



Financial Regulatory Reform: Systemic Risk and the Federal Reserve

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Summary

The recent financial crisis contained a number of systemic risk episodes, or episodes that caused instability for large parts of the financial system. The lesson some policymakers have taken from this crisis is that a systemic risk or “macroprudential” regulator is needed to prevent similar episodes in the future. But what types of risk would this new regulator be tasked with preventing, and is it the case that those activities are currently unsupervised?

Some of the major financial market phenomena that have been identified as posing systemic risk include liquidity problems; “too big to fail” or “systemically important” firms; the cycle of rising leverage followed by rapid deleverage; weaknesses in payment, settlement, and clearing systems; and asset bubbles. The Federal Reserve (Fed) already regulates bank holding companies and financial holding companies for capital and liquidity requirements, and it can advise their behavior in markets that it does not regulate. In addition, the Fed directly regulates or operates in some payment, settlement, and clearing systems. Many too big to fail firms are already regulated by the Fed because they are banks, although some may exist in what is referred to as the shadow banking system, which is largely free of federal regulation for safety and soundness. The Fed’s monetary policy mandate is broad enough to allow it to use monetary policy to prick asset bubbles, although it has not chosen to do so in the past. Neither the Fed nor other existing regulators have the authority to identify and address gaps in existing regulation that they believe pose systemic risk.

Opponents of a systemic risk regulator argue that regulators did not fail to prevent the crisis because they lacked the necessary authority, but because they used their authority poorly and failed to identify systemic risk until it was too late. They fear that greater government regulation of financial markets will lead to moral hazard problems that increase systemic risk. On the other hand, the current crisis has demonstrated that government intervention may become unavoidable, even when firms or markets are not explicitly regulated or protected by the government.

If policymakers choose to create a systemic risk regulator, those duties could be given to the Fed or a new or existing regulator in the executive branch. The Fed’s political independence has been used as an argument for and against giving it systemic risk regulatory responsibilities. Another consideration is that the Fed’s existing responsibilities already have some overlap with systemic risk regulation. These responsibilities include a statutory mandate to maintain full employment and stable prices and the role of lender of last resort, as well as being the institution with the broadest existing financial regulatory powers.

The Financial Stability Improvement Act of 2009 (H.R. 4173) passed the House on December 11, 2009. The Restoring American Financial Stability Act was ordered to be reported out of the Senate Banking Committee on March 22, 2010. Provisions of these bills involving the Federal Reserve and systemic risk are discussed in this report, including the creation of a Financial Services Oversight Council and the regulation of systemically significant firms by the Fed. Neither bill creates a “systemic risk regulator”; nonetheless, many of the potential duties that could be assigned to a systemic risk regulator discussed in this report are included in both bills. The bills spread these duties among multiple regulators, although many of the important ones are assigned to the Fed. Although this could be portrayed as an expansion of the Fed’s powers, the bills also strip the Fed of certain powers and creates new checks on other powers.

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In the wake of the recent financial crisis, many commentators have proposed creating a systemic risk or “macroprudential” regulator to help avoid future crises. Some proposals would give this role to the Federal Reserve (Fed), whereas others would house it in a new or existing regulator within the executive branch. The Obama Administration’s financial regulatory reform proposal includes many of the elements that are often assigned to a systemic risk regulator, giving many—but not all—of these responsibilities to the Fed.

This report defines the potential duties and responsibilities of a systemic risk regulator, relating those duties to events that potentially contributed to the recent crisis. It then identifies the powers that would need to be given to a regulator to perform those duties, and compares those powers and responsibilities to the Fed’s existing powers and responsibilities. It discusses advantages and disadvantages of giving those responsibilities to the Fed or the executive branch. It includes a brief overview of major elements of the Administration’s proposal, H.R. 4173, which passed the House on December 11, 2009, and The Restoring American Financial Stability Act, which was ordered to be reported out of the Senate Banking Committee on March 22, 2010, that involve the Fed.¹

What is Systemic Risk?

All financial market participants face risk—without it, financial intermediation would not occur. Some risks, such as the failure of a specific firm or change in a specific interest rate, can be protected against through diversification, insurance, or financial instruments such as derivatives. One definition of systemic risk is risk that can potentially cause instability for large parts of the financial system.² Often, systemic risk will be caused by risks that individual firms cannot protect themselves against; some economists distinguish these types of risks as a subset of systemic risks called systematic risks.³ Systemic risk can come from within or outside of the financial system. An example of systemic risk that came from outside of the financial system were fears (that largely proved unfounded in hindsight) that the September 11, 2001 terrorist attacks on the nation’s financial center would lead to widespread disruption to financial flows because of the destruction of physical infrastructure and death of highly specialized industry professionals. Systemic risk within the financial system is often characterized as *contagion*, meaning that problems with certain firms or parts of the system spill over to other firms and parts of the system.

The financial crisis that intensified in September 2008 featured many examples of systemic risk, including runs on financial institutions and illiquidity of asset classes, that will be discussed below. Many of these examples were highly unusual and had not been experienced as acutely by industry participants or financial regulators in the past. It can be argued whether firms or

¹ An overview of the current financial regulatory system can be found in CRS Report R40249, *Who Regulates Whom? An Overview of U.S. Financial Supervision*, by Mark Jickling and Edward V. Murphy.

² A recent International Monetary Fund report points out that this definition is imprecise and that systemic risk “is often viewed as a phenomenon that is there “when we see it,” reflecting a sense of a broad-based breakdown in the functioning of the financial system, which is normally realized, ex-post, by a large number of failures of financial institutions (usually banks).” See International Monetary Fund, *Global Financial Stability Report*, April 2009, p. 113.

³ See, for example, Olivier De Bandt and Philipp Hartmann, “Systemic Risk: A Survey,” European Central Bank, working paper 35, November 2000, <http://www.ecb.int/pub/pdf/scpwps/ecbwp035.pdf>.

regulators were carelessly unprepared for what occurred, or whether these incidents truly could not be reasonably predicted, prevented, or avoided.

Some experts, both within the regulatory community and outside of it, have argued that part of the reason regulators failed to prevent the crisis is that regulators were given a mandate to prevent microprudential risk, but no regulator has a mandate to prevent macroprudential risk.⁴ (Whether this is actually the case will be discussed below.)⁵ Microprudential regulation focuses on identifying risks to an individual firm and requiring firms to protect against those risks, whereas macroprudential regulation focuses on preventing or safeguarding against systemic risks. A scenario can be imagined where microprudential regulators focus on the risks of a firm's actions to itself, but overlook risks posed by those same actions to the system as a whole. Proponents argue that financial regulatory reform should feature a new mandate to regulate systemic risk.⁶ Systemic risk could be regulated by an existing agency, such as the Federal Reserve, a newly created agency, or the mandate could be spread across multiple agencies.

At least two arguments could be made against a systemic risk regulator.⁷ It could be argued that regulators already had the authority to respond to the systemic risk episodes that occurred in the crisis. Thus, the failure was not the result of a lack of regulator authority but poor use of existing authority. Conversely, it could be argued that those systemic risk episodes could not have been prevented precisely because they were systemic risk episodes—by their nature, the problems that arose were unlikely to be foreseen or neutralized. Either argument is likely to lead to the conclusion that even with a systemic risk regulator in place, the crisis would not have been avoided. Following this logic, it could be argued that were a systemic risk regulator to be created, it would be ineffective at best and harmful to necessary risk-taking behavior at worst because a systemic risk regulator, by design, has incentives to be overly cautious. Specific examples in the following section will help elucidate the arguments for and against a systemic risk regulator.

What Are Sources of Systemic Risk?

Policymakers can manage systemic risk only if the sources of systemic risk can be identified and regulated. A systemic risk regulator's authority to act could be made very broad and open ended to cover all contingencies, or it could be made more narrow to limit discretion and curb "mission creep," increasing the likelihood that once a risk was identified, additional legislative action would be needed to respond to it. This choice has implications for the balance of power between the legislative and executive branches. This section reviews sources of systemic risk that arose during the recent crisis, with the caveat that future crises are unlikely to follow a similar path as past crises. These examples are the types of specific activities that could potentially be regulated for systemic risk.

⁴ See CRS Report R40417, *Macroprudential Oversight: Monitoring Systemic Risk in the Financial System*, by Darryl E. Getter.

⁵ See the section "Systemic Risk and the Fed's Existing Authority and Responsibilities" below.

⁶ Leading proponents of this view are cited in International Monetary Fund, "How to Ensure Financial Stability after the Crisis," *IMF Survey Online*, May 14, 2009, <http://www.imf.org/external/pubs/ft/survey/so/2009/NEW051409A.htm>.

⁷ Criticisms of the proposal to create a systemic risk regulation include Alex Pollack, "Is a 'Systemic Risk Regulator' Possible?," *The American*, May 12, 2009; Dean Baker, "Making Financial Regulation Work: A Systemic Risk Regulator," *Washington Post*, June 22, 2009, http://voices.washingtonpost.com/hearing/2009/06/one_of_the_major_debates.html.

