

Forefront

New Ideas on Economic Policy from the FEDERAL RESERVE BANK
of CLEVELAND

The Future of Financial Market Regulation

INSIDE:

Slowing Speculation in Housing

Introducing the
Cleveland Financial Stress Index

A Bad Bank, for the Greater Good

PLUS:

Interview with Charles Calomiris

Forefront

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Forefront
Federal Reserve Bank of Cleveland
PO Box 6387
Cleveland, OH 44101-1387

forefront@clev.frb.org
clevelandfed.org/forefront

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President and CEO: Sandra Pianalto

Editor-In-Chief: Mark Sniderman,
Executive Vice President and Chief Policy Officer

Managing Editor: Robin Ratliff

Editor: Doug Campbell

Associate Editors: Amy Koehnen, Michele Lachman

Art Director: Michael Galka

Designer: Natalie Bashkin

Web Managers: Stephen Gracey, David Toth

Contributors:

O. Emre Ergungor	Dan Littman
Thomas Fitzpatrick	Lou Marich
Elizabeth Hanna	April McClellan-Copeland
Joseph Haubrich	Jennifer Ransom
Natalie Karrs	

Editorial Board:

Ruth Clevenger, Vice President, Community Development
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Stephen Ong, Vice President, Supervision and Regulation
James Savage, Vice President, Public Affairs
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James Thomson, Vice President, Research

PRESIDENT'S MESSAGE

Sandra Pianalto

President and Chief Executive Officer
Federal Reserve Bank of Cleveland



Now that some of the worst effects of the financial crisis are fading, our attention has properly turned to the future. The Dodd–Frank Wall Street Reform and Consumer Protection Act of 2010

contains Congress's blueprint for addressing gaps in the financial market regulatory and supervisory framework, the types of gaps that contributed to the tumultuous events of 2007 and 2008. Among other key provisions, the new law calls for greater oversight of the shadow banking system, stricter supervision of systemically important financial institutions, and a resolution authority to deal with too-big-to-fail financial firms.

Those provisions cover a lot of territory. In this issue of *Forefront*, we explain some of the ways that the details will get worked out. Congress has asked the Federal Reserve and other regulatory agencies to write hundreds of new rules as part of Dodd–Frank's implementation. The law requires many of these rules to be final as soon as this summer.

Of course, Dodd–Frank did not cover everything. As the Federal Reserve Bank of Cleveland's James Thomson argues in this issue, the creation of a federally chartered "bad bank" to acquire and dispose of distressed assets is another idea whose merits should be considered. The Bank's Emre Ergungor and Thomas Fitzpatrick make the case for states to evaluate some options that would make it harder for irresponsible investors to neglect their properties.

This issue also includes an update on the Bank's model for detecting systemic risk in the financial system — a model we hope can be a useful tool for newly created entities such as the Financial Stability Oversight Council. Finally, we interview banking scholar Charles Calomiris, who comments on elements specific to Dodd–Frank as well as additional ideas he considers important to regulatory reform.

As always, we'd like your comments on these efforts, just as we encourage all points of view about the implementation of the new legislation.

In the past, I've likened the rule-making phase to the finishing of a house. With skillful craftsmanship, we can carry out this complicated and challenging responsibility in a way that makes our financial house solid and secure. An open, continuous dialogue that considers many perspectives is most likely to achieve the goal of financial stability.

I invite you to get involved. An enormous amount of information on the proposals is already available through dedicated websites from the Federal Reserve and other financial system regulators. It's easy to comment. Go to the Federal Reserve Board's Freedom of Information Office at www.federalreserve.gov or visit www.regulations.gov to read the proposed rules and then have your say.

Working together, we can build a stronger and more stable financial system. So speak up — we are listening. ■

Reader Comments



Stop Investing in Stadiums... Start Investing in Kids Forefront Fall 2010



**Stephanie
Wright Byrd**

Success By 6[®], a strategic initiative of United Way of Greater Cincinnati, is working to improve outcomes for young children in support of the organization's number one priority—“Children are prepared for kindergarten.” Our work is focused on improving the early childhood system by increasing access to high-quality early childhood education and best practice home visitation. The combination of these services, when targeted to reach at-risk children, prenatal through age 5, has proven to be effective in improving health outcomes and kindergarten readiness.

The current system too often falls short in meeting the needs of young children, in part due to misaligned goals among child-serving programs, insufficient funding of services, and inconsistent quality standards. In 2007, United Way established the Winning Beginnings campaign for early childhood to provide local, private resources to improve the system and increase access to quality services.

The scholarship model being piloted in Minnesota is a promising way of getting children into quality programs using demand-side incentives. Our strategies focus on both supply and demand. On the demand side we aim specifically

at getting children enrolled in programs that work, including Every Child Succeeds home visitation and the Cincinnati Public School Summer Bridge program, among others. On the supply side, working with 4C for Children, the local resource and referral agency, we help child care programs achieve and maintain quality standards through leadership development and coaching. We have established Learning Circles for quality-rated programs to understand how to use data to drive decisions and improve practice.

The work we are doing in the Greater Cincinnati community is an important part of the cradle-to-career education continuum, a philosophy that has been adopted by members of the local business, academic, and philanthropic communities. When state and federal policymakers incorporate early childhood education — prenatal through age 5 — into the education continuum, with funding, aligned standards, and consistent access, we will see improved outcomes for children and communities across the country.

Stephanie Wright Byrd, MHA
Executive Director
Success By 6[®]
Cincinnati, Ohio



Rebekah Dorman

For those of us who have been working in the field of early childhood for years, the recent economic research of Art Rolnick, James Heckman, and others, demonstrating the high return on investment of early childhood programs, has literally changed the conversation we can have with both public- and private-sector leaders. We are now able to say investing in early childhood is not only the “right” thing to do—it’s the smart thing to do. We are indebted to economists for giving us this new perspective on our work and a new way of describing its impact.

In “Stop Investing in Stadiums... Start Investing in Kids,” Rolnick describes the Minnesota Early Learning Foundation and its new flagship program, Scholarship Plus. Rolnick outlines four key aspects of the work in Minnesota: Start early (prenatally), be able to go to scale, measure results, and engage parents. I am proud to say that in Cuyahoga County, Ohio, we have a 10-year old, nationally recognized, comprehensive early childhood system named Invest in Children built on those same tenets. Invest in Children is a public/private partnership staffed by the Cuyahoga County Office of Early Childhood, and we have the evaluation data to show that we are making a difference. Our independent evaluation is conducted by the Center for Urban Poverty and Community Development in the Mandel School of Applied Social Sciences at Case Western Reserve University.

The continuum of services we offer begins during the prenatal period and continues until the child reaches kindergarten. The continuum includes home visiting programs, health and behavioral health programs, and a number of child care initiatives to raise the quality of care across all settings for children 0 to 6 years. We are in the fourth year of our Universal Pre-Kindergarten Program, which provides

high-quality care to 1,000 preschoolers across the county and makes it accessible to low- and moderate-income families via parent scholarships. Many of our families access multiple programs, according to their needs and the age of the child, and over 160,000 children have been served in the past decade.

Here are some of our evaluation results:

- Medical concerns were addressed at 39 percent of the nurse home visits to mothers and their newborns, potentially avoiding more costly forms of medical care.
- Eighty-six percent of low-income families in our Medical Home Pilot Program brought their child to all of their well child visits during the first year of life as compared to a rate of 40 percent in the general Medicaid population.
- Children in our Universal Pre-Kindergarten Program entering the Cleveland Metropolitan School District scored three points higher on the Kindergarten Readiness Assessment for Literacy than average for the district. In addition, children who had scored the lowest on cognitive measures upon entrance to the program showed the most significant gains at exit.

We are all aware that tough choices lie ahead on state and local budgets. It is our hope that at a time when funds are tight, policymakers will use limited dollars where they can have the greatest impact. We encourage private funders to do the same. In the words of Rolnick, “I think it’s important for communities to get their priorities in order to make it clear that this is an area we can’t afford not to invest in.”

Rebekah L. Dorman, PhD
Director
Office of Early Childhood Invest in Children
Cleveland, Ohio

Using the CRA to Fight Vacancy and Abandonment

Forefront Spring 2010

While I don’t disagree with the proposal of using CRA money to fight vacancy and abandonment, this situation would not have occurred had the banks not created it through foreclosure in the first place. Though this proposal would assist with rebuilding neighborhoods, it would be of greater assistance not to allow this situation to occur in the first place.

One of the biggest issues nationwide is banks’ reluctance to write off principal and allow moderate-income families to stay in their homes. Then, adding insult to injury, these homes remain vacant, until the bank writes off the loan,

then sells the property at auction for less money than the original homeowner (who now is unable to obtain another mortgage due to foreclosure and bad credit) could have paid.

In addition to these measures, CRA funds should be used to allow those who have suffered foreclosure to receive alternate mortgage loans with no time frame penalties, and also be used to write down principal. It has never made sense to me to foreclose on someone and then sell their house for a price that the original owners could have paid.

Jody Veler
Egg Harbor City, New Jersey

Unemployment Benefits: Help or Hindrance?



Amy Koehnen,
Associate Editor

Almost 15 million Americans were jobless as of the end of 2010, a strikingly high 9.4 percent of the would-be working population. Although the mass layoffs that marked the beginning of the recession have tapered off, people who are out of work are having a hard time finding new jobs. A full 6.2 million of the unemployed have been that way for at least half a year. On average today, the unemployed stay out of work for a record-high 34 weeks, about 50 percent longer than in previous cycles.

As a consequence, more unemployed Americans than ever are tapping federal unemployment insurance (UI) benefits after exhausting state benefits. This situation has reignited a policy debate: Are overly generous benefits at least partly responsible for the rising unemployment rate?

The debate centers on two main arguments. One is that UI increases the nation's unemployment rate and lengthens unemployment spells because job seekers put less effort into the search, a form of what economists term "moral hazard." The other is that UI is not a significant factor in unemployment duration or rate, and something else is mainly responsible for the high numbers of both.

A New Deal

Signed into law by President Franklin Roosevelt in 1935 in response to the Great Depression, the Social Security Act provided the original framework of the unemployment insurance system. UI provides benefits for eligible workers who have lost their jobs involuntarily. Regular benefits are based on a percentage of an individual's earnings over a recent 52-week period and are paid for a maximum of 26 weeks in most states.

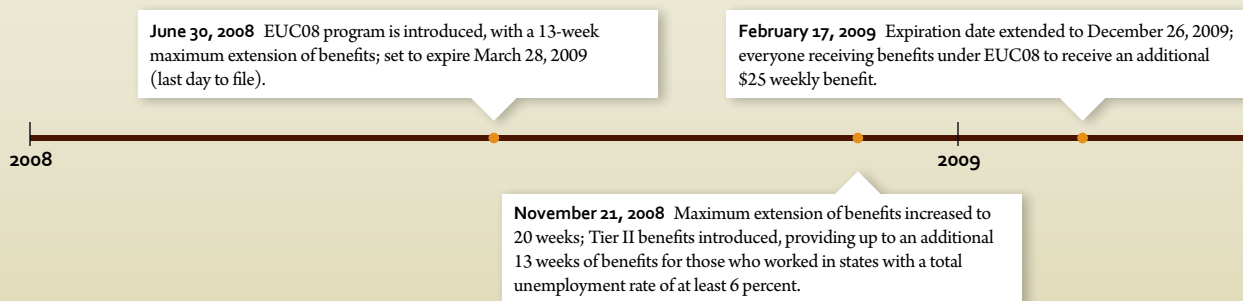
Unemployment Benefits: A Disincentive to Job Seeking?

Harvard economist Robert Barro is one of the highest-profile critics of unemployment benefits. In a recent *Wall Street Journal* op-ed, he argued that in trying economic times, it is reasonable to adopt a more generous UI program—but not one that lasts almost two years. Unemployment benefits decrease efficiency, Barro and others argue, because the program subsidizes unemployment and can cause insufficient job search, job acceptance, and levels of employment. An unemployed person drawing benefits, for example, might search less vigorously for a job or be more selective about accepting offers than he would be in the absence of benefits.

Unemployment Benefits: An Economic Booster?

Some people may indeed take longer to find a new job because of unemployment insurance extensions, but many economists think that UI is not a large contributing factor in driving up the rate of unemployment or in lengthening its average duration.

Timeline of the Emergency Unemployment Compensation Program (EUC08)



Economists at the Federal Reserve Bank of San Francisco compared the duration of unemployment in four categories: involuntary job losers, voluntary job leavers, new labor market entrants, and re-entrants. Their goal was to find out whether there was a difference in length of unemployment between involuntary job losers (who are usually eligible for UI) and job leavers, new labor market entrants, and re-entrants (who usually are not). The results showed that involuntary job losers remain unemployed slightly longer than unemployed workers who are not eligible for benefits, indicating that extended UI benefits have a modest impact on unemployment duration.

