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Fostering Financial Stability

Remarks by

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Board of Governors of the Federal Reserve System

at the

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I commend the organizers of this conference for the event's apt subtitle: "The Devil's in the Details." For the Federal Reserve and other financial regulators, getting the details right is crucial as we implement the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) and strive to meet our broader financial stability responsibilities. About three and a half years have passed since the darkest days of the financial crisis, but our economy is still far from having fully recovered from its effects. The heavy human and economic costs of the crisis underscore the importance of taking all necessary steps to avoid a repeat of the events of the past few years.

Tonight I will discuss some ways in which the Federal Reserve, since the crisis, has reoriented itself from being (in its financial regulatory capacity) primarily a supervisor of a specific set of financial institutions toward being an agency with a broader focus on systemic stability as well. I will highlight some of the ways we and other agencies are working to increase the resiliency of systemically important financial firms and identify and mitigate systemic risks, including those associated with the so-called shadow banking system. I will also discuss the broad outlines of our evolving approach to monitoring financial stability. Our efforts are a work in progress, and we are learning as we go. But I hope to convey a sense of the strong commitment of the Federal Reserve to fostering a more stable and resilient financial system.

Systemically Important Financial Firms

Banking Institutions

Since the crisis, the Federal Reserve has made important strides in the traditional, microprudential regulation and supervision of individual banking organizations. Promoting the safety and soundness of individual financial firms is a critical

responsibility. To an increasing extent, however, we have also been working to embed our supervisory practices within a broader macroprudential framework that focuses not only on the conditions of individual firms but also on the health of the financial system as a whole.

Even before the enactment of the Dodd-Frank Act, we had begun to overhaul our approach to supervision to better achieve both microprudential and macroprudential goals. In 2009, we created the Large Institution Supervision Coordinating Committee--a high-level, multidisciplinary working group, drawing on skills and experience from throughout the Federal Reserve System--and charged it with overseeing the supervision of the most systemically important financial firms. Through the coordinating committee, we have supplemented the traditional, firm-by-firm approach to supervision with a routine use of horizontal, or cross-firm, reviews to monitor industry practices, common trading and funding strategies, balance sheet developments, interconnectedness, and other factors with implications for systemic risk. Drawing on the work of economists and financial market experts, the coordinating committee has also made increasing use of improved quantitative methods for evaluating the conditions of supervised firms as well as the risks they may pose to the broader financial system.

An important example of our strengthened, cross-firm supervisory approach is the recently completed second annual Comprehensive Capital Analysis and Review (CCAR).¹ In the CCAR, the Federal Reserve assessed the internal capital planning

¹ For more information, see Board of Governors of the Federal Reserve System (2012), "Federal Reserve Releases Paper Describing Methodology Used in 2012 Comprehensive Capital Analysis and Review Stress Test," press release, March 12, www.federalreserve.gov/newsevents/press/bcreg/20120312a.htm; and Board of Governors of the Federal Reserve System (2012), "Federal Reserve Announces Summary Results

processes of the 19 largest bank holding companies and evaluated their capital adequacy under a very severe hypothetical stress scenario that included a peak unemployment rate of 13 percent, a 50 percent drop in equity prices, and a further 21 percent decline in housing prices. From a traditional safety-and-soundness perspective, we looked at whether each firm would have sufficient capital to remain financially stable, taking into account its capital distribution proposal, under the stress scenario. The simultaneous review, by common methods, of the nation's largest banking firms also helped us better evaluate the resilience of the system as a whole, including the capacity of the banking system to continue to make credit available to households and businesses if the economy were to perform very poorly. Because stress tests will be an enduring part of the supervisory toolkit, we are evaluating the recent exercise particularly closely to identify both the elements that worked well and the areas in which execution and communication can be improved.

We also now routinely use macroprudential methods in analyzing the potential consequences of significant economic events for the individual firms we supervise and for the financial system as a whole. A good example is our response to the European sovereign debt concerns that emerged in the spring of 2010. Since those concerns arose, we have been actively monitoring U.S. banks' direct and indirect exposures to Europe and tracking the banks' management of their exposures. We have also been analyzing scenarios under which European sovereign debt developments might lead to broader dislocations, for example, through a sharp increase in investor risk aversion that adversely affects asset values. This work not only has improved our understanding of

banks' individual risk profiles, it also has helped us better evaluate the potential effects of financial disruptions in Europe on credit flows and economic activity in the United States.