Runs and Liquidity

Firms are said to be liquid when they are able to meet current obligations or short-term demand for funds. A firm is said to be solvent but illiquid when its assets exceed its liabilities but it is unable to liquidate assets rapidly enough to meet current obligations. Markets are said to be liquid when a large volume of financial securities can be traded without price distortions because there is a ready and willing supply of buyers and sellers. Liquid markets are a sign of normalcy—most of the time, investors can take liquidity for granted.

Banking, and many other types of financial intermediation, often involves borrowing on a short-term basis and using the funds to lend or invest on a long-term basis. This creates a mismatch, where a financial institution's assets tend to be less liquid than its liabilities. Under normal financial conditions, the institution's short-term liquidity needs are relatively predictable, and it can easily sell or borrow against its long-term assets to meet those needs.

In a liquidity crunch of the type that characterized the episode beginning in August 2007 and other historical financial panics, investors are no longer willing to buy a firm's assets (at least not at prices the firm would consider reasonable) or lend it new funds against those assets. In these circumstances, if creditors attempt to withdraw their deposits or loans all at once, the institution will fail even if the value of the institution's assets exceed its liabilities. This scenario is referred to as a run. Historically, depositors have caused runs on banks, and mainstream economic thought credits the creation of FDIC deposit insurance for ending them (because depositors have less incentive to withdraw funds if those funds are guaranteed by the government). In the current crisis, lenders caused runs on non-banks by refusing to roll over loans as they matured. During the crisis, the FDIC created the Temporary Liquidity Guarantee Program to halt runs by debt-holders. This program, which was financed through fees levied on participating banks, temporarily guaranteed newly issued bank debt.⁸

Runs are subject to contagion. Runs may begin at troubled institutions, but sometimes spread to healthy institutions because of the liquidity mismatch. Because an institution's liquidity is finite, all depositors or creditors have an incentive to withdraw their funds first if they believe that the firm may run out of it. The sudden withdrawal of funds can cause losses for remaining creditors at an otherwise healthy institution and can ultimately lead to the firm's failure. Runs can also be set off by an otherwise healthy institution's "counterparty" exposure to an unhealthy institution. Financial firms do not operate in isolation—they depend on each other as sources of credit, liquidity, risk-sharing, and to buy and sell securities. Through these transactions, they become counterparties to each other, with the failure of one counterparty potentially imposing losses on the other. The crisis saw a widespread breakdown in counterparty trust that greatly reduced these transactions, straining the basic functioning of the financial system. Creditors and depositors may not be able to clearly gauge counterparty exposure, but because of the first-mover advantage in a run, may decide to err on the side of caution and withdraw funds.

Institutions face a tradeoff between the desire to hold liquidity to avoid the sorts of problems described above and the cost of holding that liquidity, which typically earns less than alternative uses of funds. One way regulators reduce the likelihood of liquidity problems is by requiring that financial firms hold sufficient liquid reserves to meet unforeseen circumstances. Another way is

⁸ For more information, see CRS Report R41073, *Government Interventions in Response to Financial Turmoil*, by Baird Webel and Marc Labonte.

to limit reliance on short-term debt that may be difficult to roll over during periods of financial turmoil. In principle, these interventions can be justified on economic grounds based on the argument that liquidity creates *positive externalities* for the financial system as a whole that are not fully captured by the individual institution holding the liquidity. Because the individual firm does not receive all of the benefit generated by the liquidity, from a societal perspective, the individual does not hold as much as would be optimal. In addition, individual institutions may hold too little liquidity for their own needs because they know that if they run out they can access Federal Reserve liquidity inexpensively (at least during the recent crisis). In economics, this is called the *moral hazard* problem—anticipated rescue from bad outcomes leads to greater risk taking.

During the crisis, money market mutual funds were also revealed to be susceptible to runs. When Lehman Brothers failed, the Reserve Fund, a money market fund holding Lehman Brothers commercial paper, “broke the buck” (the value of its assets fell below par), and this prompted widespread withdrawal requests that could not be met. This set off a run throughout the money market industry, including a run against funds that did not hold Lehman debt. Like any investment fund where funds can be withdrawn on demand, a run is possible when the assets of the fund cannot be immediately liquidated to meet unusually high redemption requests. Money market mutual funds are seen as more susceptible to runs than other types of investment funds because funds can be withdrawn on demand; some funds hold assets, such as commercial paper, that cannot be resold to meet redemption requests; and money market funds are marketed as a safe alternative to bank accounts, with some featuring bank-like options such as check-writing.

Too Big to Fail or Systemically Important Firms

One way that systemic risk can spread is if the failure of an important counterparty imposes losses on a firm that either causes that firm to fail or causes the firm’s other counterparties to doubt that the firm is solvent. Most counterparties are not important enough to impose serious losses on a critical number of counterparties, but regulators have argued that some firms, such as American International Group (AIG), are “too big to fail” or, in the case of Bear Stearns, if not too big, then “too interconnected to fail.”⁹ According to the International Monetary Fund (IMF), large firms “dominate key market segments ranging from private securitization and derivatives dealing to triparty repo and leveraged investor financing.”¹⁰ Some policymakers have argued that if their counterparties and creditors experienced losses or delays in payment through the bankruptcy process, it could undermine the health of the financial system as a whole.¹¹ For example, as discussed above, when the investment bank Lehman Brothers failed, it caused a money market mutual fund holding its commercial paper to “break the buck.” This set off a widespread run on money market accounts that disrupted firms’ access to short-term debt.

Although equity holders of Bear Stearns and AIG suffered heavy losses, all counterparties and creditors (including subordinated debt holders, who bought debt that was explicitly junior to regular debt holders) were paid by the government. However, the knowledge or suspicion that a firm is too big to fail changes the behavior of a firm and its creditors because of moral hazard. If a

⁹ Greg Ip, “Central Bank Offers Loans to Brokers, Cuts Key Rate,” *Wall Street Journal*, March 17, 2008, p. A1.

¹⁰ International Monetary Fund, United States—Selected Issues, July 13, 2009, p. 24.

¹¹ For example, the Federal Reserve used this rationale to justify its assistance to Bear Stearns. See Chairman Ben S. Bernanke, “Developments in the Financial Markets,” Testimony before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, April 3, 2008.

firm and its creditors believe that they will be protected from any future losses, they have an incentive to take more risks in an attempt to increase potential profits, since there will be less downside if those risks turn out badly. Thus, moral hazard increases the likelihood that large firms will be a source of systemic risk. As a result, many policymakers believe that too big to fail firms require more regulation to prevent risky behavior than other firms.¹² Alternatively, it has been argued that a framework needs to be put in place so that these firms can fail without creating widespread contagion. This would be more feasible if regulators could anticipate ahead of time where the contagion would come from; the Lehman Brothers example suggests that this might not be realistic, as the ensuing money market run was widely viewed as a surprise.

Leverage

Financial institutions fund their loans and asset purchases through a combination of liabilities (deposits and debt) and capital. Leverage is a term that refers to the ratio of liabilities to capital held by an institution. Institutions have an incentive to hold more capital to safeguard against insolvency (when liabilities exceed assets), but they also have an incentive to hold less capital so that profits are not spread too thinly among capital holders. During the credit boom, leverage increased in the financial sector, as some institutions increased their liabilities to expand their loans and asset purchases.¹³ Because interest rates were relatively low, liabilities could be financed at relatively low costs. Beginning in the second half of 2007, firms began to write off losses on loans and assets, depleting their capital. Some capital was replenished by issuing new equity, but eventually institutions needed more capital than investors were willing to supply. Thus, if firms wished to reduce their liabilities to reduce leverage, they would have to sell some of their assets. Financial institutions complained that the desire of all institutions to sell assets at once when buyers were scared off by uncertainty about future asset prices led to a situation where assets could only be sold at “fire sale” prices that further depleted the seller’s capital. To the extent that assets were “marked to market” (recorded at prevailing market prices) on an institution’s balance sheet, fire sales could cause “feedback effects” where all institutions holding similar assets—even those that had not sold—faced write downs that depleted capital.¹⁴

Some economists have argued that this cycle of leveraging when times are good and deleveraging when times are bad is a source of systemic risk. They propose that capital requirements should be made less pro-cyclical, meaning that regulators would require firms to hold more capital than needed when times are good, so that they could draw down capital rather than be forced into fire sales when faced with losses.¹⁵

¹² Alternatively, in some ways large firms may be less risky than small firms. For example, large firms are more likely to be well diversified against risk. The argument that too big to fail firms need closer regulation for safety and soundness is based on moral hazard, not because large firms are inherently riskier than small firms.

¹³ See, for example, U.S. Government Accountability Office, *Financial Crisis Highlights Need to Improve Oversight of Leverage at Financial Institutions and across System*, GAO 09-739, July 2009.

¹⁴ For more information, see CRS Report R40423, *Fair Value Accounting: Context and Current Concerns*, by Gary Shorter.

¹⁵ See, for example, Rafael Repullo and Javier Suarez, “The Procyclical Effects of Basel II,” Centre for Economic Policy Research, working paper 0809, June 2008, <http://www.cemfi.es/research/publications/workingpapersre.asp?lang=en>.