The economists concluded that the impact of extended insurance benefits on the unemployment rate for all of 2009 and the first half of 2010 was about 0.8 percentage point. So, at the end of June 2010, the unemployment rate would have been 8.7 percent (compared with 9.5 percent if no UI program had been in place).

Another analysis looks at the broad economic effects of unemployment insurance. Federal Reserve Bank of Philadelphia senior economist Shigeru Fujita contends that the

positive relationship between the level of benefits and the duration of unemployment is socially desirable. The benefits can improve unemployed people's well-being, he says, by helping them avoid large drops in consumption in the face of job losses.

Since UI benefits increase the amount of cash the unemployed have, their consumption is supported, Fujita says, which improves the economy's welfare. And when these workers continue to receive benefits, the pressure to accept a low-paying job is reduced. While this pattern initially seems counterproductive, it also may serve as motivation for creating higher-paying jobs in order to attract workers—another boost to the economy.

Moreover, UI cannot explain the doubling of the unemployment rate during the recession, even when an estimate of UI's effect is on the high end. "I do believe that the effect on the unemployment rate is not more than 1 percentage point, probably less," says Murat Tasci, an economist at the Federal Reserve Bank of Cleveland who specializes in business cycles and labor markets. "My conclusion is based on my observation that, for most of the

period when extended unemployment insurance was in effect, job openings in the U.S. economy were at very depressed levels." In other words, the unemployed couldn't have gone off the rolls if they had wanted to—there was no work for them.

It's logical that it would take some time for the unemployment rate to come down after a large shock like the one our nation recently experienced. Tasci's view is in keeping with that of many other economists: that a large part of the unemployment rate increase results from the severe recession and the accompanying decline in output, not from extended benefits. ■

Recommended readings



Fujita, Shigeru. 2010. "Economic Effects of the Unemployment Insurance Benefit." Federal Reserve Bank of Philadelphia, *The Business Review* (Q4): 20–7.

Valletta, Rob, and Katherine Kuang. 2010a. "Extended Unemployment and UI Benefits." Federal Reserve Bank of San Francisco, *Economic Letter* 12 (April 19).

Valletta, Rob, and Katherine Kuang. 2010b. "Is Structural Unemployment on the Rise?" Federal Reserve Bank of San Francisco, *Economic Letter* 34 (November 8).

November 6, 2009 Tier II benefits extended to 14 weeks and no longer dependent on a state's unemployment rate; Tier III (providing up to 13 more weeks to those in states with an average unemployment rate of 6 percent or higher) and Tier IV (providing up to an additional six weeks if the state unemployment rate is at least 8.5 percent) introduced.

December 6, 2010 Federal unemployment benefits extended and will remain in effect through the end of 2011 for workers who have been laid off for more than 26 and less than 99 weeks.

December 19, 2009 Expiration date extended to February 28, 2010.

April 15, 2010 Expiration date extended to June 2, 2010.

March 2, 2010 Expiration date extended to April 5, 2010.

July 22, 2010 Expiration date extended to November 30, 2010.



Rules and Regulations: How the Details Take Shape



April McClellan-Copeland,
Community Relations and Education

Last summer, Congress approved the most sweeping reforms to the financial market regulatory system since the Great Depression with the Dodd–Frank Wall Street Reform and Consumer Protection Act of 2010. But that was only the beginning. Now come the details—hammering out more than 250 rules among 11 different regulatory agencies (the Federal Reserve itself is responsible for developing more than 50 new rules). Many of the rules are geared toward the same goal—preventing a replay of the financial crisis that crippled the economy from 2007 through 2009.

Most people know the Federal Reserve for its highest-profile job—conducting monetary policy. But it's the Federal Reserve Board's role as a regulatory agency that empowers it to write rules to govern banks and protect consumers' financial transactions. In years past, the Federal Reserve has aimed to protect Americans in their financial dealings by implementing and enforcing laws such as the Truth in Lending Act and the Credit Card Accountability, Responsibility, and Disclosure Act.

Americans have been able to comment on proposed rules and regulations in the federal decision-making process for many years, but the rule-writing phase of the Dodd–Frank implementation provides an unusually significant opportunity for people to weigh in. Consider that the Federal Reserve Act of 1913 was all of 31 pages long; the Dodd–Frank legislation was more than 2,000 pages. The impact of Dodd–Frank is wide and deep. It is safe to say this is the best opportunity for citizens to influence federal regulatory policy in generations.

The Writing of a Regulation

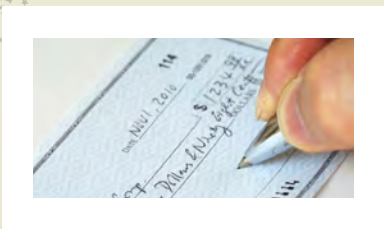
Laws often do not include all of the details needed to explain how an individual, business, state or local government, or nonprofit might follow the law. To make laws practical on a day-to-day basis, Congress authorizes certain government agencies—including the Federal Reserve's Board of Governors—to create regulations.

The impact of Dodd–Frank is wide and deep. It is safe to say this is the best opportunity for citizens to influence federal regulatory policy in generations.

New rules under Dodd–Frank will reach nearly every piece of the financial market apparatus. Among the key provisions:

- A Financial Stability Oversight Council, whose members include the Federal Reserve Chairman, Treasury Secretary, and Federal Deposit Insurance Corporation head, to monitor systemic risks

Examples of Past Board of Governors Regulations



Regulation CC

Check Clearing for the 21st Century Act (Check 21)

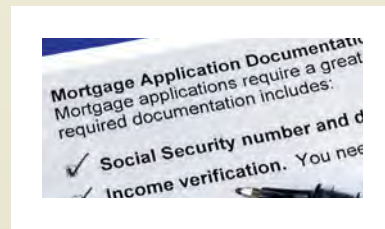
The 2003 Check 21 Act allows banks to process more checks electronically with a new negotiable instrument called a substitute check. If you need to retrieve a record of canceled checks, now you can see copies of check fronts and backs, the legal equivalent to the real thing.



Regulation B

Equal Credit Opportunity Act

Enacted in 2003, this regulation prohibits lenders from discriminating against credit applicants, establishes guidelines for gathering and evaluating credit information, and requires written notification when credit is denied.



Regulation C

Home Mortgage Disclosure Act

As amended in 2002, this regulation provides the public with loan data that can be used to help determine whether financial institutions are serving the housing needs of their communities; assists in identifying possible discriminatory lending patterns; and enforces anti-discrimination statutes.

The Rule-Making Process

PROPOSAL AND NOTICE

- Agency proposes regulation, issues a press release, and lists it in the *Federal Register* as an advance notice of proposed rulemaking, which invites the public to participate in the rulemaking process.
- Agency sends proposed regulation to the Office of Management and Budget (OMB) for approval.

PUBLIC COMMENT

- Public has a comment period (usually 30 to 90 days), during which time written comments either supporting or opposing the proposed regulation or ideas for changes can be submitted at www.regulations.gov or through specific regulatory agencies.
 - Comments can be simple or contain detailed arguments.
 - Anyone—from professional lobbying groups to organized interest groups to individuals—can submit comments on a proposed rule.
- Recent research finds evidence that public input influences policy content, especially when the public is involved in the early stages, though there are conflicting opinions about the role that public feedback plays during rulemaking.

What's the Difference Between a Law and a Regulation?

Law: a rule of conduct or procedure established by custom, agreement, or authority; once approved by Congress and the president, a new law is called an *act*

Regulation: specific requirements issued by governmental agencies about what is legal and what is not

Rule-making: the process by which regulations are developed

- Enhanced standards for all large bank holding companies—those with greater than \$50 billion in assets—as well as certain nonbank financial firms (insurers such as AIG, for example)
- Greater transparency to the over-the-counter derivatives market; derivatives include vehicles such as credit default swaps, a sort of insurance that was blamed for the buildup of risk that led to the financial crisis
- A Consumer Financial Protection Bureau, funded by the Federal Reserve but operating independently, to administer consumer financial protection laws

And that's just for starters. Other elements will reform the regulation of credit rating agencies and require registration by hedge fund managers with the Securities and Exchange Commission.

The rule-writing phase of Dodd–Frank began in earnest early last fall. By the end of 2010, the Federal Reserve, sometimes jointly with other agencies, had already opened comments for seven proposals and initiated studies on several others. A study of the proposed Volcker Rule, for example, was launched with the Financial Stability Oversight Council to learn more about the impact of limiting the amount of proprietary trading—essentially, playing the market with their own money—that banks can do. In late December, the Board asked for comments on a rule to establish new standards on debit card interchange fees, trying to ensure that debit card transactions are reasonable and proportional to their costs. ■

GOVERNMENT OVERSIGHT

- OMB reviews the proposed regulation and the analysis supporting it and makes sure the proposal fits with current administrative policy. In the majority of cases, OMB approves the regulation as is.
- The OMB review has historically been a confidential process, though the level of confidentiality changes with each administration.
- In recent years, special interest groups have sprung up to promote open government, accountability, and citizen participation.

FINAL RULE

The agency considers all the comments, revises the regulation accordingly, and issues a final rule, which is published in the *Federal Register*.

AMENDMENTS

- Agency proposes changes to the final rule, based on a new law or review of the regulation.
- Changes are offered for public comment.
- Final amendments are approved by the agency and published in the *Federal Register*.
- If there are unusual circumstances, an agency may instead issue an interim final rule.

Resources

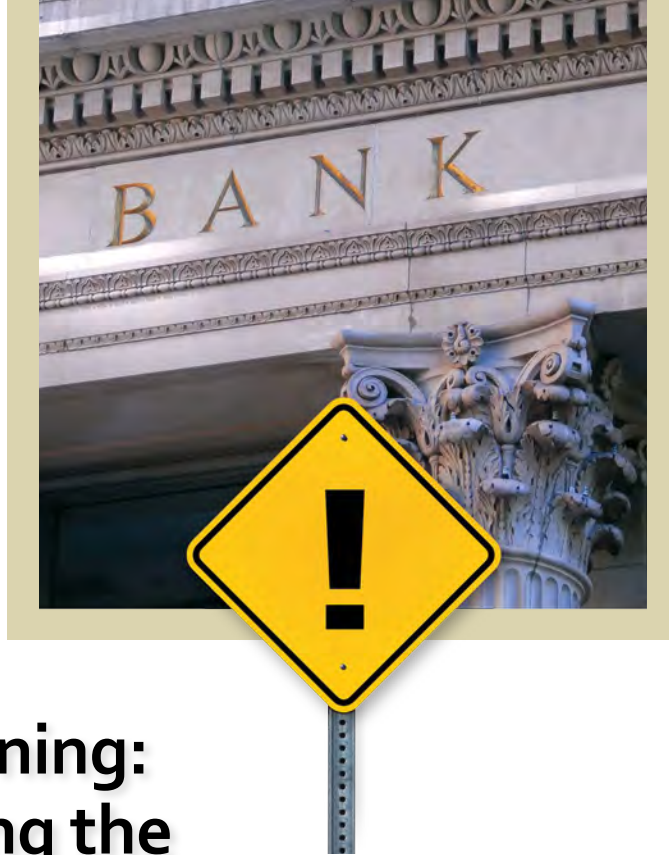


For updates on regulatory reform progress, the Federal Reserve provides a number of resources, including

The Federal Reserve Board's "Regulatory Reform" news webpage at www.federalreserve.gov/newsevents/reform.htm

The Federal Reserve Board's Freedom of Information Office at www.federalreserve.gov or www.regulations.gov, where you can view or comment on a proposed rule

The Federal Bank of St. Louis' "Dodd–Frank Regulatory Reform Rules" webpage at www.stlouisfed.org/regreformrules



Early Warning: Introducing the Cleveland Financial Stress Index

The financial crisis has raised interest around the world in developing models that can spot the emergence of systemic risk. Last year in these pages, we described the Federal Reserve Bank of Cleveland's new early warning system, SAFE—short for Systemic Assessment of the Financial Environment. (For an explanation of how SAFE helps supervisors monitor the financial landscape, see *Forefront* Spring 2010, "Spotting a Financial Crisis Before it Happens.") Now we'd like to describe one of its essential elements—an index that tracks financial stress.



Stephen Ong,
Vice President,
Supervision and Regulation

Building a model to forecast the condition of the financial system is daunting in and of itself. Before a condition can be forecast, it must be measured. And even before it can be measured, it must be defined. In developing SAFE as a robust tool for supervisors, we needed to take a fundamental step by first defining what systemic risk actually is and then creating a measurement of it.

The key to defining the slippery concept of systemic risk depends on the ability to recognize when stress in the financial market reaches critical levels. While there is no magic threshold, it's fair to say that the probability of

systemically risky financial conditions rises when financial stress measures become elevated. Stress may be observed in the movements of various financial market components, including swings in the stock market or the rates of interest required to issue debt.

