

## Part III: The Financial Crisis

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### Contents

Early 2007: Subprime concerns spread.....	1
Goldman: “Let’s be aggressive distributing things” .....	5
Bear Stearns’s hedge funds: “Looks pretty damn ugly” .....	9
Rating agencies are told: “Investors Don’t Want Rating Downgrades” .....	17
AIG: “We’re f***ed, basically” .....	20
July 30: Investors “run” asset-backed commercial paper .....	24
IKB of Germany: \$20 billion of CDOs financed short-term .....	26
Countrywide: “That’s our 9/11” .....	29
BNP Paribas: “The ringing of the bell” .....	34
Federal Reserve: “Prepared to act as needed” .....	36
SIVs: “An oasis of calm” disturbed.....	37

### 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.<sup>1</sup>

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 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.<sup>2</sup>

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.

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.<sup>3</sup> 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.<sup>4</sup> The Treasury and the Federal Reserve insisted throughout the spring and early summer that the subprime collapse would have limited 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.”<sup>5</sup> 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.”<sup>6</sup>

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.

### **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.<sup>7</sup> 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.<sup>8</sup>

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.<sup>9</sup> 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.”<sup>10</sup> 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 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.”<sup>11</sup>

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 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.<sup>12</sup> 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 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."<sup>13</sup>

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.

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.<sup>14</sup> This financing arrangement made Ralph Cioffi "a very popular fellow with most Wall Street firms,"<sup>15</sup> 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.<sup>16</sup> 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.<sup>17</sup>

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. The Enhanced fund would be leveraged at 12:1, with returns projected to be commensurately high.<sup>18</sup> 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.<sup>19</sup>

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.<sup>20</sup> 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.]

### **“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.<sup>21</sup>

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.”<sup>22</sup>

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.<sup>23</sup> 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.<sup>24</sup> Now all 10 refused Schwartz’s appeal and instead increased their margin calls.<sup>25</sup> As a direct result, the two funds had to sell bonds at distressed prices in order to raise cash.<sup>26</sup> Selling the bonds led to a complete loss of confidence by the investors, whose requests for redemptions accelerated.<sup>27</sup>

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.<sup>28</sup> The strategy backfired. Shortly after the suspension, Merrill Lynch seized more than \$850 million in collateral for its outstanding repo loans. Auctioning this seized collateral, Merrill was only able to sell certain portions – and at deep discounts to face value.<sup>29</sup> [requesting further information on this sale.] Other repo lenders were increasing their collateral requirements or refusing to roll over their loans.<sup>30</sup> 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.<sup>31</sup> 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.<sup>32</sup> Marano now worked to understand the basics of the portfolio, including what could be done in a worst-case scenario in which significant amounts of assets had to be sold.<sup>33</sup> 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.<sup>34</sup> 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.<sup>35</sup> 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.<sup>36</sup> 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.<sup>37</sup> [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.”<sup>38</sup> 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 more market turmoil.<sup>39</sup> [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.<sup>40</sup> 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 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<sup>41,42</sup>), 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:

*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.<sup>43</sup> 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 protection had been written.<sup>44</sup> 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.<sup>45</sup> 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.<sup>46</sup> 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.

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.<sup>47</sup> 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.<sup>48</sup> 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 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.”<sup>49</sup>

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.<sup>50</sup> 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.<sup>51</sup> AIG still disputed Goldman’s marks and balked at posting the money.<sup>52</sup> 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.”<sup>53</sup> 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.

## 1. July 30: Investors “run” asset-backed commercial paper

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.<sup>54</sup> 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 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.”<sup>55</sup>

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.

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.*<sup>56</sup>

### **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,"<sup>57</sup> 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."<sup>58</sup>

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.”<sup>59</sup>

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 important to note that the company has experienced no disruption in financing its ongoing daily operations, including placement of commercial paper.”<sup>60</sup> 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.”<sup>61</sup>

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.”<sup>62</sup> 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.<sup>63</sup> Sambol said that “management can only plan on a week by week basis due to the tenuous nature of the situation.”<sup>64</sup> 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 credit lines.<sup>65</sup> The same day, the company stated in a public disclosure that it had “highly reliable short-term funding liquidity” of \$46.2 billion.”<sup>66</sup>

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.<sup>67</sup> 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.”<sup>68</sup>

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.”<sup>69</sup>

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.<sup>70</sup>

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 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.”<sup>71</sup>

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.<sup>72</sup> 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.”<sup>73</sup>

Six days later, after the markets closed, Bank of America announced a \$2 billion equity investment for a 16% stake in the Countrywide.<sup>74</sup> 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.”<sup>75</sup>