Payment, Settlement, and Clearing Systems

Another potential source of systemic risk could be an event that leads to the breakdown of a payment, settlement, or clearing system. This type of regulation focuses not on the activities of specific firms, but rather on the robustness of the system as a whole when something goes wrong. Adverse events could potentially include the failure of a major counterparty, exchange, or clearinghouse, technological disruptions, or fraud, any of which might disrupt timely payments to a large number of financial market participants.

Concerns about systemic risk in the payment systems in the current crisis has focused on the derivatives market. Policymakers have expressed concern that over-the-counter derivative contracts were not processed promptly enough and suffered from inadequate record keeping. Regulators have also expressed a concern that over-the-counter contracts were overly vulnerable to counterparty risk, since the holder of a contract, who is often trying to hedge risk of its own, is exposed to the risk that the provider of protection could fail to make contractual payments. Further, there was not enough transparency for markets or regulators to identify where these counterparty risks lay. One proposal to cope with these problems has been to move derivatives on to a regulated central clearing system or exchange.

Derivatives have not been the only market to fail to function smoothly in the current crisis. Repurchase agreement (repo) markets also saw a large increase in “fails” during the crisis. In a common repurchase agreement, the holder of a Treasury bond sells it, with an agreement to buy it back for a higher price the next day. Repurchase agreements are a common source of liquidity for financial firms such as investment banks. During the crisis, investor flight to Treasury securities caused scarcity and low yields that led to many buyers of the Treasury security to be unwilling or unable to sell it back at the end of the repo contract. According to the Treasury Market Practices Group, “While some settlement fails are inevitable, these widespread and persistent fails prevent efficient market clearing and impose credit risk on market participants, and are therefore damaging to overall market liquidity.”¹⁶

Regulatory Gaps, Discretion, and Information Gathering

One criticism raised about the performance of regulators in the run-up to the crisis is that each regulator was given very narrow mandates, and had no responsibility for “seeing the forest for the trees.” It is argued that problems emerged in these gaps that existed between the responsibilities of different regulators, and even that regulators were unconcerned about whether activities taken by institutions they regulated posed risks to the system as a whole. For example, it is argued that the Office of Thrift Supervision inadequately supervised American International Group’s (AIG’s) financial products subsidiary because it posed no risk to the health of thrifts.¹⁷ (AIG was officially a thrift holding company.) Gaps have been identified in the regulation of institutions (such as investment banks), financial systems (such as over-the-counter derivatives), and products (such as mortgages issued by non-banks, pre-crisis) that contributed to the crisis. Sometimes the focus of the “gaps in regulation” argument is the shadow banking system, and the proposed solution is for

¹⁶ Treasury Market Practices Group, “Treasury Market Practices Group Endorses Several Measures to Address Widespread Settlement Fails,” *press release*, November 12, 2008, <http://www.newyorkfed.org/tmpg/pr081112.pdf>.

¹⁷ See, for example, Scott Polakoff, Testimony before the Senate Banking Committee, March 5, 2009; Jeff Gerth, “Was AIG Watchdog Not Up to the Job?”, *MSN Money*, November 10, 2008, <http://articles.moneycentral.msn.com/Investing/Extra/was-aig-watchdog-not-up-to-the-job.aspx>.

regulators to close gaps are focused on creating a similar regulatory environment for banks and non-banks. This is related to, but distinct from, calls for the regulation of “too big to fail” firms because the latter would lead to regulation of only a subset of non-bank financial firms.

Going forward, some policymakers have proposed that some regulator should have responsibility for looking at the “big picture” and identifying gaps in existing regulation.¹⁸ The question then becomes once these gaps have been identified, whether that regulator should seek new authority from Congress or have open-ended discretionary authority to issue new regulations as gaps are identified. A case could be made that regulators need new, broad powers to gather information on institutions, transactions, and markets in order to accurately identify incipient problems. Alternatively, it could be argued that broad powers to gather information and intervene would give regulators too much discretionary power and could lead to heavy-handed responses that stifle financial innovation. Another issue is whether regulators would be able to successfully identify systemically important gaps that may not be readily apparent.

Other proposals focus on reducing the number of regulators and their overlapping authority. Five regulators have responsibilities for different types of depository institutions at the federal level, for example. An argument for reducing the number of regulators is that firms can “forum shop” in the current system, choosing the regulator whom they believe will be most sympathetic or have the lightest touch. This could lead to a “race to the bottom” in terms of regulatory standards, where other regulators ease up to avoid losing firms to other regulators. An argument in favor of multiple regulators is that competition among regulators makes it less likely that regulators will suffer from “blind spots” or “groupthink.” Proponents of reforming the regulatory organizational chart often argue that the Fed should be given new systemic risk or macroprudential regulatory powers, but be stripped of its institutional or microprudential regulatory powers.¹⁹

Asset Bubbles

A macroeconomic perspective might lead to the conclusion that fixing specific details of what went wrong in the recent crisis is less important for preventing a future crisis than addressing the disequilibrium in underlying fundamentals that led to the crisis. Specifically, it can be argued that the housing bubble, and the financial sector’s large exposure to it, made a crisis inevitable. Furthermore, some argue that when the bubble first emerged, policymakers should have taken steps to prevent the bubble from becoming so large, so that when the bubble did burst, it would have been less disruptive. For example, the Federal Reserve could have raised interest rates to raise (indirectly) the financing costs of purchasing a house, and regulators could have set rules to tighten mortgage underwriting standards which, in hindsight, are generally believed to have been too lax. Because investors have shown a willingness to accept lower underwriting standards in booms when defaults are low, it could be argued that regulators should have required underwriting standards high enough that borrowers would have been able to withstand a downturn in the housing market. Unless the bubble could have been avoided, it is argued, focusing on measures such as overall capital and liquidity levels would not have prevented the boom and bust cycle.

¹⁸ See, for example, Chairman Ben S. Bernanke, “Financial Regulation and Supervision after the Crisis: The Role of the Federal Reserve,” Speech at the Federal Reserve Bank of Boston 54th Economic Conference, Chatham, Massachusetts, October 23, 2009, <http://www.federalreserve.gov/newsevents/speech/bernanke20091023a.htm>.

¹⁹ See, for example, U.S. Treasury Department, *Blueprint for a Modernized Financial Regulatory Structure*, March 2008, <http://www.treas.gov/press/releases/reports/Blueprint.pdf>.

Systemic Risk and the Fed's Existing Authority and Responsibilities

Systemic risk regulation is not a new concept. On page one of a 2005 Federal Reserve document entitled *Federal Reserve: Purposes and Functions*, the Fed identifies “maintaining the stability of the financial system and containing systemic risk that may arise in financial markets” as one of its four primary duties.²⁰ The Fed can use its existing regulatory powers over bank holding companies and certain consumer financial products to prevent systemic risk, and it can use its existing lender of last resort powers to ameliorate the fallout following a systemic risk episode. Besides its ability to lend to banks through the discount window, it can provide direct assistance to any firm through its emergency authority, found in Section 13(3) of the Federal Reserve Act. This emergency authority was used extensively during the recent crisis to provide assistance to non-bank parts of the financial system.²¹ Finally, the Fed has been given an overall mandate by Congress to keep inflation stable and unemployment low. Arguably, it would be impossible to meet this existing mandate if the Fed ignored systemic risk.

Although regulators may have used their powers to attempt to prevent systemic risk before and during the crisis, it may be the case that they do not have all the legal authority needed to respond to the types of systemic issues that have recently emerged. This may be, in part, because regulation has not kept pace with the changes brought about by financial innovation. This section looks at the Fed's existing powers and gaps in its powers in light of the specific systemic issues raised in the previous section.

Runs and Liquidity

The potential for runs can never be fully eliminated because they are a by-product of the maturity mismatch inherent in financial intermediation. Nevertheless, regulators can require that financial institutions take precautionary steps that minimize the likelihood of runs, namely by requiring firms to hold some of their assets in a liquid form and obtaining access to long-term credit. Banks are already regulated to ensure that they hold sufficient liquidity. This regulation is more concerned with the liquidity of depository subsidiaries than non-depository subsidiaries, however. The assumption made by banks and regulators before the crisis was that healthy banks would always have access to ample private sector liquidity, in part because the Fed could always flood the private market with liquidity by buying Treasury securities. In September 2009, this was no longer the case, as fear of counterparty risk caused the interbank lending market to freeze up. When banks cannot access liquidity from private markets, they can borrow from the Fed's discount window, posting their illiquid assets as collateral. Access to the discount window creates a moral hazard problem, which regulation of liquidity can offset. Moving forward, regulators will need to decide whether insufficient bank liquidity contributed to the crisis, in which case regulators can adjust liquidity requirements at banks with or without legislative action.

²⁰ Federal Reserve Board of Governors, *Federal Reserve: Purposes and Functions* (Washington, DC: June 2005), p. 1. The Fed is not the only regulator that already has systemic risk authority. For example, the FDIC has a systemic risk exception that allows it to waive its least cost resolution mandate when a bank failure could cause systemic risk.

²¹ For more information on the Fed's recent emergency assistance, see CRS Report RL34427, *Financial Turmoil: Federal Reserve Policy Responses*, by Marc Labonte.

