for bankruptcy protection in November 2009. Still, some active lenders to smaller businesses, such as GE Capital, a commercial lender with a focus on middle-market customers, were able to continue to offer financing. GE Capital's commercial paper borrowing fared better than others, which the firm attributed to a flight to quality by investors. Nonetheless, the terms of their borrowing did worsen, and in 2008 the company registered to

²³⁶⁵ Need source

²³⁶⁶ National Federation of Independent Businesses. <http://www.nfib.com/research-foundation/small-business-economic-trends/>

²³⁶⁷ FCIC hearing, Bakersfield, Calif., Sept. 7, 2010.

²³⁶⁸ Federal Reserve Senior Loan Officer Survey, Aug. 16, 2010. <http://www.fxstreet.com/fundamental/analysis-reports/daily-global-commentary/2010-08-16.html>

sell up to \$98 billion of commercial paper through one government program and issued \$13.4 billion in long-term debt and \$21.8 billion in commercial paper under another program. Softening the effects of the crisis for the company, GE Capital had trimmed commercial paper to less than 10% of its total debt, or about \$46 billion. “A decision was made that it would be prudent for us to reduce our reliance on the commercial paper market, and we did,” Mark Barber, deputy treasurer of GE Company and GE Capital, told the Commission.²³⁶⁹ It put more than \$60 billion in cash on its balance sheet, with \$52 billion in back-up bank lines of credit, if needed.

In an effort to assist small-business lenders, the Federal Reserve created the Term Asset Backed Securities Loan Facility (TALF), a program to aid securitization of loans, such as auto loans, student loans, and small business loans. Another federal effort aimed at improving small-business access to credit included guidance in February 2010 from the Federal Reserve, advising banks to try to meet the credit needs of “creditworthy small business borrowers” with the assurances that government supervisors would not hinder those efforts.²³⁷⁰

Nonetheless, the prevailing headwinds have been difficult to overcome. Without access to credit, many small businesses that had depleted their cash reserves had trouble paying bills and faced rising bankruptcies and loan defaults. Defaults on small-business loans increased to 12% in 2008, from 8% in 2007.²³⁷¹ More than 100,000 small businesses shut down or laid off significant numbers of people in 2009, a number 30% to 40% higher than in previous years.²³⁷² Overall, the current state of the small business sector is a critical factor in the struggling labor market: ailing small businesses are laying people off in large numbers, and stronger small businesses are not hiring additional workers.

The decline in global trade also hurt the U.S. economy as well as economies across the world. As the financial crisis peaked in Europe and the United States, exports collapsed in nearly every major trading country. Indeed, world trade fell faster than it did during the Great Depression or at any time since. The decline in exports shaved more than 3 percentage points off of GDP growth in the third and fourth quarters of 2008. Recently, exports have begun to recover and they are back near pre-crisis levels.

²³⁶⁹ cite

²³⁷⁰ Federal Reserve Interagency Statement on Meeting the credit Needs of Creditworthy Small Business Borrowers, Feb. 2010.

²³⁷¹ CNNmoney.com: “Small Biz Loan Failure Hits 12%”; February 25, 2009 [that in turn cites to a trade report]

²³⁷² www.Equifax.com

Commercial Real Estate: “Nothing's Moving”

Commercial real estate – offices, stores, factories, warehouses –also took a pounding, an indicator both of its reliance on the lending markets, which were impaired by the crisis, and the sector’s role as a barometer of business activity. In the weak economy, companies do not need more space if they lay off workers or decide not to expand. This lack of demand lowers rents and squeezes landlords to give their big tenants incentives to stay put. One glaring example: two huge real estate brokerages with headquarters in New York City received nine month’s free rent for signing leases in 2008 and 2009.²³⁷³

In mid-2010, commercial vacancy rates were still sky-high, with more than 20% of all office space unoccupied.²³⁷⁴ And the actual rate is probably much higher, experts believe, because layoffs create “shadow vacancies” – a couple of desks here, part of a floor there – that must “burn off” before demand picks up. And without demand, banks remain unwilling to lend to all but the safest projects with the most creditworthy developers and pre-committed tenants. “Banks are neither financing, nor are they dumping their bad properties, creating a log jam,” one developer told a National Association of Realtors’ survey. “Nothing's moving.”²³⁷⁵

In Nevada, where tourism and construction once fed the labor force, commercial property took a huge hit. Office vacancies in Las Vegas are now hovering around 24%, compared with the low of 8% midway through 2005. Vacancies in retail commercial space in Las Vegas top 10%, compared with historic vacancy rates of 3% and 4%. The economic downturn tugged national-brand retailers into bankruptcy, emptying out the anchor retail space in Nevada’s malls and shopping centers. With less demand for vacant property, land values in and around Las Vegas plummeted, witnesses testified to the FCIC.²³⁷⁶

With lenders still reluctant, few developers nationally could afford to build or buy, right into the fall of 2010, further squelching the market. Lehman’s bankruptcy meant that Monday Properties came up short on building a \$300 million, 35-story glass office tower in Arlington, Virginia, across the river from

²³⁷³ *The New York Times*, “Office Deals, 19 Months Apart, Show Market’s Move,” Aug. 10, 2010

²³⁷⁴ National Association of Realtors, Commercial Real Estate Quarterly Market Survey, September 2010

²³⁷⁵ National Association of Realtors, Commercial Real Estate Quarterly Market Survey, September 2010

²³⁷⁶ FCIC testimony Las Vegas, Nev., hearing, Sept. 8, 2010. Transcript pp. 153-154.

