

The Dodd-Frank Wall Street Reform and Consumer Protection Act: 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. At the time of the crisis, the Federal Reserve (Fed) already regulated bank holding companies and financial holding companies for capital and liquidity requirements, and it could influence their behavior in markets that it did not regulate. In addition, the Fed directly regulated or operated in some payment, settlement, and clearing systems. Many systemically significant firms are already regulated by the Fed because they are bank holding companies, although some may exist in what is referred to as the shadow banking system, which was largely free of federal regulation for safety and soundness. The Fed's monetary policy mandate was broad enough to allow it to prick asset bubbles, although it has not chosen to do so. Neither the Board of Governors of the Federal Reserve System (Fed) nor other existing regulators had the authority to address gaps in existing regulation that they believed pose systemic risk.

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

The Dodd-Frank Wall Street Reform and Consumer Protection Act (H.R. 4173, P.L. 111-203) was signed into law on July 21, 2010. Provisions of this legislation involving the Federal Reserve and systemic risk are discussed in this report. The act creates a Financial Stability Oversight Council (Council) to identify (but not rectify) emerging threats and regulatory gaps. It authorizes the Fed to regulate systemically significant firms identified by the Council for safety and soundness. If the Secretary of the Treasury believes that a failure of a firm would threaten financial stability, the firm can be placed in receivership. It prohibits banks from engaging in proprietary trading, limits their ability to invest in hedge funds and private equity funds, and authorizes the Fed to regulate those activities at systemically significant firms. It also authorizes the Fed to regulate certain payment, clearing, or settlement systems identified as systemically significant by the Council. To prevent assistance to failing firms, it limits the Fed's authority to lend to non-banks in emergencies and requires more oversight and disclosure of Federal Reserve activities. It imposes minimum capital requirements on a greater array of institutions and calls for capital requirements to be made counter-cyclical. It attempts to move more derivatives into clearinghouses and exchanges.

Although the act could be portrayed as an expansion of the Fed's powers, the legislation also strips the Fed of certain powers, such as consumer financial protection responsibilities, and creates new checks on other powers, such as requirements to obtain approval from the Council or the Treasury Secretary before undertaking certain decisions.

Contents

What is Systemic Risk?	l
What Are Sources of Systemic Risk?	2
Runs and Liquidity	3
"Too Big to Fail" or Systemically Important Firms	
Leverage	
Payment, Settlement, and Clearing Systems	6
Regulatory Gaps, Discretion, and Information Gathering	<i>6</i>
Asset Bubbles	
Systemic Risk and the Fed's Existing Authority and Responsibilities at the Time of the	
Crisis	7
Runs and Liquidity	
Too Big to Fail or Systemically Important Firms	
Leverage	
Payment, Settlement, and Clearing Systems	
Regulatory Gaps, Discretion, and Information Gathering	
Asset Bubbles	
Evaluating Systemic Risk Regulation	
The Dodd-Frank Wall Street Reform and Consumer Protection Act	
Systemic Risk Provisions	
Financial Stability Oversight Council	
Regulation of Systemically Significant Firms	
Resolution Authority	
Proprietary Trading	
Payment, Clearing, and Settlement Systems and Activities	
Derivatives	
Capital Requirements	
Changes to Section 13(3) Emergency Lending Authority	
FDIC Emergency Liquidity Program	
Bank Holding Company Regulation	
Other Federal Reserve Provisions	
Consumer Financial Protection Bureau.	
GAO Audits	
Disclosure	
Federal Reserve Governance	
Regulation of Thrift Holding Companies	25
Securities Holding Companies	
Contacts	
Author Contact Information	26
Acknowledgments	26

In the wake of the recent financial crisis, many commentators have called for systemic risk or "macroprudential" regulation to help avoid future crises. The Obama Administration's financial regulatory reform proposal of 2009 included many of the proposed elements, giving many—but not all—of these responsibilities to the Board of Governors of the Federal Reserve System (Fed). Using the Administration's plan as a starting point, Congress enacted the Dodd-Frank Wall Street Reform and Consumer Protection Act (H.R. 4173), which was signed into law on July 21, 2010, as P.L. 111-203. The Dodd-Frank Act was a broad-based reform package that included provisions affecting almost every part of the financial system. This report discusses only those provisions related to systemic risk or the Federal Reserve, found mostly in Titles I and XI of the act.²

This report first discusses systemic risk issues, relating them to events in the recent crisis. It then identifies the Fed's existing powers and responsibilities for systemic risk regulation at the time of the crisis. Finally, it discusses parts of the Dodd-Frank Act involving the Fed and systemic risk, including the creation of a Financial Stability Oversight Council; regulation of systemically significant firms; resolution authority; modifications to the Fed's emergency lending authority and new disclosure requirements; the Consumer Financial Protection Bureau; the regulation of payment, clearing, and settlement systems and activities; and limits on proprietary trading.

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 addressed 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.³ 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.⁴ 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

¹ Treasury has created websites to track financial intervention and financial reform. See http://ustreas.gov/initiatives/regulatoryreform/ and http://www.financialstability.gov.

² For an overview, see CRS Report R41350, *The Dodd-Frank Wall Street Reform and Consumer Protection Act: Issues and Summary*, coordinated by (name redacted).

³ 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.

⁴ 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.

below. Many of these examples were highly unusual and had not been experienced as acutely by industry participants or financial regulators in the past. Whether firms or regulators were carelessly unprepared for what occurred, or whether these incidents truly could not be reasonably predicted, prevented, or avoided is subject to debate.

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 had a mandate to prevent macroprudential risk. (Whether this is actually the case will be discussed below.) 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.

At least two arguments have been made against a systemic risk regulator. One argument holds 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 has been 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 produces the conclusion that even with a systemic risk regulator in place, the crisis would not have been avoided. From this logic flows the same conclusion: the creation of a systemic risk regulator 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 perceived need for systemic risk regulation, while the subsequent section explains what regulators could and could not do in each area before the Dodd-Frank Act.

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 is 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

⁵ See CRS Report R40417, *Macroprudential Oversight: Monitoring Systemic Risk in the Financial System*, by (name r edacted).

⁶ See the section "Systemic Risk and the Fed's Existing Authority and Responsibilities" below.

⁷ 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.

⁸ 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.

crises. The examples selected below are the types of specific activities that could potentially be regulated for systemic risk.

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 involve 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, an institution's short-term liquidity needs are relatively predictable, allowing it to 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 call in their loans all at once, an institution will fail even if the value of the institution's assets exceeds 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 Federal Deposit Insurance Corporation (FDIC) deposit insurance for largely eliminating the threat of depositor runs (because depositors have less incentive to withdraw funds if those funds are guaranteed by the government). In the recent crisis, runs occurred on non-banks when lenders refused to roll over loans as they matured.

Money market mutual funds were another part of the "shadow banking" system that was revealed to be susceptible to runs during the crisis. 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.