A skeptic might note that institutions can never hold enough liquidity to remain liquid (without access to central bank credit) in a true market panic, so regulation to require higher liquidity in isolation is unlikely to prevent a reoccurrence of the events of September 2008. In that light, regulators may conclude that liquidity problems were a symptom of the collapse in counterparty trust, in which case other structural changes may be necessary to ensure that the problem is not repeated. For example, regulators could limit maximum exposure to individual counterparties to reduce fears of counterparty risk or require that such exposures be adequately collateralized. This would raise the cost of taking on counterparty risk, perhaps persuading firms to become better diversified.

Non-bank financial institutions are generally not federally regulated for liquidity even though they may be more dependent on short-term borrowing (not including demand deposits). For example, a recent study estimated that 38% of broker-dealers' liabilities were short-term repurchase agreements ("repos"), whereas for commercial banks they were less than 10% of liabilities.²² The proximate cause of failure for many non-bank financial institutions was a "run" by debt-holders—an inability to roll over short-term debt. The Fed likely extinguished liquidity crises at this category of institutions by making liquidity available through new temporary facilities for primary dealers (major broker-dealers in the Treasury market) in March 2008. Between September and November 2008, the Fed also added liquidity to commercial paper markets and asset-backed securities markets by directly purchasing or financing the purchase of those assets through facilities created.²³ Going forward, policymakers will consider whether non-banks should be regulated for liquidity and receive routine access to Fed liquidity because they face similar liquidity risks as banks. Furthermore, if non-banks believe that they will receive ad hoc access to Federal Reserve liquidity in future crises, regulation may be needed to tackle the moral hazard problem that will cause them to hold less liquidity than they otherwise would.

The Fed does not have regulatory responsibility for money market mutual funds. The Securities and Exchange Commission already regulates the types of assets that money market funds are allowed to hold. Money market mutual funds received a temporary guarantee in September 2008 that expired after a year (although investors may expect it to be renewed in the event of a future crisis). It can be argued that further policy reform is needed after the events of September 2008.

Too Big to Fail or Systemically Important Firms

The Fed currently has primary regulatory responsibility for bank holding companies and financial holding companies. These two categories already encompass many of the largest financial firms in the financial system. Before the crisis, there were five large investment banks that did not fall under the Fed's regulatory umbrella, but all of these firms have either failed (Lehman Brothers), merged with bank holding companies (Bear Stearns and Merrill Lynch), or converted to bank holding companies (Goldman Sachs and Morgan Stanley). Because the Fed can already regulate banks for safety and soundness, it is already possible to regulate them to take into account the too big to fail problem. Currently, the closest regulatory scrutiny is applied to a holding company's depository subsidiaries, as discussed above. If the crisis has demonstrated that systemic risk can

²² See Tobias Adrian, Christopher Burke, and James McAndrews, *The Federal Reserve's Primary Dealer Credit Facility*, Federal Reserve Bank of New York, Current Issues in Economics and Finance, vol. 15, no. 4, August 2009, p. 2.

²³ For more information, see CRS Report RL34427, *Financial Turmoil: Federal Reserve Policy Responses*, by Marc Labonte.

be caused by any of the too big to fail's subsidiaries, it may follow that all subsidiaries should receive similar regulation.

Several other types of financial firms are not closely regulated for safety and soundness by the Fed or by other federal regulators, however. These include hedge funds and broker-dealers. In the past, banks were the only types of financial institutions that were considered to be a source of systemic risk. Over time, non-bank financial institutions have grown rapidly relative to banks,²⁴ but policy remained unchanged—firms (banks or non-banks) were not explicitly identified as too big to fail, and thus non-banks received no special regulatory treatment to take into account any special systemic risks they might pose. If firms were already regulated for safety and soundness, like banks, then regulators had the option to regulate them implicitly as if they were too big to fail. Otherwise, policymakers hoped the ambiguity surrounding their too big to fail status would prevent moral hazard. Now that policymakers have intervened to keep Bear Stearns, Fannie Mae, Freddie Mac, and AIG from failing, it is unlikely that market participants would perceive a stated intent to allow a large institution to fail as credible. As long as some types of institutions continue to be unregulated for safety and soundness, if policymakers chose to regulate “too big to fail” firms in the future, legislation would be needed to allow regulators to explicitly identify firms with certain characteristics as too big or too interconnected to fail, and apply a special regulatory regime to those firms.

A systemic risk regulator might supervise firms with more of an eye toward the firms' potential for creating systemic risk. For example, a systemic risk regulator might be more concerned with the firms' counterparty exposure or reliance on short-term borrowing (which would affect its ability to weather contagion) than regulators are today. The regulator could also require that large firms hold higher capital to asset ratios than small firms on systemic risk grounds. (This would be a reverse from recent experience. According to the IMF, the largest banks in recent years held less capital relative to assets than did smaller banks.)²⁵

Under current law, when a non-bank financial firm faces failure, the policy options are to allow the firm to enter bankruptcy, as was done with the investment bank Lehman Brothers, or for the government to inject funds to keep the firm solvent, as was done with the insurance company AIG. The Fed's emergency lending authority is broad enough to allow it to lend to troubled firms, provided the loan is “secured to the satisfaction of the Federal Reserve bank....”²⁶ In the case of Bear Stearns and AIG, the Fed determined that its loans were satisfactorily secured. In the case of Lehman Brothers, Chairman Bernanke indicated after the fact that Lehman Brothers was not provided a loan because it could not secure the loan to the Fed's satisfaction. The Fed has not given (and is not required to give) specific evidence as to how it has ensured that loans are secured to its satisfaction. Its lender of last resort role is specifically aimed at assisting solvent firms (firms whose assets exceed their liabilities) with liquidity problems. A commonly held principle is that the lender of last resort function should not be employed for firms whose troubles

²⁴ According to a Federal Reserve study, assets held by broker-dealers increased from less than 3% of the size of commercial bank assets in 1980 to nearly 30% in 2007. Over the same period, hedge fund capital increased from less than 1% of the size of commercial bank capital to more than 100% of bank capital. See Tobias Adrian, Christopher Burke, and James McAndrews, *The Federal Reserve's Primary Dealer Credit Facility*, Federal Reserve Bank of New York, Current Issues in Economics and Finance, vol. 15, no. 4, August 2009, p. 5.

²⁵ This was true across all size categories, from 5 largest, 5th to 19th largest, banks with \$10 billion - \$100 billion of assets to banks with less than \$10 billion assets. International Monetary Fund, *United States – Selected Issues*, July 13, 2009, p. 24.

²⁶ Section 13(3) of the Federal Reserve Act, 12 USC 343.

stem from solvency issues, but in the heat of a crisis, it can be difficult to differentiate between liquidity problems and solvency problems.

For the depository subsidiaries of banks and the housing government-sponsored enterprises (GSEs), there are also the options of government receivership or conservatorship, where the government seizes control of the firm to either wind it down or keep it functioning, respectively.²⁷ This special resolution authority allows the firm's regulator to impose losses on specific creditors and infuse government funds to reduce losses on other creditors. For example, in the case of banks, the FDIC uses public funds (financed through deposit insurance premiums) if necessary to make depositors of a failed bank whole. Some policymakers have proposed extending government receivership to all "systemically important" firms.²⁸ It is argued that with this authority, the government could prevent losses that destabilize the rest of the financial sector, without allowing the firm to continue operation, as was the case with AIG. This would reduce the moral hazard problem relative to government rescue because the government would have the options of replacing management, wiping out shareholders, and imposing some losses on counterparties. It would not reduce moral hazard as much as bankruptcy, however, if the rationale for resolution authority is that the size of losses imposed by bankruptcy would be destabilizing, so a framework for imposing smaller losses is needed. One possible objection to this proposal is whether the government could objectively and fairly choose which counterparties should or should not bear losses, and what effect those decisions would have on moral hazard. The possibility of government receivership arguably did not curb risk taking at Fannie Mae or Freddie Mac, for example.²⁹

Leverage

Banks already face capital requirements set by regulators (including the Fed) based on the Basel Accords.³⁰ Some economists argue that the crisis has demonstrated that existing requirements were either too low or too pro-cyclical. It is argued that capital requirements were pro-cyclical because a firm was required to hold less capital when asset prices were high and to raise capital when asset prices fell. Typically, capital requirements have been seen as providing for the safety of the specific firm, without considering how the cycle of leverage and deleverage might pose systemic risk. Arguably, a systemic risk regulator might conclude that some or all firms should increase their capital to prevent the sort of downward spiral that occurred in the crisis. Some other types of financial institutions do not face capital requirements, and a systemic risk regulator could be tasked with requiring that either all do or just those that have been deemed "too big to fail."

Federal capital requirements are applied to depository subsidiaries, not a holding company's non-depository subsidiaries. "Firewalls" are in place to avoid problems with a non-depository subsidiary affecting the depository subsidiary. In the Fed's words, "The Federal Reserve's supervision of nonbank subsidiaries under the Bank Holding Company (BHC) Act is primarily directed toward, and focused on, ensuring that the nonbank subsidiary does not present material

²⁷ See CRS Report RL34657, *Financial Institution Insolvency: Federal Authority over Fannie Mae, Freddie Mac, and Depository Institutions*, by David H. Carpenter and M. Maureen Murphy.

