



Lombard Street

July 6, 2009

The collapse of the world's financial markets has resulted in intense examination of how to restructure and reform regulation for banking, securities, insurance, and other parts of the financial services industry. Various regulatory proposals are already being circulated in academic and public policy circles. Governments around the world are considering reforms. The conversation and decisions surrounding these proposals will fundamentally impact how financial services is structured and conducted across the globe throughout the 21st century.

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About Lombard Street

Lombard Street is the first ever e-journal focused exclusively on financial services regulation. Titled after the famous treatise on banking regulation authored by Walter Bagehot in 1873, this biweekly journal is filled with original pieces from prominent thought leaders across the globe.

Overseen by a multi-disciplinary editorial board led by David S. Evans of the University of Chicago and University College London, Lombard Street delivers original articles that will shape and chronicle the evolution of the impending 21st century financial services regulation reform.

Lombard Street leverages the power of the Web to provide germane and timely thought leadership to a broad and relevant audience. The online format works to fuel interaction between readers and authors, extending the dialogue beyond just the articles.

Lombard Street lives within www.finreg21.com, a non-partisan online media entity developed for, and by, those involved in or affected by financial services regulation. Launched in March 2009, it provides a platform for community members to express a diverse set of opinions, and allows the community to own and operate the discussion. FinReg21 both aggregates and produces a rich mix of content underscoring expert commentary: dedicated experts blogging daily, original reporting from Washington, D.C., virtual roundtable webinars lead by the leading lights in this space, a library of papers and reports, expert-to-expert interviews, among other features.

For more information about contributing to Lombard Street, please contact info@finreg21.com



From the Editor: The 5-Week Sprint

David S. Evans[†]

U.S. Congress begins a 5-week sprint before the summer recess and during that time will be considering, and perhaps even moving on, some of the proposals, including especially President Obama's, for reforming financial regulation for the 21st Century. *Lombard Street* will be sprinting, too, with a series of issues over the summer that focus closely on these reform efforts. This week's issue covers a diverse set of topics.

Lynn Stout argues that it was the elimination of a common law distinction between derivatives contracts for hedging, which were upheld under the common law, and for speculation, which were not, that precipitated the boom in derivatives speculation which ultimately "brought the banking system to its knees." The Commodities Futures Modernization Act made all derivatives contracts legally enforceable and, effectively, deregulated the derivatives industry. Stout advocates putting the distinction back in place which would dampen the enthusiasm of speculators whose contracts would not be enforceable. Meanwhile others are advocating closer regulation of derivatives and the movement of trading to clearing houses and exchanges—that will be the subject of a series of articles in an issue of *Lombard Street* later this summer.

What to do about Fannie Mae and Freddie Mac, the mortgage finance giants sponsored by the U.S. government is the subject of David Reiss's article. Some argue that they should come out of conservatorship much as they went in and others that they should be nationalized. Reiss recommends that they be privatized. As he puts it, "Fannie and Freddie pose a systemic risk to the financial system, unfairly benefit from their regulatory privilege, and do not create meaningful net benefits for the American people." Neither got much attention in President Obama's plan for regulatory reform. It will be interesting to see this year if they become the subject of legislative attention.

We then turn to a piece by Viral Acharya about federal deposit insurance. They observe that many countries including the United States have guarantees for demand deposits but that little consideration has been given to how financial institutions should be charged for this insurance. They observe, in an analysis of the FDIC for the United States, that "deposit insurance premiums have either been risk insensitive or relied on individual bank failure risk and never on systemic risk." They argue for premiums that account for systemic as well as individual risk, charge larger banks more, and that deal with the moral hazards of insurance. Viral's edited volume with Matthew Richardson, [Restoring Financial Stability](#), will be reviewed by Franklin Allen in the next issue of *Lombard Street*.

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Viktorina Baklanova then examines how market participants view the credit rating agencies. She focuses on the comments to a recent SEC proposal to remove references to credit ratings from the SEC rules and regulatory documents. Most industry participants opposed the proposal while the well-established credit rating agencies supported it. She concludes that market participants have become dependent on credit ratings and if anything are looking to the SEC to “assume a more important role in controlling the integrity of the credit rating process.”

We thank our contributors and hope you find their insights provocative.



How Deregulating Derivatives Led to Disaster, and Why Re-Regulating Them Can Prevent Another

Lynn A. Stout[†]

When credit markets froze up in the fall of 2008, many economists pronounced the crisis both inexplicable and unforeseeable. That's because they were economists, not lawyers.

Lawyers who specialize in financial regulation, and especially the small cadre who specialize in derivatives regulation, understood what went wrong. (Some even predicted it.)¹ That's because the roots of the catastrophe lay not in changes in the markets, but changes in the law. Perhaps the most important of those changes was the U.S. Congress's decision to deregulate financial derivatives with the Commodity Futures Modernization Act (CFMA) of 2000.

It was the deregulation of financial derivatives that brought the banking system to its knees. The leading cause of the credit crisis was widespread uncertainty over insurance giant AIG's losses speculating in credit default swaps (CDS), a kind of derivative bet that particular issuers won't default on their bond obligations. Because AIG was part of an enormous and poorly-understood web of CDS bets and counter-bets among the world's largest banks, investment funds, and insurance companies, when AIG collapsed, many of these firms worried they too might soon be bankrupt. Only a massive \$180 billion government-funded bailout of AIG prevented the system from imploding.

This could have been avoided if we had not deregulated financial derivatives.

I. Derivatives “De”Regulation?

Wait a minute, some readers might say. What do you mean, “de”regulated derivatives? Aren't derivatives new financial products that have never been regulated?

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¹ See, e.g., Rick Schmitt, *Prophet and Loss*, Stanford Magazine March/April 2009 40-47 (describing efforts of CFTC Chair Brooksley Born to warn about and regulate financial derivatives in the late 1990s); Lynn A. Stout, *Betting the Bank: How Derivatives Trading Under Conditions of Uncertainty Can Increase Risks and Erode Returns in Financial Markets*, 21 J. Corp. L. 53 (1995); Lynn A. Stout, *Why The Law Hates Speculators: Regulation and Private Ordering in the Market for OTC Derivatives*, 48 Duke L. J. 701, 769-771 (1999) (arguing that deregulating financial derivatives might increase market risk, erode returns, and lead to price distortions and market bubbles).

Well, no. Derivatives have a long history that offers four basic lessons. First, derivatives contracts have been used for centuries, possibly millennia. Second, healthy economies regulate derivatives markets. Third, derivatives are regulated because while derivatives can be useful for hedging, they are also ideal instruments for speculation. Derivatives speculation in turn is linked with a variety of economic ills—including increased systemic risk when derivatives speculators go bust. Fourth, derivatives traditionally are regulated not through heavy-handed bans on trading, but through common-law contract rules that protect and enforce derivatives that are used for hedging purposes, while declaring purely speculative derivative contracts to be legally unenforceable wagers.

II. A Brief History of Derivatives

Finance economists and Wall Street traders like to surround derivatives with confusing jargon. Nevertheless, the idea behind a derivative contract is quite simple. Derivatives are not really “products” and they are not really “traded.” They are simple bets on the future—nothing less, and nothing more. Just as you might bet on which horse you expect to win a horse race and call your betting ticket your “derivative contract,” you can bet on whether interest rates on bank deposits will rise or fall by entering an interest rate swap contract, or bet on whether a bond issuer will repay its bonds by entering a credit default swap contract.

These sorts of commercial wagers are neither new nor particularly innovative. Although derivatives have gone by many different names, derivatives contracts have been around for centuries. (Readers are invited to read the 1884 U.S. Supreme Court case of *Irwin v. Williar*,² which demonstrates both that derivatives trading was common in the nineteenth century—although derivatives were then called “difference contracts”—and that derivatives were subject even then to regulation.) Originally, most commercial derivatives were bets on the future prices of agricultural commodities, like the rice derivatives traded in Japan in the fifteenth century or the corn and wheat futures still traded on the Chicago Mercantile Exchange today. To use the language of derivatives traders, the “underlying”—that is, the thing being bet upon—was the future market price of rice, wheat, or corn.