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 will soon run out of funds, especially in the absence of a governmental guarantee. 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, and 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 means earning less than through alternative uses of the 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 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, individual firms tend not to hold as much as would be optimal from a societal perspective. In addition, individual institutions may hold too little liquidity for their own needs if they know that they can access Federal Reserve liquidity inexpensively (as was possible during the recent crisis). In economics, this is called the *moral hazard* problem—anticipated rescue from bad outcomes leads to greater risk taking.

"Too Big to Fail" or Systemically Important Firms

Systemic risk can spread if the failure of a firm causes contagion to other firms through counterparty losses that in turn cause the counterparty to fail or makes others doubt the counterparty's solvency. Most counterparties are not important enough to impose serious losses on a critical number of counterparties, but a large share of assets, deposits, and liabilities are concentrated in a few firms in the United States, and, according to the International Monetary Fund (IMF), a few large firms "dominate key market segments ranging from private securitization and derivatives dealing to triparty repo and leveraged investor financing." Some policymakers perceive the bankruptcy process, in the case of a large or highly interconnected financial firm, produces losses or delays in payment to creditors and counterparties of bankrupt firms that cause systemic risk. ¹⁰

Contagion can spread unpredictably. For example, because the investment bank Lehman Brothers was under stress since Bear Stearns was rescued in March, policymakers reasoned that Lehman's failure would not cause systemic risk because market participants had several months to prepare themselves. Nevertheless, when Lehman Brothers failed, it unexpectedly caused a money market mutual fund holding its commercial paper to "break the buck." This set off a widespread run on money market accounts, including those that did not hold Lehman's paper, that disrupted firms' access to short-term debt.

⁹ International Monetary Fund, United States—Selected Issues, July 13, 2009, p. 24.

¹⁰ 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.

In 2008, regulators acted on the principle 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." To avoid the bankruptcy of those two firms, the Fed arranged an assisted sale of Bear Stearns and lent funds to AIG. 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 in full thanks to government support. 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 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.

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 cost. 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

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¹¹ Greg Ip, "Central Bank Offers Loans to Brokers, Cuts Key Rate," Wall Street Journal, March 17, 2008, p. A1.

¹² AIG would later receive more extensive assistance from the Fed and Troubled Asset Relief Program. For more information, see CRS Report R41073, *Government Interventions in Response to Financial Turmoil*, by (name redacted) and (name redacted).

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 (name redacted).

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. Such an event would focus, 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 recent crisis have 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 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, it was apparent that there was not enough transparency for markets or regulators to identify where these counterparty risks lay. The alternative to trading on the over-the-counter market is to clear derivatives through a central clearinghouse and/or trade derivatives on public exchange.

Derivatives have not been the only market to fail to function smoothly in the recent 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 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." According to this view, there were gaps between the responsibilities of different regulators, as well as regulators who were unconcerned about whether activities undertaken by institutions they regulated posed risks to the system as a whole. For example, it was argued that the Office of Thrift Supervision inadequately supervised AIG's financial products subsidiary, instead focusing only on the fact that it posed no risk to the health of thrifts. (AIG was officially a thrift holding company.) Gaps were 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

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.

regulation" argument was the shadow banking system, and the proposed solution was for regulators to close gaps are focused on creating a similar regulatory environment for banks and non-banks.¹⁸

Another critique was that the regulatory system was ineffective because there were too many overlapping regulators, and this contributed to the crisis. Five regulators have responsibilities for different types of depository institutions at the federal level, and some depositories are regulated solely at the state 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."

Asset Bubbles

From a macroeconomic perspective, fixing specific details of what went wrong in the recent crisis is arguably less important for preventing a future crisis than addressing the disequilibrium in underlying economic fundamentals that led to the crisis. Specifically, such a viewpoint would see the housing bubble, and the financial sector's large exposure to it, as inevitably producing a crisis. Thus, a proponent of that view would argue that when the bubble first emerged, policymakers should have taken steps to prevent the bubble from becoming so large, so that the when the bubble did burst, it would have been less disruptive. For example, the Federal Reserve could have raised interest rates to increase (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 has also been argued that regulators should have required underwriting standards high enough that borrowers would have been able to withstand a downturn in the housing market. According to this view, unless the bubble could have been avoided, focusing on measures such as overall capital and liquidity levels alone would not have prevented the boom and bust cycle.

Systemic Risk and the Fed's Existing Authority and Responsibilities at the Time of the Crisis

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. ¹⁹ At the time of the crisis, the Fed could have used its existing regulatory powers over bank holding companies and certain consumer financial products to limit the likelihood of a systemic risk episode, and it could have used its existing lender-of last-resort

¹⁸ 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.

¹⁹ 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.

powers to ameliorate the fallout following a systemic risk episode. Besides its authority to lend to banks through the discount window, it had authority to 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 nonbank parts of the financial system. ²⁰ Finally, the Fed has an overall statutory mandate 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 did not have all the legal authority needed to respond to the types of systemic issues that 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 at the time of the crisis 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 mismatch²¹ inherent in financial intermediation. Nevertheless, regulators could 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 maintain access to long-term credit. Banking companies traditionally have been regulated to ensure that they hold sufficient liquidity. This regulation, however, was more concerned with the liquidity of depository institutions rather than non-depository affiliates of banking institutions.²² An 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 Federal Reserve could always flood the private market with liquidity through its open market operations. Beginning in August 2007 and becoming acute in September 2008, healthy banks could not access sufficient liquidity from private sources despite the Fed's efforts, as fear of counterparty risk caused the interbank lending market to freeze up.

When banks could not access liquidity from private markets, they began borrowing from the Fed's discount window, posting their illiquid assets as collateral. Borrowing from the discount window and another newly created lending facility called the Term Auction Facility, created for banks rose from less than \$1 billion to over \$500 billion during the crisis. Lending by the Fed was not the only action taken to halt runs by debt-holders during the crisis; the FDIC created the Temporary Liquidity Guarantee Program. This program, which was financed through fees levied on participating banks, temporarily guaranteed newly issued bank debt. Access to the discount window and similar lending facilities creates a moral hazard problem since it gives financial firms

²⁰ For more information on the Fed's recent emergency assistance, see CRS Report RL34427, *Financial Turmoil: Federal Reserve Policy Responses*, by (name redacted).

²¹ "Maturity mismatch" is used to identify a traditional characteristic of balance sheets of financial intermediaries such as banks, which will generally have short-term liabilities, such as checking and savings deposits, to be balanced against assets, such as commercial loans and real estate mortgages, which mature at the end of a longer term.

²² See, for example, CRS Report R41181, *Permissible Securities Activities of Commercial Banks Under the Glass-Steagall Act (GSA) and the Gramm-Leach-Bliley Act (GLBA)*, by (name redacted) and (name redacted).

