

Who Regulates Whom? An Overview of U.S. Financial Supervision

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Summary

Federal financial regulation in the United States has evolved through a series of piecemeal responses to developments and crises in the markets. This report provides an overview of current U.S. financial regulation: which agencies are responsible for which institutions and markets, and what kinds of authority they have.

U.S. banking regulation is largely based on a quid pro quo that was adopted in the 1930s in response to widespread bank failures. The government provides deposit insurance, to reduce customers' incentive to withdraw their funds at the first sign of trouble, and in return the banks accept direct regulation of their operations, including the amount of risk they may incur. Bank regulators can order a stop to "unsafe and unsound" banking practices and can take prompt corrective action with troubled banks, including closing the institution. There are five federal bank regulators, each supervising different (and often overlapping) sets of depository institutions.

Federal securities regulation, which also dates from the 1930s, is based on the principle of disclosure, rather than direct regulation. Firms that sell securities to the public must register with the Securities and Exchange Commission (SEC), but the agency has no authority to prevent excessive risk taking. SEC registration in no way implies that an investment is safe, only that the risks have been fully disclosed. The SEC also registers several classes of securities market participants and firms, but relies more on industry self-regulation than do the banking agencies.

Derivatives trading is supervised by the Commodity Futures Trading Commission (CFTC), which oversees trading on the futures exchanges, which have self-regulatory responsibilities as well. There is also a large over-the-counter (off-exchange) derivatives market that is largely unregulated.

The Federal Housing Finance Agency (FHFA) oversees a group of government-sponsored enterprises (GSEs)—public/private hybrid firms that seek both to earn profits and to further the policy objectives set out in their statutory charters. Two GSEs, Fannie Mae and Freddie Mac, were placed in conservatorship by the FHFA in September 2008 after losses in mortgage asset portfolios made them effectively insolvent.

A number of financial markets are unregulated, including some of the largest. No federal agency has jurisdiction over trading in foreign exchange or U.S. Treasury securities; nonbank lenders fall outside the regulatory umbrella; and hedge funds, private equity firms, and venture capital investors are largely unregulated (although their transactions in securities and derivatives markets may be).

The United States has never attempted a wholesale reformation of the entire regulatory system comparable to the 1986 "Big Bang" in the UK, which reorganized regulatory agencies across industry lines and sought to implement a consistent philosophy of regulation. In the wake of the current financial turmoil, however, such a reevaluation is possible, and a number of broad restructuring proposals have already come forward.

This report does not attempt to analyze the strengths and weaknesses of the U.S. regulatory system. Rather, it provides a description of the current system, to aid in the evaluation of reform proposals. It will be updated as warranted by market events.

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Introduction

Historically, the major changes in financial regulation in the United States have come in response to crisis. Thus, one could have predicted that the turmoil beginning in 2007 would lead to calls for reform. A number of studies and reports have already proposed broad changes to the division of supervisory authority among the various federal agencies and in the tools and authorities available to individual regulators.¹ This report provides a basis for evaluating and comparing such proposals by setting out the basic structure of federal financial regulation as it stood at the beginning of the 111th Congress.

Few would argue that regulatory failure was solely to blame for the current crisis, but it is widely considered to have played a part. In February 2009, Treasury Secretary Timothy Geithner summed up two key problem areas:

Our financial system operated with large gaps in meaningful oversight, and without sufficient constraints to limit risk. Even institutions that were overseen by our complicated, overlapping system of multiple regulators put themselves in a position of extreme vulnerability. These failures helped lay the foundation for the worst economic crisis in generations.²

In this analysis, regulation failed to maintain financial stability at the systemic level because there were gaps in regulatory jurisdiction and because even overlapping jurisdictions—where institutions were subject to more than one regulator—could not ensure the soundness of regulated financial firms. In addition, limits on risk-taking were insufficient. Regulators have a number of risk-reduction tools at their disposal, but the chief one is capital regulation—standards that require firms to maintain capital cushions to protect themselves against unexpected losses.

To create a context for what follows, this report begins with basic analysis of systemic risk and capital regulation. The first section briefly discusses regulatory jurisdiction and systemic risk, and includes a chart listing the major regulators and the types of institutions they supervise. The chart also indicates certain emergency authorities available to the regulators, including those that relate to systemic financial disturbances. The second section focuses on capital requirements and how standards are set by bank, securities, and futures regulators.

The next section provides a brief overview of each of the federal financial regulatory agencies. Because the current crisis is likely to provoke a serious reconsideration of the levels of capital that financial firms should be required to maintain as a cushion against insolvency, the capital standards that each agency applies to various classes of financial firms are also set out.

Finally, the report discusses of several major areas of financial markets that are not subject to any federal regulation.

¹ See, e.g., U.S. Treasury, *Blueprint for a Modernized Financial Regulatory Structure*, March 2008. [http://www.treas.gov/press/releases/reports/Blueprint.pdf]; Group of Thirty, *Financial Reform: A Framework for Financial Stability*, January 2009. [http://www.group30.org/pubs/recommendations.pdf]; Congressional Oversight Panel, *Special Report on Regulatory Reform*, January 2009. [http://cop.senate.gov/documents/cop-012909-report-regulatoryreform.pdf]; and Government Accountability Office, *Financial Regulation: A Framework for Crafting and Assessing Proposals to Modernize the Outdated U.S. Financial Regulatory System*, GAO-09-310T, January 14, 2009.

² Remarks by Treasury Secretary Timothy Geithner Introducing the Financial Stability Plan, February 10, 2009. [http://www.ustreas.gov/press/releases/tg18.htm]

Financial Crises, Regulatory Jurisdiction, and Systemic Risk

The United States has experienced several financial panics and economic disruptions in its history. Reactions to financial disruptions have resulted in a complex regulatory framework, in which some agencies have overlapping jurisdictions, and where there may be some regulatory gaps. With each new crisis, including the current one, there are calls to address perceived gaps and weaknesses in the regulatory system. Financial disruptions can originate from at least three sources:

- *failures within the financial system itself*, such as a breakdown in the ability of banks and other financial intermediaries to process their obligations to one another in a timely and efficient manner;
- *demands on the financial system from other sectors of the economy*, such as unexpected pressure on banks to honor their obligations to depositors and investors more quickly than they can accumulate liquid assets; and
- *weakness in real economic sectors*, such as an unexpected drop in the capacity of firms and consumers to repay bank loans.

These three types of problems are illustrated in the **Figure 1** and discussion below.



Figure 1. Where Financial Disruptions Arise

Source: CRS.

Processes Within the Financial Sector

Financial disruptions can manifest themselves within the financial sector itself (represented in the Figure 1 by the numeral 1). For example, banks may have trouble processing checks and other third-party claims, or loans to other banks. Because the willingness and ability of market participants to extend loans and make trades often depends on trust that others will honor their obligations to them in a timely manner, disruptions in interbank lending markets, clearinghouses, and trading exchanges can disrupt financial flows to the wider economy.³ The Panic of 1857 may represent an instance in which interbank markets failed and contributed to a wider recessionsubsequent reforms sought to redress problems within the financial sector itself. Prior to the Civil War, the debts of state-chartered banks circulated as currency. A clearinghouse system was required to process these state bank notes, which often traded at a discount vis-a-vis each other, similar to the way that international currencies today have exchange rates. The value of a state bank note often depended on the perceived safety and soundness of the banks that issued the note. Private inter-bank clearinghouse systems, such as New England's Suffolk Bank, coordinated the processing of bank claims. The Panic of 1857 was a financial crisis in which the value of state bank notes became uncertain and the wider economy suffered a recession. The Suffolk Bank failed in 1858. Partially in response to this crisis, the United States established a single national currency, coordinated through a system of federally chartered banks. The safety and soundness of these banks is regulated by the Office of the Comptroller of the Currency (OCC), established in 1863.

Honoring Claims of Depositors and Investors

Financial disruptions can result from problems between banks and their sources of funding, whether investors or depositors (indicated by the numeral 2 in the **Figure 1**). Banks and other financial intermediaries often have a timing mismatch: the value of their assets may only be recoverable over a long period of time, but their liabilities may be subject to immediate repayment. Banks plan for this duration mismatch using a variety of risk-management techniques, but at the end of the day, there are limits to their ability to accommodate changes in investor/depositor behavior. If investors or depositors demand repayment too quickly, a bank may be forced to sell its less liquid assets at a steep discount to meet immediate obligations. The resulting losses, or the fear of such losses, can damage the financial system and cut off credit to the wider economy.