²⁸ See, for example, U.S. Department of Treasury, *Financial Regulatory Reform*, Washington, DC, June 2009.

²⁹ See CRS Report RS22950, *Fannie Mae and Freddie Mac in Conservatorship*, by Mark Jickling.

³⁰ For more information, see CRS Report R40249, *Who Regulates Whom? An Overview of U.S. Financial Supervision*, by Mark Jickling and Edward V. Murphy; CRS Report RL33278, *The Basel Accords: The Implementation of II and the Modification of I*, by Walter W. Eubanks.

financial, legal, or reputational risks to affiliated depository institutions nor to the BHC's or FBO's ability to support these depository institutions."³¹ The logic behind this approach is that safeguards are needed for the federally insured subsidiary, but less so for non-insured subsidiaries that are presumably subject to market discipline. As discussed above, recent decisions to rescue "systemically important" firms may undermine this logic, at least for large or interconnected firms.

Payment, Settlement, and Clearing Systems

The Fed currently has regulatory responsibility and plays a key "clearinghouse" role in the check-clearing payment system for banks. The Fed sets regulations on banks' uses of the payment system to ensure its smooth functioning. (For example, the Fed caps a bank's overdrafts from its reserve account at the Fed.) This system showed little sign of stress during the crisis. In addition, there are currently five private sector settlement systems supervised by the Fed, which operate in areas such as payments, securities, and foreign exchange.³² Other payment, settlement, and clearing systems, as well as activities that do not occur through a clearinghouse, are not directly regulated by the Fed. (The Fed has set best practice guidelines for any payment or settlement system, but these guidelines are not required for systems that the Fed does not regulate.)³³ The Fed (and other bank regulators) can regulate banks' activities in other payment, settlement, and clearing activities, however, even if they cannot regulate those systems directly. For example, large banks account for a large share of credit default swap transactions, and the Fed can influence how banks use and structure those transactions.

Regulatory Gaps, Discretion, and Information Gathering

As the primary regulator of bank holding companies and financial holding companies, the Fed has broad powers to gather information and regulate all of the activities those companies undertake. For example, the Fed has used its powers to influence banks' use of derivatives and regulate the credit cards banks issue for consumer protection. Nonetheless, the Fed's existing safety and soundness regulatory powers are directed at the holding company's depository subsidiary, not at its other subsidiaries. Outside of banks, the Fed does not have broad powers to intervene in financial markets even if it were to identify a gap in regulation that could lead to systemic risk, nor does it have access to all of the proprietary information it might need to make such a determination. It has some information on non-banks in so far as banks transact with them, but this information is incomplete since not all transactions are with banks.

The Fed's broad monetary policy mandate casts doubt on the argument that there was no "big picture" regulator tasked with identifying the broader problems mounting in financial markets. With its legal mandate to "promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates,"³⁴ it is difficult to argue that the Fed's outlook was too narrow for it to be aware of the fundamental macroeconomic imbalances that were arguably at the

³¹ Federal Reserve, *Bank Holding Company Supervisory Manual*, Washington, DC, July 2009, p. 77.

³² Information on these clearinghouses can be found at http://www.federalreserve.gov/paymentsystems/over_pssystems.htm.

³³ Federal Reserve, *Policy on Payment System Risk*, as amended effective December 18, 2008, http://federalreserve.gov/paymentsystems/psr_policy.htm.

³⁴ Section 2A of the Federal Reserve Act, 12 USC 225a.

root of the crisis. The Fed may not have had the authority to act on systemic issues that were outside of its areas of responsibility, but the Fed regularly makes recommendations to Congress on issues that it believes affect its mandated goals. The argument that “everybody missed the warning signs that the Fed missed” has validity, but begs the question of whether a systemic risk regulator would have missed them as well.

Asset Bubbles

The Fed’s current legal mandate calls for it to “promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates.”³⁵ It gives the Fed broad discretion to develop and pursue a monetary policy that will meet that mandate. Events since 2007 offer strong evidence that the bursting of an asset bubble can lead to macroeconomic results that are inconsistent with its mandate. If the Fed wished to raise interest rates to burst an asset bubble, its actions could be justified by its current mandate. But in the past, the Fed has chosen not to use monetary policy to respond to asset bubbles, arguing that to burst a bubble just for the sake of doing so would stray from its current mandate.

In the past, the Fed has argued that it would not be able to identify bubbles accurately until they had already burst. Although this may seem doubtful to some, a large body of economic theory supports the position that future movements in asset prices cannot be accurately predicted since current asset prices should incorporate all available information about their future movement. In other words, the Fed could successfully identify bubbles only if it were able to “outsmart” market participants, and it is questionable whether the Fed has more information or expertise than market participants. It could be argued that the evidence that the housing market was being driven by speculation as opposed to fundamentals was prevalent and obvious, and markets have demonstrated time and again that pricing is not always efficient. Even if it is accepted that markets are sometimes prone to bubbles, it does not necessarily follow that the Fed can accurately identify them. Fed officials are on record fairly late in the housing boom as dismissing the claim that a housing bust was a serious threat to the U.S. economy. For example, in June 2007, Chairman Bernanke stated in a speech that “However, fundamental factors—including solid growth in incomes and relatively low mortgage rates—should ultimately support the demand for housing, and at this point, the troubles in the subprime sector seem unlikely to seriously spill over to the broader economy or the financial system.”³⁶

The Fed has also argued in the past that attempts to use higher interest rates to prick asset bubbles before they are fully inflated could be either ineffective or a cure that is worse than the disease. Instead, the Fed has argued it can use expansionary monetary policy to ensure a smooth landing after a bubble has burst. The aftermath of the dot-com bubble would seem to support this view—the 2001 recession was mild and brief, and it is not evident that attempts by the Fed to prick the dot-com bubble earlier would have led to a better outcome. On the other hand, it is doubtful that attempts by the Fed to prematurely prick the housing bubble could have ended worse than the 2008 financial crisis, and monetary policy was not powerful enough in this case to ensure a smooth landing.

³⁵ Section 2A of the Federal Reserve Act, 12 USC 225a.

³⁶ Chairman Ben S. Bernanke, “The Housing Market and Subprime Lending,” Speech to the 2007 International Monetary Conference, June 5, 2007, <http://www.federalreserve.gov/newsevents/speech/bernanke20070605a.htm>.

In response to this crisis, the Fed may choose to modify its policy approach and respond more aggressively to future perceived bubbles. But if Congress wished to ensure that the Fed responded more forcefully to asset bubbles, it could modify the Fed's mandate to include financial stability or similar responsibilities (although it would still be left to the Fed to accurately identify bubbles.) The recent crisis also suggests that in some circumstances, the Fed could use its regulatory powers to help defuse a bubble (by tightening mortgage underwriting standards earlier, for example). This may be another reason for changing the mandate, although future bubbles would not necessarily be in markets that overlap with the Fed's regulatory powers.

The Federal Reserve in the Administration's Financial Regulatory Reform Proposal

The phrase "systemic risk regulator" does not appear once in the Administration's 88-page white paper on financial regulatory reform.³⁷ Nonetheless, many of the potential duties that could be assigned to a systemic risk regulator discussed in this report are proposed in the Administration's proposal. The duties are spread among multiple regulators, although many of the important ones are assigned to the Fed. Although the Administration's proposal has been portrayed by some as an expansion of the Fed's powers, as will be discussed below, the proposal also strips the Fed of certain powers and creates new checks on other powers.

The following sections give an overview of the major proposals involving the Fed and systemic risk in the Administration's financial regulatory reform proposal.

Regulatory Gaps and the Financial Services Oversight Council

The Administration proposes to create the Financial Services Oversight Council (FSOC), a new council chaired by the Secretary of the Treasury and including seven heads of financial regulatory agencies, including the Chairman of the Federal Reserve. It would replace the President's Working Group on Financial Markets, which has few institutionalized powers. The Administration views FSOC as a forum for regulators to share information, identify sources of systemic risk (including gaps in existing regulation), propose legislative changes to Congress, and settle disputes between regulators. (For bank regulation, some of these duties are currently carried out by the Federal Financial Institutions Examination Council.) FSOC would also provide some institutional checks on the powers of individual regulators (although each regulator is a member of FSOC). For the Fed, FSOC would be able to recommend firms to be designated as Tier 1 FHCs (defined in the next section), and the Fed would be required to consult with FSOC on setting its standards for identifying Tier 1 FHCs, prudential regulation of Tier 1 FHCs, and identification and risk-management standards for systemically important payment, settlement, and clearing systems.

The importance of FSOC in the regulatory system of the future, and thus as a check on the power of the Fed, is hard to predict. One possibility is that FSOC would give the Treasury a vehicle to

³⁷ U.S. Department of Treasury, *Financial Regulatory Reform*, Washington, DC, June 2009, http://www.financialstability.gov/docs/regs/FinalReport_web.pdf.

exert more centralized control over regulators. Another possibility is that FSOC would become a mere “talk shop” ruled by inertia and gridlock.