²³ For more information on these and other Fed actions during the recent crisis, see CRS Report R41073, *Government Interventions in Response to Financial Turmoil*, by (name redacted) and (name redacted).

less incentive to obtain liquidity from private markets, which regulation of liquidity can potentially offset.

A skeptic might note that because institutions can never hold enough liquidity to remain liquid (without access to central bank credit) in a true market panic, simply requiring higher liquidity is unlikely to prevent a reoccurrence of the events similar to those of September 2008. If one concludes that liquidity problems were a symptom of the collapse in counterparty trust, other structural changes may be necessary to ensure that the problem is not repeated. For example, to reduce fears of counterparty risk, regulators could limit maximum exposure to individual counterparties 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.

Effective structural changes were complicated by the disparate regulatory regimes in place in the U.S. for banks and non-banks. Non-bank financial institutions generally have not been regulated at the federal level for liquidity even though they often are more dependent on short-term borrowing than are banks (not including federally insured 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. 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 arguably extinguished liquidity problems at this category of institutions by making liquidity available through its emergency lending authority, found in Section 13(3) of the Federal Reserve Act. For example, the Fed provided liquidity through new temporary lending 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 special facilities created temporarily.

The Securities and Exchange Commission (SEC), not the Fed, had regulatory responsibility for money market mutual funds. The SEC's regulation covers the types of assets that money market funds are allowed to hold. In spite of this regulatory scope, it was Treasury, not the Fed or the SEC, that intervened to provide money market mutual funds a temporary guarantee in September 2008. Although investors may hope for similar assistance in the event of a future crisis, Treasury no longer has authority to use the Exchange Stabilization Fund, the fund it used in 2008 for this purpose, that is, "for the establishment of any future guaranty programs for the United States money market mutual fund industry."

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²⁴ 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

²⁵ For more information, see CRS Report RL34427, *Financial Turmoil: Federal Reserve Policy Responses*, by (name redacted).

²⁶ The SEC issued new rules in January 2010 to strengthen regulation of money market mutual funds. See Securities and Exchange Commission, "SEC Approves Money Market Fund Reforms to Better Protect Investors," press release 2010-14, January 27, 2010.

²⁷ U.S. Department of the Treasury Press Release, "Treasury Announces Temporary Guarantee Program for Money Market Funds" (September 29, 2008). http://www.ustreas.gov/press/releases/hp1161.htm.

²⁸ P.L. 110-343, Tit. I. § 131, 122 Stat. 3797, 12 U.S.C. § 5236.

Too Big to Fail or Systemically Important Firms

The Fed had primary regulatory responsibility for bank holding companies and financial holding companies. These two categories already encompassed many of the largest financial firms in the financial system. Because the Fed could already regulate banks for safety and soundness, it already had authority to take the too big to fail problem into account when setting regulation for these types of holding companies. The closest regulatory scrutiny was applied to a holding company's depository subsidiaries, as discussed above. If the crisis has demonstrated that systemic risk can be caused by any of the too big to fail's subsidiaries, it may follow that all subsidiaries should receive similar regulation.

As previously mentioned, commercial banks and securities firms, which are commonly referred to as investment banks, are subject to distinct regulatory systems in the United States. Before the crisis, there also were five large investment banks that did not fall under the Fed's regulatory umbrella, but since the crisis, each of these firms either failed (Lehman Brothers), were acquired by bank holding companies (Bear Stearns and Merrill Lynch), or converted to bank holding companies (Goldman Sachs and Morgan Stanley). As a result of these conversions to or acquisitions by bank holding companies, the Fed became the umbrella supervisor over these institutions.

Several other types of financial firms, including hedge funds and broker-dealers, were not closely regulated for safety and soundness by the Fed or by other federal regulators before the crisis. Previously, banks were the only type of financial institutions considered to be a source of systemic risk. Although non-bank financial institutions have, over time, grown rapidly relative to banks, ²⁹ 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.

For firms that were already regulated for safety and soundness, like banks, prudential regulation could potentially be set to take into account the moral hazard posed by too big to fail. Otherwise, in hindsight, it seems as if policymakers were willing to live with the assumption that the ambiguity surrounding whether or not a company would be protected as too big to fail would prevent moral hazard. Intervening during the crisis to keep Bear Stearns, Fannie Mae, Freddie Mac, and AIG from failing made it unlikely that market participants would perceive a stated intent to allow a large institution to fail as credible.

During the crisis, when a non-bank financial firm faced failure, the policy options were 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 used its emergency lending authority (Section 13(3) of the Federal Reserve Act), which is broad enough to allow it to lend to troubled firms, provided the loan is "secured to the satisfaction of the Federal Reserve bank." With respect to the transactions involving Bear

²⁹ 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.

³⁰ 12 U.S.C. 343.

Stearns and AIG, the Fed determined that its loans were satisfactorily secured. In the case of Lehman Brothers, Fed Chairman Ben 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 did not make public (and was not required to make public) specific evidence as to how it has ensured that loans are secured to its satisfaction. Its lender-of-last-resort role was specifically aimed at assisting solvent firms (firms whose assets exceed their liabilities) with liquidity problems. ³¹ A commonly held principle is that the lender-of-last-resort function should not be employed for firms whose troubles stem from solvency issues, but in the heat of a crisis, ³² it can be difficult to differentiate between liquidity problems and solvency problems.

For banks, thrifts, credit unions, and the housing government-sponsored enterprises (GSEs) Fannie Mae and Freddie Mac, there were 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.³³ Under a government receivership, the federal administrative agency operating the receivership is given authority to impose losses on specific creditors and infuse either government or deposit insurance funds to reduce losses on other creditors. In the case of bank and thrift insolvencies, for example, the FDIC used funds financed through deposit insurance premiums to make depositors of a failed bank whole.³⁴

Leverage

Banks already faced capital requirements set by regulators (including the Fed) based on the Basel Accords.³⁵ Typically, capital requirements were seen as providing for the safety of the specific firm, without considering how the cycle of leverage and deleverage might pose systemic risk. 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.

Federal capital requirements were applied to depository subsidiaries, not a holding company's non-depository subsidiaries. "Firewalls" were in place to prevent problems with a non-depository subsidiary from 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

³¹ *See*, Howard H. Hackley, Lending Functions f the Federal Reserve Banks: A History 129 (1973). The author, who served for a number of years as General Counsel of the Board of Governors of the Federal Reserve System, states that "it seems clear that it was the intent of Congress that loans should be made only to credit worthy borrowers; in other words; the Reserve Bank should be satisfied that a loan under this authority would be repaid in due course, either by the borrower or by resort to security."

³² See, e.g., Bart De Meester, "The Global Financial Crisis and Government Support for Banks: What Role for the GATS?" 13 J. Int'l Econ. L. 27, 42 (2010).

³³ See CRS Report RL34657, *Financial Institution Insolvency: Federal Authority over Fannie Mae, Freddie Mac, and Depository Institutions*, by (name redacted) and (name redacted).