The Panic of 1907 may represent an instance in which banks were unprepared for changes in the behavior of investors and depositors. In 1907, the seasonal increase in demand for currency coincided with disruptions in the New York money market caused by a commodities speculator. F.A. Heinze had used funds from the Mercantile National Bank, which was subject to OCC supervision, in a failed attempt to corner the copper market. Fearing bank insolvency, depositors began a series of runs on institutions believed to be associated with Heinze, including the New York Knickerbocker Bank. During the ensuing liquidity crisis, the swamped OCC staff's response time for currency deliveries slowed down even as demand for money increased. National banks

³ Examples of potential disruptions that markets appear to have handled with relative resilience include the stock market crash of 1987, during which the stock ticker "ran late," and more recent concern that the trading technology for credit default swaps might not be able to process the volume of obligations if a large institution such as Fannie Mae or Freddie Mac suffered a credit event. Currently, the Federal Reserve oversees a domestic interbank clearing system for banks while the CFTC and the SEC oversee trading exchanges for commodities and securities respectively.

turned to a variety of substitutes for national currency, including the financial resources of investor J.P. Morgan. Partially as a response to this crisis, the United States established a system of federally regulated bank reserves. The Federal Reserve was created in 1914.

The Great Depression may represent another episode in which banks were unprepared for changes in depositor behavior. Rising unemployment both increased the need for households to withdraw their savings deposits and reduced the flow of funds into banks through loan repayment. Fear that banks would not be able to honor their commitments to depositors caused a series of bank runs in 1931 and 1933, which forced banks to sell assets at steep discounts. To reduce the likelihood of future bank runs, Congress established a federal insurance program for bank deposits: the Federal Deposit Insurance Corporation (FDIC) was created in 1933.

Systemic Event	Perceived Problem	Solution	New Regulator	Year Created
Panic of 1857	Failure of Private Clearinghouses that Processed State Bank Notes (circulated as currency)	Create Single National Currency Through System of Federally Chartered and Regulated Banks	Office of the Comptroller of the Currency (OCC)	863
Panic of 1907	Series of Runs on Banks and Financial Trusts with Inadequate Reserves	Create Lender of Last Resort with Power to Regulate a National System of Bank Reserves	Federal Reserve	1913
Great Depression	Series of Runs on Banks by Small Depositors who Feared Full Value of Deposits Would Not be Honored	Create Limited Deposit Insurance to Maintain Depositor Confidence and Prevent Bank Runs	Federal Deposit Insurance Corporation (FDIC)	1933
	Sharp Decline in Stock Prices along with Widespread Belief that Some Investors had an Information Advantage Reduced Confidence in Securities Markets	Restore Confidence in Securities Markets by Standardizing Disclosures and Requiring Regular Reporting	Securities and Exchange Commission (SEC)	1934

Table 1. Systemic Crises and the Creation of Financial Regulators

Source: CRS.

Performance of Loans from Banks to the Economy

Financial disruptions can also result from worse-than-expected performance of loans from banks to households, businesses, and governments, indicated by the numeral 3 in the figure above. Banks and other financial intermediaries do not expect all loans to be repaid on time and in full; rather, there is always some allowance for loan losses. When loan losses rise above expectations, however, banks become less capitalized. To avoid an undercapitalized system, the OCC and other regulators with safety and soundness authority require subject institutions to prepare for some loan losses. In addition, they examine subject institutions' loan portfolios to assess the overall prudence of lending behavior and attempt to prevent overly risky lending.

During the 2001-2005 housing boom, large volumes of mortgage lending were conducted through non-bank institutions, which were not subject to the prudential lending standards of the bank regulators. Many large banks bought mortgage-backed securities based on such loans—or assumed the equivalent risk exposure through off-balance sheet financing arrangements or derivatives contracts—and have since suffered unexpected losses and become undercapitalized. Some believe that the current crisis is evidence of a regulatory gap, and have called for the establishment of a new systemic risk regulator with authority to oversee all financial institutions and firms that could trigger a systemic disruption.

Thus, new proposals to create a regulator exclusively concerned with systemic risk repeat the pattern that has characterized the development of U.S. financial regulation. The term "systemic risk" does not have a single, agreed-upon definition. Some define systemic risk as the risk an institution faces that it cannot diversify against. In other circumstances, systemic risk is defined as the risk that the linkages between institutions may affect the financial system as a whole, through a dynamic sometimes referred to as contagion. These definitions are compatible in some cases; for example, the linkages between financial institutions could prevent any single lender from effectively protecting itself from problems that emerge in the system as a whole.

The two definitions do not always apply to the same circumstances. Particular institutions in some sectors might face risks that are not diversifiable and that arise from sources other than the financial system. Similarly, linkages between institutions can create aggregate risks that individual institutions could hedge against if they chose to do so, but there is no assurance that the institutions would. In fact, another way to think about systemic risk is that it arises because all market participants have incentives to limit their own risk-taking to prevent loss of the own capital, but no participant will willingly limit its risk-taking—the source of its profitability—to reduce the possibility of a systemic disruption.

Asset bubbles represent one form of systemic risk. In good times, loans are less likely to default; therefore, it might make sense for any individual bank to increase its leverage and reduce its capital reserves. However, overly easy lending and reduced capital reserves in good times can lead to a bubble in the price of assets financed with loans, such as farms or houses (even tulip bulbs). When the bubble eventually deflates, simultaneous deterioration of banks' balance sheets can result.

Over the years, the financial regulatory system has been modified to address various sources of financial instability and evolving concepts of systemic risk. Not all federal financial regulators have authority to address systemic risk, and no single regulator has jurisdiction over all the financial institutions and markets that may become sources of systemic risk.

 Table 2 below sets out the current federal financial regulatory structure: the agencies and the financial institutions they regulate. Supplemental material—charts that illustrate the differences between banks, bank holding companies, and financial holding companies—appears in Appendix A.

Regulatory Agency	Institutions Regulated	Emergency/Systemic Risk Powers	Other Notable Authority
Federal Reserve	Bank holding companies, ^a financial holding companies, state banks that are members of the Federal Reserve System, U.S. branches of foreign banks, foreign branches of U.S. banks	Lender of last resort to member banks (through discount window lending). In "unusual and exigent circumstances" the Fed may lend to "any individual, partnership, or corporation"	The Fed issues consumer protection regulations under various federal laws, including the Truth-in- Lending Act
Office of the Comptroller of the Currency (OCC)	National banks, U.S. federal branches of foreign banks		
Federal Deposit Insurance Corporation (FDIC)	Federally-insured depository institutions, including state banks that are not members of the Federal Reserve System	After making a determination of systemic risk, the FDIC may invoke broad authority to use the deposit insurance funds to provide an array of assistance to depository institutions	
Office of Thrift Supervision (OTS)	Federally chartered and insured thrift institutions, savings and loan holding companies		
National Credit Union Administration (NCUA)	Federally-chartered or insured credit unions	Serves as a liquidity lender to credit unions experiencing liquidity shortfalls through the Central Liquidity Facility	Operates a deposit insurance fund for credit unions, the National Credit Union Share Insurance Fund (NCUSIF)
Securities and Exchange Commission (SEC)	Securities exchanges, brokers, and dealers; mutual funds; investment advisers. Registers corporate securities sold to the public	May unilaterally close markets or suspend trading strategies for limited periods	Authorized to set financial accounting standards which all publicly traded firms must use
Commodity Futures Trading Commission (CFTC)	Futures exchanges, brokers, pool operators, advisers	May suspend trading, order liquidation of positions, or raise margins in emergencies.	
Federal Housing Finance Agency (FHFA)	Fannie Mae, Freddie Mac, and the Federal Home Loan Banks	Acting as conservator (since Sept. 2008) for Fannie and Freddie	

Table 2. Federal Financial	Regulators and Who	They Supervise
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Source: CRS.

Notes: For more detail on banking regulation, see the chart "Banking Institutions and Their Regulators," http://www.newyorkfed.org/publications.

a. See Appendix A.

Capital Requirements

As a general accounting concept, capital means the equity of a business—the amount by which its assets exceed its liabilities.⁴ The more capital a firm has, the greater its capacity to absorb losses and remain solvent. Financial regulators require the institutions they supervise to maintain specified minimum levels of capital—defined in various ways—in order to reduce the number of failing firms and to minimize losses to investors, customers, and taxpayers when failures do occur. Capital requirements represent a cost to businesses because they restrict the amount of funds that may be loaned or invested in the markets. Thus, there is a perpetual tension: firms structure their portfolios to reduce the amount of capital they must hold, while regulators continually modify capital standards to prevent excessive risk-taking.