That's where the financial stress index comes in. With this index, supervisors are better able to pinpoint when levels of financial market stress have reached worrisome levels. It's much like the Dow Jones Industrial Average or the S&P 500, which are designed to measure the level and activity of the equity markets. Each index consists of a

unique set of components that are combined using related index construction methods. Interestingly, prior to 2007, a public financial stress index for U.S. financial markets did not exist. Since then, several have been developed, each with its own unique elements and methods.

The Federal Reserve Bank of Cleveland has developed its own financial stress index for use with its SAFE early warning system. The Cleveland Financial Stress Index (CFSI) is a continuous index constructed of daily public market data. These data are collected from four sectors of the financial markets: credit markets, foreign exchange markets, equity markets, and interbank markets, providing broad coverage of elements that may be indicators of financial stress.

For example, components from credit markets include various interest-rate spreads associated with debt instruments such as bonds. These spreads indicate perceived risk in these instruments, and point to potential stress in the markets. When the spread on a typical corporate bond is large, for example, it suggests that investors have grown wary of the borrower's ability to stay current. Various components from the equity markets represent volatility and, therefore, the degree of stress in those markets. In total, 11 different components derived from these four markets are combined into a single index that represents relative stress in the financial markets.

Using historical data, figure 1 depicts the CFSI and its measurement of stress in the financial system since 1994. Also included are indications of periods of financial stress events. Notice that the index began to spike even before the events in 2008 made clear the depth of the financial crisis.

Figure 2 shows the movements of specific components within the FSI, providing insight into the amount of stress that the four distinct markets of the component inputs contributed to the overall index. As the figure shows, the component from the foreign exchange market contributed substantially less to overall financial stress than did the other markets. Measures from the credit, interbank, and equity markets indicate significant levels of stress from each, contributing to the overall financial stress of the recent crisis.

The CFSI is not designed to predict, but rather to reflect, current relative levels of systemic financial stress. It is what's known as a coincident indicator. That said, its use of daily data — rather than less-frequent data, such as weekly or monthly input — provides earlier indications

Figure 1. Cleveland Financial Stress Index

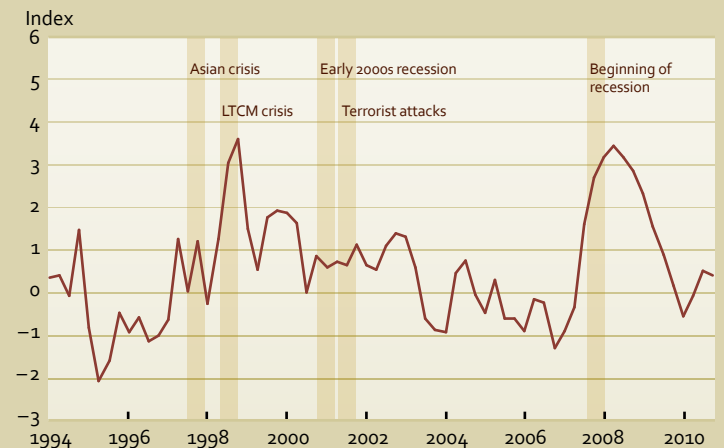
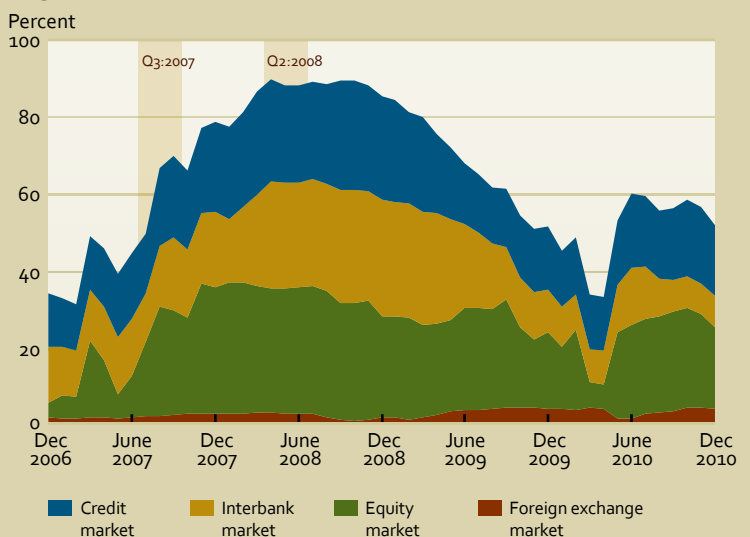


Figure 2. Components of the Financial Stress Index



Note: First shaded bar represents the onset of the crisis and the second-steepest rise on record; second shaded bar represents the peak of the crisis.

Source: Federal Reserve Bank of Cleveland.

of the existence of stress in the financial markets. Used in tandem with our SAFE early warning system, the CFSI acts as a robust measure of stress in the financial markets. In addition, the design of the index and its use of components from four distinct financial markets allow for identification of the origin of the stress. To supervisors charged with alleviating systemic risk, this is useful information indeed. ■



Coming soon

The Cleveland Financial Stress Index will be posted on the Bank's homepage. Watch for it at www.clevelandfed.org



How to Build a Bad Bank —for the Greater Good



James B. Thomson,
Vice President
and Financial Economist

Among the many unwanted things that taxpayers get socked with during a financial crisis is a portfolio of deeply distressed assets—loans gone sour, millions of them, many of them sliced and bundled into securities that nobody can sell because nobody wants to buy. The overwhelming uncertainty around these troubled assets can paralyze the financial system. Almost inevitably, they fall into the government's hands as a side effect of efforts to rehabilitate the financial system and restore credit flows.

It's an important and necessary step in nursing the financial market back to health. The government usually takes possession of troubled assets either through receivership of failing financial institutions or through programs that strip distressed assets from struggling but still open-and-operating financial firms.¹

1. The originally planned use of the \$700 billion in TARP funds was to strip (through an outright purchase of) distressed assets from the balance sheets of banks, thrifts, and nonbank financial firms.

These assets often go by the infamous term “toxic assets,” the likes of which throttled so many financial institutions in 2008 and 2009. And despite the economic damage they did over the past few years, the problem of what to do about them persists. Elements of the Dodd–Frank legislation go a long way toward averting and dealing with financial market meltdowns, as the legislation establishes a separate Federal Deposit Insurance Corporation (FDIC) resolution authority for nonbank financial firms. But absent from this legislation are provisions for handling troubled assets on the scale generated during a financial meltdown.

It is true that the FDIC's receivership operations are set up to dispose of the assets from the estates of failed financial firms during non-crisis times. U.S. federal deposit agencies are funded by assessments on the industries they insure, which limits their resources for dealing with large-scale banking problems.

In other words, the FDIC's operations currently are not geared toward dealing with the volume of distressed assets that would likely need to be managed in the aftermath of a financial crisis; systemic crises require the marshalling of resources beyond those normally available to the deposit guarantor. Hence, there is a need for an institution whose sole purpose is large-scale asset salvage—to acquire, manage, and then dispose of the overhang of distressed assets on the books of banks and other financial firms.

Such an institution is not a new concept. The government and even the private sector have created special-purpose entities to deal with troubled assets in all of the recent financial crises. From the Great Depression to the 1980s savings and loan debacle, vehicles of this sort have played a role in getting the financial market functioning again.

Some have done their jobs quite well; others not.

Drawing on these lessons, I propose the creation of a resolution management corporation, or RMC. Call it an asset-salvage entity, or bad bank. The RMC that I propose would be sponsored by and operated by the federal government. It would become operational only in response to a financial crisis where the volume of troubled assets that needs to be managed and disposed of exceeds the capacity of the FDIC’s receivership operations.

The RMC’s overarching goal: restoration of a stable, healthy financial system at a minimal cost.

The Trouble with Assets

An asset is said to be troubled, toxic, impaired — pick your term — under a number of different conditions. If it is a mortgage loan, it may be “nonperforming,” that is, the borrower is no longer making payments. It could be an entire bundle of mortgages made to subprime borrowers, in which case finding a market value may be impossible.

It’s like a carton of eggs in a supermarket. They might appear to be fine eggs, but if shoppers suspect they might be tainted on the inside, the eggs might not sell at any price. The market reaction to toxic assets is much the same.

These toxic assets, if large enough in scale, could wreak havoc on the economy. Financial institutions are reluctant to sell them, because the markets for these assets, if working at all, tend to be very thin. The problem is made worse if financial firms holding the assets are undercapitalized and likely reluctant to undertake any actions that would require them to recognize losses on these assets. Creditors and counterparties grow nervous about doing business with toxic-asset-owning financial institutions. Over time, the uncertainty bleeds out into the real economy, freezing the fundamental financial-sector activities of facilitating people’s and firms’ borrowing, saving, and investing.

The logic of stripping away toxic assets from their current owners is the same as ripping off a bandage — it hurts, but it’s best to get it over with quickly. Otherwise, you only prolong the pain.

History clearly teaches us the downside of nursing along struggling firms — from the savings and loan industry in the 1980s to Japan’s banks in the 1990s. Instead of shutting them down and seizing their assets, the government

Some Bad Banks of the Past

	Reconstruction Finance Corp.	FDIC rescue of Continental Illinois	Grant Street Bank	Resolution Trust Corp.
Year established	1932	1984	1988	1989
Purpose	Varied, but shifted to solvency support of banking industry	Take out problem loans, place them in a “bad bank,” leave the performing loans in Continental Illinois	Split Mellon Bank into two, with good assets remaining in original bank and bad assets moving to Grant Street	Manage and dispose of assets that came into the government’s hands from the estates of failed thrifts
Structure	Purchased equities from troubled institutions as a means to recapitalize them; established with its own balance sheet, funded largely by issuing its own debt claims	Part of FDIC operations	Separately chartered and capitalized bank	Constrained by funding limits; lacked a clear mission and had competing objectives; no clear exit strategy
Results	Somewhat successful	Successfully allocated cash flows associated with the distressed assets between the existing shareholders and the FDIC	Effective liquidation of Mellon’s troubled assets by tying returns to Mellon directly to the recovery value of Grant Street’s troubled assets, aligning incentives	Delays in bringing troubled assets from zombie thrifts into the RTC’s portfolio, with negative implications for asset recovery value
Authority structure	Federal law — Reconstruction and Finance Corporation Act of 1932	Existing FDIC authority	Private company action	Federal law — Financial Institutions Reform, Recovery, and Enforcement Act of 1989

injected these firms with liquidity and capital, further exacerbating and extending the economic decline. By one study (DeGennaro and Thomson), regulatory forbearance — a policy of delaying a receivership process — quadrupled the cost of the savings and loan crisis for taxpayers.

Until now, the way the government has gone about trying to restore order hasn't been very systematic. Past experience with bad banks is mixed. The Federal Deposit Insurance Corporation had some success in setting up a bad bank to handle the rescue of Continental Illinois Bank and Trust Company of Chicago in May 1984; the 1989-created Resolution Trust Corporation, by contrast, was hobbled for various reasons in its ability to manage assets from failed thrift institutions (see box: Some Bad Banks of the Past, page 13).

Four Keys

So, how should we go about establishing an effective bad bank? Four features are crucial to the proper design of my proposed resolution management corporation:

1 Transparency and accountability: Taxpayers need to be able to track losses and gains. This can be accomplished by a crystal-clear separation between the “good” and “bad” assets, acknowledging at the start the losses from toxic assets and the costs associated with managing and disposing of them. This allows for an auditable allocation of losses, which in turn properly aligns incentives for efficient management and disposition of the toxic assets.

The more transparent decisions are at the beginning, the more likely it will be that the financial system can be rehabilitated quickly and credit flows restored. A straightforward way to accomplish a transparent separation of toxic assets from the financial system would be to put the failing institution through a receivership process.

A systemic regulator — perhaps the Board of Governors of the Federal Reserve System along with either the FDIC, the SEC (for securities broker-dealers), or the Federal Insurance Office (for insurance companies), in consultation with the Secretary of the Treasury — would make the call on which firms should pass into receivership.

The troubled assets — mortgage securities and so forth — would be set in a pile and valued as fairly as possible (which, granted, could prove difficult). The creditors might receive a certificate with a percentage claim to any future cash flows from the asset. There might even be a certain comfort level in handing over the assets because of the next stage of the process.

2 A simple, unambiguous mission: A resolution management corporation should aim to maximize net recoveries on the portfolio of distressed assets under its management. Period.

The bad bank must quickly return assets to the private sector at the highest possible recovery value. A fast realization of losses is the surest path to economic recovery, as financial market players can effectively take their lumps and move on. The sick institutions themselves could be passed into a bridge institution where they would be recapitalized, and the bad assets moved into the resolution management corporation for management and rehabilitation.