³⁴ Although it has not been used in the recent crisis and in currently occurring bank failures, the Federal Deposit Insurance Corporation has authority, if the Deposit Insurance Fund is depleted, to access a line of credit with Treasury, i.e., to borrow public funds, to operate bank resolution regimes. 12 U.S.C. § 1824(a).

³⁵ For more information, see CRS Report R40249, *Who Regulates Whom? An Overview of U.S. Financial Supervision*, by (name redacted) and (name redacted); CRS Report RL33278, *The Basel Accords: The Implementation of II and the Modification of I*, by (name redacted).

financial, legal, or reputational risks to affiliated depository institutions nor to the BHC's or FBO's [Foreign Banking Organization's] ability to support these depository institutions." The logic behind this approach was that leverage limits or capital requirements are needed for the federally insured subsidiary because it has the advantage of the federal subsidy in terms of federally insured deposits, but less so for non-insured subsidiaries that are presumably subject to market discipline, including by stockholders. As discussed above, decisions during the recent financial crisis to rescue "systemically important" firms may be viewed as having undermined this logic, at least for large or interconnected firms.

Payment, Settlement, and Clearing Systems

The Fed had regulatory responsibility and played a key "clearinghouse" role in the check-clearing payment system for banks.³⁷ The Fed set regulations on banks' uses of the payment system to ensure its smooth functioning. (For example, the Fed has capped and assessed fees on a bank's overdrafts from its reserve account at the Federal Reserve bank. 38) This system showed little sign of stress during the crisis. In addition, there are five private sector settlement systems supervised by the Fed, which operate in areas such as payments, securities, and foreign exchange.³⁹ Other payment, settlement, and clearing systems, as well as activities that did not occur through a clearinghouse, were not directly regulated by the Fed. (The Fed set best practice guidelines for any payment or settlement system, but these guidelines were not required for systems that the Fed does not regulate.)⁴⁰ The authority of Fed (and other bank regulators) over the institutions which they regulate is sufficient for them to monitor how banks operate in other payment, settlement, and clearing settings. Banks, particularly large banks, account for a considerable share of credit default swap and other derivative transactions. Thus, despite having no direct authority to regulate the private systems and clearinghouses handling these transactions, by overseeing how banks use and structure those transactions, the Fed could have a large role in affecting the overall operations of those systems.

Regulatory Gaps, Discretion, and Information Gathering

Regulators already coordinated policy through inter-agency groups such as the Federal Financial Institution Examinations Council (FFIEC) and the President's Working Group on Financial Markets. FFIEC is composed of the federal bank regulators and is meant to set consistent regulation for banks across regulators. The President's Working Group includes the Secretary of the Treasury and the chairmen of the Federal Reserve, the SEC, and the CFTC. Those promoting the need to eliminate regulatory gaps argue that FFIEC's scope was too narrow to perceive systemic risk, while the President's Working Group's responsibilities were too ad hoc.

³⁶ Federal Reserve, Bank Holding Company Supervisory Manual, Washington, DC, July 2009, p. 77.

³⁷ Under 12 U.S.C. § 4008(c)(1), the Fed has the responsibility '[i]n order to carry out the provisions of the [Expedited Funds Availability Act ... to regulate ... any aspect of the payment system, including the receipt, payment, collection, or clearing of checks."

³⁸ See, "Policy on Payment System Risk, 73 Fed. Reg. 79109 (December 24, 2008).

³⁹ Information on these clearinghouses can be found at http://www.federalreserve.gov/paymentsystems/over_pssystems.htm.

⁴⁰ Federal Reserve, *Policy on Payment System Risk*, as amended effective December 18, 2008, http://federalreserve.gov/paymentsystems/psr_policy.htm.

It can be said that during the recent crisis, there was no explicit statutory delegation of authority for systemic regulation. On the other hand, although the Fed lacked direct authority over many of the components of the financial services industry, it had a statutory directive sufficiently broad to provide a basis for it to monitor the financial system to inform Congress of potential systemic dangers.

Prior to enactment of the Dodd-Frank Act, the Fed lacked sufficient authority to intervene in financial markets even if it were to identify a gap in regulation that could lead to systemic risk. Under the type of functional regulation in place after the enactment of the Gramm-Leach-Bliley Act in 1999. 41 regulatory authority over holding companies was dispersed among an array of regulators. As the primary regulator of bank holding companies and financial holding companies, the Fed had broad powers over the banking subsidiaries of the holding company but limited powers over the non-banking subsidiaries such as insurance companies and securities firms.⁴² Although the law provided the Fed with safety and soundness regulatory authority over the holding company itself, and over certain of its depository subsidiaries, federal banking and securities regulators, as well as state insurance regulators, were designated as primary functional regulators of other subsidiaries. The result was that there was no clear authority for the Fed or for any one regulator to oversee or to intervene in the entire operations of a holding company. Moreover, although the Fed had full access to information on transactions between banks and nonbanks and any public information on nonbanking concerns, neither the Fed nor any one regulator had access to all of the proprietary information that may have been needed to make a systemic risk determination.

On the other hand, the Fed's broad general 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," 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 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 legal mandate to "promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates",44 gives it 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

⁴¹ P.L. 106-102, 113 Stat. 1339.

⁴² For further information, see CRS Report R41181, Permissible Securities Activities of Commercial Banks Under the Glass-Steagall Act (GSA) and the Gramm-Leach-Bliley Act (GLBA), by (name redacted) and (name redacted).

⁴³ Section 2A of the Federal Reserve Act, 12 USC 225a.

⁴⁴ Section 2A of the Federal Reserve Act. 12 USC 225a.

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, two months before liquidity problems emerged, 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."45

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.

Evaluating Systemic Risk Regulation

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.

Assuming that the Fed's mandate provides it with systemic risk authority, the law seems not to have offered any clear-cut mechanism to discipline the Fed for failure to prevent a systemic event—other than congressional intervention by amending federal law. Under the Federal

⁴⁵ 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.

Reserve Act, Fed governors serve 14-year terms and can only be removed for "cause," not for policy disputes. ⁴⁶ The Federal Reserve System is self-financing; without changing the law, Congress cannot adjust its budget to influence its priorities. Adding specific systemic risk authority to the Fed's current wide-ranging remit, which some see as enabling the Fed to justify any action by pointing to some part of its mission, broadens the Fed's already wide-ranging authority and may enhance arguments that the broad mandate hampers effective oversight.