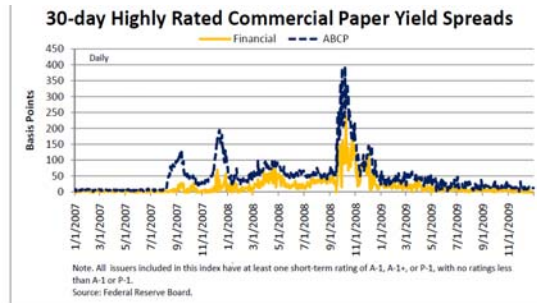
In October, Countrywide reported a \$2 billion pretax loss, its first quarterly loss in 25 years. Confronting increased future default estimates and rising net-charge offs, Countrywide raised provisions for loan losses from the \$38 million allocated in the third quarter of 2006 to \$934 million one year later.<sup>76</sup> 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.<sup>77</sup> 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.”<sup>78</sup>

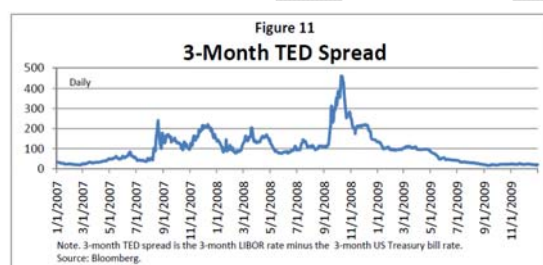
In retrospect, many investors regarded the suspension of these three French funds as the true beginning of the unprecedented liquidity crisis in the money markets. Paul McCulley of Pimco told the FCIC that August 9 “was the ringing of the bell” for short-term funding markets. “It was very obvious in 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-1 rated asset-backed commercial paper rose 20 basis points, from 5.36% to 5.56%, the highest level since March 2001.<sup>79</sup>



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.<sup>80</sup> 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.<sup>81</sup> 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 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.<sup>82</sup> 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.”<sup>83</sup> The European Central Bank infused €5 billion into the overnight lending markets.<sup>84</sup> 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 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.<sup>85</sup> 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.”<sup>86</sup>

### **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.”<sup>87</sup>

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 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 imbroglia 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.

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<sup>1</sup> 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.

<sup>2</sup> SEC, *Risk Management Reviews of Consolidated Supervised Entities*, memo to Erik Sirri and others, January 4, 2007. SEC\_TM\_FCIC\_002442.

<sup>3</sup> Senior Supervisors Group report.

<sup>4</sup>

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<sup>7</sup> See April 27, 2010 Testimony of David Viniar to the Senate Permanent Subcommittee on Investigations, at 3-4.

<sup>8</sup> See April 27, 2010 Testimony of David Viniar to the Senate Permanent Subcommittee on Investigations, at 3-4.

<sup>9</sup> See April 27, 2010 Testimony of David Viniar to the Senate Permanent Subcommittee on Investigations, at 4.

<sup>10</sup> 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."

<sup>11</sup> Permanent Subcommittee on Investigations, Exhibit 3.

<sup>12</sup>

<sup>13</sup> PSI, Exhibit 84.

<sup>14</sup> FCIC Interview with Alan Schwartz.

<sup>15</sup> FCIC Interview with Thomas Marano.

<sup>16</sup> BSC-FCIC 00000690.

<sup>17</sup> SEC Complaint at 5.

<sup>18</sup> 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.

<sup>19</sup> SEC complaint.

<sup>20</sup> The CDO was called High Grade Structured Credit CDO 2007-1. Underwritten by Credit Suisse, it was the largest ABS CDO issued in 2007.

<sup>21</sup> 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).

<sup>22</sup>

<sup>23</sup> *Barclays Bank Plc v. Bear Stearns Asset Management Inc.*, 07-11400, page 42, paragraph 175.

<sup>24</sup> *Barclays Bank Plc v. Bear Stearns Asset Management Inc.*, 07-11400, page 42, paragraph 175.

<sup>25</sup> FCIC Interview with Alan Schwartz; *Barclays Bank Plc v. Bear Stearns Asset Management Inc.*, 07-11400, page 54, paragraphs 227 – 229.

<sup>26</sup> FCIC Interview with Alan Schwartz; *Barclays Bank Plc v. Bear Stearns Asset Management Inc.*, 07-11400, page 54, paragraphs 227 – 229.

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<sup>27</sup> See Upton interview & Schwartz interview.

<sup>28</sup> FCIC Interview with Warren Spector.

<sup>29</sup> 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)

<sup>30</sup> “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.

<sup>31</sup> FCIC Interview with Robert Upton; FCIC Interview with Thomas Marano; FCIC Interview with Warren Spector.

<sup>32</sup> FCIC Interview with Warren Spector.

<sup>33</sup> FCIC Interview with Thomas Marano. 4/19/2010.

<sup>34</sup> Email from Thomas Marano to Warren Spector. BSC-FCIC-e00118978.

<sup>35</sup> FCIC Interview with Alan Schwartz.