In U.S. banking regulation, capital standards are based on the Basel Accords, an international framework developed under the auspices of the Bank for International Settlements.⁵ The guiding principle of the Basel standards is that capital requirements should be risk-based. The riskier an asset, the more capital a bank should hold against possible losses. The Basel Accords provide two broad methodologies for calculating risk-based capital: (1) a standardized approach to credit risk determinations, based on external risk assessments (such as bond ratings), and (2) an alternative approach that relies on banks' internal risk models and rating systems. Adoption of the latter method—set out in the 2004 Basel II framework—in the United States has been slow, and thus far is limited to a few large banks.⁶

Table 3 shows how the standardized approach works in assessing the amount of capital to be held against credit risk in various types of financial instruments. The Basel Accords call for a basic capital requirement of 8% of the value of an asset; the risk-weighting then determines what percentage of that 8% baseline will apply to a given asset. For example, if the risk-weighting is 0%, no capital must be held (i.e., 8% X 0% = 0). A risk weighting of 100% means that the full 8% requirement applies. Assets weighted above 100% require that a multiple of the 8% capital requirement be held.

⁴ Regulatory uses of "capital" include more specific definitions and classifications.

⁵ See CRS Report RL33278, *The Basel Accords: The Implementation of II and the Modification of I*, by Walter W. Eubanks.

⁶ See CRS Report RL34485, *Basel II in the United States: Progress Toward a Workable Framework*, by Walter W. Eubanks.

Asset	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	Unrated
Sovereign Debt	0%	20%	50%	100%	150%	100%
Bank Debt	20%	50%	50%	100%	150%	100%
Corporate Debt	20%	50%	100%	NA	l 50% (below BB-)	100%
<mark>Assets not Assign</mark> Residential Mortgag		t <mark>andard & Poor</mark> 35%	<u>'s or other Cre</u>	edit Rating Agen	<u>cies</u>	
Commercial Real Es		100%				
Past Due Loans		100%-150% (dep	ending on specif	ic provisions made	to cover loan losse	s)

Table 3. The Basel Accords: Risk Weightings for Selected Financial Assets Under theStandardized Approach

Source: Basel Committee on Banking Supervision, International Convergence of Capital Measurement and Capital Standards, BIS, November 2005, pp. 15-22.

Federal banking regulators use the Basel Accords as the basis for their capital requirements. **Table 4** sets out the specific standards imposed by each.

Agency	Capital Standard	Source	
осс	Minimum risk-based capital ratio of 8%. (The ratio measures bank capital against assets, with asset values risk-weighted, or adjusted on a scale of riskiness.)	I2 CFR § 3.6 ("Minimum capital ratios")	
	In addition, banks must maintain Tier I capital ^a in an amount equal to at least 3.0% of adjusted total assets. (A simple definition of Tier I capital is stockholders' equity, or the net worth of the institution.) The 3% total assets leverage ratio applies to the most highly rated banks, which are expected to have well-diversified risks, including no undue interest rate risk exposure; excellent control systems; good earnings; high asset quality; high liquidity; and well managed on-and off-balance sheet activities; and in general be considered strong banking organizations, with a rating of I under CAMELS ^b rating system of banks. For other banks, the minimum Tier I leverage ratio is 4%.		
FDIC	The FDIC requires institutions to maintain the same minimum leverage capital requirements (ratio of Tier 1 capital to assets) as the OCC, that is, 3% for the most highly-rated institutions and 4% for others.	12 CFR § 325.3, ("Minimum leverage capital requirement")	
Federal Reserve	State banks that are members of the Federal Reserve System must meet an 8% risk-weighted capital standard, of which at least 4% must be Tier 1 capital (3% for strong banking institutions rated "1" under the CAMELS rating system of banks).	12 CFR § 208.4, Regulation H ("Membership of State Banking	
	In addition, the Fed establishes levels of reserves that depository institutions are required to maintain for the purpose of facilitating the implementation of monetary policy by the Federal Reserve System. Reserves consist of vault cash (currency) or deposits at the nearest regional Federal Reserve branch, held against the bank's deposit liabilities, primarily checking, saving, and time deposits (CDs). The size of these reserves places a ceiling on the amount of deposits that financial institutions can have outstanding, and ties deposit liabilities to the amount of assets (loans) these institutions can acquire.	Institutions in the Federal Reserve System") and 12 CFR § 204.9 (Reserve requirements)	
	Reserves are calculated as a percentage of customers' net transaction accounts. A bank with between \$10.3 million and \$44.4 million in transaction accounts must maintain reserves equal to 3% of the amount. Banks with over \$44.4 million in transaction accounts must maintain \$1,023,000 plus 10% of the amount over \$44.4 million. Banks holding less than \$10.3 million in transaction accounts are not subject to reserve requirements.		
OTS	Risk-based capital must be at least 8% of risk-weighted assets. Federal statute requires that OTS capital regulations be no less stringent than the OCC's. Tangible capital must exceed 1.5% of adjusted total assets. The leverage ratio (Tier 1 capital to assets) must be 4% of adjusted total assets (3% for thrifts with a composite CAMELS rating of 1).	12 CFR §567	
NCUA	Credit unions must maintain a risk-based net worth of 7%, as a minimum to be considered well-capitalized.	NCUA Regulations (Section 702) Subpart A)	

Table 4. Capital Standards for Federally Regulated Depository Institutions

Source: CRS.

a. Tier I capital or core capital means the sum of common stockholders' equity, noncumulative perpetual preferred stock, and minority interests in consolidated subsidiaries, minus all intangible assets, minus identified losses, minus investments in certain financial subsidiaries, and minus the amount of the total adjusted carrying value of nonfinancial equity investments that is subject to a deduction from Tier I capital.

b. See Appendix B.

Non-Bank Capital Requirements

The SEC's Net Capital Rule

The SEC's net capital rule, set out in17 CFR 240.15c3-1, imposes an "Aggregate Indebtedness Standard." No broker/dealer shall permit its aggregate indebtedness to all other persons to exceed 1500% of its net capital (or 800% of its net capital for 12 months after commencing business as a broker or dealer). The 1500% (or 15-to-1) ratio of debt to liquid capital, is arithmetically equivalent to a $6\frac{2}{3}$ % capital requirement.

To calculate liquid capital, SEC rules require that securities and other assets be given a "haircut" from their current market values (or face value, in the case of bonds), to cover the risk that the asset's value might decline before it could be sold. The haircut concept is essentially the same as the standardized risk weights in the Basel Accords. The riskier the asset, the greater the haircut. For example, U.S. Treasury securities might have a haircut of zero to 1%; municipal securities, 7%; corporate bonds, 15%; common stock, 20%; and certain assets, such as unsecured receivables or securities for which no ready market exists, receive a haircut of 100%. As discussed below, the intent of the net capital rule is not the same as that of banking capital requirements, because the SEC is not a safety and soundness regulator. The net capital rule is meant to ensure that brokerages cease operations while they still have assets to meet their customers' claims.

CFTC Capital Requirements

Futures commission merchants (or FCMs, the futures equivalent of a securities broker/dealer) are subject to adjusted net capital requirements. Authority to enforce the capital rules is delegated by the CFTC to the National Futures Association (NFA), a self-regulatory organization created by Congress.

Each NFA Member that is required to be registered with the CFTC as a Futures Commission Merchant (Member FCM) must maintain "Adjusted Net Capital" (as defined in CFTC Regulation 1.17) equal to or in excess of the greatest of:

(i) \$500,000;

(ii) For Member FCMs with less than \$2,000,000 in Adjusted Net Capital, \$6,000 for each remote location operated;

(iii) For Member FCMs with less than \$2,000,000 in Adjusted Net Capital, \$3,000 for each associated person;

(iv) For securities brokers and dealers, the amount of net capital specified by SEC regulations;

(v) 8% of domestic and foreign domiciled customer and 4% of non-customer (excluding proprietary) risk maintenance margin/performance bond requirements for all domestic and foreign futures and options on futures contracts excluding the risk margin associated with naked long option positions;

(vi) For Member FCMs with an affiliate that engages in foreign exchange (FX) transactions and that is authorized to engage in those transactions solely by virtue of its affiliation with a registered FCM, \$7,500,000; or

(vii) For Member FCMs that are counterparties to FX options, \$5,000,000, except that FX Dealer Members must meet the higher requirement in Financial Requirements Section 11.⁷

Federal Housing Finance Agency

FHFA is authorized to set capital classification standards for the Federal Home Loan Banks, Fannie Mae, and Freddie Mac that reflect the differences in operations between the banks and the latter two gocerbment-sponsored enterprises.⁸ The law defines several capital classifications, and prescribes regulatory actions to be taken as a GSE's condition worsens.