Macroprudential considerations are being incorporated into the development of new regulations as well as into supervision. For example, in December, the Federal Reserve issued a package of proposed rules to implement sections 165 and 166 of the Dodd-Frank Act. The rules would establish prudential standards for the largest bank holding companies and systemically important nonbank financial firms, standards that become more stringent as the systemic footprint of the firm increases. We are also collaborating with the Federal Deposit Insurance Corporation (FDIC) and foreign authorities to help implement the FDIC's new resolution authority for systemically critical firms. In particular, last fall we issued a joint rule with the FDIC that requires each of these firms to produce a credible plan--known as a living will--for an orderly resolution in the event of its failure.

In the international arena, we strongly supported the Basel Committee's adoption in the summer of 2009 of tougher regulatory capital standards for trading activities and securitization exposures. We have also worked closely with international partners to help develop the Basel III framework, which requires globally active banks to hold more and higher-quality capital and larger liquidity buffers, and which now incorporates a provision to impose capital surcharges based on firms' global systemic importance. These surcharges are intended to reduce the risk of failure of systemic firms and also to force these firms, in their decisions regarding their size and complexity, to internalize the possible costs that those decisions might impose on the broader economic and financial

system. The purpose of each of these steps is to improve the traditional prudential regulation of systemically important firms while fostering greater stability and resilience in the banking system as a whole.

Nonbank Financial Firms

Gaps in the regulatory structure, which allowed some systemically important nonbank financial firms to avoid strong, comprehensive oversight, were a significant contributor to the crisis. The Federal Reserve has been working with the other member agencies of the Financial Stability Oversight Council (FSOC), established by the Dodd-Frank Act, to close these regulatory gaps. On April 3 the FSOC issued a final rule and interpretive guidance implementing the criteria and process it will use to designate nonbank financial firms as systemically important.² Once designated, these firms would be subject to consolidated supervision by the Federal Reserve and would be required to satisfy enhanced prudential standards established by the Federal Reserve under title I of Dodd-Frank. The FSOC's rule provides detail on the framework the FSOC intends to use to assess the potential for a particular firm to threaten U.S. financial stability. The analysis would take into account the firm's size, interconnectedness, leverage, provision of critical products or services, and reliance on short-term funding, as well as its existing regulatory arrangements.

The FSOC's issuance of this rule is an important step forward in ensuring that systemically critical nonbank financial firms will be subject to strong consolidated supervision and regulation. More work remains to be done, however. In particular,

² Financial Stability Oversight Council (2012), "Authority to Require Supervision and Regulation of Certain Nonbank Financial Companies," final rule and interpretive guidance (12 C.F.R. pt. 1310; RIN 4030-AA00), April 3, available on the Financial Stability Oversight Council website at www.treasury.gov/initiatives/fsoc/Pages/final-rules.aspx; forthcoming in the Federal Register, vol. 77.

although the basic process for designation has now been laid out, further refinement of the criteria for designation will be needed; and, for those firms that are ultimately designated, it will fall to the Federal Reserve to develop supervisory frameworks appropriate to each firm's business model and risk profile. As the FSOC gains experience with this process, it will make adjustments to its rule and its procedures as appropriate.

Regulation of Shadow Banking

I have been discussing the oversight of systemically important financial institutions in a macroprudential context. However, an important lesson learned from the financial crisis is that the growth of what has been termed "shadow banking" creates additional potential channels for the propagation of shocks through the financial system and the economy. Shadow banking refers to the intermediation of credit through a collection of institutions, instruments, and markets that lie at least partly outside of the traditional banking system.

As an illustration of shadow banking at work, consider how an automobile loan can be made and funded outside of the banking system. The loan could be originated by a finance company that pools it with other loans in a securitization vehicle. An investment bank might sell tranches of the securitization to investors. The lower-risk tranches could be purchased by an asset-backed commercial paper (ABCP) conduit that, in turn, funds itself by issuing commercial paper that is purchased by money market funds. Alternatively, the lower-risk tranches of loan securitizations might be purchased by securities dealers that fund the positions through collateralized borrowing using

repurchase (repo) agreements, with money market funds and institutional investors serving as lenders.

Although the shadow banking system taken as a whole performs traditional banking functions, including credit intermediation and maturity transformation, unlike banks, it cannot rely on the protections afforded by deposit insurance and access to the Federal Reserve's discount window to help ensure its stability. Shadow banking depends instead upon an alternative set of contractual and regulatory protections--for example, the posting of collateral in short-term borrowing transactions. It also relies on certain regulatory restrictions on key entities, such as the significant portfolio restrictions on money market funds required by rule 2a-7 of the Securities and Exchange Commission (SEC), which are designed to ensure adequate liquidity and avoid credit losses. During the financial crisis, however, these types of measures failed to stave off a classic and self-reinforcing panic that took hold in parts of the shadow banking system and ultimately spread across the financial system more broadly.

