Thank you for this opportunity to speak with you this evening. Three years have passed since the darkest days of the 2007–2009 financial crises. Since then, as is often the case in the wake of extreme economic events, we have seen considerable effort devoted to regulatory reform, including legislative action, supervisory improvements and international collaboration. While this first wave of remediation work has yielded considerable progress, we should be under no illusions that the steps taken so far will provide durable and reliable protection against future instability. My view is that without a robust program for repairing the fundamentally flawed relationship between government and the financial sector, the odds are quite high that before long we will face an episode of financial distress just as wrenching as the one we just experienced.

One might wonder what remains to be done now that the economy is in recovery and we are well on the way to implementing the 2,319-page Dodd-Frank Wall Street Reform and Consumer Protection Act. The Act, however, is a patchwork of provisions, motivated by an array of conflicting crisis narratives, and supplemented by an assortment of banking provisions largely unrelated to the crisis. The law does some very good things and some arguably counterproductive things, but it leaves many important things undone. With the financial crisis largely abated, at least on this side of the Atlantic, this strikes me as a good time to step back, reflect on what we’ve learned and consider what steps to take next. Our path forward will be much more constructive if it’s grounded in a reasonably coherent understanding of the tradeoffs inherent in financial stability policy—and of how the crisis came to pass.

In our time together tonight, I will outline a broad agenda for achieving a sustainable and effective relationship between the government and the financial sector—a “program for financial stability,” if you will. This program is based on what I believe is the most compelling assessment of the causes of the crisis, one that emphasizes the role of the financial safety net in weakening market discipline and the role of ambiguity about the safety net in amplifying the effects of financial stress and inducing public sector rescues. I have discussed this assessment at length in other venues over the last four years. While others have articulated very similar
perspectives, I should note that the views expressed here are my own and are not necessarily shared by colleagues within the Federal Reserve System.

**Competitive Markets and Moral Hazard**

Let me begin with the observation that competitive markets for financial instruments—and here I would include everything from credit cards and other consumer loan products to the complex derivatives widely used to reallocate risk—have demonstrated an immense power to extract, aggregate and disseminate diverse individual assessments about the economic fundamentals that underlie financial market transactions. This feature is generally beneficial because such aggregation of information is how financial markets play their role in allocating resources to their most valued uses. As remarkably efficient as financial markets may be at processing disparate information, however, they perform this function imperfectly and can sometimes make mistakes. Financial markets can “overshoot,” in the sense that prices or quantities can reach levels that, with hindsight, appear to represent erroneous valuations. But identifying those mistakes in real time is exceedingly difficult. Since estimating the true fundamental value of a financial instrument is hard even for market mechanisms, which embody the judgment of many, it can be quite risky to rely instead on the judgment of a few individuals—even central bank staff—who claim to know that the market is wrong.

My use of the word “competitive” is vitally important here, since competition is what allows many investors to have a voice in the market process. Competitive markets give participants the incentive and opportunity to use the information they have in pursuit of individual gain. This dynamic is how their individual information gets amalgamated into market prices. But this same dynamic means that competitive markets also can be ruthless in devising and proliferating ways to shift private risks to the government, and thus to taxpayers. When a government guarantee program creates an opportunity to profit from taking risks that are to some extent borne by taxpayers, competition will generate a rush toward that opportunity, inflating the risks born by the taxpayer and depriving other sectors of resources they deserve.

Government guarantees for financial institutions have been particularly problematic for financial stability. Federal deposit insurance was established in the 1930s in response to the wave of bank failures that swept the country early in the Great Depression. But the banking problems in the 1930s were at least partially the result of the nation’s fragmented banking system, which in turn was the result of legal restrictions on bank consolidation. Federal deposit insurance emerged as a political compromise that placed taxpayers behind the risks taken by small, poorly-diversified banks, instead of allowing banks to diversify those risks through consolidation. The incentive problems associated with deposit insurance came to a head in the 1980s, at a substantial cost to taxpayers, and led to reforms that stabilized the system, making it more sustainable.