FHFA may downgrade the capital classification of a regulated entity (1) whose conduct could rapidly deplete core or total capital, or (in the case of Fannie or Freddie) whose mortgage assets have declined significantly in value, (2) which is determined (after notice and opportunity for a hearing) to be in an unsafe or unsound condition, or (3) which is engaging in an unsafe or unsound practice.

No growth in total assets is permitted for an *undercapitalized* GSE, unless (1) FHFA has accepted the GSE's capital restoration plan, (2) an increase in assets is consistent with the plan, and (3) the ratio of both total capital to assets and tangible equity to assets is increasing. An undercapitalized entity is subject to heightened scrutiny and supervision.

If a regulated entity is *significantly undercapitalized*, FHFA must take one or more of the following actions: new election of Directors, dismissal of Directors and/or executives, and hiring of qualified executive officers, or other actions. Without prior written approval, executives of a significantly undercapitalized regulated entity may not receive bonuses or pay raises. In addition, FHFA may appoint a receiver or conservator for several specified causes related to financial difficulty and/or violations of law or regulation.

When a GSE becomes *critically undercapitalized*, mandatory receivership or conservatorship provisions apply. For example, FHFA must appoint itself as the receiver if a regulated entity's assets are (and have been for 60 days) less than its obligations to its creditors, or if the regulated entity has (for 60 days) not been generally paying its debts as they come due. The FHFA appointed itself conservator for both Fannie and Freddie in September 2008, before either GSE had failed to make timely payments on debt obligations.

The Federal Financial Regulators

Banking Regulators

Banking regulation in United States has evolved over time into a system of multiple regulators with overlapping jurisdictions. There is a dual banking system, in which each depository institution is subject to regulation by its chartering authority: state or federal. In addition, because

⁷ National Futures Association, NFA Manual/Rules, Section 7001.

[[]http://www.nfa.futures.org/nfaManual/manualFinancial.asp#fins1]

⁸ See Sections 1142 and 1143 of the Housing and Economic Recovery Act of 2008, P.L. 110-289.

virtually all depository institutions are federally insured, they are subject to at least one federal primary regulator, i.e., the federal authority responsible for examining the institution for safety and soundness and for ensuring its compliance with federal banking laws. The primary federal regulator of national banks is their chartering authority, the Office of the Comptroller of the Currency (OCC). The primary federal regulator of state-chartered banks that are members of the Federal Reserve System is the Board of Governors of the Federal Reserve System. State-chartered banks that are not members of the Federal Reserve System have the FDIC as their primary federal regulator. Thrifts (both state- or federally-chartered) have the Office of Thrift Supervision as their primary federal regulator. All of these, because their deposits are covered by FDIC deposit insurance, are also subject to FDIC's regulatory authority. Credit unions–federally-chartered or federally-insured–are regulated by the National Credit Union Administration. Federal consumer protection laws, many of which are implemented under rules issued by the Board of Governors of the Federal Reserve System is studied by the insurance of the state of the office of the office of Thrift Supervision as their primary federal regulator. All of these, because their deposits are covered by FDIC deposit insurance, are also subject to FDIC's regulatory authority. Credit unions–federally-chartered or federally-insured–are regulated by the National Credit Union Administration. Federal consumer protection laws, many of which are implemented under rules issued by the Board of Governors of the Federal Reserve System, are enforced upon depository institutions by their primary federal regulator.

In general, lenders are expected to be prudent when extending loans. Each loan creates risk for the lender. The overall portfolio of loans extended or held by a lender, in relation to other assets and liabilities, affects that institution's stability. The relationship of lenders to each other, and to wider financial markets, affects the financial system's stability. The nature of these risks can vary between industry sectors, including commercial loans, farm loans, and consumer loans. Safety and soundness regulation encompasses the characteristics of (1) each loan; (2) the balance sheet of each institution; and (3) the risks in the system as a whole.

Each loan has a variety of risk characteristics of concern to lenders and their regulators. Some of these risk characteristics can be estimated at the time the loan is issued. Credit risk, for example, is the risk that the borrower will fail to repay the principal of the loan as promised. Rising interest rates create another risk because the shorter-term interest rates that the lender often pays for its funds rise (e.g., deposit or CD rates) while the longer-term interest rates that the lender will receive from fixed-rate borrowers remain unchanged. Falling interest rates are not riskless either: fixed-rate borrowers may choose to repay loans early, reducing the lender's expected future cash flow. Federal financial regulators take into account expected default rates, prepayment rates, interest-rate exposure, and other risks when examining the loans issued by covered lenders.

Each lender's balance sheet can reduce or enhance the risks of the individual loans that make it up. A lender with many loans exposed to prepayment risk when interest rates fall, for example, could compensate by acquiring some assets that rise in value when interest rates fall. One example of a compensating asset would be an interest-rate derivative contract. Lenders are required to keep capital in reserve against the possibility of a drop in value of loan portfolios or other risky assets. Federal financial regulators take into account compensating assets, risk-based capital requirements, and other prudential standards when examining the balance sheets of covered lenders.

When regulators determine that a bank is taking excessive risks, or engaging in unsafe and unsound practices, they have a number of powerful tools at their disposal to reduce risk to the institution (and ultimately to the federal deposit insurance fund). They can require banks to reduce specified lending or financing practices, dispose of certain assets, and order banks to take steps to restore sound balance sheets. Banks have no alternative but to comply, since regulators have life-or-death options, such as withdrawing deposit insurance or seizing the bank outright.

The five federal banking agencies are briefly discussed below.

Office of the Comptroller of the Currency

The Office of the Comptroller of the Currency (OCC) was created in 1863 as part of the Department of Treasury to supervise federally chartered banks ("national" banks) and to replace the circulation of state bank notes with a single national currency (Chapter 106, 13 STAT. 99). The OCC regulates a wide variety of financial functions, but only for federally chartered banks. The head of the OCC, the Comptroller, is also a member of the board of the FDIC and a director of the Neighborhood Reinvestment Corporation. The OCC has examination powers to enforce its responsibilities for the safety and soundness of nationally chartered banks. The OCC has strong enforcement powers, including the ability to issue cease and desist orders and revoke federal bank charters.

In addition to institution-level examinations, the OCC oversees systemic risk among nationally chartered banks. The OCC's use of the term systemic risk is more consistent with the linkages definition than the undiversifiable risk definition. One example of OCC systemic concerns is the regular survey of credit underwriting practices. This survey compares underwriting standards over time and assesses whether OCC examiners believe the credit risk of nationally chartered bank portfolios is rising or falling. In addition, the OCC publishes regular reports on the derivatives activities of U.S. commercial banks.

Federal Deposit Insurance Corporation

The Federal Deposit Insurance Corporation (FDIC) was created in 1933 to provide assurance to small depositors that they would not lose their savings if their bank failed (P.L. 74-305, 49 Stat. 684). The FDIC is an independent agency that insures deposits, examines and supervises financial institutions, and manages receiverships, assuming and disposing of the assets of failed banks. The FDIC manages the deposit insurance fund, which consists of risk-based assessments levied on depository institutions. The fund is used for various purposes, primarily for resolving failed or failing institutions. The FDIC has broad jurisdiction because nearly all banks and thrifts, whether federally or state-chartered, carry FDIC insurance.

Deposit insurance reform was enacted in 2006 (P.L. 109-173, 119 STAT. 3601), including raising the coverage limit for retirement accounts to \$250,000 and indexing both its limit and the general deposit insurance coverage ceiling to inflation. The reform act made changes to the risk-based assessment system to determine the payments of individual institutions. Under authority granted by the reform act, the FDIC used notice and comment rulemaking to set a range of 1.15 to 1.50 for the designated reserve ratio (DRR) that supports the Deposit Insurance Fund (DIF). The FDIC uses its power to examine individual institutions and to issue regulations for all insured depository institutions to monitor and enforce safety and soundness.

In 2008, as the financial crisis worsened, Congress enacted a temporary increase in the deposit insurance ceiling from \$100,000 to \$250,000 for most accounts.⁹ Using emergency authority it received under the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA, P.L. 102-242),¹⁰ the FDIC made a determination of systemic risk in October 2008 and announced that it would temporarily guarantee (1) newly issued senior unsecured debt of banks, thrifts, and

⁹ Section 135 of the Emergency Economic Stabilization Act of 2008 (EESA, P.L. 110-343).