Washington, D.C. Potential tenants wanted to know if the developer had financing; potential lenders wanted to know if it had tenants. “It’s a bit of a cart-and-horse situation,” said CEO Anthony Westreich²³⁷⁷, who in October 2010 took the big risk of starting construction on the building without signed tenants or permanent financing.²³⁷⁸ In California, the collapse of teetering financial institutions put commercial real estate developers and commercial landlords in binds when overextended banks suddenly pulled out of commercial construction loans, witnesses told the Commission. And when banks failed and were taken over by the Federal Deposit Insurance Commission, the commercial landlords overnight lost major bank tenants and the long-term leases that went with them.²³⁷⁹ In California, at least 35 banks have failed since 2003.²³⁸⁰

Nearly half of commercial real estate loans were under water as of February 2010, meaning the loans were larger than the market value of the property. Commercial real estate loans are especially concentrated among the holdings of community and regional banks. Some commercial mortgages were also securitized, and by September 2010, the delinquency rate on these packaged mortgages exceeded 9% for the first time, an ominous sign for real estate a full two years after the height of the financial storm. Even at the end of 2008, with the crisis in full bloom, the default rate had been a mere 1.2 %.²³⁸¹

Near the end of 2010, it was not at all clear when or even if this market had hit bottom. Green Street Advisors of Newport Beach, California, which tracks real estate investment trusts, believed that it did so in mid-2009. About half of the decline between 2007 and 2009 has been recovered, according to Mike Kirby, Green Street’s director of research. “Nevertheless,” Kirby added, “values remain roughly 20% shy of their peak.”²³⁸² That’s one perspective. Moody’s Investors Service, whose Real Commercial Property Price Index tracks large sales of commercial buildings, says it is too early to make a call. Moody’s detected some signs of a pickup through the spring of 2010, and Managing Director Nick Levidy said, “If this is in fact occurring, we would expect transaction volumes to rise steadily and price volatility to ebb in

²³⁷⁹ FCIC hearing Bakersfield, Calif., Sept. 7, 2010, pp. 77-78.

²³⁸⁰ Federal Deposit Insurance Commission “Failed Bank List,” through Nov. 10, 2010.

²³⁸¹ Trepp National CMBS Delinquency Report, September, 2010

²³⁸² Green Street Advisors, “Commercial Property Values Move Higher in September and Are Now Up Nearly 30% From Their Trough,” Oct. 5, 2010

the months to come.”²³⁸³ The largest commercial real estate loan losses are projected for 2011 and beyond, according to a report issued by the Congressional Oversight Panel.

Government and Public Policy: “States Struggled to Close Shortfalls”

State and Local Government Finances

The recession devastated not only many companies and their workers but also state and local governments. In the typical state, tax revenue fell more than 8% for the fiscal year ending July 2009, and 3% through July 2010—this decline clashing with the increased demand for services from people who lost their jobs, or were in bankruptcy or foreclosure proceedings. Those services included Medicaid, unemployment compensation and welfare, in addition to local assistance for mental health, for children, and for the homeless. “At least 46 states struggled to close shortfalls when adopting budgets for the current fiscal year,” recently reported the Center on Budget and Policy Priorities, a Washington think tank.²³⁸⁴

“A critical aspect of our situation in Sacramento and ... throughout the state is that these increased demands for services are occurring at a time that resources ... are being dramatically reduced,” Bruce Wagstaff, the agency administrator with the Sacramento’s Countywide Services Agency, explained to Commissioners.²³⁸⁵

Unlike the federal government, almost every state requires a balanced budget, so running a deficit is not an option. Sujit CanagaRetna, senior fiscal analyst with the Council of State Governments, told the FCIC that the budget shortfalls facing the states “are staggering numbers. It’s not just the big states; it’s nearly all of the states.” He said the “radical transformation” occurring in state finances means states are less able to provide “a whole host of services and programs.”²³⁸⁶ In the 2011 fiscal year alone, which started July 2010, states had to come up with \$125 billion in savings or revenue to balance their budgets, the researchers estimate. By the fall of 2010, there was some good news: Revenue from some taxes and fees in some states had started to pick up, or at least stopped falling as fast.

²³⁸³ Moody’s Investor Service, “US Commercial Real Estate Prices Decline 4%, repeat sales volume up,” Aug. 19, 2010

²³⁸⁴ Center on Budget and Policy Priorities, “States Continue to Feel Recession’s Impact,” Oct. 7, 2010

²³⁸⁵ FCIC testimony of Bruce Wagstaff, Sacramento hearing Sept. 23, 2010, p. 234 transcript.

²³⁸⁶ FCIC interview, Aug. 25, 2010, from notes.

In a September 2010 report, the National Conference of State Legislatures stated, “The states are waiting to see if the economy will sustain this nascent revenue growth. But despite recent revenue improvements, more gaps loom as states confront the phase-out of federal stimulus funds, expiring tax increases and growing spending pressures.”²³⁸⁷

Some states were hit harder than others, some particularly affected by the crisis and some coming into the crisis with structural budget problems. In 2010, New Jersey Governor Chris Christie proposed chopping \$11 billion – or a quarter – of the state budget to eliminate a deficit. California officials struggled through the summer and fall to close a \$19 billion shortfall – larger than the entire budgets of some states. After a rough two years of similar budget wrangling, the bright spot was news that California’s \$87.5 billion budget did not call for more drastic cuts in program spending and public jobs.

As people lost jobs, many lost their health insurance, driving 3.7 million Americans into the Medicaid program in 2009 alone, an 8% increase--the largest in a single year since the early days of this government health-insurance plan, according to the nonprofit health-research organization Kaiser Family Foundation. Every state showed an enrollment increase: in nine states it was greater than 15%; in Nevada and Wisconsin, greater than 20%.²³⁸⁸

States share the cost of Medicaid with the federal government. Congress included \$87 billion in the stimulus package to help them with this expense, and it has extended the assistance through June 2011 at a reduced level. If the economy has not improved by then, Kaiser predicts, this will be another huge potential source of trouble for the states.

The National League of Cities recently said that our cities are in the worst fiscal shape in at least a quarter of a century and probably have not yet hit bottom—even after four straight years of falling revenue.²³⁸⁹ This is because some local property assessors are only now recording lower property values, which is likely to mean even lower revenue for at least several more years, because property taxes are the main source of revenue for most local governments.