If it's a security with, say, parts of 1,000 subprime mortgages, there may be no initial market in which to sell it. So the RMC would hold the security, and perhaps even take the time and effort to “rehabilitate” some of its underlying mortgages. Perhaps a certain homeowner had been out of work and not paying, but then found a job. The RMC could conceivably be the one that makes the phone calls to get the borrower back on a payment schedule, even if at a reduced rate.

There must be confidence that the bad bank will care for the assets and then speedily return them to the private sector, or be held responsible if not. The Government Accountability Office should conduct periodic audits; Congress should hear regular testimony from the bad bank's chief; and Congress should establish an independent body to oversee the operations and activities.

3 Adequate resources: Bad banks need funding and staffing. The funding is to pay for operations and costs associated with stripping troubled assets from the failing institution.

The independent bad bank should be given a revolving line of credit with the U.S. Treasury, enough to fund operations during the start-up period — perhaps about \$100 billion.

Kane's Principles for Unconflicted Asset Salvage

Edward Kane, a Boston College economist, laid out the basic principles for an effective asset-salvage entity more than 20 years ago. The entity charged with maximizing net recovery on troubled assets needs to be proficient in:

- rescue (peril reduction)
- appraisal (damage evaluation, that is, documenting and valuing inventories of damaged goods)

- property management (efficiently protecting and enhancing existing value)
- sales (searching out potential buyers, communicating appraisal information to them, and running auctions or bargaining for the best price)

Moreover, for effective asset salvage, the public salvor must have access to experts in each core activity as well as experts on the specific types of assets that come under its supervision.

Source: Kane, Edward J. 1990. "Principal-Agent Problems in S&L Salvage." *The Journal of Finance* 45(3): 755-64.

In this initial phase, the bad bank can acquire assets in a manner that preserves their value and reduces losses that insolvent and possibly neglectful institutions had let mount. After that, the bad bank should seek permanent operational funding from direct Congressional appropriations and issuance of bonds. The principal and interest on the bonds would be funded through the (eventual) liquidation of the assets. Because assets should be acquired at fair value, little or no additional funding should be required to cover shortfalls in the value of assets sold.

However structured, a bad bank should essentially be established as a shelf organization. Its charter, funding authority, and authorization for staffing and other resources would always be in place, but the RMC itself would be dormant until activated. And that activation should happen only in case of a real fire—a widespread financial crisis, not the sort of higher-frequency disruptions that are normal in a cycle. Who would declare the RMC's activation is a matter of preference—it could be the FDIC's board, the newly created Financial Stability Oversight Council, the Board of Governors of the Federal Reserve System, the Secretary of the Treasury, or some combination of these.

4 A limited life span: Once the troubled assets have been repaired and re-sold, the bad bank can fold up.

Establishing a fixed expiration date clearly ties the existence of the RMC to its function. Ten years seems like a reasonable maximum life for such an entity. Once the need for the function goes away, the RMC does, too. It also reduces incentives to speculate on asset-recovery values by limiting the maximum time any asset can be held. There is also the more technical but important benefit of easing uncertainty

among market players about who will issue claims against the expected cash flows from the troubled assets. They will have a rough idea when the cash will start flowing, because they know the bad bank will cease to exist when its job is done. Any assets remaining on the RMC's books when its charter expires could be turned over to the FDIC's receivership function for eventual sale or liquidation.

A Necessary Reform

The way we respond to crises can either help or hinder the recovery. The establishment of a government-chartered RMC could go a long way along the "helping" path. At best, a national "bad bank" should be seen as a complement to other financial-crisis rescue efforts. We will still need emergency liquidity and credit programs, for example. But financial crises have grown more frequent in recent decades. Perhaps if we had a system for dealing with the most troubled assets up front, we would lessen the need to deal with another crisis in the near future. ■

Recommended readings



Fitzpatrick, Thomas J., and James B. Thomson. 2011. "An End to Too Big to Let Fail? The Dodd-Frank Act's Orderly Liquidation Authority." Federal Reserve Bank of Cleveland *Economic Commentary* (January 6). www.clevelandfed.org/research/commentary/2011/2011-01.cfm

Thomson, James B. 2010. "Cleaning Up the Refuse from a Financial Crisis: The Case for a Resolution Management Corporation." Federal Reserve Bank of Cleveland Working Paper 10-15. www.clevelandfed.org/research/workpaper/2010/wp1015.pdf

DeGennaro, Ramon P., and James B. Thomson. 1996. "Capital Forbearance and Thrifts: Examining the Costs of Regulatory Gambling." *Journal of Financial Services Research* 10(3): 199-211.

Keeping Banks Strong— Countercyclical Capital Requirements



James B. Thomson,
Vice President
and Financial Economist



Joseph Haubrich,
Vice President and Economist

To measure a bank's strength, one could look at factors like profitability or stock price, but few gauges are as revealing as a bank's capital level. That is why supervisors are increasingly turning to formal capital regulation as a way to promote financial stability. The belief is that the stronger individual institutions are, the safer the entire financial system will be.

But capital requirements can have unintended effects because they tend to be "procyclical." During economic expansions, banks need a smaller equity cushion to absorb unanticipated losses in their assets than they do during contractions. As a result, they increase leverage to accommodate credit demand in good times. They see little need to boost capital levels when credit losses are low and expected to remain that way. But in bad times, higher credit-default rates force banks to eat into their capital buffers.

Faced with continued losses, banks look to conserve their remaining capital, partly by reducing the credit supply.

The upshot of procyclical capital requirements is that economic swings are more intense than they otherwise would be. This is how credit bubbles are formed and burst.

That's what happened in the Panic of 2008, when the banking system corrected for its earlier exuberance by dramatically curtailing lending activity and hoarding capital. How can we avoid that problem in the future? How can regulators encourage financial institutions to increase their capital in good times, anticipating their needs when times turn bad? How can we start thinking about the merits of countercyclical capital requirements?

Last October, the Federal Reserve Bank of Cleveland held a conference to address these questions.

Performance, Risk, and Capital Buffer under Business Cycles and Banking Regulations: Evidence from the Canadian Banking Sector

by Alaa Guidara, Van Son Lai, and Issouf Soumaré (Laval University, Québec)

Canada offers an interesting case study for the United States. Although their economies are closely connected, the two nations' banking sectors differ in both structure and performance. Canada's system is dominated by a handful of nationwide banking companies. The United States has more than 10,000 insured depository institutions and, although it has a few mega-banks, it has no truly nationwide bank.

Guidara and his colleagues note that besides the Basel international capital standards, Canadian banks are subject to a leveraging constraint that could be adjusted according to the phases of the business cycle, producing what's known as a variable capital buffer. U.S. banks are also subject to a leveraging constraint, but theirs is fixed and cannot change with the business cycle.

To see how capital buffers affect the Canadian banking system's performance, the authors test the relationship between changes in the capital buffer, bank risk, and bank performance. They find evidence that Canadian capital buffers tend to be countercyclical. Moreover, they find a positive relationship between Canadian banks' capital buffers and their riskiness.

What these authors do not account for, however, is that Canadian banks are likely to have higher charter values than their U.S. counterparts—and charter values act as a constraint on risk-taking. If this structure results in Canadian banks having high charter values, then they would be expected to hold less risky portfolios than U.S. banks and be better positioned to weather an economic downturn.

Countercyclical Provisions, Managerial Discretion, and Loan Growth: The Case of Spain

by Santiago Carbó-Valverde and Francisco Rodríguez-Fernández (University of Granada)

Spain provides another useful model for countercyclical regulatory policy. In Canada, the buildup of capital buffers might simply represent passive accumulation of earnings during a strong growth phase. But starting in 2000, Spain adopted a policy of countercyclical loan-loss provisioning, which sets aside reserves when bank profits are high and loan growth is strong.

By forcing banks to set aside reserves in good times, the policy reduces the near-term profitability of bank lending and reduces incentives to overlend. In doing so, this policy tames procyclicality in the bank credit cycle. Dynamic provisioning also reduces the impact of loan portfolio deterioration on bank credit decisions. This happens because reserves for loan losses can be drawn down during recessions, lessening the need to set aside additional earnings to cover them.

To analyze how Spain's dynamic provisioning policy affects loan growth, the authors use quarterly data on a sample of Spanish banks from the first quarter of 2001 through the first quarter of 2010. They test whether loan-loss provisioning in Spain before and during the financial crisis resulted in procyclical reserving, income smoothing, countercyclical loan growth, or some combination of them. Overall, they find evidence of procyclical reserving and income smoothing, although both of these effects decrease over the sample period. The authors do not, however, find evidence that dynamic loan-loss provisioning dampened loan growth at the peak of the credit cycle. That is to say, the Spanish policy failed to do one of its most important jobs—smoothing loan growth over the credit cycle by reducing incentives to overlend during the peak of the cycle.

The Trade-offs between Capital and Liquidity Requirements: Theory, History, and Empirical Evidence

by Charles Calomiris (Columbia University)

Calomiris reminds us that formal capital regulation is a relatively modern phenomenon. For most of U.S. banking history, supervision focused on liquidity (the liability side of the balance sheet rather than the asset side). Because banks' liabilities—banknotes before the Federal Reserve era and bank deposits after—are an important part of the money supply, regulation ensured that banks could meet maturing obligations, particularly during periods of financial distress. A bank's failure to redeem banknotes or inability to offset deposit withdrawals would mean closing its doors. Bank clearinghouses arose in the nineteenth century partly to provide a liquidity backstop for their members and, sometimes, for the broader banking system.

A lesson from the past, which was relearned during the crisis of 2007–09, is that general market liquidity tends to dry up in response to shocks to the system, particularly when firms start hoarding their liquidity as part of a preservation strategy. To put it another way, a source of liquidity is protective only if it can be tapped during a crisis.

The next iteration of the Basel international capital accords (Basel III) will include two kinds of liquidity standard. One is a coverage ratio that requires banks to hold enough liquidity to withstand 30 days of net cash outflows. The other is a net stable funding ratio that aims to lessen mismatches between the maturity structures of assets and liabilities. For example, a bank wouldn't want to have all of its assets in long-term mortgages and most of its liabilities in short-term deposits. Liquidity risk also gets attention in the 2010 regulatory reform act.

Calomiris argues that regulatory policy should refocus on liquidity and liquidity risk. But when establishing liquidity standards, the devil is in the details. As Calomiris sees it, a practical approach to measuring liquidity and implementing liquidity standards remains elusive. An open question is whether policymakers' current efforts to reward financial market firms for limiting liquidity risk will prove productive.

<p>Incentive Compensation, Accounting Discretion, and Bank Capital</p>	<p>by Timothy W. Koch, Dan Waggoner, and Larry D. Wall (Federal Reserve Bank of Atlanta)</p>
<p>Most writing on regulatory reform doesn't bother with connections; it often treats the effects of policy in isolation. A useful corrective to this practice is provided by researchers at the Atlanta Fed, who look at how new regulatory guidance on bankers' pay will interact with accounting rules to affect <i>how</i> banks adjust their capital buffer in good times and bad.</p> <p>Because accounting rules allow discretion in how firms report gains and losses, it's not surprising that firms engage in earnings management, generally smoothing their earnings over time. Nor is it surprising that bankers' compensation affects how they smooth earnings. And because retained earnings increase bank capital, and declaring losses lowers it, anything that affects earnings management affects bank capital.</p> <p>Regulatory guidance on compensation will have somewhat contradictory effects on the cyclicity of bank capital. A lot depends on whether the banker's pay is based more on accounting earnings or on stock</p>	<p>price. If it's earnings, the new guidance will reinforce the current countercyclical pattern that results from smoothing earnings. With more compensation coming from deferred bonuses with a potential claw-back (that is, the ability of the firm or regulators to seek repayment of some or all of a bonus payment), managers will want to make sure earnings stay steady in the future, so that they actually see that bonus when it is due to arrive. And with less sensitivity to performance, bumping up earnings this year won't add a lot to that bonus.</p> <p>Putting more of the bonuses in stock, the other alternative, could have the opposite effect. Managers could want a high price when they sell their stock or exercise their options, so they might want to goose earnings in the short term to boost share prices when they sell.</p> <p>The upshot is that incentive guidance on capital may have ambiguous effects, which is less than satisfying. But there is really a larger point at stake—the need to consider these sorts of interactions when making policy, setting regulations, or establishing guidance.</p>