**Implicit Government Guarantees and Shadow Banking**

Alongside formal deposit insurance, there arose beginning in the 1970s, the practice of using the Federal Reserve’s independent balance sheet to provide fiscal support for the uninsured liabilities of large financial institutions. This trend created a pattern of assistance to financially distressed firms like Penn Central, Franklin National, Continental Illinois and the Bank of New York. The
presumption of support for large financial institutions was further bolstered by repeated regulatory forbearance for large bank holding companies with exposures to emerging market debt in the 1980s. The growth of the government sponsored enterprises Fannie Mae and Freddie Mac as implicitly protected institutions also contributed to this trend. I believe the recent crisis was the culmination of a sequence of precedent-setting interventions that led the creditors of many large financial firms to expect protection in the event of financial distress. This regime reached the point where federal guarantees—implicit and explicit—covered nearly 60 percent of the liabilities of financial firms in the U.S.4

As we learned from the savings and loan crisis of the 1980s, government guarantees are dangerous without limits on risk-taking. The market discipline that is lost when insured creditors do not feel themselves to be at risk must be replaced by official regulation and supervision. Otherwise, moral hazard will lead to excessive risk-taking. As the recent crisis made clear, however, the same incentive problems extend beyond explicitly-insured depository institutions to include the wide swaths of the financial sector that enjoyed implicit guarantees. Such guarantees provided an artificial stimulus to leverage up, take on concentrated risks and engage in maturity transformation—issuing liquid liabilities to fund longer-term, illiquid assets; all of which led to overexpansion of the so-called “shadow banking system.”

Most of the financial market disruptions during this crisis originated in the shadow banking sector. Accordingly, much of the response by regulators and legislators has been in the form of strengthening prudential regulation for all manner of financial firms, especially those large enough to be considered “systemically important” and, therefore, more likely to receive support in a crisis. For instance, regular forward-looking capital assessments, or “stress tests” (a set of these was recently concluded), provide a robust and transparent means of ensuring the adequacy of firms’ capital buffers against regulator-specified adverse economic scenarios. The enhanced prudential standards mandated by Dodd-Frank have also usefully strengthened the regulatory restraints on risk-taking, particularly in the areas of capital requirements and liquidity management expectations.

But it would be a grave error, in my view, to rely too heavily on our ability to offset the effects of implicit safety net guarantees through more strenuous regulation. Sooner or later that approach is likely to fail. The more the centralized judgment of a small handful of officials, however well-informed or well-meaning, replaces the decentralized judgments of a multitude of financial market participants, the less resilient our system will become. We should strive for a financial system that is robust to large shocks and to the unavoidable errors of judgment made by individuals or single organizations.

I should note that I have the utmost respect and admiration for the men and women of our federal banking agencies who have served on the frontlines overseeing and evaluating the activities of large financial institutions. Many worked incredibly long and stressful hours for months at a time during the darkening days from mid-2007 through early 2009, only to find in the aftermath that their unique skills and experience necessitated continued demands on their time for the task of adapting prudential supervision to the new order. To my knowledge, they have served with distinction and integrity in pursuit of an arduous and complex mission.
Restoring Market Discipline

Instead of placing all of our eggs in the basket of tighter regulation, we should place significantly greater reliance on the powerful decentralized forces of market discipline to constrain the risk-taking of large financial institutions. This requires a credible restoration of the belief that financial firms’ creditors will not benefit from public sector support in the event of financial distress. To do this, however, we must face the fact that authorities often view the unassisted resolution of a failing or illiquid financial firm as intolerable, despite the acknowledged likelihood that such assistance erodes market discipline and distorts incentives.

Accordingly, one key strategy in the pursuit of financial stability is to make unassisted financial firm failures less disruptive—and thus less aversive to policymakers. One task under such a strategy would be to critically re-examine the bankruptcy code from a post-crisis perspective, to look for ways to better adapt it to the business of financial firms, particularly those firms that rely heavily on short-term funding to finance holdings of longer-term assets. In this context, some scholars have highlighted the fact that many short-term financing instruments and derivatives are exempt from bankruptcy’s automatic stay. Such treatment is argued to have over-encouraged the use of such instruments, and thereby enhanced the growth and fragility of the shadow banking sector. Thomas Jackson and David Skeel have proposed limiting this exemption, as well as adding a new chapter to the bankruptcy code specifically adapted to large financial firms. These reform proposals look quite promising and deserve serious consideration, in my view.

Another approach to making unassisted financial firm failures less intimidating would be to ensure that financial firms prepare credible and robust plans for their orderly wind down in the event of illiquidity or insolvency. Such “living wills,” as they are called, were mandated by the Dodd-Frank Act. Regulators issued final rules for resolution plans on October 17, 2011, and expect to receive draft plans from the largest financial institutions by July 1. Related, an international group of banking and financial supervisors and regulators is working to understand and address impediments involved in the resolution of large, complex, internationally active financial institutions.