The Dodd-Frank Wall Street Reform and Consumer Protection Act

The Dodd-Frank Wall Street Reform and Consumer Protection Act (H.R. 4173) was signed into law on July 21, 2010, as P.L. 111-203. The Dodd-Frank Act was a broad-based reform package that included provisions affecting almost every part of the financial system. While the overall goal of the act was to prevent another systemic risk episode, this section discusses only those provisions of the act related to the types of systemic risk issues discussed in this report or the Federal Reserve. The provisions discussed are found mostly in Titles I and XI of the act. 47

Systemic Risk Provisions

New systemic risk responsibilities in the Dodd-Frank Act were mostly divided between the newly created Financial Stability Oversight Council and the Federal Reserve, although resolution authority was largely shared between the Treasury Secretary and the Federal Deposit Insurance Corporation. Modifications to existing regulations generally applied to the existing regulator.

Financial Stability Oversight Council

Title I, Subtitle A of the Dodd-Frank Act creates the Financial Stability Oversight Council on the date of enactment. The Council is chaired by the Secretary of the Treasury, and the voting members consist of the heads of eight federal regulatory agencies (including the chairman of the Fed), the Treasury Secretary, and a member appointed by the President with insurance expertise. The Council is tasked with identifying risks to financial stability and responding to emerging systemic risks, while minimizing moral hazard arising from expectations that firms or their counterparties will be rescued from failure. The Council's duties include

- collecting information on financial firms from regulators and through the Office of Financial Research, which is created in Title 1, Subtitle B to support the Council:
- monitoring the financial system to identify potential systemic risks;
- proposing regulatory changes to Congress to promote stability, competitiveness, and efficiency;

⁴⁶ 12 U.S.C. §§ 241-242.

⁴⁷ For an overview, see CRS Report R41350, *The Dodd-Frank Wall Street Reform and Consumer Protection Act: Issues and Summary*, coordinated by (name redacted).

- facilitating information sharing and coordination among financial regulators;
- making regulatory recommendations to financial regulators, including "new or heightened standards and safeguards";
- identifying gaps in regulation that could pose systemic risk;
- reviewing and commenting on new or existing accounting standards issued by any standard-setting body;
- providing a forum for the resolution of jurisdictional disputes among council members. The Council may not impose any resolution on disagreeing members, however.

The Council is required to provide an annual report and testimony to Congress.

In contrast to some proposals to create a systemic risk regulator, the Dodd-Frank Act does not give the Council authority (beyond the existing authority of its individual members) to eliminate emerging threats or close regulatory gaps it identifies. In many cases, the Council can only make regulatory recommendations—it cannot impose change. The fact that regulators are on the Council may make it less likely they would resist its recommendations, however.

Regulation of Systemically Significant Firms⁴⁸

In addition to the duties listed above, the Council has authority to identify non-bank financial firms that are systemically significant by a "two-thirds vote of the voting members then serving," including the Treasury Secretary. A firm would be deemed systemically significant on the basis of a Council determination that it could pose a threat to financial stability because of material distress or because of "the nature, scope, size, scale, concentration, interconnectedness, or mix of the activities" of the firm. Foreign financial firms operating in the United States could be identified by the Council as systemically significant. The act exempts firms with consolidated assets under \$50 billion, although the Council and Fed may raise that threshold. The Fed is given examination powers to help the Council determine whether a firm is systemically significant. A firm can contest its designation before the Council and, if unsuccessful, through appeal to a federal district court, which may set aside the Council's determination only if it finds it to be arbitrary and capricious. Any firm that has over \$50 billion in consolidated assets and received assistance under the Troubled Asset Relief Program (TARP) that ceases to be a bank holding company would automatically be considered a systemically significant firm.

Under the new law, the Council may recommend that the Fed impose more stringent prudential safety and soundness standards on these firms than are applicable to other nonbank financial firms and bank holding companies which do not pose a systemic risk. In recommending these standards, the Council may recommend different standards for individual institutions or categories based on the risk they present.

Under Subtitle C of Title I, the Fed would regulate for safety and soundness the firms which the Council has subjected to Fed supervision on the basis of a systemic risk determination and any other bank holding company with total consolidated assets of \$50 billion. At the recommendation of the Council or on its own initiative, the Fed may set different standards for different

⁴⁸ This section prepared with (name redacted), Legislative Attorney.

systemically significant firms or categories of firms based on various risk-related factors. The standards include risk-based capital requirements that account for off-balance-sheet activities and 15 to 1 leverage limits (if appropriate), liquidity requirements, risk management requirements, and exposure limits of 25% of a company's capital per counterparty. Other prudential standards may be applied at the Fed's discretion. The firms are required to submit resolution plans ("living wills") and credit exposure reports to the Fed. Regulated subsidiaries would continue to be regulated by their primary functional regulator, although the Fed may override the functional regulator if the Fed believes the firm is not adhering to regulatory standards or poses a threat to financial stability. The Fed must consult with the primary regulator before applying heightened prudential standards to a regulated subsidiary. The Fed must conduct annual stress tests on systemically significant firms and, in consultation with the Council and the FDIC, issue regulations establishing remediation measures to be imposed at an early stage of a firm's "financial decline" in an effort to prevent insolvency and its potential impact on the financial system.

If the Board determines, and at least two-thirds of the Council confirms, that a systemically significant firm poses a "grave threat" to financial stability, it may:

- (1) limit the ability of the company to merge with, acquire, consolidate with, or otherwise become affiliated with another company;
- (2) restrict the ability of the company to offer a financial product or products;
- (3) require the company to terminate one or more activities;
- (4) impose conditions on the manner in which the company conducts one or more activities; or
- (5) if the Board of Governors determines that the actions described in paragraphs (1) through (4) are inadequate to mitigate a threat to the financial stability of the United States in its recommendation, require the company to sell or otherwise transfer assets or off-balance-sheet items to unaffiliated entities.⁴⁹

In addition, Title VI prohibits any insured depository institution, bank holding company, or systemically significant institution from merging with or acquiring assets of another company which causes the total consolidated liabilities of the acquiring company to exceed 10% of the aggregate consolidated liabilities of all financial companies or, in the case of interstate mergers, 10% of the total amount of deposits of insured depository institutions in the United States. The Fed may make exceptions for a bank in default, an acquisition involving assistance provided by the FDIC to institutions in danger of default, an acquisition that results in minimal increase in the company's liabilities, or during severe financial conditions.

Resolution Authority⁵⁰

Title II attempts to address the concern that failures of systemically important financial firms were too destabilizing under prior law by establishing a new system for certain financial companies whose resolution under otherwise available law is determined by various federal

⁴⁹ P.L. 111-203, § 121(a).

⁵⁰ This section was prepared with (name redacted), Legislative Attorney.

regulators to pose dangers to the U.S. financial system. This resolution system is modeled after the FDIC's existing receivership regime for depository institutions. Many types of financial companies and their subsidiaries are eligible for this special resolution regime; however, subsidiaries that are insurance companies, certain broker-dealers, and insured depositories are not eligible.