The first “financial” derivatives, in the form of stock options, became common in the 1800s. The 1990s saw an explosion in other types of derivatives contracts, including bets on interest rates (interest rate swaps), credit ratings (credit default swaps), and even weather derivatives. By 2008, the notional value of the derivatives market—that is, the size of the outstanding bets as measured by the value of the things being bet upon—was estimated at \$600 trillion,³ amounting to about \$100,000 in derivative bets for every man, woman, and child on the planet.

This sudden development of an enormous market in financial derivative contracts was not the result of some new idea or “innovation.” Rather, it was a consequence of the steady deregulation of financial derivatives trading.

² 110 U.S. 449 (1884)

³ Sheridan, *The \$600 Trillion Derivatives Market*, Newsweek, October 27, 2008 <http://www.newsweek.com/id/164591>.

III. A Brief History of Derivatives Regulation

Just as derivatives have been around for centuries, so has derivatives regulation. In the U.S. and U.K., derivatives were regulated primarily by a common-law rule known as the “rule against difference contracts.”

The rule against difference contracts did not stop you from wagering on anything you liked: sporting contests, wheat prices, interest rates. But if you wanted to go to a court to have your wager enforced, you had to demonstrate to a judge’s satisfaction that at least one of the parties to the wager had a real economic interest in the underlying and was using the derivative contract to hedge against a risk to that interest.

Because, of course, wagers can be used to hedge against risk. For example, if you own a corporate bond and you are worried the issuer might default, you can reduce your risk by entering a CDS contract, essentially betting against the issuer’s creditworthiness. If the bond decreases in value, the CDS will increase in value. Similarly, if you own a \$500,000 home, you can hedge against the risk your home will burn down by making a bet with an insurance company that will pay off \$500,000 if the home actually burns. (Most of us call these wagers “homeowner’s insurance,” although a typical Wall Street derivatives dealer might label them “home value swaps.”) Using derivatives this way is truly hedging, and it serves a useful social purpose by reducing risk.

But as judges have recognized for centuries, at least until recently, derivative bets are also ideally suited for pure speculation. Speculation is the attempt to profit not from producing something, or even from providing investment funds to someone else who is producing something, but from predicting the future better than others predict it.⁴ A speculator might, for example, try to make money predicting wildfires by buying home insurance on houses in Southern California without actually buying the houses themselves. Similarly, a speculator might hope to make money betting on a company’s fortunes by buying CDS on the company’s bonds without buying the bonds themselves. Unlike hedging, which reduces risk, speculation increases a speculator’s risk in the much same way that betting at the track increases a gambler’s risk. Highly-speculative markets are also historically associated with asset price bubbles, reduced returns, price manipulation schemes, and other economic ills.

Common-law judges accordingly viewed derivatives speculation with suspicion. Under the rule against difference contracts and its sister doctrine in insurance law (the requirement of “insurable interest”), derivative contracts that couldn’t be proved to hedge an economic interest in the underlying were deemed nothing more than legally unenforceable wagers.

This didn’t mean derivatives couldn’t be used to speculate. But the rule against difference contracts forced speculators to think about how they could make sure their fellow gamblers paid their bets. The answer was for the speculators to set up private exchanges with membership requirements, margin requirements, netting requirements, and a host of other rules designed to make sure that, despite the legal invalidity of

⁴ See Lynn A. Stout, *Irrational Expectations*, 3 Legal Theory 227 (1997) (discussing theories of speculation).

speculative derivatives contracts, speculating traders would make good on their contract promises. In the process, the exchanges kept derivatives speculation in check and under controlled conditions. Eventually, the control was increased when government regulators like the Commodities Futures Trading Commission (CFTC) and Securities Exchange Commission (SEC) were empowered to oversee trading on particular exchanges. Meanwhile, off the exchanges, the rule against difference contracts kept “over the counter” speculation in derivatives in check.

At least, it kept speculation in check until the rule was dismantled. The dismantling process began when the United Kingdom passed its Financial Services Act of 1986, “modernizing” the UK’s financial laws by eliminating the old rule against difference contracts and making all financial derivatives, whether used for hedging or for speculation, legally enforceable. US regulators, worried that Wall Street banks might lose out on a lucrative new market, followed suit in the 1990s by creating ad hoc regulatory exemptions for particular types of financial derivatives like currency forward contracts and interest rate swaps. Soon the US also embraced wholesale deregulation with the passage of the CFMA in 2000. The CFMA not only declared financial derivatives exempt from CFTC or SEC oversight, it also declared all financial derivatives legally enforceable. The CFMA thus eliminated, in one fell swoop, a legal constraint on derivatives speculation that dated back not just decades, but centuries. It was this change in the law—not some flash of genius on Wall Street—that created today’s \$600 trillion financial derivatives market.

IV. Why Re-Regulate Derivatives? Speculation and Systemic Risk

The results have proven unfortunate, to say the least. Yet it’s surprising the unregulated over-the-counter derivatives market didn’t go sour even sooner. Even before AIG, derivatives speculation had already led to the collapse of Barings Bank in 1995; the failure of hedge fund Long Term Capital Management (LTCM) in 1998; the Enron bankruptcy in 2001; and the collapse of investment bank Bear Stearns in 2008, a few months before AIG’s fall.

These examples show why it is essential for policymakers thinking about how derivatives affect risk in the marketplace to distinguish, as the common law did, between using derivative contracts to hedge and using them for speculation. Hedging provides a social benefit by reducing the hedging party’s risk. But when speculators use derivatives to try to profit from predicting future events, they increase their risk, just as gamblers increase their risk by betting. Unchecked derivatives speculation thus adds risk to the system by making it possible for individual speculators, like AIG (and Barings and LTCM and Enron and Bear Stearns) to lose very large amounts of money very unexpectedly.

But wait, some readers might say. Couldn’t AIG have been an unusual case, a “rogue” insurance company that succumbed to speculative fever? Isn’t it possible that most financial derivatives users wisely confine their derivatives deals to true hedging?

Given the stigma attached to speculation, it’s not surprising that most parties to derivatives contracts claim, at least in public, that they use derivatives for hedging and not for speculation. In some cases this seems a rather transparent attempt at deception. (Hedge funds, for example, should really call themselves “speculation funds,” as it is quite clear they are using derivatives to try to reap profits at the other traders’

expense.) Perhaps more often, derivatives traders incorrectly describe themselves as “hedging” when they use derivatives to offset some of the risk associated with taking a speculative position. This is much the same as a racetrack gambler claiming she is “hedging” because, in addition to betting on a particular horse to win, she also buys a betting ticket for the horse to show.

Yet the data suggests that speculation, not hedging, drives over-the-counter financial derivatives markets. For example, we know the CDS market was dominated by speculation in 2008. We know this because by the end of that year, the notional value of the CDS market had reached \$67 trillion.⁵ At the same time, the total market value of all the underlying bonds issued by U.S. companies outstanding was only \$15 trillion.⁶ When the notional value of a derivatives market is more than four times larger than the market for the underlying, it is a mathematical certainty that most derivatives trading is speculation, not hedging. And business history—including very recent history—shows derivatives speculation increases systemic risk.

It is possible, of course, that derivatives speculators provide other benefits to the market that offset the social cost of this increased systemic risk. Although from a social perspective speculation is a zero-sum game—one trader’s gains necessarily come at another trader’s expense, just as gamblers can only make money by taking money away from other gamblers—economists sometimes claim speculators add useful liquidity to markets and that speculation can improve the accuracy of market prices. The derivatives industry routinely repeats this mantra. Yet there is virtually no empirical evidence to establish the value of the supposed liquidity and “price discovery” benefits from derivatives speculation, much less evidence that shows the value of those benefits exceeds the enormous social costs of derivatives speculation. (Recall that US taxpayers have spent nearly \$180 billion on the AIG bailout alone.)

V. What to Do?

Although few observers appreciated it at the time, the CFMA’s deregulation of financial derivatives was a novel legislative experiment. It’s almost as if the US Congress said to itself, “let’s see what happens if we suddenly removed centuries of law!” Now we know what happens. The experiment has not turned out well.