¹⁰ FDICIA created a new section 13(c)(4) of the Federal Deposit Insurance Act,12 USC § 1823(c)(4)(G).

certain holding companies, and (2) non-interest bearing deposit transaction accounts (e.g., business checking accounts), regardless of dollar amount.¹¹

The Federal Reserve

The Board of Governors of the Federal Reserve System was established in 1913 to provide stability in the banking sector through the regulation of bank reserves (P.L. 63-43, 38 STAT. 251). The System consists of the Board of Governors in Washington and 12 regional reserve banks. In addition to its authority to conduct national monetary policy, the Federal Reserve has safety and soundness examination authority for a variety of lending institutions including bank holding companies; U.S. branches of foreign banks; and state-chartered banks that are members of the federal reserve system. Under the Gramm-Leach-Bliley Act (GLBA, P.L. 106-102), the Fed serves as the umbrella regulator for financial holding companies, which are defined as conglomerates that are permitted to engage in a broad array of financially related activities.

In addition to institution-level examinations of covered lenders, the Federal Reserve oversees systemic risk. This role has come about not entirely through deliberate policy choices, but partly by default, as a result of the Fed's position as lender of last resort and its consequent ability to inject capital or liquidity into troubled institutions. The Federal Reserve's standard response to a financial crisis has been to announce that it stood ready to provide liquidity to the system. This announcement worked well until 2007: a range of crises—the Penn Central bankruptcy, the stock market crash of 1987, the junk bond collapse, sovereign debt crises, the Asian crises of 1997-1998, the dot.com crash, and the 9/11 attacks—were quickly brought under control without systemic consequences. In 2007, however, the Fed's liquidity provision failed to restore stability. As a result, the Fed's role as the primary systemic risk regulator will be closely scrutinized.

Office of Thrift Supervision

The Office of Thrift Supervision (OTS), created in 1989 during the savings and loan crisis (P.L. 101-73, 103 STAT. 183), is the successor institution to the Federal Savings and Loan Insurance Corporation (FSLIC), created in 1934 and administered by the old Federal Home Loan Bank Board. The OTS has the responsibility of monitoring the safety and soundness of federal savings associations and their holding companies. The OTS also supervises federally insured state savings associations. The OTS is part of the Treasury Department but is primarily funded by assessments on covered institutions. The primary business model of most thrifts is accepting deposits and offering home loans, but thrifts offer many other financial services.

There are three main advantages for firms to choose a federal thrift charter. First, a federal thrift charter shields the institution from some state regulations, because federal banking law can preempt state law.¹² Second, a federal thrift charter permits the institution to open branches nationwide under a single regulator, while state-chartered thrifts must comply with multiple state regulators. Third, a federal thrift charter and its holding company are regulated by the same regulator, but a federal bank charter may split regulation of the institution (OCC) from regulation

¹¹ "FDIC Announces Plan to Free Up Bank Liquidity," Press Release, October 14, 2008. [http://www.fdic.gov/news/news/press/2008/pr08100.html

¹² The scope of federal preemption has been the subject of recent court decisions. See CRS Report RS22485, *Watters v. Wachovia Bank, N.A.*, by M. Maureen Murphy.

of its holding company (FRB). Thus, a number of diversified financial institutions that are not primarily savings and loans have come under the supervision of OTS as "thrift holding companies," including Lehman Brothers, AIG, and Morgan Stanley.

OTS was created in response to the savings and loan crisis of the late 1980s. That crisis was characterized by an increase in the number of bad loans coincident with inflation, rising costs of deposits, and significantly declining collateral values, primarily in commercial real estate. The magnitude of the losses threatened to overwhelm the deposit insurance funds in the FSLIC. In 1989 Congress enacted the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA, P.L. 101-73), which reorganized thrift regulation and created OTS. FIRREA also created the Resolution Trust Corporation (RTC), charged with sorting out which thrifts could be successfully reorganized or merged with others and which were beyond help. The RTC paid deposit insurance claims and liquidated the assets of failed thrifts.

National Credit Union Administration

The National Credit Union Administration (NCUA), originally part of the Farm Credit Administration, became an independent agency in 1970 (P.L. 91-206, 84 STAT. 49). The NCUA regulates all federal credit unions and those state credit unions that elect to be federally insured. It administers a Central Liquidity Facility, which is the credit union lender of last resort, and the National Credit Union Share Insurance Fund, which insures credit union deposits. Credit unions are member-owned financial cooperatives, and must be not-for-profit institutions. As such, they receive preferential tax treatment compared to mid-sized banks.

Non-Bank Financial Regulators

Securities and Exchange Commission

The Securities and Exchange Commission (SEC) was created as an independent agency in 1934 to enforce newly-written federal securities laws (P.L. 73-291, 48 Stat. 881). The SEC is not primarily concerned with ensuring the safety and soundness of the firms it regulates, but rather with maintaining fair and orderly markets and protecting investors from fraud. This distinction largely arises from the absence of government guarantees for securities investors comparable to deposit insurance. The SEC does not have the authority to limit risks taken by non-bank financial institutions, nor the ability to prop up a failing firm. Two types of firms come under the SEC's jurisdiction: (1) all corporations that sell securities to the public, and (2) securities broker/dealers and other securities markets intermediaries.

Firms that sell securities—stocks and bonds—to the public are required to register with the SEC. Registration entails the publication of detailed information about the firm, its management, the intended uses for the funds raised through the sale of securities, and the risks to investors. The initial registration disclosures must be kept current through the filing of periodic financial statements: annual and quarterly reports (as well as special reports when there is a material change in the firm's financial condition or prospects).

Beyond these disclosure requirements, and certain other rules that apply to corporate governance, the SEC does not have any direct regulatory control over publicly traded firms. Bank regulators are expected to identify unsafe and unsound banking practices in the institutions they supervise, and have power to intervene and prevent banks from taking excessive risks. The SEC has no

comparable authority; the securities laws simply require that risks be disclosed to investors. Registration with the SEC, in other words, is in no sense a guarantee that a security is a good or safe investment.

To enable investors to make informed investment choices, the SEC has statutory authority over financial accounting standards. All publicly traded firms are required to use generally accepted accounting principles (GAAP), which are formulated by the Financial Accounting Standards Board (FASB), the American Institute of Certified Public Accountants (AICPA), and the SEC itself.

Besides publicly traded corporations, a number of securities market participants are also required to register with the SEC (or with one of the industry self-regulatory organizations that the SEC oversees). These include stock exchanges, securities brokerages (and numerous classes of their personnel), mutual funds, auditors, investment advisers, and others. To maintain their registered status, all these entities must comply with rules meant to protect public investors, prevent fraud, and promote fair and orderly markets. The area of SEC supervision most analogous to banking regulation is broker/dealer regulation. Several provisions of law and regulation protect brokerage customers from losses arising from brokerage firm failure. The Securities Investor Protection Corporation (SIPC), created by Congress in 1970, operates an insurance scheme funded by assessments on broker/dealers (and with a backup line of credit with the U.S. Treasury). SIPC guarantees customer accounts up to \$500,000 for losses arising from brokerage failure or fraud (but not market losses). Unlike the FDIC, however, SIPC does not examine broker/dealers and has no regulatory powers.

Since 1975, the SEC has enforced a net capital rule applicable to all registered broker/dealers. The rule requires broker/dealers to maintain an excess of capital above mere solvency, to ensure that a failing firm stops trading while it still has assets to meet customer claims. Net capital levels are calculated in a manner similar to the risk-based capital requirements under the Basel Accords, but the SEC has its own set of risk weightings, which it calls haircuts. The riskier the asset, the greater the haircut.

While the net capital rule appears to be very close in its effects to the banking agencies' riskbased capital requirements, there are significant differences. The SEC has no authority to intervene in a broker/dealer's business if it takes excessive risks that might cause net capital to drop below the required level. Rather, the net capital rule is often described as a liquidation rule—not meant to prevent failures but to minimize the impact on customers. Moreover, the SEC has no authority comparable to the banking regulators' prompt corrective action powers: it cannot preemptively seize a troubled broker/dealer or compel it to merge with a sound firm.

The differences between bank and securities regulation with respect to safety and soundness came into sharp focus with the collapse of Bear Stearns, one of the five largest investment banks, in March 2008.¹³ The SEC monitored Bear Stearns' financial condition until shortly before the collapse (which was precipitated by the refusal of other market participants to extend short-term credit), and believed that the firm had sufficient levels of capital and liquidity. When bankruptcy suddenly loomed, it was the Federal Reserve that stepped in to broker the sale of Bear Stearns to JP Morgan Chase by agreeing to purchase \$30 billion of "toxic" Bear Stearns assets.

¹³ See CRS Report RL34420, *Bear Stearns: Crisis and "Rescue" for a Major Provider of Mortgage-Related Products*, by Gary Shorter.