Too Big to Fail and Tier 1 Financial Holding Company Regulation³⁸

The Administration proposes that “any financial firm whose combination of size, leverage, and interconnectedness could pose a threat to financial stability if it failed” be designated a Tier 1 financial holding company. The Fed would be required to consider the following criteria when determining if a firm should be designated Tier 1:

- “(i) the amount and nature of the company’s financial assets;
- (ii) the amount and types of the company’s liabilities, including the degree of reliance on short-term funding;
- (iii) the extent of the company’s off-balance sheet exposures;
- (iv) the extent of the company’s transactions and relationships with other major financial companies;
- (v) the company’s importance as a source of credit for households, businesses and State and local governments and as a source of liquidity for the financial system;
- (vi) the recommendation, if any, of the Financial Services Oversight Council; and
- (vii) any other factors that the Board deems appropriate.”

The Fed would be made the consolidated regulator of all Tier 1 FHCs and would regulate the firms for safety and soundness. Although many of the Tier 1 FHCs would likely be bank holding companies that are already regulated by the Fed for safety and soundness, other types of financial firms that are not currently federally regulated for safety and soundness, such as broker-dealers, insurers, and hedge funds, might also be designated as Tier 1 FHCs. (If a Tier 1 FHC already has a primary functional regulator, the Fed would not become its primary regulator, but would regulate the overall firm at the holding company level.)³⁹ The Fed, in consultation with the Council, would develop standards to identify and regulate Tier 1 firms. The prudential standards would be “more stringent than standards applicable to bank holding companies” and would include capital requirements, liquidity standards, restrictions on non-financial activities, and a prompt corrective action regime. The Fed would have the authority to require the Tier 1 FHC to “alter, reduce, or terminate any activity that the Board determines poses excessive risk....” After a five-year transition period, Tier 1 firms would be subject to the same restrictions on non-financial activities as currently apply to financial holding companies. The Administration proposes that the Fed regulate a Tier 1 firm to limit the risk it poses to the overall financial system, whereas traditionally a financial firm is regulated to limit the risks it poses to itself.

³⁸ Legislative language cited in this section comes from Title II of the Administration’s draft legislation on financial regulatory reform, available at <http://www.financialstability.gov/docs/regulatoryreform/07222009/titleII.pdf>.

³⁹ For example, a national bank’s primary regulator would be the Office of the Comptroller of the Currency (which is merged into the new National Bank Supervisor in the Administration’s plan).

Critics fear that explicitly labeling some firms as Tier 1 is likely to backfire—if regulation is ineffective, then moral hazard will increase for those firms and their creditors because of the perception that the government stands behind them. To illustrate what could happen, they draw analogy to how regulators were unable to keep Fannie Mae and Freddie Mac from taking advantage of their special status as government-sponsored enterprises to increase their risk taking.⁴⁰ On the other hand, market participants may already have concluded that certain firms are too big to fail even though they have not been explicitly designated as such after observing the assistance to Bear Stearns and AIG.

Too Big to Fail and Resolution Authority⁴¹

The Administration proposes a new resolution regime for BHCs and Tier 1 FHCs that are either in default or in danger of default. Under the Administration's proposal, the resolution process can be initiated by the Fed, Treasury, or other primary regulators if applicable. After making a systemic risk determination, Treasury would then decide whether to resolve the firm based on a set of guidelines, with the recommendation of two-thirds of the members of the Fed's Board of Governors and other applicable regulators. Treasury would then decide how to resolve the firm, with options being conservatorship (keep the firm in operation) or receivership (wind the firm down), as well as the ability to set up a "bridge" firm to assume assets and liabilities. Depending on the type of firm, the Treasury would appoint the FDIC or the Securities and Exchange Commission (SEC) as conservator or receiver. The conservator or receiver would be required to maximize the return from the sale of assets, minimize the cost to the taxpayer, and mitigate the potential for systemic risk—goals that would sometimes conflict. The conservator or receiver would be provided with "such sums as are necessary, without fiscal year limitation," and could recoup funds through assessments on financial companies. As consolidated Tier 1 FHC and BHC regulator, responsibility under the proposal for any of these steps could plausibly have been assigned to the Fed.

Leverage

The Administration proposes that a working group of financial regulators (including the Fed), led by the Treasury, issue a report by December 2009 proposing modifications to capital standards that include modifying standards to reduce pro-cyclicality and increasing capital requirements on riskier assets, off-balance sheet entities, and over-the-counter derivatives. The Administration proposes applying capital standards to the entire holding company, whereas current policy applies them only to the depository subsidiary. As noted above, the Administration also proposes that Tier 1 firms be held to more stringent capital standards than other banks.

⁴⁰ See Peter Wallison, "Congress is the Real Systemic Risk," Wall Street Journal, March 17, 2009.

⁴¹ Legislative language cited in this section comes from Title XII of the Administration's draft legislation on financial regulatory reform, available at http://www.financialstability.gov/docs/regulatoryreform/title-XII_resolution-authority_072309.pdf. For more information, see CRS Report R40526, *Insolvencies of "Systemically Significant Financial Companies" (SSFCs): Proposal for Federal Deposit Insurance Corporation (FDIC) Resolution*, by M. Maureen Murphy.

Regulation of “Systemically Important” Payment, Clearing, and Settlement Systems⁴²

The Administration proposes giving the Fed authority, in consultation with the FSOC, to identify systemically important payment, clearing, and settlement (PCS) systems, and set risk management standards and conduct safety and soundness examinations for those systems. If those systems are already overseen by another regulator, that regulator would maintain primary regulatory responsibility, but the Fed would have emergency authority to trump that regulator on systemic risk grounds. The Administration also proposes that systemically important PCS systems be given “the same discount and borrowing privileges as the Federal Reserve Bank may provide to a depository institution under the Federal Reserve Act.”

Consumer Financial Protection Agency⁴³

Currently, regulation of financial products for consumer protection is spread among several state and federal regulators, including the Fed for bank products such as mortgages and credit cards.⁴⁴ It has been argued that the mortgage crisis was caused in part by mortgages, particularly for subprime borrowers, with exploitative or otherwise unsuitable terms and conditions.⁴⁵ If so, a financial product itself or a particular feature of financial products can be a source of systemic risk. Before the crisis, the Fed used a disclosure-based approach to regulating mortgages, and it did not limit or prohibit practices or terms of mortgages. In December 2007, it issued new regulations that limited or prohibited certain practices.

The Administration proposes to create a new Consumer Financial Protection Agency to regulate all consumer financial products except for investment products and services regulated by the SEC or the Commodities Futures Trading Commission (CFTC). This proposal would strip the Fed of its authority to regulate mortgages and credit cards. The original rationale for giving the Fed these regulatory powers was to ensure the safety and soundness of banks under its authority, and a question left unanswered by this proposal is how it would affect the Fed’s ability to ensure the safety and soundness of banks. One possible downside to this proposal is that too much focus on consumer protection could lead to neglect of the need to regulate products for systemic risk.

⁴² Legislative language cited in this section comes from Title VIII of the Administration’s draft legislation on financial regulatory reform, available at http://www.financialstability.gov/docs/regulatoryreform/title-VIII_payments_072209.pdf.

⁴³ Legislative language cited in this section comes from Title X of the Administration’s draft legislation on financial regulatory reform, available at <http://www.financialstability.gov/docs/CFPA-Act.pdf>. For more information, see CRS Report R40696, *Financial Regulatory Reform: Analysis of the Consumer Financial Protection Agency (CFPA) as Proposed by the Obama Administration and H.R. 4173 (Formerly H.R. 3126)*, by David H. Carpenter and Mark Jickling.

⁴⁴ For current policy, see CRS Report R40857, *Consumer Financial Protection by Federal Agencies*, by Mark Jickling.

⁴⁵ For more information, see CRS Report RL33775, *Alternative Mortgages: Causes and Policy Implications of Troubled Mortgage Resets in the Subprime and Alt-A Markets*, by Edward V. Murphy.

Amend the Fed's Emergency Authority⁴⁶

The Fed's normal powers are limited to assisting banks and purchasing a limited array of assets, including Treasury securities and obligations of the government sponsored enterprises (GSEs). The Fed's actions during the financial crisis not involving banks or GSEs have generally been authorized by Section 13(3) of the Federal Reserve Act, which allows the Fed to lend to non-banks in "unusual and exigent circumstances." This authority, which requires the assent of five governors of the Federal Reserve Board, gives the Fed broad discretion to identify an emergency, determine whether the applicant can access private credit markets, and identify acceptable collateral for the loan. These powers have been used to offer financial assistance to primary dealers, commercial paper markets, asset-backed securities markets, AIG, Citigroup, and to facilitate J.P. Morgan Chase's takeover of Bear Stearns. Although not required, the Fed sought the Treasury's informal approval for these actions.

The Administration proposes that, in the future, the Fed receive written approval from the Treasury before invoking Section 13(3). A drawback to this proposal is that it could be seen as an encroachment on the Fed's political independence and a shift in the balance of power between the legislative and executive branches (since the Fed's powers are delegated from Congress). Alternatively, the proposal may be seen as giving democratic legitimacy to recent controversial actions taken using emergency powers. Insulating the Fed from a political backlash could arguably make future encroachments on its independence less likely.