An important feature of shadow banking is the historical and continuing involvement of commercial and clearing banks--that is, more "traditional" banking institutions. For example, commercial banks sponsored securitizations and ABCP conduits, arrangements which, until recently, permitted those banks to increase their leverage by keeping the underlying assets off their balance sheets. Clearing banks stand in the middle of triparty repo agreements, managing the exchange of cash and securities while providing protection and liquidity to both transacting parties. Moreover, to ease operational frictions, clearing banks extend very large amounts of temporary intraday credit to borrowers and lenders each day. This temporary intraday credit--averaging

about \$1.4 trillion--allows securities dealers access to their securities (for example, the tranches of loan securitizations mentioned earlier) during trading hours.

Because of these and other connections, panics and other stresses in shadow banking can spill over into traditional banking. Indeed, the markets and institutions I mentioned--the repo market, the ABCP market, and money market funds--all suffered panics to some degree during the financial crisis. As a result, many traditional financial institutions lost important funding channels for their assets; in addition, for reputational and contractual reasons, many banks supported their affiliated funds and conduits, compounding their own mounting liquidity pressures.

Status of Shadow Banking Reform Efforts

Given the substantial stakes, I am encouraged that both regulators and the private sector have begun to take actions to prevent future panics and other disruptions in shadow banking. However, in many key areas these efforts are still at early stages.

A first set of reforms relate to the accounting and regulatory capital treatment of shadow banking entities sponsored by traditional banks. The Financial Accounting Standards Board finalized a rule in 2009 that requires securitizations and other structured finance vehicles, in certain situations, to be consolidated onto the sponsoring bank's balance sheet. In the context of regulatory capital, Basel 2.5 and Basel III addressed interconnectedness and other sources of systemic risk frequently associated with shadow banking by raising capital requirements for exposures to unregulated financial institutions, such as asset managers, hedge funds, and credit insurers, and by strengthening the capital treatment of liquidity lines to off-balance-sheet structures.

Basel III also includes quantitative liquidity rules that reflect contractual and other risks that arise from bank sponsorship of off-balance-sheet vehicles.

A second area of ongoing reform is money market funds. In an important step toward greater stability, the SEC in 2010 amended its regulations to, among other things, require that money market funds maintain larger buffers of liquid assets, which may help reassure investors and reduce the likelihood of runs. Notwithstanding the new regulations, the risk of runs created by a combination of fixed net asset values, extremely risk-averse investors, and the absence of explicit loss absorption capacity remains a concern, particularly since some of the tools that policymakers employed to stem the runs during the crisis are no longer available. SEC Chairman Mary Schapiro has advocated additional measures to reduce the vulnerability of money market funds to runs, including possibly requiring funds to maintain loss-absorbing capital buffers or to redeem shares at the market value of the underlying assets rather than a fixed price of \$1. Alternative approaches to ensuring the stability of these funds have been proposed as well. Additional steps to increase the resiliency of money market funds are important for the overall stability of our financial system and warrant serious consideration.

A third set of emerging reforms is aimed at repo markets, an area in which the Federal Reserve has taken an active role. The initial efforts have focused on the vulnerabilities created by the large amounts of intraday credit provided by clearing banks in the triparty repo market. Intraday credit, while a great convenience in normal times, may foster systemic risk by creating large mutual exposures between securities dealers and clearing banks. In times of market stress, a dealer default on intraday credit extended could be large enough to pose a threat to the stability of the clearing bank--institutions

tightly connected to the rest of the financial system. But were a clearing bank to decline to provide intraday credit to a dealer, that dealer's ability to operate normally would be substantially compromised, likely causing difficulties for its clients and counterparties, including many other financial institutions. As a result, during a period of market stress, the actions of clearing banks can jeopardize the stability of securities dealers, and vice versa.

An industry task force recognized this mutual vulnerability in 2010 and recommended the "practical elimination" of intraday credit in the triparty repo market. Although some progress has been made, securities dealers and clearing banks have yet to fully implement that recommendation. Nevertheless, through supervision and other means, we continue to push the industry toward this critical goal. In doing so, we are collaborating with other agencies, notably the SEC, which has regulatory responsibility for money market funds and securities dealers, institutions that are active in the triparty repo market. At the same time, we continue to urge market participants to improve their risk-management practices, and, in particular, to ensure that tools are in place to address the risks that would be posed to the repo market by the default of a major firm.