Credible plans for liquidating a large complicated financial firm may be hard to imagine. The legal and operational complexity of such firms may reflect a variety of motives, such as optimizing tax liabilities, managing regulatory jurisdictions or isolating legal liabilities. There may be trade-offs between the benefits to the firm employing such strategies and the financial stability benefits of more separable legal structures. If so, I believe that ease of separability deserves the far higher priority, given what we have been through. Credible pre-existing plans for the orderly wind down of a large financial institution would go a long way toward reducing the odds of public sector support that thwarts market discipline. I also believe that supervisory work on such plans, by highlighting the implications of various organizational structures for the bankruptcy process, could materially assist in efforts to understand how bankruptcy law might be improved as it applies to large financial firms.

A key characteristic of a regime relying more heavily on market discipline is a widespread belief that policymakers will not rescue the creditors of failing financial firms. Bankruptcy reform and sound resolution plans may not be enough to allow authorities to credibly commit to allow
markets to work, however. Accordingly, a second strategy for financial stability is to constrain the public sector’s ability to provide ad hoc support to firms facing financial stress. The Dodd-Frank Act included some explicit constraints on the Fed’s ability to provide extraordinary support by limiting our so-called “13(3)” powers to lend to non-depository firms in “unusual and exigent circumstances.” These restrictions do not go far enough, in my view, and I would favor further tightening restrictions on Federal Reserve lending by eliminating section 13(3) entirely. This would be consistent with reducing the discretionary scope for inappropriate central bank credit allocation and thereby enhancing the separation between monetary and fiscal policy.5

Dodd-Frank, in Title II, also created an “Orderly Liquidation Authority,” under which the FDIC appears to have substantial discretion in the use of public support to aid creditors in the liquidation of failing financial firms. This title, which otherwise closely parallels existing bankruptcy law, undercuts the objective of greater financial stability by promoting uncertainty about public support.

A third financial stability strategy is to look for places where regulatory or legal impediments prevent private sector arrangements that would reduce instability. Money market mutual funds, which benefited from substantial official support at the height of the crisis in 2008, appear to present such an opportunity. These funds have been allowed to use amortized cost accounting and fixed net asset values, rather than marking assets to market as do other mutual funds. In exchange, their asset holdings are restricted to short-term financial instruments. This allows the money funds to operate very much like bank accounts, but without the overlay of banking regulation and supervision. (Indeed, money market mutual funds arose in the 1970s and became popular as a means of bypassing regulatory limits on bank deposit interest rates.) The regulations also stipulate that if the value of a fund’s assets falls below the value it has promised to investors—that is if they “break the buck”—then the fund must be liquidated. These two features combine to prevent funds from temporarily suspending full payment in the event of difficulty, a strategy that has allowed institutions in many settings to staunch destabilizing “runs.” For example, in the era before deposit insurance partial suspensions were key to resolving banking panics and in the recent crisis, many hedge funds were able to avoid instability and preserve value by delaying redemptions. Current regulations essentially prevent money market funds from structuring themselves in ways that reduce their fragility and vulnerability to runs. We should eliminate regulations that keep these intermediaries from reducing their vulnerability.

A Program for Financial Stability

Let me conclude by briefly summarizing the program I have outlined for you. The first element—strengthening the prudential supervision of large financial institutions—is well underway, though much important work remains to be done. This good work will fail to prevent financial market disruptions, however, without serious efforts to significantly increase our reliance on the disciplining force of competition to constrain inappropriate risk-taking.

- We should critically re-examine bankruptcy law in light of recent events, looking for ways to improve its effectiveness for stressed financial firms and reassure policy authorities.

- We should take a very rigorous approach to the Dodd-Frank provisions requiring credible resolution plans for large financial firms.
To improve the credibility of a commitment to greater market discipline, we should further restrict the means available to use public funds to rescue private creditors.

And we should remove any legal or regulatory impediments—such as the existing money market fund rules—that prevent financial intermediaries from reducing their vulnerability to financial shocks.

This program of enhancing the use of competitive market forces may take considerable time and effort to achieve. In particular, since actions often speak louder than words, commitment to market discipline might not be fully credible until the first instance in which authorities allow a large financial firm to fail without public assistance. But I believe the alternative of relying solely on regulation with ever-increasing reach and ever-increasing stringency will ultimately fail to provide adequate financial stability.

---

1 I am grateful to John Weinberg for assistance in preparing this address.