<p>Accounting for Banks, Capital Regulation, and Risk-Taking</p>	<p>by Jing Li (Carnegie Mellon University)</p>
<p>Li formulates the regulatory question as one of choosing a capital requirement and how bank capital is measured (that is, the accounting standard). The question comes down to which accounting regime most effectively controls excessive risk-taking by banks, given that the regulations can have costly side effects.</p> <p>The paper considers three accounting regimes: "historical cost" accounting, in which assets are valued at their historical price; "lower of cost or market value" accounting; and "fair value" accounting, in which assets are marked to market prices. The accounting regime that is adopted may effectively reduce capital, driving levels below what regulators require and forcing an intervention. For example, under fair-value accounting, a drop in the price of the asset would show up as a loss, reducing capital, while value measured at historical cost would show no change. If, as seems likely, asset prices move along with the business cycle, the choice of accounting standard also affects the amount of cyclicity in bank capital.</p>	<p>Which accounting standard is best? The answer depends partly on which comes first, the accounting standard or the capital requirement. The government might coordinate these requirements, but the Federal Reserve and the Financial Accounting Standards Board are quite independent of each other.</p> <p>Overall, regulators face a rather complicated problem. Capital requirements can reduce risk, but setting them too high shrinks the banking system and reduces the liquidity they provide. Adopting the appropriate accounting standard can help, but at the cost of curtailing bank loans to productive enterprises. Regulators must balance the relative importance of two bank activities: funding new businesses and providing deposit accounts. Instead of coming to a once-and-for-all decision, Li's paper highlights the trade-offs and tough choices that banking regulators and accounting boards must face.</p>

<p>Countercyclical Regulation under Collateralized Lending</p>	<p>by Laura Valderrama (International Monetary Fund)</p>
<p>Some banking historians have described the evolution of the recent financial crisis as a run on collateral, especially in the repo market, where institutions agree to sell securities and then repurchase them at a specified date and price.</p> <p>Bank capital regulation that focuses on credit risk doesn't prevent the type of contagion that exists in the interbank collateralized lending markets. After all, the banks in Valderrama's model are assumed to</p>	<p>be default-free. So she proposes that regulators adopt policies that deal specifically with the "spread of systemic liquidity risk" through collateral runs. She shows that under certain conditions, adding a liquidity buffer, a capital buffer, or a regulatory haircut on collateral could reduce the probability of a repurchase run and help stabilize financial markets.</p>

Credit Derivatives and the Default Risk of Large, Complex Financial Institutions

by Giovanni Calice (University of Southampton),
Christos Ioannidis (University of Bath), and
Julian M. Williams (University of Aberdeen)

These authors explore a method of setting explicit numerical values for bank capital requirements. By looking at the risk in 16 large, complex institutions as well as the risk in the market for credit default swaps, their paper paints an intriguing picture of risk transmission.

The story begins with a standard measure of risk that comes from Nobel Prize winner Robert Merton, something called distance to default. Let's say the bank owns a portfolio of assets—loans, government bonds, cash in its ATMs—and that its portfolio is risky. Loans may go bad, bond prices may fall, and robbers may steal the cash. The bank also has debts, mainly to depositors but also to investors who have bought senior and subordinated bonds. Merton assumes that when the value of the assets falls below the value of the debt, the firm is bankrupt and must close down (this leaves out accounting issues, such as when the value is declared—admittedly important but sometimes a distraction).

How far is the bank from defaulting? The distance-to-default approach starts by finding out the bank portfolio's risk or, put another way, its variability. This is measured in standard deviations, perhaps familiar from statistics classes. The distance to default is the number of standard deviations that the bank's value must fall before it drops below the value of the debt. The more standard deviations, the further the distance to default and the lower the chance of failure. Using standard

deviations allows us to compare the riskiness of different-sized banks. It would also make sense to declare a distance-to-default equivalent to how much money a bank would have to lose to become insolvent, but that might make a bigger bank look safer than a small one, even if their chance of failure is the same.

It turns out that the distances to default of large, complex financial institutions (like Citigroup and Goldman Sachs) often move together. The distances also move together with the volatility of two indexes of credit-default-swap markets. Credit default swaps are a way to protect against bonds defaulting. One party to the swap "buys protection," paying what amounts to an insurance premium. The other party "sells protection" by agreeing to make a large payment if the bond defaults. There are two indexes for stocks, the Dow Jones and the S&P; likewise, there are two indexes for credit defaults, the iTraxx and the CDX. Using these indexes, Calice and his colleagues show that the volatilities of bank assets and credit default swaps move together. The authors put this down to the transmission of volatility across banks via credit default swaps.

Furthermore, the distance to default measure provides a natural stress test for a bank's capital: Is the capital buffer large enough to make default unlikely? The influence of the aggregate iTraxx and CDX indexes, then, adds a cyclical component across firms.

Managing Credit Booms and Busts

by Olivier Jeanne (Johns Hopkins University) and
Anton Korinek (University of Maryland)

The authors ask how policymakers should respond to the continual booms and busts in credit and asset markets. They point out that if there is too much of something, one solution is to tax it. They argue that there is too much borrowing, and prescribe a "pigouvian tax" (after Arthur Pigou, the late Cambridge University economist). Of course, this adds the problem of determining the right tax level, which Jeanne and Korinek tackle.

The root of the problem is that excessive borrowing makes the economy vulnerable to a feedback spiral when an adverse shock arrives. Falling housing prices, worsening unemployment, or other shocks make credit tighter, so people spend less. This further reduces asset values and makes credit even tighter, continuing the downward spiral. So the financial system exacerbates booms and busts in credit and asset markets and, ultimately, in output and employment.

Curiously, the authors' solution—to discourage excessive borrowing by taxing it—is exactly the opposite of U.S. policy, which subsidizes borrowing by making interest tax deductible for businesses and home mortgages.

Jeanne and Korinek then take a step that too often is skipped: They set out to quantify how much tax should be levied. Using U.S. data, they estimate that imposing an additional tax of 0.5 percent on household borrowing, and slightly more on business borrowing, would counteract the effect of excessive borrowing. For example, households might pay 4.5 percent instead of 4 percent on a loan. Furthermore, the tax rate should vary with the business cycle. In a boom, the tax slows the growth of debt; but during a recession, the tax drops to avoid a worse decrease in spending. ■



Conference on Countercyclical Capital Requirements

For links to conference papers, go to
www.clevelandfed.org/research/conferences/2010/10-14-2010_capital/index.cfm



Resources

Countercyclical capital requirements are the subject of some proposed rules under the Dodd–Frank Act. For more information, see
www.federalreserve.gov/newsevents/reform.htm

Slowing Speculation: A Proposal to Lessen Undesirable Housing Transactions



Thomas J. Fitzpatrick IV,
Economist



O. Emre Ergungor,
Senior Research Economist

In the City of Cleveland, 8.2 percent of the housing stock sits vacant or abandoned, according to the U.S. Postal Service. In this environment, private investment in foreclosed properties may sound like welcome news. Indeed, some speculative purchases can add liquidity to a distressed market and help heal distressed neighborhoods when properties are purchased for rehabilitation.

But if speculators fail to keep up with maintenance and taxes, allowing properties to sit empty and in disrepair, the opposite happens. In weak-market cities like Cleveland, some speculative investments extend the time that properties sit vacant, lower the value of nearby homes, and make the vacancy problem much more challenging to fix.

But are such speculative investments a large enough problem to demand a policy response? We believe they are. Evidence shows that some investors may be transacting irresponsibly, potentially hurting neighboring homeowners in the process. We outline one of many policy options states might consider if they are looking for solutions to this problem.

Financing Holds the Key

The key to understanding—and addressing—these harmful transactions is to look at how most speculative transactions are financed. When a homebuyer applies for a mortgage, the bank requires that all claims on the property, including tax and code enforcement liens, be paid off by the closing. Banks also require that past-due taxes that have not yet become liens be paid prior to closing, so they do not supersede the bank's claim on the property.

But speculative home purchase transactions are not always funded through the banking system. If investors pay cash or secure nonbank seller financing, they can postpone paying off liens, past due taxes, and housing code assessments against the property, often for many years.

To address this problem, policymakers would need a rule that discourages investors from trying to quickly flip low-value properties without maintaining or improving them. One potential solution would require that all past-due taxes and code enforcement penalties be cleared before county recorders declare a property transfer official. This change would target the speculative activity that destabilizes weak housing markets.

This rule would apply to all residential property transfers but, in practice, would affect only the cash or seller-financed transfers of property with outstanding taxes or housing code assessments. To see how widespread cash and seller-financed transactions are, we analyzed the property transfers in Cuyahoga County, Ohio (home to Cleveland),



in 2009. Transfers totaled 16,828 excluding foreclosures; about half of them did not have any associated mortgage as reported under the Home Mortgage Disclosure Act. That is, they were most likely all-cash or seller-financed transactions. All transactions with conveyance amounts less than \$10,000 (almost 3,000 of them) were in this category. Of those small-dollar transactions, almost one in three had a tax delinquency at the time of transfer.

We do not suggest that all of these transactions involved harmful speculation, as many delinquencies clear around the time of the transfer. For a significant number of properties, however, tax delinquency is persistent or grows after the transfer. These are the properties that will likely be affected by this proposal. (Note: While we include housing code assessments in our proposal, we are unable to report the data on this component of the problem because of lack of uniform record-keeping across municipalities.)

Undesirable Housing Transactions in Cuyahoga County, Ohio

We consider speculation harmful when the buyer has no intention of improving or maintaining the property or paying its taxes — but expects to resell as much of its stock as possible quickly, “as is,” and at a small markup. Speculators tend to factor in the probability that some of their purchased properties will languish or be lost to tax foreclosure. But they buy them anyway because the markup on properties sold is high enough to pay for the lost properties.

Keep in mind that a markup as low as a few hundred dollars can still provide a significant return in places such as Cuyahoga County, Ohio, where more than 40 percent of properties sold by financial institutions after a foreclosure are priced at less than \$10,000, according to a 2008 Case Western Reserve University study (see “Resources” at the end of this article). This speculative activity seems to be most common among bulk buyers who purchase low-value properties in large numbers.

We consider speculation harmful when the buyer has no intention of improving or maintaining the property or paying its taxes — but expects to resell as much of its stock as possible quickly, “as is,” and at a small markup.

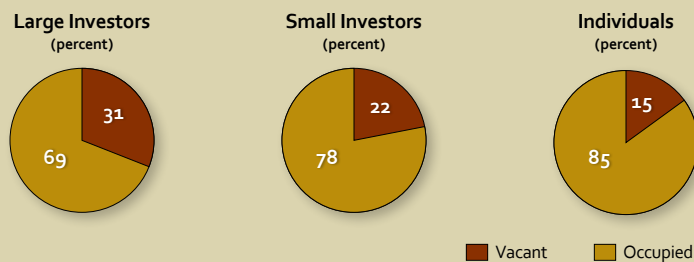
How is this strategy profitable? When buying foreclosed or lender or real estate-owned (REO) properties, irresponsible buyers have a built-in advantage over rehabbers. While rehabbers must take into account the costs of improvements and delinquent tax payments, speculators who plan to flip the property at a quick profit don’t, so they can bid higher. Typically, after taking over the property, the speculator sells it as soon as possible to an unsuspecting out-of-state (or even out-of-country) buyer who believes the property is a great investment.

This belief could be rooted in the promise of future appreciation or a predictable rental income stream after minor rehabilitation. Only after the transaction closes does the new buyer find out that the property has more in delinquent taxes than the price paid to acquire it, or that the property is in need of substantially more rehabilitation than was originally thought. More often than not in these situations, the new buyer abandons the property, which may go into tax foreclosure and be sold at auction, where it may once again be acquired by a bulk buyer. As this cycle continues, the property remains vacant, falls into further disrepair, and becomes a nuisance to the entire neighborhood.

Consider what would happen if these speculators *didn’t* exist. First, distressed property values would fall, freeing up resources for rehabbing or demolition. Second, a large amount of distressed property would go on the market, which would allow for large-scale rehabilitation, redevelopment, or demolition and the associated economies of scale.

For example, the Cuyahoga County Land Bank (which acquires distressed properties to demolish, rehabilitate, or repurpose for long-term neighborhood stability) has been able to regularly solicit bids in small and bulk packages for demolition as its inventory has grown. As a result, the land bank reports that it has seen its average demolition cost fall by nearly 35 percent.

Figure 1. Outcomes for Homes Sold out of Foreclosure in Cuyahoga County, Ohio, 2007–09



Source: Cuyahoga County Auditor.

Substantiating Anecdotes: Data on Housing Transactions and Tax Delinquency

Some transactions illustrate the bulk-buyer business model. For example, Cuyahoga County records show that one tax-delinquent property was acquired by a bulk buyer from a securitization pool for \$1 and resold four days later for \$10,000. The new owner (a low-volume investor) resold the property six months later for \$72,000.

A fascinating transaction, but how frequently are properties sold in bulk transactions? And what is the evidence for harmful activity? We looked at the period from 2007 to 2009 and divided investors into groups: high-volume (large) investors, who purchased or sold 11 or more properties, and low-volume (small) investors, who purchased or sold four to 10 properties. The great majority of transactions occur among people who buy or sell three or less properties over four years; we classify those as “individuals” buying or selling for consumption purposes.