In order for an eligible financial company to be resolved under the special regime, a group of regulators, including two-thirds of the Federal Reserve Board, must recommend the company for the resolution based on standards delineated by the Dodd-Frank Act. After the recommendation, the Treasury Secretary, in consultation with the President, must make a determination that the "company is in default or in danger of default;" the company's resolution under otherwise available law would "have serious adverse effects on financial stability of the United States;" "no viable private sector alternative is available;" and other considerations. A company that disputes the determination by the Treasury Secretary will have limited rights to appeal the determination in federal court.

While the special resolution regime is modeled after the FDIC's receivership power, there are some important distinctions between the two. For instance, the Dodd-Frank Act emphasizes that

creditors and shareholders will bear the losses of the financial company; management responsible for the condition of the financial company will not be retained; and the [FDIC] and other appropriate agencies will take all steps necessary and appropriate to assure that all parties, including management, directors, and third parties, having responsibility for the condition of the financial company bear losses consistent with their responsibility, including actions for damages, restitution, and recoupment of compensation and other gains not compatible with such responsibility.⁵¹

The act also states that "[a]ll financial companies put into receivership under this title shall be liquidated [and n]o taxpayer funds shall be used to prevent the liquidation of any financial company under this title."⁵²

The funding mechanism for resolutions under the Dodd-Frank Act also differs from the conservatorship/receivership regime for depositories. The Orderly Liquidation Fund established by the Dodd-Frank Act will not be prefunded. Instead, the FDIC, upon being appointed receiver of a particular financial company, is authorized to borrow funds from the Treasury subject to explicit caps based on the value of the failed firm's consolidated assets. If necessary to pay off such obligations to the Treasury, the FDIC would have the authority to assess claimants of the failed institution that received more through the receivership than they would have received had the failed firm been liquidated in bankruptcy, as well as the power to assess certain large financial institutions (bank holding companies and nonbank financial companies eligible for the special resolution regime that have more than \$50 billion in assets and all nonbank financial institutions supervised by the Fed as systemically significant). The Dodd-Frank Act also imposes a three-year time limit on any receivership with the possibility of up to two one-year extensions."

⁵¹ P.L. 111-203, § 204(a).

⁵² P.L. 111-203, § 214.

Proprietary Trading⁵³

Title VI contains an outright prohibition on proprietary trading by any FDIC-insured depository institution, company controlling an insured depository institution, company treated as a bank holding company for purposes of the International Banking Act of 1978, and any affiliate or subsidiary of such entity. Such institutions are also barred from owning interests in or sponsoring hedge funds or private equity funds. There are, however, certain exceptions to the prohibition—some transitional, some involving activities by foreign firms that take place solely outside the United States, and others designated as permitted activities, including purchasing and selling government or GSE securities, market making activities, risk mitigating hedging activities, small business investment company investments, insurance company portfolio investments, and other investments identified by regulators.

Rather than subjecting non-bank financial companies supervised by the Fed to a prohibition on proprietary trading and hedge fund ownership or sponsorship, the legislation authorizes the regulators to issue rules subjecting such companies to additional capital and quantitative limits on such activities unless the activity has been identified under one of the exceptions.

Payment, Clearing, and Settlement Systems and Activities

In addition to the duties listed above, the Council, by a two-thirds vote including the chairman, is authorized to identify systemically significant systems for payment, clearing, and settlement (PCS) of financial transactions (also called utilities) and (PCS) activities for regulation by the SEC or the CFTC if registered therewith; otherwise, by the Fed. Title VIII identifies activities that could potentially be regulated, including settling and netting of financial transactions; the provision and maintenance of trade, contract, or instrument information; risk management activities related to continuing transactions; transmittal and storage of payment instructions; and the movement of funds. The act identifies funds transfers, securities contracts, futures contracts, forward contracts, repurchase agreements, swaps, foreign exchanges contracts, financial derivatives contracts, and any similar transaction identified by the Council as financial instruments whose payment, clearing, or settlement could be regulated. It explicitly excludes designated contract markets, registered futures associations, swap data repositories, certain swap execution facilities, national securities exchanges and associations, alternative trading systems, security-based swap data repositories, broker dealers, investment companies, futures commission merchants, commodity trading advisors, and commodity pool operators from regulation.

The PCS regulator may make information requests, issue rules and take enforcement actions, and examine a designated PCS system or firm performing a PCS activity. For PCS systems and activities regulated by the SEC or CFTC, the Fed may make enforcement recommendations or take actions in case of "imminent risk or substantial harm." Once a PCS system is regulated, it may borrow from the Fed; the right to borrow is limited to "unusual or exigent circumstances" and requires a showing that the firm cannot secure credit elsewhere and a majority vote of the Fed Board taken after consultation with the Treasury Secretary.⁵⁴

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⁵³ This section prepared with (name redacted), Legislative Attorney.

⁵⁴ P.L. 111-203, § 806(b).

Derivatives55

Title VII seeks to remake the OTC market in the image of the regulated futures exchanges. The act includes a requirement that swap contracts be cleared through a central counterparty regulated by one or more federal agency. Clearing houses require traders to post initial margin at the time they open a contract to cover potential losses, and require subsequent deposits of cash (called maintenance margin) to cover actual losses to the position. The effect of margin requirements is to eliminate the possibility that any firm can build up an uncapitalized exposure so large that default would have systemic consequences. The size of a cleared position is limited by the firm's ability to post capital to cover its losses. That capital protects its trading partners and the system as a whole. Counterparty risk is shifted from the firms engaged in the trade to the clearing house.

The new law provides exceptions to the clearing requirement for commercial end-users, or firms that use derivatives to hedge the risks of their nonfinancial business operations. Regulators may also provide exemptions for smaller financial institutions.

Swap dealers and major swap participants—firms with substantial derivatives positions—will be subject to margin and capital requirements above and beyond what the clearing houses mandate. Trades that are cleared will also be subject to trading on an exchange, or an exchange-like "swap execution facility," regulated by either the Commodity Futures Trading Commission (CFTC) or the Securities and Exchange Commission (SEC), in the case of security-based swaps. All trades will be reported to data repositories, so that regulators will have complete information about all derivatives positions. Data on swap prices and trading volumes will be made public. This would make more information available to regulators about the size and distribution of possible losses during periods of market volatility.

The act prevents insured depository institutions from dealing credit default swaps.

Capital Requirements⁵⁶

Title I requires the federal banking regulators to establish minimum risk-based capital requirements and leverage requirements on a consolidated basis for depository institutions, depository holding companies, and firms designated as systemically significant by the Council that are no lower than those were set for depository institutions as of the date of enactment. Under this provision, no longer will holding companies be authorized to include trust-preferred securities in Tier I capital. These requirements are phased in, and certain small firms are exempted.

Title VI requires the federal banking regulators to make capital "requirements countercyclical, so that the amount of capital required to be maintained ... increases in times of economic expansion and decreases in times of economic contraction, consistent with ... safety and soundness."⁵⁷

The Council is required to conduct a study on the feasibility of implementing a contingent capital requirement for systemically significant firms. Contingent capital is debt that can be converted into equity by the issuing firm under certain circumstances. Following the study, if the Council

⁵⁵ This section prepared with (name redacted), Specialist in Financial Economics.