What to do? The answer seems obvious: go back to what worked so well, for so long, before. The old common law rule against difference contracts was a simple, elegant legal sieve that separated useful hedging contracts from purely speculative wagers, protecting the first and declining to enforce the second. This no-cost, hands-off system of “regulation” (there is no cheaper form of government intervention than refusing to intervene at all, even to enforce a deal) did not stop speculators from using derivatives. But it did require speculators to be much more careful about their counterparties, and to develop private enforcement mechanisms like organized exchanges that kept speculation confined to an environment where traders were well-capitalized and knew who was trading what, with whom, when. This approach

⁵ Bank for International Settlements, *Quarterly Review Statistical Annex* at A103 Table 19 (Amounts Outstanding of Over-The-Counter (OTC) Derivatives) (December 2008).

⁶ *Id.* at A97, Table 16B (Domestic Debt Securities).

kept runaway speculation from adding intolerable risk to the financial system. And it didn't cost a penny of taxpayer money.

During the roaring 1990s, when financial derivatives were being widely applauded as risk-reducing, highly-efficient (and, for Wall Street, highly profitable) financial "innovations," the old rule against difference contracts had little appeal. Maybe it has more now.



Coming Out of Conservatorship: Developing an Exit Strategy for Fannie and Freddie

David Reiss[†]

As part of its response to the ongoing credit crisis, the federal government recently placed Fannie Mae and Freddie Mac, the government-chartered, privately owned and politically powerful mortgage finance companies, in conservatorship. These two massive companies are profit-driven, but as government-sponsored enterprises (GSEs) they also have a government-mandated mission to provide liquidity and stability to the United States mortgage market and to achieve certain affordable housing goals. The fate of Fannie and Freddie has been linked with the Obama administration's long term proposals for comprehensive financial reform. How the two companies should exit their conservatorship is of key importance to the future of federal housing finance policy.

Notwithstanding recent events, Fannie and Freddie remain extraordinarily large companies: together, they own or guarantee well in excess of forty percent of all the residential mortgages in the United States. This amounts to nearly \$5.3 trillion in mortgages. By statute, Fannie and Freddie's operations are limited to the "conforming" portion of the mortgage market, which is made up of mortgages that do not exceed an annually adjusted threshold. The two companies effectively have no competition in the conforming sector of the mortgage market because of advantages granted to them by the federal government in their charters.

The most significant of these regulatory advantages has been the federal government's implied guarantee of Fannie and Freddie's debt obligations. The government guarantee is a privilege that arose from Congress's efforts to create a national secondary residential mortgage market. It is the characteristic that allows them to borrow more cheaply than other financial institutions. It is the characteristic that allows them to completely dominate the prime conforming mortgage market. And it is the characteristic that poses the greatest threat to the federal government and the American taxpayer.

One important consequence of conservatorship is its impact on this implied guarantee. Some commentators argue that the implied guarantee is now an explicit one. The government and the market

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have not yet embraced this view, although recent testimony by both the director of the Federal Housing Finance Agency (FHFA) overseeing the GSEs and statements by members of Congress may indicate a movement toward its long overdue recognition. How the two companies exit their conservatorships will determine the nature of their government guarantee as well.

While the American taxpayer will likely be required to fund a bailout of the two companies that will be measured in the hundreds of billions of dollars, the current state of affairs presents an opportunity to reform the two companies and the manner in which the mortgage market is structured. I believe that Fannie and Freddie should be privatized so that they can compete on an even playing field with other financial institutions, and their public functions should be assumed by government actors. While this is a radical solution and one that would have been considered politically naïve until the recent credit crisis, it is now a serious option.

I. Fannie and Freddie are Poor Servants of Public Policy

There is very little controversy regarding the overwhelming benefits that Fannie and Freddie brought to the national mortgage market during the 1970s; indeed, they effectively created it. Fannie and Freddie claim they still provide important benefits. These claims have been contradicted, to a great degree, by researchers.

- *Systemic Stability and Liquidity.* Fannie and Freddie claim they provide liquidity and stability to the mortgage market. At early stages in the current crisis, they promoted themselves as white knights and lobbied for access to a broader swath of the mortgage market in order to stabilize it. But as the credit crisis developed, it became clear that Fannie and Freddie were subject to the same forces that led to the insolvency and massive write-down of private mortgage lenders, until the government stepped in quite forcefully to bolster the entire government-supported mortgage market. Thus, while providing some short term liquidity and stability, Fannie and Freddie fail to provide a long term solution to systemic risk in the secondary mortgage market.
- *Affordable Housing.* Fannie and Freddie claim they advance the American Dream of homeownership by making mortgages more affordable for underserved groups. Fannie and Freddie typically do meet the minimal affordable housing goals set forth by statute and by their regulatory agencies, although they sometimes may use financing shenanigans (such as buying a portfolio of loans solely to meet affordable housing goals) to do so. However, a number of studies have indicated that Fannie and Freddie actually cannibalize the Federal Housing Administration loan market, and the U.S. General Accounting Office has questioned whether the two companies do any more than other lenders to promote affordable housing. Thus Fannie and Freddie's affordable housing efforts

duplicate and even hinder other government initiatives, and may embrace unsound business practices just to hit their housing targets.

- *Consumer Protection.* Fannie and Freddie argue that they have helped to standardize the conforming mortgage to the benefit of consumers. And indeed, through their dominance of the conforming market, Fannie and Freddie have helped to standardize the market and reduce bad options for consumers. However, as Fannie and Freddie's significant purchases of subprime and Alt-A loans originated by other companies shows, the two giants are complicit with the predatory lending practices of others even though they did not engage in them directly. Consequently, recent events have undermined to some extent their claim that they safeguard consumer rights.
- *Lower Overall Interest Rates for Homeowners.* Fannie and Freddie accurately claim that they lower overall interest rates for homeowners. Research shows that they are responsible for a reduction of between 24 to 43 basis points on conforming mortgages. This is not an extraordinary benefit to the average homeowner, measured as it is in the tens of dollars a month. If the federal government acted directly to provide or guarantee certain mortgages, much like it provides student loans at a cheaper cost than private education lenders, interest rates for targeted homeowners would be lower still. Comparing Fannie and Freddie's staggering profits to the modest benefits passed on to homeowners, their impact on interest rates cannot justify their privileged regulatory status.

Given the limited benefits that Fannie and Freddie now provide, one concludes that Fannie and Freddie are not particularly useful agents of public policy. If the federal government acts on this finding, it would, however, need to reassign some of Fannie and Freddie's key functions to other federal instrumentalities. Budgetary implications of the government's guarantee provide an additional public policy argument against Fannie and Freddie's special relationship with the federal government. Fannie and Freddie present four distinct budgetary problems. First, the cost of the government's guarantee is hidden because it is off-budget. Second, the cost of the guarantee is particularly difficult to quantify because it depends on the companies' ever-changing exposure to mortgage obligations. Third, the cost of the guarantee is not capped by the federal government, given that the federal government has not imposed any meaningful limits on Fannie and Freddie's growth. Finally, Fannie and Freddie's charters and the costs they might pose to the federal government are infrequently revisited by Congress. Indeed, Congress only takes a serious look at them every ten years or so, usually in the midst of some sort of crisis.

The first of these budget problems is particularly thorny. The federal government's contingent liability for its guarantee of Fannie and Freddie's obligations has been off-budget, allowing Congress to avoid having that liability trigger debt ceiling limits. If off-budget accounting is a bad sign when found in corporations such as Enron, it is at least as bad for the federal government. For, while the federal government was ultimately able to investigate Enron, who will watch the watchers? If the federal government had to

quantify and account for this contingent liability in its budget, it would materially reduce Congress's ability to increase net spending.

II. Fannie and Freddie Should Be Privatized

There are four broad positions regarding the appropriate role of Fannie and Freddie in the housing finance market. First, Fannie and Freddie are generally doing the job that they were designed to do, although their powers and that of their regulators should be tweaked. Second, Fannie and Freddie are generally doing their job, but they are retaining too much of the value of the government guarantee for the benefit of shareholders and management at the expense of their affordable housing goals. Third, Fannie and Freddie should be nationalized because the federal government has taken on most of the risk associated with them already. And finally, Fannie and Freddie pose a systemic risk to the financial system, unfairly benefit from their regulatory privilege, and do not create net benefits for the American people: they should therefore be privatized.