²³⁸⁷ National Conference of State Legislatures, www.ncsl.org, “NCSL Fiscal Brief: Projected State Revenue Growth in FY 2011 and Beyond,” Sept. 29, 2010

²³⁸⁸ Kaiser Family Foundation, “Medicaid and the Uninsured: Hoping for Economic Recovery, Preparing for Health Reform: A Look at Medicaid Spending, Coverage and Policy Trends,” Sept. 30, 2010

²³⁸⁹ National League of Cities, City Fiscal Conditions 2010, “Recession’s Effects Intensify in Cities,” Oct. 6, 2010

“The effects of a depressed real estate market, low levels of consumer confidence, and high levels of unemployment will likely play out in cities through 2010, 2011 and beyond,” the survey of 338 cities reported. The authors of the survey projected that revenue would fall 3% in 2010, and cities budgets would shrink another 2%, the largest cutbacks in the 25 years the group has published the report.

Investors now look askance at once-solid state and local bonds, raising borrowing costs for many states and making budget-balancing even harder. Municipalities in Florida, the state with the third-highest rate of home foreclosures, saw borrowing costs rise to a record when selling \$442 million in bonds in September 2010.²³⁹⁰

One fact summarizes the straits state and local governments are in: Their combined debt has more than doubled in this recession, from \$122 billion to \$241 billion.²³⁹¹

Impact at the Federal Level

The federal government’s response to the financial crisis and the ensuing recession “included some of the most aggressive fiscal and monetary policies in history,” said economists Mark Zandi and Alan Blinder, echoing a view shared among many. “Yet almost every one of these policy initiatives remain controversial to this day, with critics calling them misguided, ineffective or both.”²³⁹²

The government’s fiscal initiatives began soon after the recession started, with the Economic Stimulus Act of 2008 providing roughly \$170 billion in tax rebates for households and tax incentives for businesses. At the height of the crisis, the \$700 billion TARP was enacted and in early 2009, the American Recovery and Reinvestment Act of 2009 was enacted to stimulate the weakening economy, costing another \$784 billion.

Beginning with the rate cuts in mid-2007 through the implementation of TALF in early 2009, the Federal Reserve provided support to the economy throughout the crisis. From September 2008 to October 2010, the Fed put about \$2 trillion into the economy—primarily by buying financial assets such as mortgages and Treasury notes, a process known as “quantitative easing.” And in November, officials

²³⁹⁰ Bloomberg LP, “Florida Issuers Borrow \$442 Million as State’s Debt Costs Rise to Record,” Sept. 10, 2010

²³⁹¹ Federal Reserve Flow of Funds

²³⁹² Both Blinder and Zandi were interviewed by the FCIC. “In my view, we would have suffered a Depression, if not for the subsequent very aggressive policy response by the Federal Reserve and fiscal policymakers,” Zandi told the commission. p. 3 MFR.

announced another \$500 billion in easing, with the design of keeping both long-term as well as short-term interest rates down.

In October, 2010, the Treasury Department reported that the TARP program would cost far less than the \$700 billion Congress appropriated in the fall of 2008 as banks began repaying the Treasury in 2009. In fact, Treasury said, TARP would wind up costing about \$29 billion, mostly owing to the bailout of automakers General Motors and Chrysler, and mortgage-lenders Fannie Mae and Freddie Mac.²³⁹³ Latest estimates from the Congressional Budget Office put the cost at \$25 billion.²³⁹⁴ Overall, faced with increases in spending and declining revenues during the recession, the federal deficit grew from \$459 billion in 2008 to \$1.4 trillion in 2009.

Financial System: “States Struggled to Close Shortfalls”

Like other sectors of the economy, the financial industry has cut jobs. After growing steadily for years, employment in the financial sector fell by 106,000 in 2007, 154,000 in 2008 and another 226,000 in 2009. Areas dependent on the financial industry, such as North Carolina (and in particular Charlotte), have been hit hard. The unemployment rate in Charlotte rose from 4.8% in 2006 to a recent peak of 12.8% in February 2010.

In 2009 and so far in 2010, 291 banks have failed. Most of these institutions were small and medium sized banks. While a number of large financial institutions failed or nearly failed during the crisis, on the whole they have done better since the fall of 2008. Total financial sector profits peaked at \$428 billion in 2006 and then over the course of the crisis fell in 2007 and 2008, reaching a low of \$122 billion on an annual basis in the fourth quarter of 2008, the lowest level since the early 1990s.^[1] Then, financial sector profits rebounded in 2009 and 2010 boosted by low interest rates and access to low-cost government borrowing. [insert aggregate numbers]

²³⁹³ U.S. Treasury Department, Office of Financial Stability, report, “Troubled Asset Relief Program: Two Year Retrospective,” October, 200

²³⁹⁴ <http://cboblog.cbo.gov/?p=1647>

^[1] Bureau of Economic Analysis.

Within the financial sector, commercial bank profits rose from \$7.7 billion in the first quarter of 2009 to \$15.8 billion in the first quarter of 2010.^[2] This rise was mostly experienced among the larger banks in this group.^[3] For banks with assets greater than \$1 billion, profits more than doubled from \$6.6 billion to \$14.5 billion from the first quarter of 2009 to the first quarter of 2010. For commercial banks with less than \$1 billion in assets, profits rose only 16% from \$1.1 billion to \$1.3 billion. The number of small banks on the FDIC's list of troubled institutions rose from 829 in the second quarter of 2010 to 860 in the third quarter, the largest number since March 1993.

The securities industry has reported record profits and is once again distributing large bonuses. In New York City alone, bonuses at these Wall Street firms rose by 17% to \$20.3 billion in 2009, with "average compensation r[ising] by 27 percent to more than \$340,000."²³⁹⁵ After reporting \$54 billion of losses during 2007 and 2008, Wall Street firms reported \$61.4 billion of profits in 2009.^{2396, 2397} The New York Comptroller estimates that 2010 could be "Wall Street's fourth most profitable year in absolute dollars and the sixth best year (in at least 30 years) on an inflation-adjusted basis."²³⁹⁸

^[2] <http://www2.fdic.gov/qbp/2009mar/qbp.pdf>.

^[3] The Federal Reserve noted: "Profitability diverged between the largest banking institutions and the rest of the industry, primarily reflecting the ability of large banks to generate income from specialized activities in which other banks do not generally participate." From *Profit and Balance Sheet Developments at U.S. Commercial Banks in 2009*, <http://federalreserve.gov/pubs/bulletin/2010/pdf/bankprofits10.pdf>.