International regulatory groups have also been focused on addressing the financial stability risks of shadow banking. The Group of Twenty leaders have directed the Financial Stability Board (FSB), whose membership consists of key regulators from around the world, including the Federal Reserve, with developing policy recommendations to strengthen the regulation of the shadow banking system. The FSB currently has five major projects under way devoted to understanding the risks of, and developing policy recommendations for, shadow banking. The areas under study include

money market funds, securitization, securities lending and the repo market, banks' interactions with shadow banks, and "other" shadow banking entities. Given the substantial variation in the structure of shadow banking in different countries, the FSB's agenda is ambitious. But it is also critical in light of the potential risks to stability from shadow banking and the ease with which shadow banking entities can create intermediation chains across national borders.

Monitoring Financial Stability

I've outlined a number of ongoing efforts, both domestic and international, to bring the shadow banking system into the sunlight, so to speak, and to impose tougher standards on systemically important financial firms. But even as we make progress on known vulnerabilities, we must be mindful that our financial system is constantly evolving, and that unanticipated risks to stability will develop over time. Indeed, an inevitable side effect of new regulations is that the system will adapt in ways that push risk-taking from more-regulated to less-regulated areas, increasing the need for careful monitoring and supervision of the system as a whole.

At the Federal Reserve, we have stepped up our monitoring efforts substantially in recent years, with much of the work taking place under the auspices of our recently created Office of Financial Stability Policy and Research. We conduct an active program of research and data collection, often in conjunction with other U.S. and foreign regulators and supervisors, including our fellow members on the FSOC. In addition, by making use of resources throughout the Federal Reserve System, we are developing a framework and infrastructure for monitoring systemic risk. Our goal is to have the capacity to follow developments in all segments of the financial system, including parts

of the financial sector for which data are scarce or that have developed more recently and are thus less well understood. This work complements and is closely coordinated with our efforts, mentioned earlier, to supervise systemically important banking organizations from a macroprudential perspective. For example, based on public data, we develop and monitor measures of systemic importance that reflect firms' interconnectedness and their provision of critical services.

Unfortunately, data on the shadow banking sector, by its nature, can be more difficult to obtain. Thus, we have to be more creative to monitor risk in this important area. We look at broad indicators of risk to the financial system, such as measures of risk premiums, asset valuations, and market functioning. We try to gauge the risk of runs by looking at indicators of leverage (both on and off balance sheet) and tracking short-term wholesale funding markets, especially for evidence of maturity mismatches between assets and liabilities. We are also developing new sources of information to improve the monitoring of leverage. For example, in 2010, we began a quarterly survey on dealer financing (the Senior Credit Officer Opinion Survey on Dealer Financing Terms) that collects information on the leverage that dealers provide to financial market participants in the repo and over-the-counter derivatives markets.³ In addition, we are working with other agencies to create a comprehensive set of regulatory data on hedge funds and private equity firms.

Broader economic developments can also create risks to financial stability. To assess such risks, we regularly monitor a number of metrics, including, for example, the leverage of the nonfinancial sector. In addition, we use data from the flow of funds

³ The Senior Credit Officer Opinion Survey on Dealer Financing Terms is available on the Federal Reserve Board's website at www.federalreserve.gov/econresdata/releases/scoos.htm.

accounts to assess how much nonfinancial credit is ultimately being funded with short-term debt.⁴ This assessment is important because an overleveraged nonfinancial sector could serve to amplify shocks, to the detriment of the functioning of the financial sector and broader economy. Our judgment of how the financial sector is affecting economic activity reflects both information on lenders--most notably, underwriting standards, risk appetite, and balance sheet capacity--and analytical indicators of macroeconomic vulnerability to financial risks. Meanwhile, efforts are under way, both at the Federal Reserve and elsewhere, to evaluate and develop new macroprudential tools and to develop early warning indicators that could help identify and limit future buildups of systemic risk.

In the decades prior to the financial crisis, financial stability policy tended to be overshadowed by monetary policy, which had come to be viewed as the principal function of central banks. In the aftermath of the crisis, however, financial stability policy has taken on greater prominence and is now generally considered to stand on an equal footing with monetary policy as a critical responsibility of central banks. We have spent decades building and refining the infrastructure for conducting monetary policy. And although we have done much in a short time to improve our understanding of systemic risk and to incorporate a macroprudential perspective into supervision, our framework for conducting financial stability policy is not yet at the same level. Continuing to develop an effective set of macroprudential policy indicators and tools,

⁴ The Federal Reserve's statistical release "Flow of Funds Accounts of the United States" provides detailed information on patterns of financial intermediation through a consolidated set of balance sheets for the household, business, and government sectors and financial institutions. The flow of funds accounts are published quarterly and are available at www.federalreserve.gov/releases/z1.

while pursuing essential reforms to the financial system, is critical to preserving financial stability and supporting the U.S. economy.