⁵⁶ This section prepared with (name redacted), Legislative Attornev.

⁵⁷ P.L. 111-203 § 616.

recommends, the Fed may impose contingent capital requirements on systemically significant firms.

Changes to Section 13(3) Emergency Lending Authority

Title XI amends Section 13(3) of the Federal Reserve Act to require the Fed to establish, in consultation with the Secretary, regulations governing the use of the Federal Reserve Act's Section 13(3) emergency lending authority, in contrast to the ad hoc use of Section 13(3) during the recent crisis. The policies and procedures prescribed in these regulations must include measures to prevent aid to failing firms or insolvent borrowers and may require borrowers to certify that they are solvent. Any program established under this authority must be approved by the Treasury Secretary and must be "for the purpose of providing liquidity to the financial system, and not to aid a failing financial firm or company." A program that is "structured to remove assets from the balance sheet of a single and specific company" is forbidden, as is any program designed to help a single company to avoid bankruptcy or an insolvency proceeding. The policies and procedures must ensure that any assistance be secured sufficiently to protect taxpayers from losses "consistent with sound risk management practices." This contrasts with the standard applicable during the recent crisis, which required that security for assistance be "indorsed [sic.], or otherwise secured to the satisfaction of the Federal reserve [sic.] bank." Any program under this authority must be "terminated in a timely and orderly fashion."

FDIC Emergency Liquidity Program

In addition to the Fed, the Federal Deposit Insurance Corporation (FDIC) also set up emergency programs in response to the crisis. On October 14, 2008, the FDIC announced the creation of the Temporary Liquidity Guarantee Program to encourage liquidity in the banking system, including a Debt Guarantee Program and a Transaction Guarantee Program. ⁵⁹ This program was not specifically authorized by Congress; it was authorized under the FDIC's standing systemic risk mitigation authority, 12 U.S.C. § 1823(c)(4)(G). The Debt Guarantee Program guarantees debt issued by banks, thrifts, and bank holding companies, including commercial paper, interbank funding, promissory notes, and any unsecured portion of secured debt. ⁶⁰

Title XI provides more specific, explicit authority for the FDIC to create a program to guarantee debt of solvent depository institutions or depository institution holding companies and their affiliates "during times of severe economic distress." This supersedes the authority in 12 U.S.C. 1823(c)(4)(G). To institute such a program, at the Treasury Secretary's request, two-thirds of the FDIC's Board and two-thirds of Fed governors must make a finding, that (1) a liquidity event exists, (2) failure to act would have serious adverse effects on financial stability, and (3) using this authority would ameliorate the effects. The program must be "widely available" to "solvent insured depository institutions or solvent depository institution holding companies (including any affiliates thereof" and may not include "the provision of equity in any form." There could,

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⁵⁸ P.L. 111-203, § 1101.

⁵⁹ See the initial announcement at http://www.fdic.gov/news/news/press/2008/pr08100.html. See http://www.fdic.gov/news/news/press/2008/pr08105.html, which provides further details of the program.

⁶⁰ For more information, see CRS Report R41073, *Government Interventions in Response to Financial Turmoil*, by (name redacted) and (name redacted).

therefore, be no program under this authority similar to the Capital Purchase Program⁶¹ undertaken under the Troubled Asset Relief Program (TARP) authorized by the Emergency Economic Stabilization Act of 2008.⁶² Under the legislation, the FDIC, in consultation with the Treasury Secretary, must establish policies and procedures governing the terms and conditions of such a program "as soon as is practicable." The program must be financed by assessments on participants, although temporary funding will be available to the FDIC from the Treasury. Upon establishing a program, the Treasury Secretary, in consultation with the President, is to establish a maximum amount of debt that can be guaranteed, and obtain congressional approval before any guarantees may be issued. Congressional approval is to take the form of a joint resolution to be considered under expedited procedures.

Bank Holding Company Regulation⁶³

Title VI makes modifications to the Fed's authority to regulate bank holding companies. It removes the strict limitations on Fed authority to take direct action against functionally regulated subsidiaries of bank holding companies. It expands Fed authority to examine bank holding company subsidiaries by specifically including risks to U.S. financial stability as a focus of the examination. It authorizes the Fed to monitor how the subsidiaries, except for functionally regulated subsidiaries and depository institution subsidiaries, are complying with any other applicable federal law (subject to the allocation of examination functions under the Consumer Financial Protection Act of 2010, Title X of the Dodd-Frank Act).

Title VI also sets standards for the Fed to examine activities of non-depository, non-functionally regulated subsidiaries of depository institution holding companies that "are permissible for the insured depository institution subsidiaries of the depository institution holding company in the same manner, subject to the same standards, and with the same frequency as would be required if such activities were conducted by the lead insured depository institution subsidiary of the holding company." The regulator of the lead depository institution may request a Fed examination of the non-depository, non-functionally regulated subsidiaries of the holding company, and if the Fed fails to begin such an examination, the regulator of the lead depository institution may commence to conduct the examination. Recommendations for supervisory actions are to be submitted to the Fed; if the Federal Reserve Board does not take enforcement action within 60 days, the agency making the recommendation may take action. 64

Other Federal Reserve Provisions

This section discusses major provisions of the Dodd-Frank Act related to the Federal Reserve that do not involve systemic risk issues.

⁶¹ http://www.financialstability.gov/roadtostability/capitalpurchaseprogram.html.

⁶² P.L. 110-343, 110 Stat. 3765, § 101, 12 U.S.C. § 5211.

⁶³ This section prepared with (name redacted), Legislative Attorney.

⁶⁴ P.L. 111-203 § 1105.

Consumer Financial Protection Bureau⁶⁵

Title X establishes a Bureau of Consumer Financial Protection (Bureau) within the Federal Reserve System with authority over an array of consumer financial products and services (including deposit taking, mortgages, credit cards and other extensions of credit, loan servicing, check-guaranteeing, collection of consumer report data, debt collection, real estate settlement, money transmitting, and financial data processing, among others). It will serve as the primary federal consumer financial protection supervisor and enforcer of federal consumer protection laws over many of the institutions that offer these products and services. The Bureau will be required to consult with the prudential regulators when prescribing regulations.

The Dodd-Frank Act authorizes the Bureau to prescribe rules and issue orders and guidance. The legislation also transfers to the Bureau rulemaking authority for many of the existing federal consumer protection laws, including the Truth in Lending Act, the Real Estate Settlement Procedures Act, and the Home Ownership and Equity Protection Act. As a check on the Bureau's rulemaking powers, the Financial Stability Oversight Council has the ability to set aside a regulation prescribed by the Bureau if the regulation "would put the safety and soundness of the United States banking system or the stability of the financial system of the United States at risk."