²³⁹⁵ NY State Comptroller Thomas P. DiNapoli, "Wall Street Bonuses Rose Sharply in 2009," available <http://www.osc.state.ny.us/press/releases/feb10/022310.htm>

²³⁹⁶ "Wall Street profits may top \$19 billion in 2010," Marketwatch, Nov. 16, 2010, available at <http://www.marketwatch.com/story/wall-street-profits-may-top-19-billion-in-2010-2010-11-16>

²³⁹⁷ NY State Comptroller Thomas P. Dinapoli, Report, Nov. 2010, available at <http://www.osc.state.ny.us/osdc/rpt10-2011.pdf>

²³⁹⁸ NY State Comptroller Thomas P. Dinapoli, Report, Nov. 2010, available at <http://www.osc.state.ny.us/osdc/rpt10-2011.pdf>

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Part IV, Chapter 2. The Foreclosure Crisis

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Foreclosures on the rise: “Hard to talk about any recovery”

When the economic damage finally abates, a record number of American families will have lost their homes— anywhere from 8 million to more than 13 million families, according to various estimates—by far the worst foreclosure crisis since the Great Depression.²³⁹⁹ The foreclosure epidemic hurts families, of course, but it also undermines home values in entire Zip codes, strains school systems as well as community support services, and depletes state coffers. Even if the economy were suddenly booming, experts suggest, the country would need years to recover.²⁴⁰⁰

Prior to 2007, the foreclosure rate was historically less than 1%. But the default trend since the housing market collapsed has been dramatic: In 2009, 2.2% of all houses with mortgages, or one out of 45,

²³⁹⁹ Testimony of Center for Responsible Lending, October 27, 2010, before the Congressional Oversight Panel, p. 5; and FCIC interview of John Taylor, president and CEO, National Community Reinvestment Coalition, Oct. 27, 2010, time 0:04:40

²⁴⁰⁰ “Nobody can predict how long it will take to process, modify, review or foreclose the millions of distressed assets currently in the servicers’ pipelines or clogging courthouses. Estimations vary from two years to five and even 10 years,” Mortgage Servicing News, Nov. 2, 2010. http://www.mortgageservicingnews.com/msn_features/-1021956-1.html

received at least one foreclosure filing.²⁴⁰¹ In the fall of 2010, one in every 10 outstanding residential mortgage loans in the United States was at least one payment past due but not yet in foreclosure – an ominous warning that this wave has not crested.²⁴⁰²

The causes of foreclosures have been analyzed by many academics and government agencies. Typically, defaulting on a mortgage requires two triggers. First, monthly payments become unaffordable due to unemployment or other financial hardship, or because mortgage payments increase; second, and in the opinion of many now the more important factor, the home's value becomes less than the debt owed, in other words, the borrower has negative equity.

“The evidence is irrefutable,” Laurie Goodman, senior managing director with Amherst Securities, told Congress in 2009. “Negative equity is the most important predictor of default. When the borrower has negative equity, unemployment acts as one of many possible catalysts, increasing the probability of default,” she said.²⁴⁰³

After falling 29% from their peak in 2006 to the end of 2009, home prices have rebounded somewhat, but improvements are regionally uneven.²⁴⁰⁴ Nationwide, 11 million households, or 23% of those with

²⁴⁰¹ RealtyTrac year-end report, Jan. 14, 2010. <http://media.oregonlive.com/frontporch/other/RealtyTrac%20Year-End%202009%20National%20Data%20FINAL.pdf>

²⁴⁰² Mortgage Bankers Association Delinquency Survey, August 26, 2010. “Delinquencies and Foreclosure Starts Decrease in Latest MBA National Delinquency Survey,” August 26, 2010. The delinquency rate for mortgage loans on one-to-four-unit residential properties dropped to a seasonally adjusted rate of 9.85 percent of all loans outstanding as of the end of the second quarter of 2010, a decrease of 21 basis points from the first quarter of 2010, and an increase of 61 basis points from one year ago. <http://www.mortgagebankers.org/NewsandMedia/PressCenter/73799.htm>

²⁴⁰³ Laurie Goodman, senior managing director, Amherst Securities Group, testified before the House Financial Services Committee, Dec. 8, 2009

²⁴⁰⁴ Wall Street Journal, “One in Four Borrowers is Underwater,” by Ruth Simon and James R. Hagerty, Nov. 24, 2009.

mortgages, owe more on their mortgages than the market value of their house.²⁴⁰⁵ In Nevada, 68.1% of homes are under water, the highest rate in the country; in California, it's 33%.

With the extraordinary prevalence and extent of negative equity, the phenomenon of “strategic defaults” has also been on the rise: homeowners purposefully walk away from mortgage obligations when they perceive that their homes are worth less than what they owe, and they don't believe the value will go up anytime soon.

By the end of 2010, three of the four states that were hardest hit by foreclosures at the beginning of the crisis—California, Florida, and Nevada--reported some recent improvement, but [in October] Nevada's rate was still five times higher than the national average. Foreclosures also climbed in portions of the West and Midwest, such as Illinois (with 9.9 percent unemployment); New Mexico (8.2 percent unemployment); and even South Dakota (4.4 percent unemployment), according to the Mortgage Bankers Association.²⁴⁰⁶ And the *initiation* of foreclosure proceedings surged in 11 states during the second quarter of 2010, compared with the same period a year earlier.

In Ohio, the city of Cleveland and surrounding Cuyahoga County remain so firmly in decline that governments bulldoze abandoned houses down to the dirt. Authorities seize blighted properties for unpaid taxes; with the aim of creating a Northeastern Ohio “bank” of land preserved for the future, they take donations of eyesores from the Department of Housing and Urban Development, Fannie Mae, and some private lenders. Now, the city finds itself in deepening duress with a record 14,000 foreclosures in the last year. After years of high unemployment and a fragile economy, the financial crisis took vulnerable residents “and shoved them over the edge of the cliff,” Jim Rokakis, Cuyahoga's treasurer, told the

²⁴⁰⁵ CoreLogic Inc., Aug. 26, 2010, news release, second quarter 2010. Second quarter figures were an improvement from 11.2 million residential properties – 24 percent – in negative equity in the first quarter of 2010.