The Bear Stearns situation highlighted several apparent anomalies in the U.S. regulatory structure. The SEC lacked safety and soundness powers over the institutions it supervised, while the Fed was forced to commit funds to an investment bank over which it had no regulatory jurisdiction. The anomaly became even more pronounced when the Fed subsequently established a lending facility to provide short-term credit to other investment banks.¹⁴

The Bear Stearns collapse showed the inability of the SEC to respond to a brokerage failure with systemic risk implications. There is more to the story, however, than the differences between bank regulation and the SEC's net capital rule. In 2004, the SEC devised a voluntary supervisory scheme for the largest investment banks, called the Consolidated Supervised Entities (CSE) program.¹⁵ The CSE firms were all registered broker/dealers, but were also large holding companies with extensive operations carried on outside the broker/dealer unit. Thus, the SEC had no capital requirement that applied to the entire investment bank. Under CSE, this was to change: as a substitute for the net capital rule, the firms agreed to abide by the Basel risk-based standard, and maintain that level of capital *at the holding company level*. On a voluntary basis, the firms agreed to grant the SEC the authority to examine and monitor their compliance, above and beyond the SEC's explicit statutory authority.¹⁶

Whatever the intent of the CSE program, it did not succeed in preventing excessive risk-taking by the participants.¹⁷ By the end of September 2008, all five CSE investment banks had either failed (Lehman Brothers), merged to prevent failure (Merrill Lynch and Bear Stearns), or applied for bank holding company status (Morgan Stanley and Goldman Sachs).¹⁸ On September 26, 2008, SEC Chairman Cox announced the end of the CSE program, declaring that "[t]he last six months have made it abundantly clear that voluntary regulation does not work. When Congress passed the Gramm-Leach-Bliley Act, it created a significant regulatory gap by failing to give to the SEC or any agency the authority to regulate large investment bank holding companies."¹⁹

Commodity Futures Trading Commission

The Commodity Futures Trading Commission (CFTC) was created in 1974 to regulate commodities futures and options markets, which at the time were poised to expand beyond their traditional base in agricultural commodities to encompass contracts based on financial variables such as interest rates and stock indexes. The CFTC's mission is to prevent excessive speculation, manipulation of commodity prices, and fraud. Like the SEC, the CFTC oversees industry self-regulatory organizations (SROs)—the futures exchanges and the National Futures Association—and requires the registration of a range of industry firms and personnel, including futures

¹⁴ See CRS Report RL34427, *Financial Turmoil: Federal Reserve Policy Responses*, by Marc Labonte.

¹⁵ SEC, "Holding Company Supervision Program Description: Consolidated Supervised Entities ("CSEs")," [http://www.sec.gov/divisions/marketreg/hcsupervision.htm].

¹⁶ The Market Reform Act of 1990 permits the SEC to collect certain financial information from unregulated affiliates of broker/dealers, under the Broker-Dealer Risk Assessment Program.

¹⁷ Some argue that CSE allowed the investment banks to hold less capital and increase their leverage. For two views on this issue, see Stephen Labaton, "Agency's '04 Rule Let Banks Pile Up New Debt, and Risk," *New York Times*, October 3, 2008, p. A1, and: Testimony of SEC Chairman Christopher Cox, House Oversight and Government Reform

October 3, 2008, p. A1, and: Testimony of SEC Chairman Christopher Cox, House Oversight and Government Reform Committee, October 23, 2008. (Response to question from Rep. Christopher Shays.)

¹⁸ By becoming bank holding companies, Morgan Stanley and Goldman Sachs placed themselves under Federal Reserve regulation, presumably to signal to the markets that their financial condition was being monitored.

¹⁹ SEC, "Chairman Cox Announces End of Consolidated Supervised Entities Program," Press Release 2008-230.

commission merchants (brokers), floor traders, commodity pool operators, and commodity trading advisers.

Like the SEC, the CFTC does not directly regulate the safety and soundness of individual firms. Nevertheless, its oversight can have important consequences for the ability of market participants to manage financial risk. Futures, options, and derivatives can have a systemic impact.

Some argue that the CFTC's ability to respond to systemic crises is limited because a large part of the derivatives market is exempt from its jurisdiction. Derivatives contracts may be traded in an unregulated over-the-counter (OTC) market, so long as no small investors are allowed to trade. OTC derivatives are some of the largest financial markets in the world, and many OTC market participants also trade on the CFTC-regulated futures exchanges, but the CFTC does not receive regular reports about price, volume, and size of positions in the OTC markets.

Federal Housing Finance Agency

The Federal Housing Finance Agency (FHFA) was created in 2008 by the Housing and Economic Recovery Act of 2008 (P.L. 110-289) to consolidate and strengthen regulation of a group of housing finance-related government-sponsored enterprises (GSEs): Fannie Mae, Freddie Mac, and the Federal Home Loan Banks.²⁰ The FHFA succeeded the Office of Federal Housing Enterprise Oversight (OFHEO) and the Federal Housing Finance Board (FHFB).

The impetus to create the FHFA came from concerns about risk—including systemic risk—arising from the rapid growth of the GSEs, particularly Fannie and Freddie. These two GSEs were profit-seeking, shareholder-owned corporations that took advantage of their government-sponsored status to accumulate undiversified investment portfolios of over \$1.5 trillion, consisting almost exclusively of home mortgages (and securities and derivatives based on those mortgages).

The FHFA was given enhanced safety and soundness powers resembling those of the federal bank regulators. These powers included the ability to set capital standards, to order the enterprises to cease any activity or divest any asset that posed a threat to financial soundness, and to replace management and assume control of the firms if they became seriously undercapitalized.

The FHFA's first action was to place both Fannie and Freddie in conservatorship.²¹ Fannie and Freddie continue to operate, under an agreement with the U.S. Treasury. The Treasury will provide capital to the two firms, by means of preferred stock purchases, to ensure that each remains solvent. In return, the government assumed a 79.9% equity ownership position in the firms.

²⁰ For more on GSEs and their regulation, see CRS Reports CRS Report RS21724, *GSE Regulatory Reform: Frequently Asked Questions*, by N. Eric Weiss, and CRS Report RS21663, *Government-Sponsored Enterprises (GSEs): An Institutional Overview*, by Kevin R. Kosar.

²¹ See CRS Report RS22950, Fannie Mae and Freddie Mac in Conservatorship, by Mark Jickling.

Regulatory Umbrella Groups

The need for coordination and data sharing among regulators has led to the formation of innumerable interagency task forces to study particular market episodes and make recommendations to Congress. Two interagency organizations have attained permanent status.

Federal Financial Institution Examinations Council

The Federal Financial Institutions Examination Council (FFIEC) was created by legislation²² in 1979 as a formal interagency body to coordinate federal regulation of lending institutions. Through the FFIEC, the federal banking regulators issue a single set of reporting forms for covered institutions. The FFIEC also attempts to harmonize auditing principles and supervisory decisions. The FFIEC is made up of the Federal Reserve, OCC, FDIC, OTS, and NCUA, each of which employs examiners to enforce safety and soundness regulations for lending institutions.

• Federal financial institution examiners evaluate the risks of covered institutions. The specific safety and soundness concerns common to the FFIEC agencies can be found in the handbooks employed by examiners to monitor lenders. Each subject area of the handbook can be updated separately. Examples of safety and soundness subject areas include important indicators of risk, such as capital adequacy, asset quality, liquidity, and sensitivity to market risk.

President's Working Group on Financial Markets

The President's Working Group on Financial Markets (PWG) was created by President Reagan through executive order in 1988.²³ The PWG includes the Secretary of the Treasury and the Chairmen of the Federal Reserve, the SEC, and the CFTC. It is not a formal agency subject to congressional oversight, although each member is subject to Senate confirmation at the time of appointment.

The impetus for the creation of the PWG was the stock market crash of October 1987, and specifically the role that the stock index futures markets (under CFTC jurisdiction) had played in creating panic in the stock market (regulated by SEC). Studies conducted by the SEC, the CFTC, a blue-ribbon panel appointed by the President (the Presidential Task Force on Market Mechanisms, or Brady Commission), and the stock and futures exchanges reached strikingly different conclusions; the task of the PWG was to study the studies and issue a further report.

The PWG was not dissolved, but continued to provide interagency coordination and information sharing, and to study entities and products that raised intermarket regulatory issues, such as hedge funds and OTC derivatives. In March 2008, at the direction of President Bush, the PWG issued a policy statement on the ongoing financial crisis.²⁴

²² P.L. 95-630, 92 STAT. 3641.

²³ Executive Order 12631, March 18, 1988, 53 FR 9421.

²⁴ President's Working Group on Financial Markets, "Policy Statement on Financial Market Developments," March 2008, [http://www.ustreas.gov/press/releases/reports/pwgpolicystatemktturmoil_03122008.pdf].