One taking the first view—that Fannie and Freddie are generally doing the job that they were designed to do—might argue that there is no need to extricate the federal government from its relationship with Fannie and Freddie because the government has similar regulatory relationships with many other private companies. Most of the proposals floated in the last few years fall into this category of limited reforms. They include

- limiting the size of their mortgage portfolios;
- limiting their debt issuance;
- stripping the two companies of some of their unique privileges to signal to the market that the implied guarantee has been weakened;
- freezing the conforming loan value to limit the size of mortgages they can buy, thereby limiting their overall size;
- requiring them to obtain ratings for their debt issuances that discount the implied guarantee;
- imposing user fees; and
- strengthening their subordinated debt programs.

Such a view simply fails to appreciate the unparalleled political influence that Fannie and Freddie are able to marshal. In combining elements of public instrumentalities and private companies, public-private hybrids like Fannie and Freddie can assert outsized influence in Washington. If any of the above half-measures

were adopted, Fannie and Freddie's lobbying juggernaut would be sure to undercut them as soon as Congress's focus moved on to another pressing issue.

Affordable housing providers and advocates often take the second position: Fannie and Freddie are pretty much doing their job of making housing more affordable to Americans, but they are retaining too much of the value of the government guarantee for the benefit of the shareholders and management, at the expense of their affordable housing goals. Thus, these parties favor proposals that redirect some of the excess profits of Fannie and Freddie from their shareholders and management to affordable housing programs.

Indeed, in a plan subsequently suspended by federal conservatorship, Congress had recently implemented an affordable housing fund in which the two firms would have deposited upwards of \$500 million of their income each year. These monies were to be invested in affordable housing projects throughout the country. Affordable housing advocates saw this as a painless way to dramatically increase the supply of affordable housing. The ongoing bailout of the two companies demonstrates that the initiative was not painless, just pain deferred.

The third position, nationalization, has only begun to be taken seriously as the Fannie and Freddie bailouts become more and more likely. Indeed, then-Treasury Secretary Henry Paulson had raised the idea, one which would seem to be anathema to a fiscal conservative like himself. Paulson proposed merging the two companies with the Federal Housing Administration, a government agency, which already insures certain mortgages. He did note, however, that such a plan would place much of the underwriting in the hands of the government, which is unlikely to do that task well (not that the private sector has done so either in recent years!).

I advocate for the fourth view: Fannie and Freddie pose a systemic risk to the financial system, unfairly benefit from their regulatory privilege, and do not create meaningful net benefits for the American people. Fannie and Freddie are holdovers from an earlier era of government action, one that has seen its day come and go. Indeed, if one were to create from scratch a new system of federally-supported residential mortgage finance, it is quite clear that the model would not be Fannie and Freddie, which are relatively inflexible and centralized solutions to the complex and fluid problems posed by the housing finance market. And while there is an argument to be made that Fannie and Freddie are market-oriented and incentive-based, it is a stronger argument to say that they are beneficiaries of regulatory privilege with incentives that have benefited their own management teams disproportionately.

Some commentators have pointed out that privatization is not a panacea for all systemic risk in the secondary mortgage market. They note that taxpayers have been held liable for bailing out private actors as much as GSEs during the recent crisis. However, in any systemic crisis comparable to the present one, the federal government will necessarily play the role of lender of last resort. Under more common market

conditions, privatization is a far superior alternative to private companies extracting monopolistic rents by exploiting a government-granted regulatory privilege.

III. Four Paths to Privatization

Four concrete plans have been recently proposed to fundamentally change Fannie and Freddie's structure, each involving different degrees of government involvement. First, convert them into cooperatives owned by lenders. Second, break the companies up into a number of smaller companies (or charter a number of similar competitors). Third, leave them intact, but regulate them like public utilities. Fourth, convert them into generic financial holding companies.

The first proposal, converting Fannie and Freddie into cooperatives, has precedent. There are two other privately-owned GSEs that are cooperative lenders: the Federal Home Loan Bank System (FHLB System) and the Farm Credit System. Some commentators have called for the FHLB System to take over Fannie and Freddie. This proposal has some initial attraction as it might attenuate the short term profit-maximizing culture that characterizes publicly-traded corporations like Fannie and Freddie. But history does not give comfort that such a GSE structure is superior to that of Fannie and Freddie. Indeed, Congress had to bail out the Farm Credit System in 1987. And there are rumblings that the FHLB System may soon face problems similar to those of Fannie and Freddie.

The second proposal, chartering additional housing finance competitors, also has some initial attraction. Indeed, one might consider the Federal Deposit Insurance system to be a model for this approach: numerous recipients of regulatory privilege (access to federally guarantee insurance) who must compete amongst themselves. If the Fannie/Freddie duopoly could be diluted with enough similar competitors, the amount of economic rent that Fannie and Freddie retain from their government guarantee subsidy should reduce significantly. In addition, one might think that a more competitive market would spread risk among more firms.

Upon further reflection, however, this proposal also reveals significant flaws. The benefit of GSE competition is less compelling now that we have experienced a bubble in which so many financial institutions demonstrated herd-like behavior in their business models. And, as with the first proposal, the American taxpayer is still left with the contingent liability of the government guarantee.

The third proposal, regulating Fannie and Freddie like utilities, appears to be favored by Paulson and taken seriously by the likes of Federal Housing Finance Agency Director James Lockhart. One worries however, how the common regulatory problem of capture would be avoided here where the two companies to be regulated are so clearly skilled in the art of politics.

The fourth proposal, converting them into generic financial services holding companies along the lines of institutions like Citigroup, J.P. Morgan, and Bank of America, has the attraction of simplicity. It also terminates the contingent liability of the government guarantee and allows the conforming mortgage market to function like other sectors of the overall mortgage market. There is also a precedent for this approach: Sallie Mae was successfully converted from a GSE to a privatized company. This approach would also send the message that the American mortgage markets have grown up and are now to be integrated with the rest of the financial sector.

This proposal has its own limitations which must be addressed if it were to be implemented. First, because Fannie and Freddie can offer at least a short term stabilizing role in the residential mortgage markets, the federal government would need to implement other policies to address that need when future crises occur. Possible policy responses to market disruptions could include providing targeted federal mortgage guarantees, authorizing the Treasury to make mortgage-backed securities purchases, and allowing mortgage lenders to access the Federal Reserve's discount window. There would also need to be a high degree of standardization and quality control across the multiple market players to ensure that the secondary mortgage market remains attractive to institutional investors. Policies like these can ensure that the residential mortgage market can function during a panic.

Second, homeowners will pay slightly higher interest for conforming mortgages if the two companies were privatized. If Congress determines that this increase were too much, particularly given the current condition of the economy, it could reduce the burden by modifying the deduction for mortgage interest or by providing a tax credit relating to mortgage interest. While such a strategy would decrease federal revenues, it would be offset by the liability that Fannie and Freddie impose on the federal government, a liability that is already on its way to costing taxpayers hundreds of billions of dollars as part of the current bailout.

Third, if the federal government wanted to increase funding for affordable housing as contemplated in the Act, it would need to do so through direct expenditures. Again, this direct cost would be offset (in reality, if not in terms of federal budget accounting) by terminating the contingent liability of the government guarantee.

Finally, Fannie and Freddie have imposed pro-consumer terms on the prime conforming mortgage market. These must be maintained and built upon through new consumer protection regulations in order to avoid the nasty and brutish environment that took root in the subprime mortgage market. And, indeed, it is hard to imagine that privatization would be politically feasible if such protections were not built into the privatization proposal.

Notwithstanding these limitations, the full-privatization proposal has the most going for it. It avoids the problem of the government guarantee that remains with the other three proposals. It leaves to the private

sector what the private sector is supposed to do best: evaluate risk. And it leaves to the government what it is supposed to do best: protect against systemic risk; provide affordable housing to those who could not otherwise afford it; and protect consumers.

IV. Conclusion

The main problem with GSEs is well-documented: they take on a life of their own and can survive well after they have achieved the purposes for which they are created. The typical result of poor GSE design is that the GSE ends up driving much of the legislative and regulatory agenda regarding its own fate. Fannie and Freddie reflect what is worst in GSE design. After fulfilling their purpose of creating a national mortgage market, they have taken on monstrously large lives of their own. In the midst of their bailout, Congress should take the opportunity to convert them to fully private status. Congress should also enact appropriate financial regulation, affordable housing programs, and consumer protection legislation. And Congress should remember the lessons of Fannie and Freddie when it considers using the GSE as a tool of government in the future.