²⁴⁰⁶ MBA report, Aug. 26, 2010; plus Bureau of Labor Statistics Local Area Unemployment Statistics, September 2010, <http://www.bls.gov/lau/#data>.

commission. “The cumulative impact, I would argue, on Cleveland and this part of the country is more significant than any other part of the country.”²⁴⁰⁷

In a June 2010 survey, 85 percent of the nation’s mayors ranked the easy availability of non-prime or sub-prime mortgages as either first or second on a list of factors causing foreclosures in their cities. Almost all the mayors, 92 percent, said they expected the foreclosure problems to stay the same or worsen in their cities over the next year.²⁴⁰⁸

“There has been no meaningful decline in the inventory of distressed properties found in the housing market,” Guy Cecala, chief executive and publisher of Inside Mortgage Finance Publications, told a congressional panel overseeing the TARP program in October. “It is hard to talk about any recovery of the housing market when the share of distressed property transactions remains close to 50 percent.”²⁴⁰⁹

“There was a fundamental change in our financial services sector that really is the reason we’re in this economic crisis, and is the reason we will see in total probably before we’re done, between 15 or 16 million foreclosure filings in this country,” John Taylor, president and CEO of the National Community Reinvestment Coalition, explained to the FCIC. “And by the way, a few hundred thousand people, even a million people going into foreclosure, you can kind of blame and say, ‘Well they should have known better.’ But 15 or 16 million American families can’t all be wrong. They can’t all be greedy and they can’t all be stupid.”²⁴¹⁰

²⁴⁰⁷ FCIC interview Jim Rokakis, Cuyahoga County treasurer, Nov. 8, 2010, time stamp 0:06:34.

²⁴⁰⁸ United States Conference of Mayors 77-city survey, “Impact of the Mortgage Foreclosure Crisis on Vacant and Abandoned Properties in Cities,” June 2010, pp. 3-4. www.usmayors.org.

²⁴⁰⁹ Prepared testimony of Guy Cecala before the Congressional Oversight Panel, Oct. 27, 2010, p. 2.

²⁴¹⁰ FCIC interview with John Taylor, president and CEO, National Community Reinvestment Coalition, Oct. 27, 2010, time 0:04:40, part II of two-part interview

Initiatives to stem foreclosures: “The modification process is not working”

As mortgage problems mounted, the federal and state governments responded with financial incentives to encourage banks to adjust interest rates, spread loan payments over longer terms, or simply write down mortgage debts. But to date, federal auditors and independent consumer watchdogs have given Washington’s mortgage modification programs poor grades.²⁴¹¹ The Home Affordable Modification Program (HAMP) is falling short of the 3 to 4 million families targeted for help by the end of 2012. (The program’s resources come from the federal TARP funds.²⁴¹²) As of August, 2010, HAMP has resulted in the permanent modification of only 470,000 mortgages. [update] Meanwhile, the banks report that they have independently approved 3.2 million loan alterations of various kinds, although many of these modifications simply roll missed payments into a new mortgage and thus result in higher monthly payments.²⁴¹³

The effectiveness of state mortgage modification and foreclosure assistance programs is unclear. Some are just getting started. New Jersey, for instance, will begin a \$112 million “HomeKeeper Program” in 2011, to offer some residents who face foreclosure due to unemployment or “substantial underemployment” a deferred-payment, no-interest loan to continue making payments on their homes.²⁴¹⁴

“I just want the commission to know that the modification process is not working,” borrower and former real estate agent Glen Smith said during the FCIC’s hearing in Las Vegas, the epicenter of the foreclosure

²⁴¹¹ The Center for Responsible Lending on October 27, 2010 in prepared testimony (p. 2) before the Congressional Oversight Panel called the outcome of the federal Home Affordable Modification Program “disappointing,” while the Oct. 26, 2010, report of the Special Inspector General for the Troubled Asset Relief Program (SIGTARP) said the government’s efforts had “fallen woefully short,” p. 6.

²⁴¹² Written testimony of Phyllis Caldwell, chief of the Treasury Department’s Office of Homeownership Preservation, before the Congressional Oversight Panel on Oct. 27, 2010, p. 5.

²⁴¹³ Testimony of Julia Gordon, Center for Responsible Lending, October 27, 2010, before the Congressional Oversight Panel, p. 3.

²⁴¹⁴ New Jersey HomeKeeper Program, New Jersey Housing and Mortgage Financing Agency, approved Sept. 23, 2010. Maximum loan amount will be \$48,000; maximum period of assistance will be 24 months; loan to be secured by a subordinate mortgage. <http://www.state.nj.us/dca/hmfa/home/foreclosure/programs.html>

crisis.²⁴¹⁵ Smith bought a house near the peak of the housing bubble in 2005 and lived there with his 87-year-old mother and his teenage son. As Nevada's unemployment rate passed 14 percent – the highest in the nation -- Smith's 25-year career in real estate sales and his primary income from apartment rental properties evaporated. He returned to school to train for different work. During that period, he fell behind in his house payments and sought relief under the bank's home loan modification program.

"This is where the nightmare began," he explained to the FCIC. Through faxes and certified mail, he repeatedly sent applications to his bank to amend his loan, and his lender repeatedly responded that the paperwork was missing or in the wrong office. Smith appealed to the Nevada Fair Housing Center for help and eventually joined the state's modification mediation program. He thought he was on the path toward a permanent modification, but then his lender rejected his loan, for what Smith said was one in a string of bureaucratic errors--the bank told him he was turned down because he had no buyer for a distressed, or "short sale," of his home. But Smith wanted to keep his house, not sell it, and challenged the bank to produce evidence that he had ever signed paperwork to sell. His lender admitted it had no such documentation, but then ordered him--more than a year after he had first approached the bank--to begin the modification process anew. "It's been extremely stressful," he said. In the meantime, half of the homes in his subdivision were in foreclosure; he worried that houses in his community were worth 70% less than before the downturn began.