The Bureau is established within the Federal Reserve System, but it has some measure of independence from the Fed. For instance, the Fed does not have the formal authority to stop, delay, or disapprove of a Bureau regulation, nor can it

- (A) intervene in any matter or proceeding before the Director [of the CFPB], including examinations or enforcement actions, unless otherwise specifically provided by law;
- (B) appoint, direct, or remove any officer or employee of the Bureau; or
- (C) merge or consolidate the Bureau, or any of the functions or responsibilities of the Bureau, with any division or office of the Board of Governors or the Federal Reserve banks. 66

However, the Bureau is not completely independent of the Fed. As an example, the act allows, but does not require, the Fed to "delegate to the Bureau the authorities to examine persons subject to the jurisdiction of the [Board] for compliance with the Federal consumer financial laws." ⁶⁷

The Bureau is to be headed by a director appointed by the President, subject to the advice and consent of the Senate, to serve for a five-year term from which s/he could only be removed for "inefficiency, neglect of duty or malfeasance in office." The director has authority to hire the employees necessary to carry out the duties of the Bureau. The act establishes a procedure by which the existing regulators (including the Fed) will transfer employees to the Bureau as necessary to perform the consumer financial protection functions that are transferred from those agencies to the Bureau.

⁶⁵ This section was prepared with (name redacted), Legislative Attorney. For more information, see CRS Report R41338, *The Dodd-Frank Wall Street Reform and Consumer Protection Act: Title X, The Consumer Financial Protection Bureau*, by (name redacted).

⁶⁶ P.L. 111-203, § 1012(c)(2).

⁶⁷ P.L. 111-203§ 1112(c)(1).

The Bureau will be funded "from the combined earnings of the Federal Reserve System [in an] amount determined by the Director to be reasonably necessary to carry out the authorities of the Bureau" subject to specified caps. The cap will be 10% of the total operating expenses of the Federal Reserve System for FY2011, 11% for FY2012, and 12% thereafter. As a gauge of how much money this will be, the system's total operating expenses for FY2009 were \$4.98 billion, 10% of which is just under \$500 million. These funds are not reviewable by either the House or Senate Committees on Appropriations. The act also authorizes appropriations if the director "determine[s] that sums available to the Bureau [as specified by the caps] under this section will not be sufficient to carry out the authorities of the Bureau under Federal consumer financial law for the upcoming year."

GAO Audits

Previously, the Government Accountability Office (GAO) was not allowed to audit monetary policy actions, including interest rate changes, transactions with foreign governments, open market operations, and loans to financial firms. Actions taken by the Fed in response to the financial crisis were covered by this exemption. Title XI allows GAO to audit open market operations, discount window lending, actions taken under emergency authority, and actions taken in response to the financial crisis for

- (A) the operational integrity, accounting, financial reporting, and internal controls governing the credit facility or covered transaction;
- (B) the effectiveness of the security and collateral policies established for the facility or covered transaction in mitigating risk to the relevant Federal reserve bank and taxpayers;
- (C) whether the credit facility or the conduct of a covered transaction inappropriately favors one or more specific participants over other institutions eligible to utilize the facility; and
- (D) the policies governing the use, selection, or payment of third-party contractors by or for any credit facility or to conduct any covered transaction. ⁶⁹

The legislation does not authorize the GAO to conduct policy evaluations of the Fed's monetary actions. GAO may not disclose confidential information in its reports until that information was made public by the Fed. The GAO must audit the Fed's response to the recent crisis response within a year of enactment.

The legislation also calls for a separate GAO audit of Federal Reserve bank governance to assess whether it produces conflicts of interest or potential conflicts, and whether the existing system of selecting regional Federal Reserve bank directors results in directors who represent "the public without discrimination on the basis of race, creed, color, sex, or national origin, and with due but not exclusive consideration to the interests of agriculture, commerce, industry, services, labor, and consumers."

⁶⁸ P.L. 111-203 § 1017.

⁶⁹ P.L. 111-203 § (b)(2).

⁷⁰ P.L. 111-203, § 1109(b) quoting 12 U.S.C. § 302.

Disclosure

Title XI of the Dodd-Frank Act establishes, for the first time, disclosure requirements relating to Federal Reserve lending. It requires that the Fed provide the congressional committees of jurisdiction details on the rationale for assistance, the identity of the recipient, the material terms of the assistance, and the expected cost to the taxpayer. This information is to be provided within seven days of an action taken under Section 13(3), with updates every 30 days following. The Fed can request that this information be kept confidential and limited to the chairmen and ranking members of the committees.

The act calls for public disclosure of the identities of borrowers, amount borrowed, rate charged, and collateral pledged or assets transferred within one year after a credit facility is terminated and within two years after the transaction for discount window loans or open market operations. For Fed programs created during the crisis, this information must be publicly disclosed by December 1, 2010.

Federal Reserve Governance

Previously, one of the seven governors of the Federal Reserve Board was designated (by the President with Senate confirmation) chairman and one was designated vice-chairman. In addition to these positions, Title XI creates a vice-chairman for supervision, nominated by the President with Senate confirmation. The vice-chairman for supervision is required to testify to the committees of jurisdiction semi-annually.

Previously, the presidents of the 12 Federal Reserve regional banks were chosen by each regional bank's Board of Directors. The board was comprised of nine members: three chosen by the member banks from the banking industry, three chosen by the member banks to represent non-banking interests, and three chosen by the Board of Governors in Washington to represent non-banking interests. Title XI allows only the directors representing non-banking interests to select the regional bank presidents. As noted in the previous section, the legislation also calls for a GAO audit of the selection process for regional bank directors.

Regulation of Thrift Holding Companies⁷¹

Previously, thrifts were regulated by the Office of Thrift Supervision (OTS). Title III abolishes OTS and transfers its authority to other regulators. The Fed gains the authority to supervise, issue rules, and take enforcement actions with respect to any savings and loan holding company and any of its subsidiaries, other than a depository institution.

Title VI authorizes the Fed to require a grandfathered unitary thrift holding company which conducts some commercial or other non-financial activities to conduct all or part of its financial activities in an intermediate savings and loan holding company regulated by the Fed.

⁷¹ This section prepared with (name redacted), Legislative Attorney.

Securities Holding Companies⁷²

Title VI eliminates the investment bank holding company framework in section 17 of the Securities Exchange Act of 1934, under which a securities firm not having a depository institution subsidiary may choose to be supervised by the SEC as an investment bank holding company, coincidentally satisfying a foreign law requirement for consolidated supervision by its home country. Instead, a securities holding company (SHC) may submit to Fed regulation. It would then become subject to the record-keeping, reporting, and examination requirements imposed by the Fed as specified in section 618 of the Dodd-Frank Act. The Fed is also authorized to prescribe capital and risk management standards for SHCs.

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⁷² This section prepared with (name redacted), Legislative Attorney.

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