This article is based in part on a forthcoming article by the author, Fannie Mae and Freddie Mac and the Future of Federal Housing Finance Policy: A Study of Regulatory Privilege, 61 ALA. L. REV. XXX (forthcoming 2009), available at http://works.bepress.com/david_reiss/25/. Thanks to Philip Tucker for excellent research assistance.



How to Charge for Deposit Insurance

Viral Acharya[†]

We stand at interesting crossroads. It is clear the world over that the financial sector is in for more regulation from central banks and governments. Bold plans are being proposed for resolving the distress of systemically risky institutions, expanding the perimeter of regulation to hedge funds, setting standards for compensation structures, and enhancing the transparency of derivatives and other off-balance-sheet activities. Will these plans work? It depends on the details of their execution.

Yet, one omission is striking even at the blueprint stage: There is little recognition, if any, that a large number of explicit guarantees—in effect, subsidies—still exist for the financial sector. These include, most notably, deposit insurance and the recently provided temporary guarantees for debt issuance offered to banks as a result of the financial crisis. Charging the financial sector for these guarantees in a manner that preserves financial stability ought to be on the regulatory agenda. That would require measuring and charging for the direct costs to taxpayers and indirect costs due to induced incentives for banks to take excessive risks.

This paper provides a basic introduction on how to charge for one such guarantee – the government provision of demand deposit insurance to banks—and offers an assessment of the current scheme for charging of such insurance in the United States.

Banks are funded to a large extent by short-term liabilities called “demand deposits”. Providers of deposits choose to roll these deposits over each day in the sense that they have the right to demand that their deposits be paid back at any point in time. Such demand deposits are explicitly or implicitly insured in most countries of the world up to some threshold amounts per individual (or deposit account). Furthermore, during the current financial crisis many countries, most notably Australia and New Zealand, introduced deposit insurance for the first time, whereas a significant majority increased their insurance coverage. To provide for deposit insurance when it is triggered, it is common in most developed countries to have a deposit insurance “fund” although regulators in some countries only realized the need to set up such a fund during the current crisis. The capital of deposit insurance funds—which will be needed in case an insured bank cannot meet its depositor’s demands—is essentially the reserve built up over time through collection of insurance premiums from insured banks.

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Given the relatively vast quantity of deposit insurance offered globally to the banking sector, it would seem natural that much thought must have gone into how governments or regulators should charge banks a premium for this insurance. It is thus rather surprising that most countries' funds have no insurance premium being charged and the few countries whose funds do charge a premium, such as the United States, do so in a manner that is not sufficiently risk-sensitive, and unfortunately pro-cyclical, so that the funds are almost certain to be strapped for capital when insurance claims materialize.

To help address these limitations in future regulatory reforms, we lay out three simple rules for how deposit insurance premium should be charged:

1. The premium should be sensitive to the risk of individual banks but also to *systemic risk*; that is, it should increase not only as individual bank failure risk increases but also, crucially, as the joint bank failure risk increases;
2. The premium for large banks should be higher per unit insured deposit compared to small banks; and,
3. The premium should be charged not just to be *actuarially fair*—that is, to ensure that the fund breaks even on average—but also to discourage moral hazard associated with the insurance. In particular, to discourage banks from acting as herds and creating excessive systemic risk, the premium should charge *more* for systemic risk than what the actuarially-fair premium would.

Our first and most basic prescription is that the extent of systemic risk in the financial sector is a key determinant of efficient deposit insurance premiums to be charged to insured banks. The argument is as follows. When a bank with insured deposits fails, the deposit insurance fund takes over the bank and sells it as a going concern or piecemeal. During periods with widespread bank failures, it is difficult to sell failed banks at attractive prices since other banks are also experiencing financial constraints (Shleifer and Vishny, 1992). Hence, in a systemic crisis, the deposit insurance fund suffers from a low recovery from liquidation of failed banks' assets. This, in turn, leads to higher draw-downs per insured deposit.

Also, the failure of large banks leads to greater fire-sale discounts and higher draw-downs from the insurance fund per insured deposit. In addition, the fire-sales problem has the potential to generate a significant pecuniary externality that can have adverse contagion-style effects on other banks and the real economy (compared to effects stemming from the failure of smaller banks). Hence, the resolution of big banks is more costly for the deposit insurance regulator, directly in terms of losses from liquidating big banks and indirectly from contagion effects.

Finally, bank closure policies reflect a time-inconsistency problem (Mailath and Mester, 1994; Acharya and Yorulmazer, 2007, 2008). In particular, the regulators would *ex ante* like to commit to be tough on banks

when there are wholesale failures to discourage them from ending up in that situation. However, this is not credible ex post and the regulators invariably show greater forbearance during systemic crises. While such forbearance has featured in the ongoing crisis from most regulators around the world, it has a strong set of precedents.¹ However, it is also true that such forbearance is costly ex post due to the fiscal costs of government intervention during crises. And such forbearance during systemic crisis is also costly ex ante as it creates a collective moral hazard whereby banks have incentives to herd and become interconnected so that, when they fail, they fail with others and increase their chance of a bailout.²

While our three principles for determining efficient deposit insurance premiums apply generally, it is useful to consider them in the context of how premiums have been priced in the United States. To this end, we provide below a discussion of the Federal Deposit Insurance Corporation (FDIC), the deposit insurance regulator, and the premium schemes that have prevailed so far in the United States.³

As a response to the devastating effects of the Great Depression, to insure deposits of commercial banks and to prevent banking panics, the FDIC was set up in 1933. The FDIC's reserves began with a \$289 million capital injection from the US Treasury and the Federal Reserve in 1934. Through most of FDIC's history, the deposit insurance premiums have been independent of the risk of banks, mostly due to the difficulty in assessing banks' risk. During the period 1935–1990, FDIC charged flat deposit insurance premiums at the rate of approximately 8.3 cents per \$100 insured deposits. However, starting in 1950, some of the collected premiums started being rebated. The rebates have been adjusted to target the amount of FDIC reserves in its Deposit Insurance Fund.

While the banking industry usually wanted deposit insurance assessments to be set at a relatively low level, FDIC wanted premiums to be high enough that the reserves could cover future claims from bank failures. In 1980, the assessment rate for the Deposit Insurance Fund varied between 1.1% and 1.4% of total insured deposits. As a result of the large number of bank failures during the 1980s, the Deposit Insurance Fund became depleted and the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA) mandated that the premiums be set to achieve a Designated Reserve Ratio (DDR) of reserves to total

¹ For example, Hoggarth, Reidhill, and Sinclair (2004) study resolution policies adopted in 33 banking crises around the world during 1977–2002. They document that when faced with individual bank failures, authorities have usually sought a private sector resolution where the losses have been passed onto existing shareholders, managers, and sometimes uninsured creditors, but not to taxpayers. However, government involvement has been an important feature of the resolution process during systemic crises: at early stages, liquidity support from central banks and blanket government guarantees have been granted, usually at a cost to the budget; bank liquidations have been very rare and creditors have rarely made losses.

² See Acharya (2009) for a fuller description.

³ This discussion is largely based on Saunders and Cornett (2007), Pennacchi (2009), and Cooley (2009).

insured deposits of 1.25%. Figure 1 shows the total deposits insured by the FDIC and Figure 2 shows the balances of Deposit Insurance Fund and the reserve ratio for the period 1990-2008.