Borrowers who have been paying down mortgages for years and have built up substantial equity are especially susceptible to being turned down for loan modifications, because the lender would prefer that they simply sell their homes. Kirsten Keefe, a senior staff attorney with the Empire Justice Center in Albany, New York, brought this issue to regulators' attention in March 2010. Speaking to the Federal Reserve Board's Consumer Advisory Council in Washington, Keefe identified trends among borrowers in

²⁴¹⁵ Glen Smith testimony before the FCIC, September 8, 2010, transcript p. 163.

New York who tried to qualify for the government's HAMP program. "We are ... routinely hearing that folks who have a lot of equity are ... being denied HAMP modifications," she said.²⁴¹⁶

Competing incentives may encourage banks to view foreclosure as a quicker, cleaner and often cheaper alternative to modifying the terms of existing mortgages. For them, foreclosure is a prudent response to default because many borrowers who receive temporary or permanent forgiveness on their terms will slide into default again, the data suggest.²⁴¹⁷

Frequently, there's another complication to foreclosure or modification: the second mortgages that were layered onto first mortgages. The first mortgages, usually the larger of the two, were commonly sold by banks in the securitization machine. The second mortgages were often retained by the lenders, who typically service the mortgage, that is, they process the monthly payments and provide customer service to borrowers. If a first mortgage is modified or foreclosed upon, the entire value of the second mortgage may be wiped out. Under these circumstances, the lender holding that second lien has an incentive to delay a modification, even one that makes the mortgage payments more affordable to the borrower.

The country's leading banks now hold on their books more than \$400 billion in second mortgages. David J. Grais, a securitization lawyer, told the Commission that the banks report these loans as performing, and so the loans have not been marked down on the banks' books.²⁴¹⁸ The actual value of these second

²⁴¹⁶ Meeting of the Federal Reserve's Consumer Advisory Council, Washington, D.C., March 25, 2010, presentation by Kirsten Keefe, transcript p. 28.

²⁴¹⁷ Prepared testimony of Joseph H. Evers, Office of the Comptroller of the Currency deputy comptroller for large bank supervision, before the Congressional Oversight Panel, Oct. 27, 2010, pp. 7-10. The OCC reported that mortgage servicers modified 1,239,896 loans since early 2008. By the end of the second quarter of 2010, more than 26 percent of the modifications were seriously delinquent; 9 percent were in the process of foreclosure; and 4 percent had completed foreclosure. The OCC examined modified loans that were 60 or more days delinquent during the second quarter of 2010, to examine when after loan modification that serious delinquency recurred. At 12 months after modification, 43 percent of loans were delinquent by two or more months; at nine months after modification, 41 percent were in arrears; at six months, 34 percent; and at three months after a loan change, nearly 19 percent were delinquent.

²⁴¹⁸ FCIC Topical Investigative Report, "Securitization: Misleading Disclosure," 2010; FCIC interview with David Grais, attorney with Grais and Ellsworth, New York, Nov. 2, 2010, p.X.

mortgages could be much less than the \$400 billion-plus reported value. Since that total is roughly equivalent to the combined equity value of the banks, the danger of future losses is self-evident. Some frustrated first-lien investors have sued servicers, asserting they are not protecting investors' financial interests, but instead are looking after their own balance sheets by encouraging borrowers to keep up the payments on the second mortgages when they cannot afford to make payments on both obligations. According to Goodman, for mortgage modifications to work, the holders of the second mortgages will have to accept some losses, a potentially expensive proposition.²⁴¹⁹

Other efforts in the private and public sectors to address the foreclosure crisis focus on encouraging short sales. In theory, short sales should help borrowers, neighborhoods, and lenders. Borrowers avoid foreclosure; neighborhoods avoid vacant, dilapidated homes that encourage crime; and lenders avoid some of the tremendous administrative cost of foreclosure. Nonetheless, such deals frequently stall because the process is cumbersome, demands coordination, and eats up resources. For example, lenders can be reluctant to sign off on the buyer's bid because they are not sure that the home is being sold at the highest possible price. In addition, when there are two mortgages, the holders of the first and second mortgages must agree to the deal.

Still, short sales are becoming more common. Overall, distressed sales, including foreclosure sales and short sales, now account for the majority of home sales in some cities, including Las Vegas, Phoenix, Sacramento and Riverside, California.²⁴²⁰

²⁴¹⁹ Laurie Goodman, senior managing director, Amherst Securities Group testified before the House Financial Services Committee on Dec. 8, 2009, stating that "any principal [mortgage] reduction program requires the administration to address the second lien problem head on. The solution is clear – the banks that own the second liens will have to write them down. ... [F]or the sake of giving homeowners the best chance to stay in their home, the second lien will have to be extinguished," p. 4.

²⁴²⁰ FCIC testimony by Mark Fleming, chief economist, CoreLogic, Sacramento hearing, Sept. 23, 2010, transcript p. 14.

Flaws in the process: “Speculation and worst-case scenarios”

In 2010, additional issues have come to the fore as problems with individual foreclosures have revealed flaws in how lenders documented and processed mortgages for securitization. Legal experts and consumer advocates told the Commission that procedural and documentation problems with foreclosure have been evident in court cases and academic studies for years, but were ignored until the number of foreclosures rose so dramatically. Now, judges are more attentive to the issues and sympathetic to the borrowers’ rights.

All 50 of the nation’s state attorneys general banded together in late 2010 to investigate foreclosure irregularities; to identify possible repairs; and to explore avenues of redress for borrowers who were harmed by improper foreclosures.²⁴²¹ For example, lenders have relied on “robo-signers” who substituted speed for care while submitting hundreds of mortgage affidavits to the courts, which may have constituted deceptive acts, unfair practices and violations of state laws.²⁴²² In addition, there have been court cases involving invalid notarizations, forged signatures, back-dated mortgage paperwork, and failure to demonstrate the legal standing to foreclose—that is, who has the right to repossess a home.