Unregulated Markets and Institutions

Although federal financial statutes and regulations fill many volumes, not all participants in the financial system are regulated. In some cases, unregulated (or self-regulated) markets appear to work very well, but disruptions or major frauds in these markets are likely to bring calls for increased government supervision. The dynamic nature of financial markets is a perennial challenge to regulatory structure design, because a market that appears insignificant at the time a law is written may grow into a potential threat to systemic stability in a few years. The following are some of the major unregulated markets and institutions.

Foreign Exchange Markets

Buying and selling currencies is essential to foreign trade, and the exchange rate determined by traders has major implications for a country's macroeconomic policy. The market is one of the largest in the world, with daily turnover in excess of \$3 trillion.²⁵ Nevertheless, no U.S. agency has regulatory authority over the foreign exchange market.

Trading in currencies takes place between large global banks, central banks, hedge funds and other currency speculators, commercial firms involved in imports and exports, fund managers, and retail brokers. There is no centralized marketplace, but rather a number of proprietary electronic platforms that have largely supplanted the traditional telephone broker market.

Despite the fact that extreme volatility in exchange rates for a number of European and Asian currencies in the 1990s was often blamed on currency speculators, neither U.S. nor foreign regulators have moved towards regulating the market.

U.S. Treasury Securities

The secondary, or resale, market for Treasury securities is largely unregulated. Like the foreign exchange market, there is no central exchange, but there are a number of proprietary, computerbased transaction systems. Treasury securities were exempted from SEC regulation by the original securities laws of the 1930s. In 1993, following a successful corner of a Treasury bond auction by Salomon Brothers, Congress passed the Government Securities Act Amendments (P.L. 103-202), which required brokers and dealers that were not already registered with the SEC to register as government securities dealers. (Existing broker/dealer registrants were simply required to notify the SEC that they were in the government securities business.) Nevertheless, the government securities market remains much more lightly regulated than the corporate securities markets.

The primary market in Treasury securities, where new debt instruments are sold to fund government operations, is also relatively unregulated. A principal channel for the distribution of new Treasuries is a group of firms called primary dealers, who purchase securities at auction for their own accounts and for their customers. The primary dealers are 19 commercial and investment banks, both foreign and domestic. The primary dealer list is maintained by the Federal

²⁵ Bank for International Settlements, *Triennial Central Bank Survey: Foreign exchange and derivatives market activity*, December 2007, p. 1. [http://www.bis.org/publ/rpfxf07t.pdf]

Reserve Bank of New York, which conducts auctions for the Treasury, but its relationship to the dealers is commercial, rather than regulatory.²⁶ The New York Fed does, however, collect certain data about primary dealers' transactions in government securities.

In March 2008, as part of its multifaceted attempt to supply liquidity to the financial system, the Federal Reserve established a Primary Dealer Credit Facility, to make short-term loans against a variety of collateral (including asset-backed and mortgage-backed securities) to the primary dealers.²⁷ This step attracted attention because the primary dealer group included investment banking firms over which the Fed had no regulatory authority.

OTC Derivatives

As noted above, the Commodity Exchange Act contains exemptions from CFTC regulation for derivative contracts and markets where all traders are "eligible contract participants," that is, not small businesses or retail investors. About two-thirds of OTC derivatives are contracts linked to interest rates; foreign exchange and credit derivatives each account for about 9%; and contracts linked to physical commodity and stock prices account for about 2% each.²⁸

Whether the unregulated status of OTC derivatives constitutes a troublesome regulatory gap has been debated in Congress and among the regulators. One view has been that there is no government interest in regulating these markets, since all participants are sophisticated and able to manage the risks. Another is that derivatives contracts make up an invisible web of financial obligations and exposures, and that the failure of a large derivatives dealer could trigger cascading losses throughout the global system.

A case that is likely to shape debate is that of AIG, whose insurance operations are regulated by New York state, but whose large derivatives trading business—the firm was a leader in the credit default swap market²⁹—was not regulated (although, technically, the firm was a thrift holding company under OTS supervision). Massive losses in credit default swaps forced the Fed and Treasury to craft an ad hoc rescue of AIG, which involves over \$150 billion in loans and guarantees.³⁰

Legislation in the 111th Congress (H.R. 977) would require reporting of OTC derivatives trades to the CFTC, require centralized clearing of OTC contracts, restrict participation in the credit default swap market, and direct the CFTC to consider limits on the size of speculative positions.

Private Securities Markets

The securities laws mandate registration of and extensive disclosures by public securities issuers, but also provide for private sales of securities, which are not subject to disclosure requirements.

²⁶ [http://www.newyorkfed.org/aboutthefed/fedpoint/fed02.html].

²⁷ Federal Reserve Bank of New York, "Federal Reserve Announces Establishment of Primary Dealer Credit Facility," Press Release, March 16, 2008. [http://www.newyorkfed.org/newsevents/news/markets/2008/rp080316.html].

²⁸ Bank for International Settlements, *Quarterly Review*, December 2008, p. A103.

[[]http://www.bis.org/publ/qtrpdf/r_qt0812.htm].

²⁹ See CRS Report RS22932, Credit Default Swaps: Frequently Asked Questions, by Edward V. Murphy.

³⁰ CRS Report RL34427, *Financial Turmoil: Federal Reserve Policy Responses*, by Marc Labonte, p. 16.

Private placements of securities may only be offered to limited numbers of "accredited investors" who meet certain asset tests. (Most purchasers are life insurers and other institutional investors.) There are also restrictions on the resale of private securities.

The size of the private placement market is subject to considerable variation from year to year, but at times the value of securities sold privately exceeds what is sold into the public market. In recent decades, venture capitalists and private equity firms have come to play important roles in corporate finance. The former typically purchase interests in private firms, which may be sold later to the public, while the latter often purchase all the stock of publicly traded companies and take them private.

Nonbank Lenders

During the housing boom of the early 2000s, substantial volumes of mortgages were written not by chartered depository institutions, but by nonbank lenders with access to credit from Wall Street firms involved in the securitization of mortgages. These lenders were not subject to safety and soundness regulation, although they were required to comply with the Federal Reserve's Truth in Lending Act consumer protection regulations. Many view these lenders as having been instrumental in the relaxation of credit standards, leading to what many now regard as the unsustainable housing price bubble that triggered the current crisis.³¹

Hundreds of these nonbank mortgage lenders failed in 2007 and 2008, as delinquency rates on their subprime and other non-traditional mortgages soared. Potential reforms of securitization and the non-bank lending channel are now under consideration.³²

Hedge Funds

Hedge funds are pools of managed money that structure themselves to fit into exemptions in the federal securities laws—in effect, they are unregulated mutual funds. By limiting the number of investors, and restricting access to wealthy investors who meet specified asset tests, hedge funds avoid regulation by the SEC.³³ Since there are no reporting requirements, the size of the hedge fund universe can only be estimated, but before losses in 2008, it was commonly stated that hedge funds had about \$2 trillion of investor funds under management.

Hedge funds have shown their potential for causing systemic disturbances. The case of Long Term Capital Management (LTCM) is one example of the Federal Reserve arranging for reorganization of an institution believed to pose systemic risk if it failed. Another hedge fund debacle—the failure of the Amaranth fund—is said to have caused significant fluctuations in the price of natural gas.³⁴ It is noteworthy, however, that hedge fund failures do not appear to have

³¹ Weakening underwriting standards are just one of many explanations for the housing bubble, including unsustainable capital flows that may have been due to a global savings glut or monetary policies that may have been too expansionary for too long.

³² See CRS Report RS22722, Securitization and Federal Regulation of Mortgages for Safety and Soundness, by Edward V. Murphy.

³³ See CRS Report 94-511, *Hedge Funds: Should They Be Regulated?*, by Mark Jickling.

³⁴ United States Senate, Permanent Subcommittee on Investigations of the Committee on Homeland Security and Governmental Affairs, *Staff Report: Excessive Speculation in the Natural Gas Market*, June 25, 2007.

played a major role in the development of the current financial crisis. Some have argued that they may actually have played a stabilizing role, by absorbing losses that would otherwise have accrued to regulated financial institutions. But this judgment is regarded by others as premature; the crisis continues to unfold.

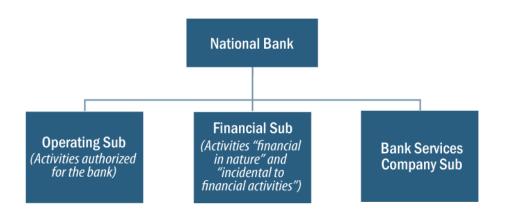
Appendix A. Forms of Banking Organizations

The structure of banks can be complex. Currently, the regulator of a particular activity of a bank or its subsidiary in part depends on the activity of the subsidiary or its charter, as described above. The following flow charts provide simplified representations of various bank structures. In some cases, the umbrella bank and its subsidiaries may have different regulators.