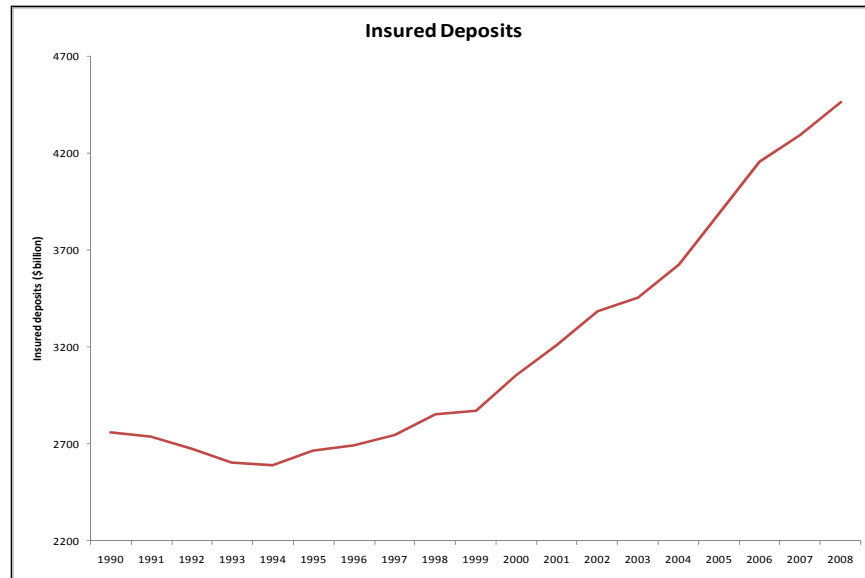


Figure 1: Total deposits insured by FDIC (Source: FDIC)

The bank failures of the 1980s and early 1990s led to reforms in the supervision and regulation of banks such as the Federal Deposit Insurance Corporation Improvement Act (FDICIA) in 1991 that introduced several non-discretionary rules. In particular, FDICIA required the FDIC to set risk-based premiums, where premiums differed depending on three levels of a bank's capitalization (well-, adequately-, and under-capitalized) and three supervisory rating groups (rating 1 or 2, rating 3, and rating 4 or 5).

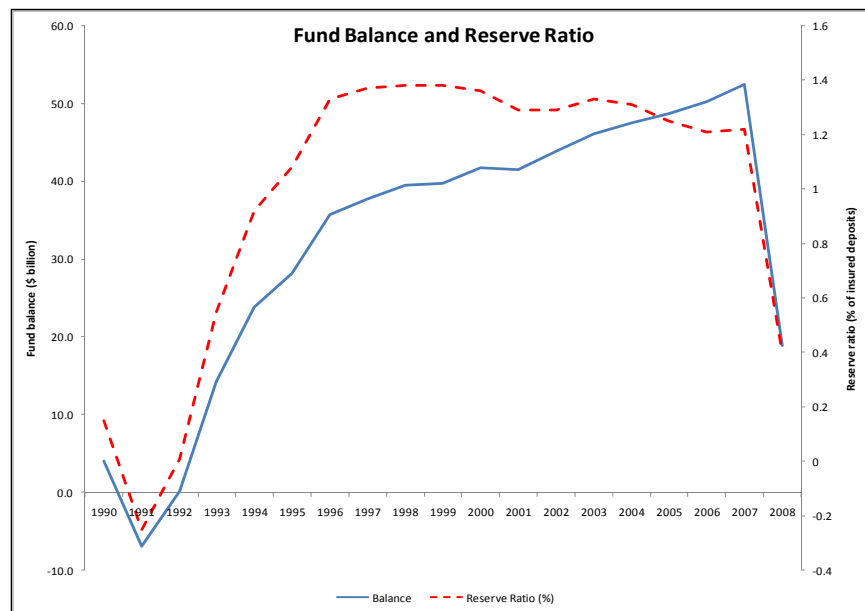


Figure 2: Balances of DIF and the reserve ratio (Source: FDIC)

However, the new rules have not been very effective in discriminating among banks. During 1996–2006, over 90% of all banks were categorized in the lowest risk category (well-capitalized, rating 1 or 2). Further, FDICIA and Deposit Insurance Act of 1996 specified that if the Deposit Insurance Fund reserves exceed the Designated Deposit Ratio of 1.25%, the FDIC was prohibited from charging any insurance premiums to banks in the lowest category. During the period 1996–2006, the Deposit Insurance Fund reserves were above 1.25% of insured deposits and the majority of banks were classified in the lowest risk category and did not pay for deposit insurance.

The Federal Deposit Insurance Reform Act of 2005 (FDIRA) brought some changes to the setting of insurance premiums. In particular, instead of a hard target of 1.25%, the Designated Deposit Ratio was given the range of 1.15% to 1.50%. When the reserve ratio exceeded 1.50% (1.35%), 100% (50%) of the surplus would be rebated to banks. If the reserve ratio falls below 1.15%, the FDIC must restore the fund and raise premiums to a level sufficient to return reserves to the reserve ratio range within five years. During the crisis of 2007–2009, the reserves of the Deposit Insurance Fund have been hit hard. The reserves did fall to 1.01% of insured deposits on June, 30, 2008, and they decreased by \$15.7 billion (45%) to \$18.9 billion in the fourth quarter of 2008, plunging the reserve ratio to 0.4% of insured deposits, its lowest level since June 30, 1993. Indeed, at such capitalization, even relatively small bank failures such as the Silverton Bank in Atlanta, Georgia and Bank United in Florida (with respectively around \$4 billion and \$12 billion in assets) threatened to wipe out the fund's reserves unless ready buyers were found in the private sector. In the first week of March 2009, the FDIC announced that it planned to charge 20 cents for every \$100 insured domestic deposits to restore the Deposit Insurance Fund. On March 5, 2009, Sheila Bair, Chairperson of FDIC, said her agency would lower the charge to around 10 basis points if its borrowing authority were increased. Senators Christopher Dodd and Mike Crapo introduced a bill that would permanently raise FDIC's borrowing authority to \$100 billion, from \$30 billion, and would also temporarily allow the FDIC to borrow as much as \$500 billion in consultation with the president and other regulators.

This discussion confirms our starting assertion that deposit insurance premiums have either been risk insensitive or relied only on individual bank failure risk and never on systemic risk. Further, even when premiums have been risk sensitive, the focus has been on *actuarially fair* premiums. This is reflected in effectively returning the premiums to banks when the deposit insurance fund's reserves become sufficiently high relative to the size of insured deposits. This kind of premium scheme is poorly designed. It is highly pro-cyclical in that the fund is never well-prepared for a reasonable systemic crisis and when one occurs it must raise the premium in the crisis rather than having done so in good times when banks would find it easier to pay. Further, the scheme is divorced from incentive properties. The rationale for charging banks a premium on a continual basis based on individual and systemic risk, regardless of deposit insurance fund's size, is that such a scheme causes banks to internalize in good times the expected costs imposed by the risk of their individual and joint failures on the deposit insurance fund and rest of the economy. Since a

systemic crisis would most likely cause the fund to fall short and dip into taxpayer funds, the incentive-efficient use of excess fund reserves, if any, is as a return to taxpayers rather than to insured banks.

While the nature of our three prescriptions for the efficient design of premium schemes is straightforward, quantifying systemic risk can be a challenge in practice. However, it is time now for academics, practitioners, and policy-makers to rise up to this challenge. A recent advance in Acharya, Pedersen, Philippon, and Richardson (2009) proposes a measure of systemic risk – the average loss incurred by a bank when the system as a whole experiences outcomes in its “left tail” (the so-called Marginal Expected Shortfall or “MES” of the bank). Such a measure can be calculated based on historical data or projected based on bank characteristics and should be suitable for revisions to future deposit insurance schemes.

This article is largely based on Acharya and Yorulmazer (2009) "Systemic Risk and Deposit Insurance Premium," forthcoming, Economic Policy Review, Federal Reserve Bank of New York.

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Regulatory Use of Credit Ratings: How it Impacts the Behavior of Market Conditions

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In July 2008, the United States Securities and Exchange Commission (SEC) published three proposals relating to the use of credit ratings in its rules and forms. The proposals were designed to address concerns that the misuse of credit ratings may have contributed to the current crisis. Learning from the recent experience and developing a solution to prevent future credit bubbles, the SEC is focusing, among other tasks, on credit rating agencies (CRA) oversight and regulation. The SEC Commissioner Kathleen Casey, in her speech to the SEC Open Meeting on December 3, 2008, stated that CRAs were not the only cause of the current crisis, but they played a role that was not insignificant. Last year the SEC staff conducted an extensive 10-month examination of the three largest CRAs and used the findings of the examination to inform the proposed amendments. The majority of them were related to the weaknesses of the rating process applied to rating residential mortgage-backed securities and collateralized debt obligations, lack of transparency, and conflicts of interests. As a result, the SEC called into question the appropriateness of using credit ratings as part of the regulatory process.