Legislative Activity

H.R. 3996/H.R. 4173

H.R. 3996, the Financial Stability Improvement Act of 2009, was reported out of the House Financial Services Committee and incorporated with other financial regulatory reform bills in H.R. 4173. H.R. 4173 passed the House on December 11, 2009. This section discusses major provisions in H.R. 4173 that involve the Fed.

H.R. 4173 creates a Financial Services Oversight Council consisting of the Treasury Secretary as chairperson and the heads of the financial regulators, including the Fed Chairman. The Council's duties would be to advise Congress on regulatory developments, monitor for potential systemic threats to the financial system, issue formal recommendations that a regulator adopt stricter prudential standards for firms it regulates to mitigate systemic risk, monitor international regulatory developments, facilitate information sharing and coordination among regulators, provide a forum for discussing and analyzing emerging market developments and regulatory issues, resolve jurisdictional disputes between members' agencies, and review accounting standards. The Council would submit a semiannual report to Congress on its activities and data on the 50 largest financial institutions.

⁴⁶ Legislative language cited in this section comes from Title XIII of the Administration's draft legislation on financial regulatory reform, available at <http://www.financialstability.gov/docs/regulatoryreform/07222009/titleXIII.pdf>. For a more detailed discussion, see CRS Report RL34427, *Financial Turmoil: Federal Reserve Policy Responses*, by Marc Labonte.

The Council would also identify systemically important firms to be subject to stricter prudential (i.e., safety and soundness) standards than other firms. Firms would be identified if the Council deemed that “material financial distress at the company ... or the nature, scope, size, scale, concentration, and interconnectedness, or mix of the company’s activities could pose a threat to financial stability or the economy.” The Fed would regulate these systemically important firms at the holding company level for safety and soundness. For functionally regulated subsidiaries of the firm, the Fed would be able to recommend heightened prudential standards to the primary regulator. The Fed would be given the discretion to prohibit proprietary trading at systemically significant firms. The firms would be required to regularly submit rapid and orderly resolution plans (“living wills”) to the Fed. The Fed would be required to take prompt corrective action against a systemically important firm that is not well capitalized. The Fed and primary regulator would be required to conduct and publish annual “stress tests” for systemically important firms. If the Council believes that a systemically important firm poses a grave threat to the financial system despite heightened supervision, it may require the firm to reduce its size or activities through sale or divestiture or limit the future growth of the firm. The bill requires the Fed to assess fees on bank holding companies with assets over \$10 billion to finance examinations of systemically important firms.

H.R. 4173 removes the Government Accountability Office audit restrictions for the Fed, and it calls for a general GAO audit of the Fed and an audit of the Fed’s actions taken to date under its emergency authority, Section 13(3) of the Federal Reserve Act. Records on “individual market actions” are not to be released before 180 days have elapsed.

H.R. 4173 sets a 15-to-1 debt to equity ratio for systemically important firms, and instructs banking regulators, including the Fed, to “seek to make (capital) requirements countercyclical so that the amount of capital required to be maintained by a banking institution increases in times of economic expansion and may decrease in times of economic contraction....”

H.R. 4173 would require certain firms that engage in banking activities but are not bank holding companies, such as industrial loan companies and unitary thrifts, to be regulated by the Fed. Going forward, the bill would prevent new firms from taking these corporate structures.

H.R. 4173 would create a dissolution authority for systemically important financial firms. When a firm experienced difficulties, the Fed and its primary regulator would make a written recommendation to the Treasury Secretary that the firm be taken into receivership. If the Secretary determines that the firm was in danger of default, its failure and resolution under state law or in federal bankruptcy court would have “serious adverse effects on financial stability or economic conditions,” and those adverse effects could be mitigated through receivership, the Secretary would appoint the FDIC as receiver to dissolve the firm. Costs of FDIC dissolutions would be financed by a FDIC fund primarily raised through assessments on firms that have more than \$50 billion of assets.

H.R. 4173 would amend the Fed’s emergency lending authority, found in Section 13(3) of the Federal Reserve Act. It would require that two-thirds of the Financial Services Oversight Council members determine that a liquidity event exists that could destabilize the financial system and the Treasury Secretary provide written consent before the Fed could provide emergency assistance. It limits total emergency assistance to \$4 trillion. It requires that assistance only be provided if the Fed and Treasury Secretary believe that there is at least a 99% probability that the assistance will be repaid with interest, and “low quality assets” cannot be used as collateral. It requires that assistance only be provided through broadly available facilities, and cannot be provided to “only

a single and specific individual, partnership, or corporation.” Within 90 days of the assistance, the bill sets procedures for expedited consideration of a joint resolution of Congress disapproving the use of Section 13(3) authority.

H.R. 4173 would create a new category of financial firms called “Securities Holding Companies” for firms that own one or more broker/dealers and require a regulator to operate abroad but do not otherwise require a prudential regulator under domestic law (because they do not take deposits or are not systemically significant, for example). The Fed would regulate these firms for safety and soundness.

H.R. 3126, the Consumer Financial Protection Agency Act of 2009, which was also incorporated into H.R. 4173, would transfer the Fed’s authorities to issue regulations under various consumer protection laws, such as the Truth in Lending Act, to the newly created Consumer Financial Protection Agency (CFPA). The bill would require the Fed to transfer funds equal to 10% of the Fed’s total system expenses to the CFPA to finance its activities. Total system expenses were \$3.9 billion in 2008.⁴⁷

An amendment to H.R. 3996 struck the section of the bill containing the Administration’s proposal to regulate systemically important payment, clearing, and settlement systems and activities. The bill allows the Council to identify financial activities or practices to be subject to new or heightened prudential standards, however, if the Council “determines that the conduct, scope, nature, size, scale, concentration or interconnectedness of such activity or practice” is a source of systemic risk. The Fed would recommend prudential standards for these activities or practices.

The Restoring American Financial Stability Act, as Amended by the Senate Banking Committee

The Restoring American Financial Stability Act of 2010 (RAFSA), sponsored by Chairman Dodd, was ordered to be reported out of the Senate Banking Committee on March 22, 2010. This section discusses major provisions in the bill that involve the Fed.

RAFSA as amended creates a Financial Stability Oversight Council consisting of the Treasury Secretary as chairperson, a presidential appointee with insurance expertise, and the heads of the financial regulators, including the Fed Chairman. The council’s duties would be to monitor for potential systemic threats to the financial system and identify gaps in regulation that could pose systemic risk, collect information necessary to assess risks and to facilitate information sharing and coordination among regulators, recommend supervisory priorities and principles to agencies, provide a forum for discussing and analyzing emerging market developments and regulatory issues, and resolve jurisdictional disputes between members’ agencies. The council would submit an annual report to Congress on its activities, financial market developments, and potential emerging threats to financial stability. The bill would create an Office of Financial Research to support the council. The activities of the council and office would be funded through assessments on financial firms with more than \$50 billion in assets.

⁴⁷ For more information, see CRS Report R40696, *Financial Regulatory Reform: Analysis of the Consumer Financial Protection Agency (CFPA) as Proposed by the Obama Administration and H.R. 4173 (Formerly H.R. 3126)*, by David H. Carpenter and Mark Jickling.

The council, by a two-thirds vote including the chairperson, could also identify systemically important firms to be subject to stricter prudential (i.e., safety and soundness) standards than other firms. Firms would be identified if the council deemed “material financial distress at the company would pose a threat to financial stability of the United States.” Foreign firms with substantial U.S. operations could be identified as systemically important; bank holding companies with assets less than \$50 billion could not. The council would report firms it had identified as systemically important in its annual report to Congress. The Fed would regulate these systemically important firms on a consolidated basis for safety and soundness, but firms would keep their existing primary regulators at the subsidiary level. For functionally regulated subsidiaries of the firm, the Fed would be able to recommend heightened prudential standards to the primary regulator. The firms would be required to regularly submit rapid and orderly resolution plans (“living wills”) to the Fed. The Fed would require early remediation for systemically important firms in financial distress. The Fed and primary regulator would be required to conduct and publish annual “stress tests” for systemically important firms. The Fed may prescribe rules to curb the growth of large firms, and if the council believes that a systemically important firm poses a grave threat to the financial system despite heightened supervision, it may require the firm to reduce its size or activities through sale or divestiture. Mergers or acquisitions that would result in a company with more than 10% of the total liabilities of financial firms would be prohibited, except to prevent a default.

RAFSAs as amended calls for new regulations to prevent bank holding companies from engaging in proprietary trading or investing in (or affiliating with) hedge funds or private equity firms. Proprietary trading by non-bank systemically significant firms would be subject to quantitative limits and capital requirements prescribed by the Fed.

Under RAFSAs as amended, the Fed would lose its existing consolidated supervisory authority over bank holding companies with less than \$50 billion and prudential regulatory authority over state-chartered member banks. This authority would be transferred to the Office of the Comptroller of the Currency and the Federal Deposit Insurance Corporation. The Fed would retain its existing rulemaking authority over bank holding companies and gain rulemaking authority over thrift holding companies.