The problem of legal standing arose because the rapid growth of mortgage securitization outpaced the ability of the legal and financial system to track who owns the mortgage. During the securitization process, loans were sold multiple times. To speed up processing, the financial industry created Mortgage Electronic Registration Systems, Inc. (MERS), an organization made up of 3,000 mortgage lenders. It

²⁴²¹ See October 13, 2010 press release at http://www.state.ia.us/government/ag/latest_news/releases/oct_2010/Foreclosure_Affidavit_joint_stmt.pdf.

²⁴²² See October 13, 2010 press release at http://www.state.ia.us/government/ag/latest_news/releases/oct_2010/Foreclosure_Affidavit_joint_stmt.pdf.

tracks changes in servicing rights and ownership interests in mortgage loans. MERS is designated as the “mortgagee of record” on behalf of its members, which is meant to give it the legal right to foreclose if the borrower fails to pay the loan.²⁴²³ MERS holds 62 million first and second mortgages in its name.

The standing of MERS or its designees to foreclose, however, has been called into question by courts and academics.²⁴²⁴ In a hearing before the House Judiciary Committee on the foreclosure crisis, New York Supreme Court Justice F. Dana Winslow testified that “[s]tanding has become such a pervasive issue that I frequently use the term ‘presumptive mortgagee in foreclosure’” to describe MERS.²⁴²⁵ Because of “multiple unrecorded transfers of the legal ownership of the mortgage,” it is unclear whether MERS continued to be the mortgagee after subsequent sales of the loan.²⁴²⁶ Winslow also highlighted other deficiencies in MERS’s standing, many involving sloppy paperwork: the failure to produce the correct promissory notes in court during foreclosure proceedings; gaps in the chain of title, including printouts of title that have differed substantially from information provided previously; retroactive assignments of notes and mortgages in an effort to clean up the paperwork problems from earlier years; questionable signatures on assignments and affidavits attesting to the ownership of the note and mortgage; and questionable notary stamps on assignments.²⁴²⁷

²⁴²³ 11/16/10 Testimony at 1-2.

²⁴²⁴ See, e.g., *Mortg. Elec. Registry Sys. V. Johnston*, No. 420-6-09 Rdev (Rutland Superior Ct., Vt., Oct. 28, 2009) (holding that MERs did not have standing to initiate foreclosure because the note and mortgage had been separated).

²⁴²⁵ Written Testimony of the Honorable F. Dana Winslow, NYS Supreme Court Justice, U.S. House of Representatives on “Causes and Effects of the Foreclosure Crisis,” Dec. 2, 2010, at 2, available at <http://judiciary.house.gov/hearings/pdf/Winslow101202.pdf>

²⁴²⁶ Written Testimony of the Honorable F. Dana Winslow, NYS Supreme Court Justice, U.S. House of Representatives on “Causes and Effects of the Foreclosure Crisis,” Dec. 2, 2010, at 4, available at <http://judiciary.house.gov/hearings/pdf/Winslow101202.pdf>

²⁴²⁷ Written Testimony of the Honorable F. Dana Winslow, NYS Supreme Court Justice, U.S. House of Representatives on “Causes and Effects of the Foreclosure Crisis,” Dec. 2, 2010, at pp. 2-4, available at <http://judiciary.house.gov/hearings/pdf/Winslow101202.pdf>

On November 16, 2010, a bankruptcy court ruled that the Bank of New York could not foreclose on a loan it purchased from Countrywide because MERS failed to endorse or deliver the note to the Bank of New York as required by the pooling and servicing agreement.²⁴²⁸ This ruling could have far reaching consequences because it was customary for Countrywide to maintain possession of the note and related loan documents when loans were securitized.²⁴²⁹

Across the market, some mortgage securities holders have sued the issuers of those securities, demanding the issuers rescind their purchases because of the questions over who actually owns the loans. If the legal challenges succeed, investors that own mortgage-backed securities could force the issuers to pay them the original price—possibly with interest.²⁴³⁰ The issuers would then be the owners of the securities and would bear the risk of loss.

The Congressional Oversight Panel, in a report issued in November 2010, said it is on the lookout for such risks: “If documentation problems prove to be pervasive and, more importantly, throw into doubt the ownership of not only foreclosed properties but also pooled mortgages, the consequences could be severe.”²⁴³¹

Whether this becomes a full-blown crisis may depend on how common these troubles are. “It is lack of knowledge of how widespread the problems may be that is turning the allegations into a crisis,” said University of Iowa law professor Katherine Porter, currently a visiting professor at Harvard Law School, who has studied foreclosures and the law. “Lack of knowledge feeds speculation and worst-case

²⁴²⁸ See *John T. Kemp v. Countrywide Home Loans, Inc.*, Case No. 08-187000-JHW (D. N.J.).

²⁴²⁹ See *John T. Kemp v. Countrywide Home Loans, Inc.*, Case No. 08-187000-JHW (D. N.J.).

²⁴³⁰ 11/16/10 Levitin Testimony at 19-20; 12/1/10 Bair written testimony before the Committee on Banking, Housing, and Urban Affairs, at 5-6.

²⁴³¹ Congressional Oversight Panel report, “Examining the Consequences of Mortgage Irregularities for Financial Stability and Foreclosure Mitigation,” Nov. 16, 2010, p. 7.

scenarios.”²⁴³² Some have estimated that the claims could be in the trillions of dollars, rendering major U.S. banks insolvent.²⁴³³

Neighborhood effects: “I’m not leaving”

Communities coast to coast are trying to stretch housing aid budgets to help people displaced by foreclosures, but the surge in demand outstrips resources. In Nevada, for example, Clark County, with 1.9 million people living in and around Las Vegas, was forced to cut its Financial Housing Assistance program. Gail Burks, chairman and chief executive of the Nevada Fair Housing Center, told the Commission that her group finds that many they counsel through the foreclosure process are in despair. “It’s very stressful. There are times that the couples we are helping end up divorcing, sometimes before the process is over. ... We’ve also seen threats of suicide.”²⁴³⁴

Warren Peterson, a homebuilder in Bakersfield, California, testified to the commission that he has built only one new home since late 2005, compared with the typical 3 to 10 homes he would build each year before.