In Europe, the Joint Forum of the Basel Committee on Bank Supervision conducted its own survey of the use of credit ratings by its member authorities in the banking, securities, and insurance sectors. The survey answered the call of the G7's "Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience" to review whether the current regulations and/or supervisory policies unintentionally give credit ratings an official seal of approval that discourages investors from performing their own due diligence. The survey's questionnaire was designed to elicit information regarding member authorities' use of credit ratings in legislation, regulations, and supervisory policies. The goal of the survey was not only to collect information on internal references to "credit ratings," "credit rating agencies," or any references to specific credit rating agencies, but also to assess whether the use of credit ratings has had an effect of implying an endorsement of such ratings and rating agencies or discouraging investors from performing their own due diligence. The Joint Forum collected 17 surveys from member authorities, representing 26 separate agencies from 12 different countries, as well as five responses describing international frameworks.

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I. Use of Credit Ratings by Fiduciaries and Regulators

Both in the U.S. and in Europe, credit ratings are generally used for five key purposes: (1) determining capital requirements; (2) identifying or classifying assets, usually in the context of eligible investments or permissible asset concentrations; (3) providing a credible evaluation of the credit risk associated with assets purchased as part of a securitization offering or a covered bond offering; (4) determining disclosure requirements; and (5) determining prospectus eligibility. Rating agencies themselves ascribe widespread use of credit ratings by the market participants to the following attributes:

- **Independent:** Investors may or may not agree with a specific rating opinion, but in general, it is believed to be unbiased towards any particular set of interests.
- **Forward-looking:** Through their historical default studies, rating agencies demonstrated that the ratings serve as reliable indicators of relative ability of bond issuers to honor their payment obligations upon maturity of the bonds.
- **Stable:** Ratings are meant to be driven by fundamentals of the issuing entity and not much affected by economic cycles.
- **Simple, easy to understand:** Letter symbols arranged in an alphabetical order are intuitively understood.
- **Broad coverage:** Credit rating agencies with global outreach assign ratings to hundreds and thousands of issuers in different countries. In addition, multiple asset classes and types of instruments are covered by rating services, which, in theory, allows for direct comparison of relative creditworthiness of different types of financial instruments.

By making their opinions broadly and publicly available, rating agencies claim to achieve their core mission of reducing information asymmetry between borrowers and lenders. The rating information excluding a relatively small share of unpublished ratings is communicated via press releases to the media and available to the general public through postings on agency's websites for free. Those rating attributes, as well as the ratings' information value, were widely criticized in academic literature. Partnoy (2006) in his paper *Why and How Credit Rating Agencies are Not Like Other Gatekeepers* commented on an unusual rating agency paradox: rating changes are important, yet they possess little informational value. Altman (2004) in *The Effects of Rating Through the Cycle on Rating Stability, Rating Timeliness and Default Prediction Performance* found evidences of conflicting goals of rating accuracy and stability as "...investors want to keep their portfolio rebalancing as low as possible and desire some level of rating stability. They do not want ratings to be changed to reflect small changes in financial condition."

The first regulatory reference to the ratings in the U.S. is found in 1931 in the Office of the Comptroller of the Currency (OCC) and Federal Reserve examination rules, and was mainly based on distinction between investment grade securities, generally rated BBB/Baa and above, and securities of below-investment grade quality. Over time, regulators in the U.S. and globally have incorporated credit ratings into laws and regulations to set capital requirements for regulated entities, provide a disclosure framework, and restrict investments. In 1975, the SEC adopted amendments to rule 15c3-1 of the Securities Exchange Act of 1934 requiring broker-dealers, when computing net capital, to “haircut” their proprietary securities positions. Rule 15c3-1 allows broker-dealers to take reduced haircuts for certain securities provided such securities are rated in a specified rating category by one or two credit rating agencies. Another example of rating use in regulatory documents is Rule 2a-7, which governs certain investment and operational policies of the U.S.-domiciled money market funds. It prohibits money market funds from investing in asset-backed securities unless rated by a credit rating agency. We also note that the SEC’s rules reference credit ratings assigned by different agencies interchangeably for the purposes of regulatory compliance and satisfying investment guidelines, thus contributing to commoditizing the rating opinions. Recognizing possible unintended consequences of the regulatory use of ratings, in the summer of 2008 the SEC in three separate releases proposed and sought public comments to amendments to most of the SEC’s rules that rely on security ratings with alternative requirements.

II. Market Participants Comment on the SEC Proposals to Remove References to Credit Ratings in its Rules

By the end of the comment period in September 2008, the SEC had collected and posted on its website 63 comments from retail and institutional investors, issuers, finance professional trade associations, and service providers such as law firms and CRAs themselves. The majority of respondents (79%) opposed the proposal of removing references from various SEC rules and other regulatory documents. Among those who opposed the SEC proposals were institutional investors mainly represented by the boards of independent directors of money market mutual funds and investment advisors managing those funds. The amendments, if accepted, were expected to make a significant impact on the scope of fund directors/trustees’ responsibilities short of placing the fund’s boards in the position of assessment or approval of individual securities’ creditworthiness. The boards found the proposed changes inconsistent with the broader SEC intent to reduce the operational burdens of fund directors. Responding funds’ directors pointed out other challenges that investors may face should the proposed changes be adopted:

- Boards of different fund complexes are likely to have diverse views on creditworthiness of money market securities thus complicating comparative analysis for fund investors;
- Smaller funds lacking research staff may pursue more aggressive strategy by pushing for yield rather than limiting credit risk.

Moreover, the boards' members admitted lack of relevant credit analysis background or experience. Thus, the boards were likely to seek the advice of qualified consultants such as CRAs. Accordingly, the fund directors found the proposed changes neither advancing the core oversight role of the fund boards nor beneficial for fund investors, and urged the SEC to leave Rule 2a-7 in its current form.

Finance professional trade associations also expressed a high level of acceptance of references to credit ratings. One of the objectives of the professional trade associations is to liaise with regulators and facilitate lobbying activities of institutional investors such as mutual funds, public fund managers, or corporate treasurers. Thus professional trade associations do not provide their own opinion, but rather express the view of their members. Consistent with the view of institutional investors, 91% of participating professional trade associations were opposed to the relevant proposals. In its comment, The Investment Company Institute, the national association of the U.S. mutual funds and investment companies, noted that "...ratings – even if occasionally flawed – protect investors by establishing an important floor below which investments may not be made. By eliminating this floor, the Commission would remove an important investor protection..., abandon a regulatory framework that has proven highly successful, introduce new uncertainties and risks, and put in jeopardy a form of mutual fund that has served investors highly successfully for a generation." Institutional investors and their professional trade associations use credit ratings as a benchmark that can be applied against a variety of conclusions regarding creditworthiness of a particular security by different fund boards. In their view, a removal of such a benchmark would likely create confusion for fund shareholders facing such multiple opinions and decrease comparability of fund portfolios managed by different investment advisors. In this case, the SEC is facing a dilemma of promoting market efficiency and transparency for the benefit of investors while limiting blind reliance on CRAs' ratings.

On the other side of the spectrum is academia, which was represented by two respondents: Professor Lawrence J. White of the Stern School of Business, NYU, and Professor Frank Partnoy of the University of San Diego Law School. Both professors supported the proposed changes. Comments from academia were mainly focused on addressing an elimination of perceived monopoly of credit rating agencies created by the regulatory use of credit ratings. Prof. White noted, "the consequences of these existing requirements...have been to protect a handful of rating firms, who thereby have had a guaranteed market for their ratings." Prof. Partnoy echoed Prof. White's comment by reiterating his view that the success of the credit rating business is largely based on fee income from regulatory-dependent structured finance rating. Prof. Partnoy recommended including language indicating reliance on market-based information and market prices to gauge riskiness of a particular asset instead of credit ratings.

Critiquing Prof. Partnoy's recommendation, we draw on the lessons of the market dislocation of 2007–2008: deterioration of relationship between market price of the security and its value. At the time of acute

liquidity constraint, secondary market price does not necessarily reflect the security's intrinsic value, but rather the balance sheet capacity of its market makers. Faced with the absence of market quotations, financial institutions were forced to take massive write downs on performing securities. High dependence of market indicators exacerbated the speed with which the market downfall unfolded. The SEC proposals were supported by academia mainly because of the stated goal to move away from the "regulatory license" and protected oligopoly of CRAs. The weakest part of the proposals is an absence of any suitable alternative for a credit risk indicator.