Cuyahoga County Auditor’s records show that of 18,692 residential properties sold out of foreclosure by financial institutions and government agencies in the 2007–09 period, about one-quarter were bought by large investors, another one-quarter by small investors, and most of the rest by individuals. As figure 1 shows, 31 percent of the properties bought by large investors were still vacant as of June 2010.

The vacancy rate was 22 percent for small investors and 15 percent for individuals (and these differences persist after controlling for property characteristics). Clearly, outcomes for homes bought by some investors are worse than for those bought by others.

Furthermore, large investors seem to have a preference for tax-delinquent properties. In 2009, 21 percent of the properties sold with a tax delinquency from the previous year were purchased by large investors. Yet, they purchased only 9 percent of properties sold without a delinquency.

This preference for tax-delinquent properties wouldn’t matter if the buyers paid those taxes, but that isn’t the case. The weighted average of the green bars in figure 2 shows that 44 percent of the properties purchased by large investors in 2009 were later tax-delinquent, despite being current the previous year. Comparable figures are 39 percent for small investors and 21 percent for individuals. In transactions where large investors sell to small and other large investors (red and green bars farthest to the right in figure 2), this pattern is particularly pronounced. In almost 60 percent of such transactions, the purchaser does not pay property taxes.

Meanwhile, the data show that when individuals and financial institutions (yellow and blue bars in figure 3) purchase a tax-delinquent property from any group, delinquencies consistently get paid more than half of the time. Large investors, however, consistently avoid paying back taxes. The most glaring result is when large investors sell tax-delinquent property to other large investors; delinquent taxes are paid in only 13 percent of those cases (green bar farthest to the right in figure 3). When large investors sell to small investors, back taxes are paid in 23 percent of the transactions (red bar farthest to the right in figure 3). Added up, the data show that most of the time, individuals transact more responsibly than small and large investors.

A final situation worth paying attention to is when a property’s tax balance actually grows after a purchase (figure 4). In these transactions, not only are back taxes not being paid, but purchasers are not paying current taxes as they come due. Again, the culprits are mostly large investors who sell to other large investors (green bar farthest to the right in figure 4)—who allow the delinquent tax balance to grow nearly 76 percent of the time. In almost all types of property transfers, investors are the worst tax avoiders.

Status Changes of Tax-Delinquent Properties in Cuyahoga County, Ohio, by Seller and Buyer Type, 2009

Buyers: Small investors (brown), Financial institutions (blue), Individuals (yellow), Large investors (green)

Figure 2. Properties That Fell into Tax Delinquency

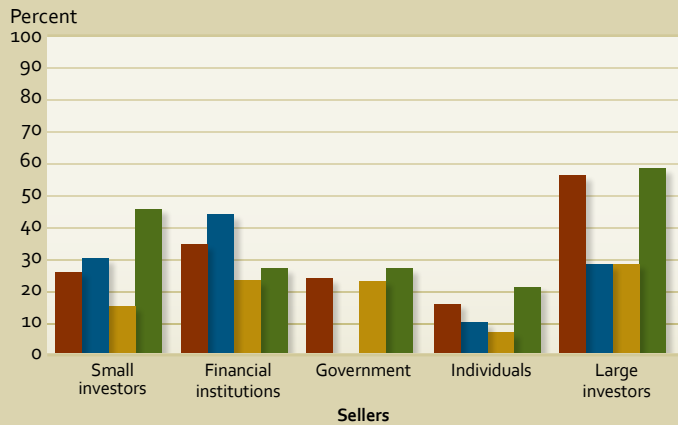


Figure 2a. Properties That Fell into Tax Delinquency: Low-value Transactions

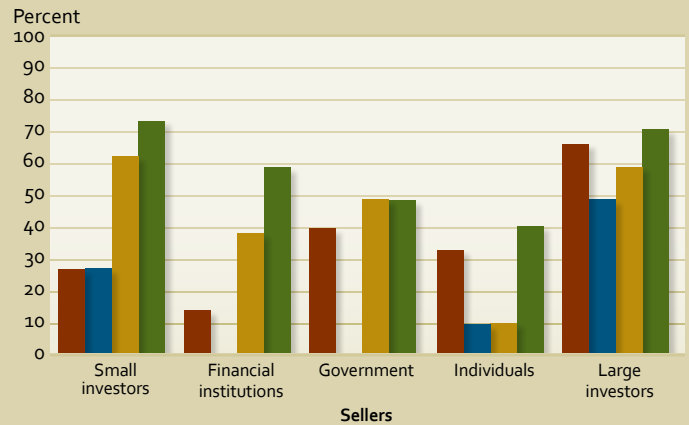


Figure 3. Properties That Became Current

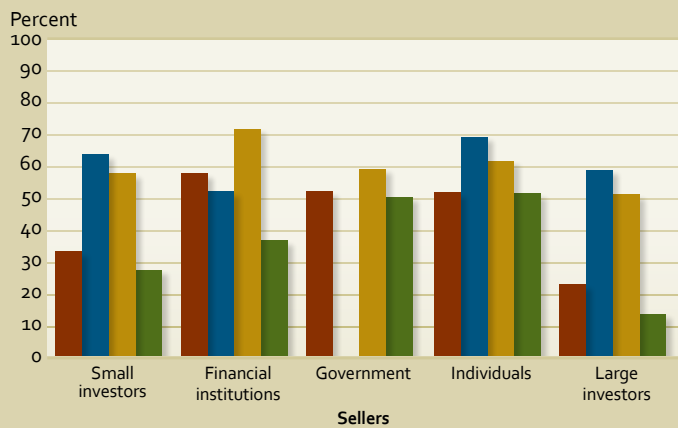


Figure 3a. Properties That Became Current: Low-value Transactions

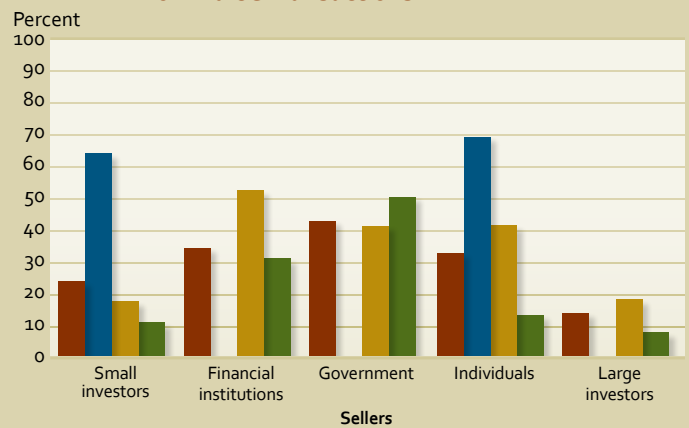


Figure 4. Properties Whose Tax Balance Grew after a Purchase

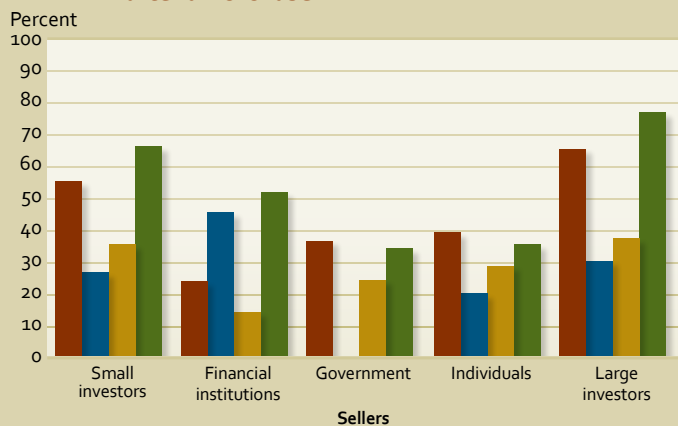
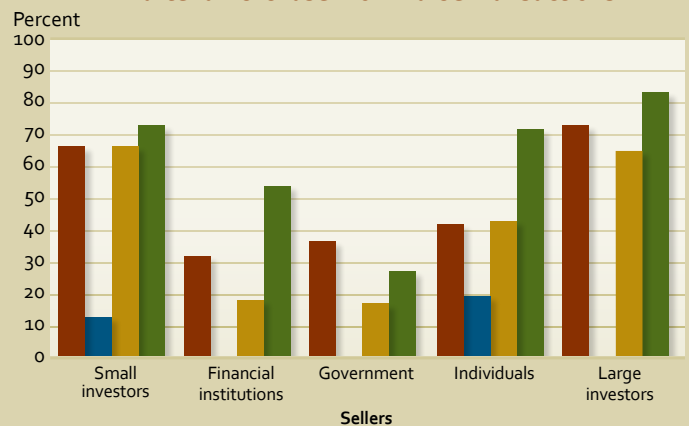
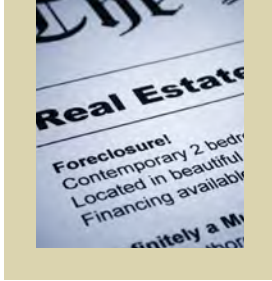


Figure 4a. Properties Whose Tax Balance Grew after a Purchase: Low-value Transactions



Note: Low-value transactions have conveyance amounts of less than \$10,000.
Source: Cuyahoga County Auditor.



Taken together, these findings support the anecdotal reports that large and small investors pay the taxes on properties

they purchase less frequently than financial institutions, governments, or individuals. The problems are more acute in the low-value cash or seller-financed transaction category with conveyance amounts of less than \$10,000 (figures 2a, 3a, and 4a).

A more promising policy solution would require a change in state law: preventing county recorders, who are charged with tracking owners of real estate, from recording any new ownership of property that has outstanding delinquent taxes or code violation penalties.

While we have no direct evidence of harmful activity, owners of tax-delinquent properties are not likely to have the incentive to maintain them because they can be taken away in a tax foreclosure. The result can be devastating to neighborhoods.

Potential Remedies

Some have suggested that one way to address the harmful-transaction problem would be to create a list of known repeat offenders and prevent them from acquiring property. A law of this type exists in Pennsylvania, where municipalities may petition to prevent a foreclosure auction purchaser from acquiring a property if that purchaser has been convicted of a housing code violation and has not corrected it.¹ But using blacklists to prevent property acquisition may not be effective in a world where anyone placed on such a list could incorporate a new entity to continue acquiring property, which can be done quickly and inexpensively. In that sense, blacklists may be under-inclusive.

A more promising policy solution would require a change in state law: preventing county recorders, who are charged with tracking owners of real estate, from recording any new ownership of property that has outstanding delinquent

taxes or code violation penalties. Currently, the Ohio Revised Code requires recorders to record authentic instruments properly presented.² Changing the law to prevent tax avoiders from closing on a transaction would directly address the problem by undermining the business model undergirding undesirable transactions. Unless purchasers paid taxes, improved the property, or kept up to code, they would be unable to legally transfer ownership.

This solution would give every purchaser an incentive to maintain properties and keep them on the active tax rolls, or they would be unable to turn over inventory. Such a transfer restriction would discourage buyers from purchasing property for which they could not provide upkeep. It might also prevent corporate shell games, where a corporate entity sells a property to another corporate entity controlled by the same owner or owners in order to delay delinquent tax or housing code enforcement actions.

A few words of caution: Because well-meaning purchasers can fall behind on taxes, broad transfer restrictions may be overly inclusive. Policymakers should carefully craft such restrictions to minimize unintended consequences. In the presence of such a restriction, for example, depository institutions may be reluctant to foreclose on a property if the property owner failed to pay taxes and they were not paid by the lender. Transfer restrictions may also chill the acquisition of properties with large amounts of outstanding taxes or code violations, even when potential purchasers would seek to rehabilitate the property or otherwise ensure its productive use.

These unintended consequences can be mitigated to some extent. For example, policymakers may want to allow properties to be transferred to public entities or land banks, to facilitate voluntary surrender of property despite back taxes and code violations. This type of exception may involve a county's forgiving some or all back taxes when responsible buyers purchase property or allowing ownership transfers if the new owner agrees to pay taxes or code violations over time. Additionally, it may make sense to allow involuntary property transfers related to a death, bankruptcy, foreclosure, or divorce, despite back taxes or code violations. These exceptions to transfer restrictions

1. See 53 Pennsylvania Statutes § 7328(b.2) & 72 Pennsylvania Statutes § 5860.619(c) (2010), enacted in 1998. Missouri attempted to create a similar provision that prohibits persons from bidding on property at sheriff's sales, VAMS § 141.550.2(2) (1998), but the entire bill containing the law was struck down because the title of the bill was vague, violating Missouri's constitutional requirement that bills have clear titles. See *Home Builder Association v. State*, 75 S.W.3d 267 (Sup. Ct. Mo., 2002).

2. Ohio Revised Code §§ 317.13 & 317.22 (2010).

should be carefully crafted. Broad exceptions may allow undesirable transactions to continue, while narrow exceptions may inhibit healthy transactions.