<sup>36</sup> *In re Bear Stearns High-Grade Structured Credit Strategies Master Fund, Ltd.* (US Bankruptcy Court SDNY, 2007).

<sup>37</sup> FCIC Interview with Samuel Molinaro; FCIC Interview with Alan Schwartz.

<sup>38</sup> FCIC Interview with Tom Marano, 4/19/2010.

<sup>39</sup> Internal email from Bill Jamison of Federated (June 21, 2007). FEDFCIC 0000131.

<sup>40</sup> JPM Morgan, “Worldwide Securities Services Risk Review”, Directors Risk Policy Committee (September 18, 2007). JPM-FCIC 00000213; FCIC Interview with Michael Alix.

<sup>41</sup> S&P July 10, 2007, teleconference transcript, p. 2; Moody’s July 12, 2007, teleconference presentation, p.12.

<sup>42</sup> 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.

<sup>43</sup> 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.

<sup>44</sup> 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).

<sup>45</sup>

<sup>46</sup> AIG-FCIC00370077 (7/26/07 email); AIG-SEC2035262 (8/2/07 email); Get collateral invoice from Goldman.

<sup>47</sup> Sparks MFR at \_\_\_\_.

<sup>48</sup> Dan Sparks interview.

<sup>49</sup> AIG-SEC 1361819-20. Emphasis added.

<sup>50</sup> AIG-SEC2035262 (8/2/07 email); AIG-SEC1913380 (8/8/07 email).

<sup>51</sup> MFR of Joseph Cassano (June 25, 2010) at 3.

<sup>52</sup> AIG-SEC2035262 (8/2/07 email); AIG-SEC1913380 (8/8/07 email).

<sup>53</sup> AIG-SEC9990006.

<sup>54</sup> 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.

<sup>55</sup> 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,

<sup>56</sup> <http://www.treasury.gov/press/releases/hp525.htm>

<sup>57</sup> Transcript of Deposition of Angelo Mozilo by the SEC, 11/9/2007 at 150:24.

<sup>58</sup> Transcript of Deposition of Angelo Mozilo by the SEC, 11/9/2007 at 36:4-23.

<sup>59</sup> 8/1/07 Mozilo email to Lyle Gramley (cc Michael Perry, IndyMac), BAC-FCIC-E-0000661408-09.

<sup>60</sup> Mark DeCambre. “Countrywide Defends Liquidity.” TheStreet.com, 8/2/07. Available at <http://www.thestreet.com/story/10372054/countrywide-defends-liquidity.html>.



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- <sup>61</sup> “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> .
- <sup>62</sup> 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.
- <sup>63</sup> 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.
- <sup>64</sup> 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.
- <sup>65</sup> 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.
- <sup>66</sup> 8/6/07 Countrywide Form 8-K, Exhibit 99.1.
- <sup>67</sup> 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.”
- <sup>68</sup> 8/14/07 Federal Reserve Memo re Background on Countrywide Financial Corporation. FCIC-149538-63 at 14.
- <sup>69</sup> 8/14/07 Federal Reserve Memo re Background on Countrywide Financial Corporation. FCIC-149538-63 at 14.
- <sup>70</sup> Countrywide Press Announcement, August 16, 2007, “Countrywide Supplements Funding Liquidity Position.”
- <sup>71</sup> Bruce, Kenneth. “Liquidity is the Achilles heel.” Merrill Lynch Analyst Report. 8/15/07, pg 4
- <sup>72</sup> Moody’s Investors Service, August 16, 2007, “Moody’s lowers Countrywide debt to Baa3.”
- <sup>73</sup> E. Scott Reckart. “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
- <sup>74</sup> “Bank of America Takes Countrywide Stake.” The Associated Press. 8/22/07.
- <sup>75</sup> 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).
- <sup>76</sup> Countrywide, October 26, 2007, PRNewswire-FirstCall, earnings release, pg 3
- <sup>77</sup> Bank of America website. [www.bankofamerica.com](http://www.bankofamerica.com). Press Releases. 01/11/08.
- <sup>78</sup> Cite to public BNP Paribas statement
- <sup>79</sup> 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).
- <sup>80</sup> Covitz, Liang, and Suarez (2009).
- <sup>81</sup> Confirm numbers
- <sup>82</sup> Insert reference to ICI data – August 2007 MMMF flows and assets; Cite (Treasuries statement)
- <sup>83</sup> “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).
- <sup>84</sup> Cite
- <sup>85</sup> “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).
- <sup>86</sup> “FOMC statement,” Federal Reserve press release, August 17, 2007, available at <http://www.federalreserve.gov/newsevents/press/monetary/20070817b.htm> (accessed August 20, 2010).
- <sup>87</sup> S&P, *Structured Investment Vehicle Ratings Are Weathering the Current Market Disruptions*, 8/15/07.