Comments were also submitted by organizations that provide services to the financial market participants such as data consolidators and distributors, law firms, and CRAs themselves. Six law firms' comments on proposed changes were largely consistent with those comments provided by investors and trade associations representing broker/dealers and securitization market participants such as Securities Industry and Financial Markets Association (SIFMA) and American Securitization Forum (ASF). None of commenting law firms supported the proposed changes to Rule 3a-7, but rather expressed concerns that the removal of references to credits ratings and/or changes in eligibility requirements are likely to lead to less transparency in the asset-backed and mortgage-backed securities (ABS/MBS) markets and may further impair ability of ABS/MBS holders to sell or otherwise transfer affected securities.

The final and, perhaps, counterintuitive group of responses came from CRAs themselves. In the U.S. there are currently ten organizations officially recognized by the SEC as Nationally Recognized Statistical Rating Organizations (NRSRO). They are Realpoint LLC, LACE Financial Corp., A.M. Best Company, Inc., DBRS Ltd., Egan-Jones Rating Company, Fitch, Inc., Japan Credit Rating Agency, Ltd., Moody's Investors Service, Inc., Rating and Investment Information, Inc., and Standard & Poor's Ratings Services. Only five NRSROs participated in the comment process. The three of the five commenting rating organizations (Moody's Investors Service, Standard & Poor's Rating Services and Egan-Jones Ratings Company) supported the SEC proposals. Two NRSROs (DBRS, Ltd. and Realpoint, LLC) objected to the proposals.

Those NRSROs supporting the proposals recognized that the widespread regulatory use of ratings may present certain dangers for the rating business as it was initially envisioned. Fourteen years ago, Moody's senior-level official Thomas McGuire discussed appropriateness of the use of the private product produced for a fee for regulatory purposes. He argued that the financial market would be able to keep a natural check on rating agencies to produce accurate ratings so long as no other objectives except serving investors' interests weighed on the rating agencies. Use of ratings for regulatory purposes disturbs the natural balance. These CRAs' main concern was related to the perception of greater need for the SEC to become involved in the substance of rating methodologies. Vicki A. Tillman, Executive Vice President Standard & Poor's Ratings Services, commented that "the investing public may perceive that [the SEC] is involved in NRSROs' processes or methodologies, or that [the SEC] has influence over the meaning or substance of NRSROs' ratings." In their comments, the participating global CRAs reiterated their view on

credit ratings as merely one of the tools available to market participants including regulators. Moody's Investors Service "[does] not believe, and never [has] recommended, that [ratings] should be used as anything but an opinion about credit risk. [Moody's] expect[s] that [the SEC's] reassessment of the use of ratings in its rules and forms will help reinforce this concept."

Opposing the SEC proposal were two smaller rating agencies for which NRSRO status was granted relatively recently: DBRS received NRSRO status in September 2007, and Realpoint received NRSRO status in June 2008. DBRS highlighted a conflict of interest that a reliance on the use of broker/dealers internal models for calculating net capital requirements may pose if not checked against some other common measures of risk such as ratings assigned by NRSROs. DBRS also proposed measures to reduce and manage such a conflict. Commenting to Rule 2a-7 proposed amendments, DBRS also voiced concerns about whether boards of directors of money market funds have necessary expertise and resources to be solely responsible for credit quality control of portfolio holdings. Realpoint, being the most recent credit rating agency granted an NRSRO status, not only opposed the SEC proposals, but advocated enhancing and clarifying the role of NRSROs in the SEC's documents. Responding to the SEC's question of what the advantages and disadvantages are of eliminating the requirement to use NRSRO ratings from Rule 2a-7 governing activities of money market funds, Realpoint noted no advantages in relying solely on money market fund boards of directors to make minimum credit risk determinations, but proposed "[the SEC] to require the board to separately consider credit rating(s) of Requisite NRSROs and document or publish when the board's determinations deviate therefrom. Such a requirement would support [the SEC] stated goals without authorizing a complete disregard for readily-available NRSRO credit ratings." Realpoint urged the SEC to consider amendments to the definition of "Requisite NRSROs" in Rule 2a-7 to include at least one unsolicited NRSRO credit rating.

Analysis of CRAs' responses highlights an interesting phenomenon of a division in opinions of mature CRAs versus those recently granted NRSRO status. Both Moody's and S&P advocated NRSRO ratings being removed from the SEC's rules, thus eliminating the public perception of regulatory support of their businesses and encouraging independent credit research and analysis by the market participants. Contrary to this view, the new entrants DBRS and Realpoint supported the existing regulatory regime and suggested measures to enhance and encourage the use of ratings in the SEC rules. The division of CRA opinions suggests that the use of credit ratings in the SEC rules perhaps helps to enhance the existing ratings business model. If so, the new entrants may be challenged to gain a market share absent mandatory rating requirements and related "rating shopping."

III. Change in Behavior of Market Constituents

There is an impression among some market participants, broad investment public, financial, and mainstream media that regulatory use of ratings caused the success of the credit rating business. Such an

impression misconstrues the history of the use of the ratings. Indeed, the ratings agencies themselves have cautioned that CRAs' ratings should not be used as a substitute for actual financial market regulation and market discipline. By using credit rating as a regulatory tool, a regulator can alter behavior of the market participants, including investors, issuers, regulated entities, and credit rating agencies themselves. Credit ratings are meant to be used by investors as an independent second opinion regarding securities' creditworthiness, thus being an additional source of information in an investment decision-making process.

Issuers mainly use ratings to increase marketability of their debt, thus facilitating access to capital markets. By establishing a level of credit risk, published rating opinions play a major role in building an effective and liquid market. However, an official recognition of credit ratings in certain regulatory documents such as Net Capital Rule and an interchangeable use of available ratings encouraged "rating shopping" among issuers. Rating shopping occurs when an issuer chooses the rating agency that will assign the highest rating or that has the most lax criteria for achieving a desired rating. The phenomenon is especially noticeable in rating structured credit issues, where the rating is based on the use of quantitative models sensitive to various assumptions. In its report titled "Rating Shopping – Now the Consequences" published in April 2006, Nomura Securities pointed out an assumption of zero correlation between two companies in different industries in S&P modeling of default probabilities in CDO ratings. The assumption was more lenient than correlation statistics used by other rating agencies and led to more favorable rating conclusions. Naturally, S&P's market share in CDO business was higher than that of Moody's and Fitch. It was noted in the same report that investors may serve as a watchdog against rating shopping and demand deals having multiple ratings. In the environment where ratings are commoditized and used interchangeably, an issuer tends to request a rating from an agency with more lax standards than its competitors. Due to extra advantages derived from getting the highest possible rating, issuers are discouraged from considering a lower rating despite of its apparent benefit of accuracy and stability. From the issuer's perspective, the rating credibility is supported by the official status of NRSROs.

Finally, rating agencies have viewed diversity of rating opinions derived on the basis of proprietary methodologies as one of the major benefits to the marketplace. However, the use of a ratings-based regulatory system for identifying, measuring, and managing investment risks may encourage regulators to attempt homogenizing credit rating methodologies. This comes in contradiction to the core purpose of the rating business: to provide independent and competing opinions about relative creditworthiness.

To conclude, we would like to note a growing dependency of all market constituents on the CRA ratings as a common measure of creditworthiness, especially in the world of less transparent structured credit securities. The behavior of market constituents, including investors, issuers, and regulated entities has been affected by such dependence. The SEC proposal came about to address the perceived failure of the CRA to accurately indicate riskiness of structured credit securities. Still, the feedback to the SEC proposals to eliminate references to NRSROs' ratings in its rule indicates that the market participants are not ready to

accept responsibilities for an independent credit risk assessment. We infer that investors, fiduciaries, and regulated entities are looking to regulators to offer a common measure of risk, accurate and free of conflict of interests. At the very minimum, the market participants expect the SEC to assume a more important role in controlling the integrity of the credit rating process.

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