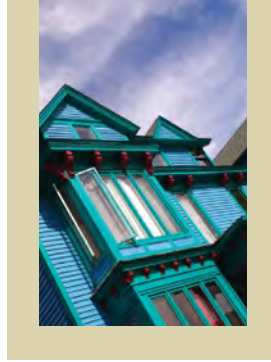
Even with these exceptions, there could be a short-run slowdown in transfer activity as the market adjusts to the new rules. While some homeowners in the affected areas may see this as a negative outcome, we believe there are positive long-run consequences for all weak markets. Properties will be channeled to the land bank or to private rehabbers at lower cost in the absence of irresponsible buyers. This frees up resources for rehabilitation or demolition. A smaller and more pristine housing inventory should stabilize home prices and strengthen the market in the long run.

Another possible unintended consequence of this proposal is that in the short run, the restriction would slow the transfer of all property because of the time it takes to check for back taxes and assessments. This delay could be significant if records on real property taxes and other public assessments are not kept in an easily accessible electronic format.

According to an informal survey we conducted with county recorders, at least four of Ohio's 88 counties do not yet keep electronic tax records. Code violation records are kept at the municipal level, and it is unclear how many are kept electronically. To avoid slowing the transfer of real property, the state legislature may choose to allow counties to opt in or out of restrictions on transfer. In any case, lawmakers would need to work closely with lenders, real estate buyers and sellers, community development practitioners, and county governments to create exceptions and minimize unintended consequences while limiting harmful transfers.

Final Thoughts

Stories about irresponsible property speculators abound. Their very business model allows them to pay more than bidders who are interested in rehabilitation. Our analysis shows that large investors focus on tax-delinquent properties and often fail to pay property taxes. As a result, entire communities sometimes are unable to break the cycle of disinvestment and decline of their housing stock.



Requiring all past-due taxes and code enforcement penalties to be cleared before transfer could help many neighborhoods in their battle against vacancy,

abandonment, and blight. It is one of many ways policy-makers could discourage the transactions that hinder the rehabilitation of housing stock. At a time when government budgets are stretched thin because of declining tax revenues, this policy proposal may give a jolt to the collection of property taxes. Cuyahoga County, for example, could have collected approximately \$8.5 million in past-due taxes in 2009 under this proposal, notwithstanding the likely decline in the number of property transfers one would expect as high-volume investors left the market. This tax revenue could be used to acquire and rehabilitate or demolish additional distressed properties.

Still, the availability of such untapped resources to all Ohio counties and municipalities may create an incentive for private investors to fund efforts to improve electronic record-keeping of taxes and code enforcement programs. In other words, the public entities could fund their efforts through bond issues that would be repaid with the enhanced property tax receipts. While this latter point is not necessarily a policy recommendation, it shows that this proposal may have advantages that go beyond the prevention of harmful transactions. The overall benefits certainly seem to outweigh the costs. ■

What do you think?



We're interested in hearing your comments as we refine this proposal. Send comments to forefront@clev.frb.org

Recommended reading



Coulton, Claudia, Michael Schramm, and April Hirsch. 2008. "Beyond REO: Property Transfers at Extremely Distressed Prices in Cuyahoga County, 2005–2008." Case Western Reserve University Center on Urban Poverty and Community Development.

Resources



For suggested reading and information about states that restrict transfers of tax-delinquent properties, go to www.clevelandfed.org/forefront



CHRIS PAPPAS

Interview with Charles Calomiris

Charles W. Calomiris is not one to keep his thoughts to himself. His 55-page curriculum vitae lists dozens of academic articles with titles like “Firm Heterogeneity, Internal Finance, and Credit Rationing”—and just as many op-eds in popular periodicals, like the *Wall Street Journal* piece, “Blame Fannie Mae and Congress for the Credit Mess.” It is not unusual for him to begin scratching out an editorial response to new legislation moments after he first hears about it in the news. A more outspoken and influential U.S. banking scholar you are not likely to find.

Calomiris is the Henry Kaufman Professor of Financial Institutions at the Columbia University Graduate School of Business and a professor at Columbia’s School of International and Public Affairs. Among his many other affiliations, he is a member of the Shadow Financial Regulatory Committee, the Shadow Open Market Committee, and the Financial Economists Roundtable, and is a research associate of the National Bureau of Economic Research. He has worked as an economist for the Federal Reserve and consulted for central banks around the globe.

Calomiris visited the Federal Reserve Bank of Cleveland last fall to participate in the Conference on Countercyclical Capital Requirements. Joseph Haubrich, vice president and economist with the Bank, interviewed Calomiris on October 14, 2010. An edited transcript follows.

Haubrich: *Let's start out with a broad question. How would you rate the U.S. response to the financial crisis?*

Calomiris: It's a great question. I would start by distinguishing between long-term response and short-term response. I'd say that the biggest short-term failure was not to require recapitalization of the investment banks between March and September of 2008. I would have liked to have seen recapitalization happen during calm markets when it was obviously necessary.

Also, with respect to the immediate response to the crisis, I would have designed TARP [the Troubled Asset Relief Program, signed into law in October 2008] differently. I don't think TARP was well-structured. Congress got to write the form of capital assistance for banks as a footnote to TARP, and it was structured to make a profit on the transactions rather than to encourage the right kind of stabilization assistance.

In many ways, our response in the 1930s was better. I think there were lessons from history that we could have put to use in this crisis. And we suffered a lot, unnecessarily, with a liquidity crisis that wouldn't have been so deep if we had used better ideas back in September and October 2008 about how we were going to support the financial system.

The Fed's short-term actions were mostly appropriate — making liquidity available to the markets in various forms, particularly TALF [Term Asset-Backed Securities Loan Facility]. I think this was a successful and warranted program. It conforms to what I take to be the central message of a what a lender of last resort has to do, which is try to take some risk on its balance sheet during a crisis, but to do so in as senior a way as possible. I'm not saying the Fed got everything right.

I think that the Dodd–Frank bill,¹ which is the main form of long-term response to the crisis, suffers from both sins of commission (bad ideas enacted in haste) and sins of omission (it doesn't really deal with some of the key problems that underlay the crisis).

The key problems that we should have learned about from a prudential regulatory standpoint were, number one, the subsidization of risk in housing through high leverage, effectively financed by the government, either explicitly or implicitly. We need to address that. Second is the failure to accurately measure risk in the financial system on a forward-looking basis and to require capital accordingly. Going forward, we really need to address that problem, too. And third is the too-big-to-fail problem. I don't think Dodd–Frank adequately tackled that problem.

Haubrich: *Part of the Dodd–Frank bill was setting up a variety of institutions, such as FSOC [Financial Stability Oversight Council], which are presumably going to provide stricter regulation for the systemically important or too-big-to-fail institutions. Do you think that will be an adequate response?*

Calomiris: My view is that we should have an incentive scorecard for any regulatory idea that asks how it is going to affect the incentives of people in the marketplace directly. And how is it going to affect the incentives of regulators, supervisors, and politicians to live by the rules they write? The creation of a new bureaucracy is not really getting at that in any direct way. Maybe it will help, maybe it will hurt. But it doesn't really get at the key problems.

I prefer other ideas that are under study and make a lot of sense. Contingent capital certificates and the restructuring of capital requirements are very promising. There are several people in the Federal Reserve System who are interested in that. If the oversight council is going to be a way to get

good ideas like that formulated, then in conjunction with those new ideas it could be effective. So, it's not a bad idea that we're going to have more of a focal point on responsibility for coming up with good ideas in some coordinated way. Maybe it will help, maybe it won't. But the ultimate test is going to be whether we see real mechanisms that matter for incentives coming out of those deliberations.

If there is a bona fide reason to promote affordable housing, it's to create stakeholders in local communities. But you're not a stakeholder if you have a 3 percent down payment on your home—you are a renter in disguise.

Haubrich: *You mentioned one aspect that hasn't been dealt with: the incentive for leverage in the housing market. What would you do about the government-sponsored enterprises Fannie Mae and Freddie Mac?*

Calomiris: I think that they should be phased out. I think that all government assistance to housing that's taking the form of lending programs that try to subsidize affordable housing through making lending easier, and especially through very high leverage and very low interest rates, are the wrong way to subsidize housing, for two reasons: First, it encourages systemic risk, just like what we've experienced. A little bit of a decline in housing prices causes huge distress throughout the financial system, precisely because of leverage.

Also, leverage encourages the wrong kind of risk that comes to the market because borrowers are not placing enough of their own resources at risk; people who are bad risks are willing to come to the mortgage market. So you get a bad incentive consequence in advance. Leverage also matters after the fact, by magnifying the losses in the financial system created by recession shocks or asset price declines.

1. Dodd–Frank refers to the financial-market, regulatory-reform legislation, sponsored by Sen. Christopher Dodd and Rep. Barney Frank, which was approved by Congress in July 2010.



We will need the political will to move away from the drug of leverage, which was attractive to politicians in the first place because it disguised the government's costs.

If leverage is not the way to promote affordable housing, then that means it is high time to phase out FHA [the Federal Housing Administration], Fannie Mae, and Freddie Mac.

Not only is mortgage risk subsidization through high leverage risky, it also fails to achieve its goal. If there is a bona fide reason to promote affordable housing, it's to create stakeholders in local communities. But you're not a stakeholder if you have a 3 percent down payment on your home — you are a renter in disguise. These extremely low down payments are a very recent trend, really the last two decades. It was all part of the desire to create invisibly — from a fiscal standpoint, that is, without showing the costs on the government's balance

sheet — these government supports, through high leverage and subsidized interest rates. But this approach doesn't accomplish the housing objective, and it destabilizes the mortgage market and creates large costs to taxpayers.

Haubrich: *OK, so what specifically would you do to ensure that homebuyers are stakeholders in their communities?*

Calomiris: I propose a four-part plan: Alongside phasing out Fannie Mae, Freddie Mac, and FHA as lending agencies, *my proposal* is to create a down payment assistance program modeled after the Australian program but on a means-tested basis. Every Australian qualifies for a \$7,000 first-time homebuyer subsidy. This subsidy increases their down payment, reduces their leverage, and makes their home more affordable. It has a stabilizing effect on leverage ratios and creates a real stake for people in their homes and communities.

A second part of that plan is to phase in, over a 17-year period, movement from the minimum 3 percent down payment requirement to a 20 percent minimum. A third policy that might also make sense, again on a means-tested basis, is to provide some assistance for the cost of locking in longer-term interest rates for low-income people because they're potentially more susceptible to the debt-service fluctuation cost.

Finally, a fourth part of that plan might be to create home savings accounts that provide tax incentives for people to accumulate equity toward the down payment, again on a means-tested basis. As part of that, it would be interesting to think about also using some tax savings from payroll taxes, because most low-income people don't pay income taxes; they pay only payroll taxes.

All of these proposed costs would be budgeted explicitly. Let's have transparency so we show the government expenditure effects of these programs. Let's create systemic stability, not instability. Let's create homeowners, not renters in disguise. To me this would be a very rational approach to housing finance reform. We will need the political will to move away from the drug of leverage, which was attractive to the politicians in the first place because it disguised the government's costs. Well, it's a little hard to disguise them now that the costs of Fannie Mae and Freddie Mac's losses are likely to top \$300 billion. Maybe that means we'll get the political will to be a little more honest.

Charles W. Calomiris

Current Position:

Henry Kaufman Professor of Financial Institutions, Columbia Business School; and professor, Columbia University School of International and Public Affairs

Other Positions:

Research associate, National Bureau of Economic Research, October 1996–present (faculty research fellow, October 1991–October 1996)
Member, Shadow Financial Regulatory Committee, December 1997–December 2004 and December 2005–present
Member, Financial Economists Roundtable, November 2007–present

Member, Shadow Open Market Committee, April 2009–present

Books:

U.S. Bank Deregulation in Historical Perspective, Cambridge University Press, 2000, 2006
Emerging Financial Markets (with David O. Beim), McGraw-Hill, 2000

Education:

Yale University, BA, 1979
Stanford University, PhD, 1985

Haubrich: Let me switch gears and talk a little bit about the subject of the conference we're hosting. Can counter-cyclical capital regulation work?

Calomiris: I think it can. First let me define it. We know that capital requirements can constrain bank lending under some circumstances. It's not just government capital requirements but also market capital requirements. Remember, government capital requirements are only about 30 years old in the United States, and we were the first country that I'm aware of that passed them.

Capital requirements mean requiring a certain ratio of your assets to be in the form of equity capital. It's a fairly young idea. Before the government required it, the market required it. Now both the government and the market require it. The one that's the binding constraint—the one that has the effect in determining capital requirements—is whichever is the higher of the two.

People are worried about two problems. First, during recessions, banks may lose capital as a result of loan losses. For example, during a recession, to preserve their capital-to-asset ratio, they may have to cut their risky assets, meaning their loans. The other thing people worry about is that going into booms, that constant capital ratio maybe isn't high enough to discourage excessive lending.