One Nevada official reported that 17 people in Lyon County, which has a population of 52,000, took their lives last year, compared with 11 suicides the year before.²⁴³⁵ Las Vegas police reported 10 deaths during a two-week period in August 2010, the result of five murder-suicides. Among them were Donald and Barbara Romano, both 74, who were found shot in their home. The body of Mr. Romano, a Korean War veteran, was found holding a gun, and a note was discovered nearby. The couple’s daughter told police

²⁴³² Prepared testimony of Katherine Porter before the Congressional Oversight Panel hearing on the TARP Foreclosure Mitigation Program, Oct. 27, 2010, pp. 7-8.

²⁴³³ 11/16/10 Levitin Testimony at 19-20.

²⁴³⁴ FCIC testimony by Gail Burks, Las Vegas field hearing, Sept. 8, 2010.

²⁴³⁵ FCIC testimony of Jeffrey Fontaine, Nevada Association of Counties, Sept. 8, 2010, transcript p. 252.

her parents had been heavily invested in real estate and were distressed by their serious financial problems.²⁴³⁶

For the millions of Americans who paid their bills, never flipped a house, and had never heard of a CDO, the financial crisis has been long, bewildering and full of villains. A crisis that started with a housing boom that became a bubble has come back full circle to forests of “for-sale” signs—but this time beckoning scarce buyers. Stores have shuttered; employers cut jobs; hopes fled. Too many Americans today find themselves in suburban ghost towns or urban wastelands, where properties are vacant and construction cranes don’t lift a thing for months.

Renters are among the victims when lenders seize property after landlords default on loans. “Most tenants do not find out their homes have been foreclosed until they are facing imminent displacement,” a California renters’ rights organization, Tenants Together, said in its May report on foreclosures. Renters can lose the roof over their heads as well as their security deposits. Based on a study of 2009 state property records, the California group found that 37 percent of homes in foreclosure were rental properties, and more than 200,000 California renters were personally affected by foreclosures that year.²⁴³⁷

For children, in particular, a repossessed house – rented or bought – is destabilizing. The impact of foreclosures on children around the country has been enormous. One third of the children who experienced homelessness after the financial crisis did so because of the foreclosures of the children’s own houses or rental housing, according to a recent government study.²⁴³⁸ School officials told the

²⁴³⁶ Las Vegas Review Journal, “Murder-Suicides: Economic Worries Taking Toll in Recent Deaths,” by Mike Blasky, Aug. 29, 2010.

²⁴³⁷ “California Renters in the Foreclosure Crisis,” May 2010, Tenants Together, p. 7, sent to FCIC commissioners Sept. 24, 2010.

²⁴³⁸ U.S. Education Department data, and National Association for the Education of Homeless Children and Youth “First Focus Survey” in early 2010 of 2,200 school districts and 47 state departments of education, released July 27, 2010. www.firstfocus.net

commission they have seen more young people trying to cope with economic distress for the first time. Nevada educator Heath Morrison told the commission that he has seen children in his state bounce from school to school as their parents move in search of employment and housing. Morrison said this summer that he had recognized one particular third-grade boy who had been enrolled in three schools in five months in the Washoe County school district around Reno.²⁴³⁹

Families in Bakersfield, California, described their situations for the commission. In one middle-class South Bakersfield community, where 29 percent of the homes are in default, foreclosed on, or owned by the banks, families with children now deal with problems long associated with blighted inner cities. In California, where homes are often close together, vandals and criminals may live three yards away from people who bought in happier times.

Karen Mann, an appraiser from Discovery Bay, California, testified to the Commission about her family's circumstances. Her daughter and son-in-law refinanced their mortgage into an adjustable-rate mortgage. When the time came for the rate to adjust upward, new financial troubles meant that the payments were more than the family could afford. With the market value of the home nearly equal to their mortgage debt, the family tried to get the mortgage modified to no avail. They lined up a buyer for a short sale, but the deal was nixed. Then, when medical problems created yet another challenge, the couple and their four children moved in with Mann. "The children were relocated to new schools, and the adults dealt with the pain and emotional suffering while they were trying to rebuild their lives," Mann said. The couple filed for bankruptcy and their house is going into foreclosure. Two months after the bankruptcy was completed, the lender asked them if they wanted to modify their mortgage.

In Cape Coral, Florida, Dawn Hunt and her husband, a mailman, and their two children live in an attractive ranch-style home they bought for about \$100,000 more than a decade ago. It was a quiet, 20-

²⁴³⁹ FCIC interview Aug. XX, 2010, and testimony Sept. 8, 2010, by Heath Morrison, superintendent of Washoe County School District, Nevada.

year-old subdivision where most of the residents were homeowners. In 2005 and 2006, builders rushed to the area and threw up dozens of new homes on empty lots. Homebuilder Comfort Homes of Florida LLC broke ground on a house across the street from the Hunts, but did not complete it. This fall, the house sat vacant, an empty shell. No stucco was ever applied to the concrete block exterior, and the house had no interior walls. A wasp nest decorated the metal box on the doorknob that held keys meant for real estate agents. The untended grass had grown four feet high. Sharp sand spurs in the brush made it difficult to approach the property. Two doors down from the Hunts, another house was also vacant, left empty when a family split up and moved a year earlier. They abandoned a car in the garage. The roof fell in, and a blue plastic tarp kept the rain out. The Hunts called the police after vandals broke into the house one night.

Now 44 percent of the homes in the Hunts' neighborhood are in default, in the foreclosure process, or have been taken back by the bank.²⁴⁴⁰ Community spirit has moved out, too. Most of the other of the houses in the community were occupied by renters whose absentee landlords bought the houses when the homeowners lost their homes to their banks.

The Hunts' house lost two-thirds of its value. Nonetheless, even though the neighborhood is not as lovely as it used to be, Dawn Hunt told the FCIC, "I'm not leaving."²⁴⁴¹

²⁴⁴⁰ Zip code 33991, default, foreclosures and REO, S&P Global Data Solutions RMBS database, July 2010.

²⁴⁴¹ FCIC interview with Dawn Hunt, Cape Coral, Florida, Sept. 20, 2010.

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