RAFSAs as amended authorizes the council, by a two-thirds vote including the chairman, to identify systemically important payment, clearing, and settlement (PCS) systems and activities that would be regulated and examined by the system’s primary regulator or the Fed. The Fed, in consultation with the primary regulator, would be given authority to prescribe regulations and issue orders applying to systems and participants on PCS issues including risk management, margin and collateral requirements, default policies, timely clearing and settlement, and capital requirements. The bill identifies activities that could potentially be regulated to include funds transfers, repurchase agreements, swaps, foreign exchange contracts, and financial derivatives. The Fed may make loans to, and hold reserve balances of, systemically significant PCS systems.

RAFSAs as amended also allows the council to identify financial activities or practices by a regulated firm to be subject to stricter prudential standards if the council “determines that the conduct of such activity or practice” is a source of systemic risk. The primary regulator would recommend prudential standards for these activities or practices.

RAFSAs as amended places a moratorium on deposit taking by newly chartered industrial banks, credit card banks, or trust banks controlled by commercial firms for three years. It does not modify the regulation of existing firms of these types.

RAFSA as amended would amend the Fed's emergency lending authority, found in Section 13(3) of the Federal Reserve Act. It requires that assistance only be provided through broadly available facilities, rather than allowing assistance to a single individual, partnership, or corporation or a failing financial firm. It requires the Fed to adopt policies and procedures to ensure it accepts collateral "of sufficient quality to protect taxpayers" and to seek prior approval from the Treasury Secretary. The Fed is required to disclose the identities of borrowers and terms of borrowing within a year unless the Fed "determines that such disclosure likely would reduce the effectiveness of the program...or would otherwise have a significant effect on the economic or financial market conditions..."

RAFSA as amended allows GAO to audit Fed actions and programs taken under Section 13(3) of the Federal Reserve Act but generally limits the scope of those audits to financial controls, financial risk, fair access for participants, and contracting to third parties.

RAFSA as amended would create a new category of financial firms called "Securities Holding Companies" that would be regulated on a consolidated basis by the Fed. A firm would be considered a Securities Holding Company if it owns one or more broker/dealers and requires a regulator to operate abroad but does not otherwise require a prudential regulator under domestic law (because it does not take deposits or is not systemically significant, for example).

RAFSA as amended would make the President of the New York Federal Reserve Bank a position appointed by the President and confirmed by the Senate. (Regional bank presidents are currently chosen by the bank's board of directors.) It would prohibit firms supervised by the Fed from voting for, or their employees, officers, or directors from serving as, members of the Federal Reserve regional banks' board of directors. (Currently, banks regulated by the Fed choose six of the nine directors of the regional bank board of directors, three of whom must have a banking background. By implication, these directors would now be chosen by banks with less than \$50 billion in assets, who would no longer be regulated by the Fed.) The bill requires the President to nominate, and the Senate to confirm, one of the board governors to be the vice chairman for supervision, and for the vice chairman to appear before Congress semi-annually.

RAFSA as amended would create a special liquidation authority for systemically important financial firms. If a systemically important firm were deemed to be in danger of default, the Fed and either the FDIC or SEC could make a written recommendation to the Treasury Secretary as to how that company should be resolved. Upon receipt of such a recommendation, if the Secretary determines (and an outside panel of bankruptcy judges confirms) that the firm were in danger of default, its failure and resolution under state law or in federal bankruptcy court would have "serious adverse effects on financial stability or economic conditions," and those adverse effects could be mitigated through receivership, the Secretary would appoint the FDIC as receiver to dissolve the firm in accordance with the resolution regime established by the bill. Costs of FDIC liquidations would be financed by a FDIC fund primarily funded through assessments on firms that have more than \$50 billion of assets.

RAFSA as amended would create a Bureau of Consumer Financial Protection within the Fed. Unlike the Fed's current Division of Consumer and Community Affairs, the new bureau would have a director appointed by the President and confirmed by the Senate. It would also be given greater autonomy from the Fed in the areas of enforcement actions, personnel decisions, and rulemaking. (The council can override its rulemaking by a two-thirds vote.) The funding of the bureau would come from the Fed's earnings, but the director of the bureau would set the funding level, subject to caps set in the legislation.

Should the Fed or the Executive Branch Be a Systemic Risk Regulator?

If policymakers choose to proceed with proposals to create a systemic risk regulator, they would have to choose which agency would be most appropriate to grant those responsibilities. Policymakers could choose to create a new agency, presumably within the executive branch, or house those responsibilities in an existing agency, such as the Federal Reserve. This section of the report will address arguments for and against making the Fed the systemic risk regulator.

Overlap With Existing Responsibilities

As discussed above, the Fed already has a mandate to maintain economic and price stability. It would be difficult to ignore financial stability and meet this existing mandate. The Fed's mandate is not unique, however. The Treasury Department's mission statement reads, "Serve the American people and strengthen national security by managing the U.S. Government's finances effectively, promoting economic growth and stability, and *ensuring the safety, soundness, and security of the U.S. and international financial systems.*" (Italics added.) Thus, either the Fed or Treasury could make a strong argument that systemic risk regulation overlaps with their existing mandate or mission.

The Fed also has a lender of last resort function that overlaps with systemic risk regulation. The Fed, in its lender of last resort role, will provide assistance to firms to prevent liquidity crises—the classic example of systemic risk—when private liquidity is unavailable. In the current crisis, the Fed has broadly interpreted this role to cover the entire financial system, and not only member banks. The lender of last resort role would be difficult for Treasury to perform because the Fed, unlike Treasury, can provide firms with unlimited funds without congressional authorization in the short-term through its ability to "print money." Because the insurance implicit in the lender of last resort function causes moral hazard, the Fed has a motive for regulating recipients to prevent it.

Although no financial regulator currently has the broad perspective covering the entire financial sector, it could be argued that the Fed, as BHC and FHC regulator, currently has the broadest outlook in its regulatory outlook. While other safety and soundness regulators are focused on the depository subsidiary, the Fed must monitor the overall operations of the holding company. As discussed above, some of the Fed's other existing regulatory responsibilities, such as regulation of the payment system, also overlap with systemic risk concerns.

An argument against housing a systemic risk regulator in the Fed would be that the Fed is already spread too thinly over too many disparate activities. More focused regulators, it could be argued, are more likely to succeed in their goals. Following this logic, one possibility would be to make the Fed responsible only for monetary policy, whereas another possibility would be to give the Fed macroprudential regulatory responsibilities, but eliminate its microprudential responsibilities, such as regulating individual banks and consumer protection.

Expertise

An initial advantage that the Fed would have over other regulators is a large, diverse staff and readily available resources to carry out systemic risk regulatory duties. In addition to bank examiners, the Fed has a large staff of economists whose specialties range from macroeconomics to financial economics. By contrast, a new systemic risk regulator or any other regulator tasked with such duties would presumably have to acquire and develop staff and resources. As BHC and FHC regulator, the Fed has already developed expertise for overseeing firms with non-banking subsidiaries.

Some policymakers have proposed that a council of regulators (including the Fed) be given systemic risk regulatory responsibilities. A council could potentially bring broad perspectives and experience to the issue. One criticism of a council approach could be that the council is only as strong as its weakest member.

Independence

Political independence is an argument that some would use in favor of making the Fed a systemic risk regulator, and some would use against. The Fed is seen as more independent than other regulators because of a combination of structural differences including budgetary independence, governors who serve long terms and are difficult to remove, regional banks that are non-governmental, and its location outside of the executive branch. An argument in favor of an independent regulator would be that regulation sometimes requires decisions that are unpopular in the short run, and an independent regulator is more likely to withstand short-term criticism. But independence can also be used as an argument for locating the regulator within the political process, because regulation involves tradeoffs that are fundamentally political in nature and, like any other policy area, officials with democratic legitimacy are best suited to make those tradeoffs. Some economists worry that giving the Fed more responsibilities that involve political tradeoffs could result in a weakening of their independence.⁴⁸ Moreover, it could be argued that just because the Fed is more independent of elected officials, it does not follow that it is necessarily less susceptible to “regulatory capture” by the banks that it regulates.

How Would the Performance of a Systemic Risk Regulator Be Evaluated?

Systemic events have proven to be rare in modern times. When they occur, they are usually not predicted by many beforehand. This hampers the evaluation of a systemic risk regulator’s performance. In years with good outcomes, it may be impossible to distinguish whether good outcomes were caused by the systemic risk regulator’s vigilance or were simply the result of normal times. There is also the risk that a systemic risk regulator who is only rewarded for avoiding instability would allow too little risk-taking, and thus stifle financial innovation and efficient intermediation. Because systemic events have proven hard to predict, a systemic risk regulator could plead that its failure to predict the systemic event accorded with conventional wisdom.

⁴⁸ See, for example, John Taylor, “Fed Needs Better Performance, Not Powers,” *Financial Times*, August 10, 2009.

If the Fed were made systemic risk regulator, it is unclear what “stick” could be used by Congress if the Fed failed to prevent a systemic event. Fed governors serve 14-year terms and can only be removed for “cause,” not for policy disputes. The Fed is self-financing, so Congress cannot adjust its budget to influence its priorities. It could be argued that the Fed’s remit is already so wide-ranging that it hampers effective oversight because any action can be justified by pointing to some part of its mission; adding systemic risk regulatory responsibilities to existing responsibilities would further broaden its remit.

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