These are the two arguments people make for dynamic capital requirements; that is, maybe we want capital requirements to be higher during booms as a way to discourage excessive lending. And maybe we want capital requirements to fall during recessions as a way to avoid really severe credit crunches. I think there is at least some evidence for the tendency for excessive lending in *some* booms. I don't think it's a general problem, but it does happen occasionally.

The key question is whether we can measure it. Can we measure when lending markets are excessive and when lending markets are going through recessions? We'd like to vary capital requirements—to relax them during recessions and to increase them during booms, especially booms where we're very worried about excessive lending. Is this something that can be measured? I would say yes. It can't be measured perfectly but it can be measured fairly well.

A paper by Claudio Borio and Mathias Drehmann at the BIS [Bank for International Settlements] showed that very severe recessions tend to happen when lending growth is very high just prior to the recession, during the boom, and when asset prices are growing very fast. So one could impose higher capital requirements based on a dual threshold. When loan growth gets very high and asset prices are growing very quickly, you'd like to impose higher capital requirements, and doing so will help you achieve a better soft landing, cooling down the loan growth and helping the economy.

Haubrich: Now capital requirements are changing. Basel III² is coming up with a set of recommendations. Could you give us your take on those proposals?

Calomiris: They're talking about phasing in an increase in capital requirements for Tier 1 capital. It's a maximum leverage requirement rather than just a risk-based capital requirement. These are good ideas. But are they enough? No.

A little increase in capital doesn't solve the problem. The key problem was the failure to measure risk on an ongoing, forward-looking basis, fairly accurately, and to require capital accordingly. If you just bump up capital a little bit, what's to prevent risk from going up even more? If financial institutions want to create risk and want to hide it from their regulators, under the existing Basel system it's almost trivial to do it. The Basel system still,

unbelievably, says that the way we measure risk is asking banks what the risk is and asking ratings agencies what the risk is. That is not dealing with the incentive problems that got us into the mis-measurement of risk in the first place, so we have to think more creatively about mechanisms that can solve this problem.

The Basel system still, unbelievably, says that the way we measure risk is asking banks what the risk is and asking ratings agencies what the risk is.

One paper that was published in 2003 by Don Morgan and Adam Ashcraft in the *Journal of Financial Services Research* shows that interest-rate spreads on loans are very good predictors of loan default risk. In the common parlance we would say, "Duh!" Because after all, that's the point of spreads. They're supposed to compensate banks for risk.

The authors showed in 2003 that we could've used interest rate spreads as good forward-looking measures of risk. We didn't use them! If we had used them in the subprime crisis, we would've budgeted a lot more capital against subprime risks and we would've been better off. So ideas coming out of Basel to tweak capital requirements in a way that's not related to measuring risk are doomed to fail.

What we need to do is take risk measurement seriously in a way that deals also with incentive problems. Notice that my proposal to gear default risk measures to loan spreads is incentive-robust. Why? Because no bank is going to cut its interest rate to save a little bit on its capital requirements. That means that interest rates will provide robust measures of risk, and we can therefore reliably use those interest-rate spreads to measure risk.



2. The Basel Committee on Banking Supervision has been meeting since 1974 to improve and coordinate the quality of bank supervision worldwide. The most recent effort to strengthen capital requirements was dubbed Basel III.

That's just one of several ideas that illustrate the idea of incentive-robust regulatory reforms. These reforms would sometimes force banks to maintain more capital—but capital commensurate with risk—using measures of risk that we could rely on.

Haubrich: *Some people argue that high-enough capital requirements would reduce the incentive that banks have for taking risk. It sounds like you don't agree with that?*

Calomiris: The problem is that financial firms are designed to be able to arbitrarily increase risk. Financial contracts can reshape and re-cut risk in many different ways to create a little risk or a lot of risk, depending on what they want to achieve. You can't say that a loan has X amount of risk, because banks can construct loans that might appear very similar that have very different kinds of risk. We have to have a flexible means of measuring risk.



What we really have to ask is what was missing in regulation. What was missing was what we've been talking about: accurate measurement of risk on a forward-looking basis.

If we just say we're going to increase capital a little bit, banks could very easily just make sure that the composition of risks of the loans in their portfolio are commensurately higher, therefore achieving nothing in terms of stabilizing a system. That's the story of what is sometimes called regulatory arbitrage, that is, the private sector undoing the effect of any regulation. If the regulations are dumb, the private sector will always smartly undo them. The regulations have to be smart enough so that they're robust to incentives.

Haubrich: *To follow up on that, to what extent do you think the problem behind the crisis was, say, regulatory arbitrage, and to what extent was it deregulation?*

Calomiris: I'll start with the second part of the question. Deregulation had nothing to do, in my view, with the crisis. The main deregulation that happened in the United States in the 1980s and the 1990s really dealt with two important issues. One of them was whether banks should be allowed to branch throughout the United States. In 1994, national deregulation of branching was a culmination of state and regional deregulation of branching that was occurring throughout the '80s and early '90s. That was a stabilizing policy. It has been shown time and time again for a whole host of reasons to be a very good idea as a matter of economic policy.

The other main deregulation was for banks and investment banks. It allowed banks to engage in the underwriting of corporate securities, which they previously had been limited in doing. This crisis had nothing to do with the underwriting of corporate securities.

Furthermore, subprime mortgage activities, which were important in creating the crisis, were something banks could have engaged in prior to the two deregulations I've talked about, and in fact did. Deregulation allowed commercial banks to engage in traditional investment-banking and corporate-underwriting practices, and allowed commercial banks to branch. These were stabilizing, in fact, during the crisis.

Why? Because of greater diversification of income. Furthermore, remember, the way we dealt with this crisis was by allowing investment banks to be purchased by commercial banks. That was possible because of deregulation, and it helped to stabilize the system in reaction to the crisis.

When you hear the political rhetoric about deregulation, I think what people really mean is that we had a failed prudential regulatory system. Banks and investment banks were both under prudential regulation under the Basel standards. The investment banks were being regulated, under Basel, by the SEC [Securities and Exchange Commission]. And what we can say is that it wasn't a very good regulatory system. We did not maintain capital commensurate with risk very effectively. But starting in 2002, the investment banks were all regulated, long before this crisis hit. If anything, prudential regulation was increasing over time during the phase when the crisis took hold.

What we really have to ask is what was missing in regulation. What was missing was what we've been talking about: accurate measurement of risk on a forward-looking basis. The other problem that arose between March 2008 and September 2008 was that once we bailed out Bear Stearns, others expected bailouts instead of recapitalizing as they needed to. They didn't want to recapitalize in a way that would dilute their stock values. Why not take a bet, hope that if things go badly they'll get bailed out? If things go well, they won't have to dilute by issuing new equity. That too-big-to-fail problem needs to be addressed, too. We've done little to address those two basic problems.

Haubrich: *We haven't talked much about monetary policy. Do you think monetary policy contributed in a material way to the financial crisis?*³

Calomiris: Yes. From 2002 to 2005, the real federal funds rate was negative. And the only other four-year period in postwar history where that was true was 1975 through 1978, the high-inflation period. If you looked at it from the standpoint of the Taylor rule as a function of the unemployment rate and the inflation rate, the Fed stopped following the Taylor rule during the period 2002 to 2005.⁴

The Fed kept the fed funds rate about 2 percentage points on average below what that rule would have implied. So the Fed surprised the market from the standpoint of the Taylor rule, ran very loose monetary policy with a negative real fed funds rate, and there is pretty convincing statistical evidence that this contributed to the underpricing of risk leading up to the crisis.

That said, I can tell you from a historical perspective that monetary policy mistakes like that — and I regard it as a mistake — do not cause these kinds of crises. They cause asset-price problems, but to get into a banking crisis you need the large losses relative to bank capital, and you can't blame that on monetary policy. Contrast, for example, with the dot-com boom and bust, where the actual losses were greater than the subprime boom and bust. Yet it didn't have any effect on the whole financial system. Why? Because it wasn't a leveraged loss. Housing leverage and banking leverage in the recent crisis translated into an overpricing of some assets and into the demise of the financial system.

Yes, the Fed contributed to the overpricing of real estate assets and other assets, but that doesn't translate into a financial crisis. You need the other distortions on the microeconomic side, particularly the housing finance distortions, to really understand the depth of the crisis.

Haubrich: *Thank you very much.* ■

3. For Federal Reserve Chairman Ben Bernanke's take on this question, see www.federalreserve.gov/newsevents/speech/bernanke20100103a.htm.

4. The Taylor rule is the monetary policy rule for targeting the federal funds rate that many believe the Fed seemed to be following prior to 2002.



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Book Review



All the Devils Are Here: The Hidden History of the Financial Crisis

by Bethany McLean and Joe Nocera
Penguin 2010



Reviewed by
Dan Littman,
Economist
Federal Reserve Bank of Cleveland

In *All the Devils Are Here: The Hidden History of the Financial Crisis* (Penguin 2010), authors Bethany McLean and Joe Nocera prove that there is still more to learn about the recent financial crisis. McLean, a contributing editor at *Vanity Fair*, who was among the first reporters to break the Enron story, and Nocera, a business columnist for the *New York Times*, draw their title from Shakespeare's *The Tempest*. The implication, regrettably appropriate in both the 1600s and the 2000s, is that plenty of hell can be found among the living right here on earth.

McLean and Nocera provide an outstanding, high-level overview of the course of the recent financial crisis, including its often-overlooked roots in the decades from 1930 to 2000, but they focus most intensely on the years since 2000. Each chapter of the book could work as a stand-alone piece; indeed, some of them first appeared as magazine and newspaper articles. The book is heavier on anecdotes about personalities, institutions, government policies, and events than on in-depth analysis of the crisis. It should appeal both to novices and to experts who could use some help in putting their other readings in context.

I found three of the book's themes especially enlightening. The first is the interconnection of personal, institutional, and public policy flaws that brought on the crisis. In that sense, all the devils really were here.

The authors do not find personifications of evil. What they find are plenty of flawed individuals in positions of power. Some of them are at once pathetic and sympathetic, like Stan O'Neal, the CEO of Merrill Lynch, whose isolation from events at the nation's largest retail brokerage company is exemplified by his practice of playing 18 holes of golf by himself, several times a week (though it could be noted, in O'Neal's defense, that J.P. Morgan famously played solitaire for hours in his office to unwind).

McLean and Nocera also find flawed institutions, or rather, flawed mechanisms of communication within institutions. At AIG, for example, only the CEO was informed about important developments in the company's far-flung divisions; senior leaders were deliberately kept in the dark. This prevented wiser heads from closing down the London unit that traded in credit default swaps, which should have been shuttered months or years earlier. The authors identify flawed public policy as well, with the federal government's multi-pronged, pro-housing policies a particularly ripe target for criticism.

A second recurrent theme is the difficulty of being a lone voice of reason, leaning against the wind, in institutions making huge profits. The authors report that in companies like AIG, Lehman Brothers, Bear Stearns, Merrill Lynch, Citibank, and others, some senior officials recognized that something was rotten in the business of mortgage securitization and credit default swaps, but found that they were crying in the wilderness. McLean and Nocera recount that when these employees questioned the business model, they were sidelined to unimportant jobs or fired. The most memorable of them was the chief risk officer at Merrill Lynch who, despite being a longtime associate of the company CEO, was pulled off the trading floor where he could observe daily activities. He left the company, returned at the urging of former colleagues, and found himself pulled off the trading floor a second time.

A third key theme is the degree to which market participants relied more on the perceived wisdom of crowds and the emotions of the market than on their understanding of market fundamentals. Investment professionals throughout the industry, including many who had doubts (however ill-formed) about the underlying mortgage origination and securitization business model, were more prone to follow the initially profitable herd.

Many in the industry recognized that a lot of borrowers and properties were unworthy of loans, or that junk tranches in mortgage bonds repackaged as synthetic collateralized debt obligations with AAA ratings were illogical. But as long as investment banks were willing to buy and package the mortgages, and as long as those banks could find willing customers for the bonds, they continued to do so. One sad episode of this story involves Angelo Mozilo, chairman and CEO of Countrywide, who initially resisted entry into the subprime mortgage and refinancing market, but then relented in order to protect the company's standing as the largest housing lender in the United States. Countrywide soon became one of the most spectacular crash stories of the financial crisis.

Ultimately, the authors paint a troubling portrait of a world afflicted with human and institutional flaws. In ordinary times, we accept such flaws as part of the human landscape. In crisis times, though, such flaws are fuel to the fire of systemic risk. This is a world in which those who lean against the wind are dismissed by their bosses and colleagues, and the emotions of the investment crowd matter more than business fundamentals. It is also a world that will resist most efforts to avoid these kinds of crises in the future.

Public policies, whether well or sloppily crafted, still have to address the harmful but inescapable elements of human nature. As Ariel put it in *The Tempest*, "Hell is empty and all the devils are here." ■

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