Figure A-2. National Bank and Subsidiaries





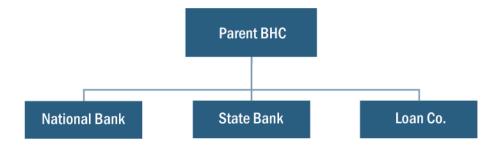
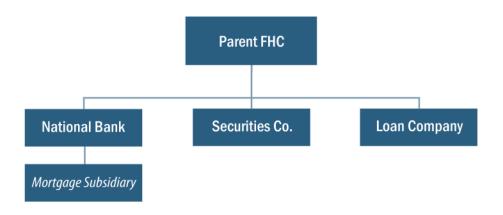


Figure A-4. Financial Holding Company



Appendix B. Bank Ratings: UFIRS and CAMELS

Federal bank regulators conduct confidential assessments of covered banks. The Federal Financial Institutions Examination Council (FFIEC) helps coordinate the ratings system used by bank examiners so that there is some consistency to the examinations, although the ratings do take into account differences in bank size, sophistication, complexity of activities, and risk profile. The FFIEC adopted the Uniform Financial Institutions Rating System (UFIRS) in 1979. The system was revised in 1996 and is often referred to as the CAMELS rating system. CAMELS stands for Capital adequacy, Asset quality, Management, Earnings, Liquidity, and Sensitivity to market risk. A description of the CAMELS system is found in the Comptrollers Handbook: Bank Supervision Process, provided by the OCC.³⁵ Market factors can affect more than one category in the CAMELS ratings.

Capital Adequacy

This component assesses the level of capital held by the institution in relation to the risks that it takes. Capital adequacy can be affected by a number of factors, including changes in credit risk, market risk, and the institution's financial condition. Increases in problem assets would require increased capital. Capital adequacy is also supposed to reflect risks even if they are technically off of the bank's balance sheet.

Asset Quality

Asset quality refers to existing and potential credit risk associated with a the bank's portfolio. Like capital adequacy, this component is supposed to reflect risk even if it is not technically on the bank's balance sheet. Asset quality can include changes in loan default rates, investment performance, exposure to counterparty risk, and all other risks that may affect the value or marketability of an institution's assets.

Management Capability

The governance of the bank, including management and board of directors, is assessed in relation to the nature and scope of the bank's activities. This rating is affected by the level and quality of management oversight. It also includes legal compliance, responsiveness to auditor recommendations, and similar issues.

Earnings Quantity and Quality

The rating of a bank's earnings takes into account current earnings and the sustainability of future earnings. Earnings that rely on favorable tax effects and nonrecurring events receive lower ratings. Similarly, inadequate controls for expenses can reduce the rating for earnings. Difficulties in forecasting and managing risks can also reduce the earnings rating.

³⁵ The Comptrollers handbooks are occasionally updated. The most recent handbook for the Bank Supervision Process is dated September 2007 and can be found at http://www.occ.gov/handbook/banksup.pdf.

Liquidity

Liquidity includes the ability of a bank to meet its expected funding needs. For a given institution size and complexity, this factor assesses the ability of the firm to fulfill its financial obligations in a timely manner. Liquidity refers to the ability to meet short-term funding needs without incurring excessive losses, which might occur if assets had to be sold at a steep discount in a time-pressure situation (or "fire sale"). Liquidity also includes assessments of specific financial categories, such as the trend and stability of deposits, and the expected ability to securitize and sell pools of assets.

Sensitivity to Market Risk

Market risk includes potential changes in the prices of financial assets, such as movements in interest rates, foreign exchange rates, commodity prices, and stock prices. The nature and scope of a bank's activities can affect the markets that it is exposed to; therefore, market risk is closely related to the other CAMELS factors. This rating takes into account management's ability to identify and manage the risks that can arise from the bank's trading activities in financial markets. It also takes into account interest rate risk from nontrading positions, such as any duration mismatch in loans held to maturity.

Appendix C. Acronyms

AICPA	American Institute of Certified Public Accountants
CAMELS	Capital Adequacy, Asset Quality, Management, Liquidity, Sensitivity to Market Risk
CFTC	Commodity Futures Trading Commission
CSE	Consolidated Supervised Entities
EESA	Emergency Economic Stabilization Act
FASB	Financial Accounting Standards Board
FDIC	Federal Deposit Insurance Corporation
FFIEC	Federal Financial Institution Examination Council
FHFA	Federal Housing Finance Agency
FHFB	Federal Housing Finance Board
FRB	Federal Reserve Board
FSLIC	Federal Savings and Loan Insurance Corporation
GAAP	Generally Accepted Accounting Principles
GSE	Government-Sponsored Enterprise
NCUA	National Credit Union Administration
occ	Office of the Comptroller of the Currency
OFHEO	Office of Federal Housing Enterprise Oversight
отѕ	Office of Thrift Supervision
PWG	President's Working Group on Capital Markets
SEC	Securities and Exchange Commission
SIPC	Securities Investor Protection Corporation
SRO	Self Regulatory Organization
UFIRS	Uniform Financial Institutions Rating System

Appendix D. Glossary of Terms

This glossary has been compiled from several earlier CRS reports, from the CFTC and SIFMA websites, and from other sources.

Affiliate—A corporate relationship of control. Two companies are affiliated when one owns all or a large part of another, or when both are controlled by a third (holding) company (see subsidiary). All subsidiaries are affiliates, but affiliates that are less than 50% controlled are usually not treated as subsidiaries.

Agency relationship—A business relationship of two parties in which one represents the other in transactions with third parties. The agent negotiates on behalf of the party actually at risk, who is known as the "principal." A commission goes to the agent who does not take on the risk of the transaction; the profit or loss goes to the principal.

Asset-backed security—A bond that represents a share in a pool of debt obligations or other assets. The holder is entitled to some part of the repayment flows from the underlying debt. (See "securitization.")

Bank holding company—A business incorporated under state law, which controls through equity ownership ("holds") one or more banks and, often, other affiliates in financial services as allowed by its regulator, the Federal Reserve. On the federal level, these businesses are regulated through the Bank Holding Company Act.

Bank Holding Company Act—The federal statute under which the Federal Reserve regulates bank holding companies and financial holding companies (FHC). Besides the permissible financial activities enumerated in the Gramm-Leach-Bliley Act (P.L. 106-102), the law provides a mechanism between the Federal Reserve and the Department of the Treasury to decide what is an appropriate new financial activity for FHCs.

Blue sky laws—State statutes that govern the offering and selling of securities.

Broker/dealer—An individual or firm that buys and sells securities for itself as well as for customers. Broker/dealers are registered with the Securities and Exchange Commission.

Bubble—Self-reinforcing process in which the price of an asset exceeds its fundamental value for a sustained period, often followed by a rapid price decline. Speculative bubbles are usually associated with a "bandwagon" effect in which speculators rush to buy the commodity (in the case of futures, "to take positions") before the price trend ends, and an even greater rush to sell the commodity (unwind positions) when prices reverse.

Capital requirements—Capital is the owners' stake in an enterprise. It is a critical line of defense when losses occur, both in banking and nonbanking enterprises. Capital requirements help assure that losses that might occur will accrue to the institution incurring them. In the case of banking institutions experiencing problems, capital also serves as a buffer against losses to the federal deposit insurance funds.

Charter conversion - Banking institutions may, with the approval of their regulators, switch their corporate form between: commercial bank or savings institution, National or State charter, and to

stockholder ownership from depositor ownership. Various regulatory conditions may encourage switching.

Clearing Organization—An entity through which futures and other derivative transactions are cleared and settled. A clearing organization may be a division or affiliate of a particular exchange, or a freestanding entity. Also called a clearing house, multilateral clearing organization, or clearing association.

Collateralized debt obligation (CDO)—A bond created by the securitization of a pool of assetbacked securities.

Collateralized mortgage obligation (CMO)—A multiclass bond backed by a pool of mortgage pass-through securities or mortgage loans.

Commercial bank—A deposit-taking institution that can make commercial loans, accept checking accounts, and whose deposits are insured by the Federal Deposit Insurance Corporation. National banks are chartered by the Office of the Comptroller of the Currency; state banks, by the individual states.

Commodity Futures Modernization Act of 2000 (CFMA, P.L. 106-554, 114 Stat. 2763) overhauled the Commodity Exchange Act to create a flexible structure for the regulation of futures and options trading, and established a broad statutory exemption from regulation for OTC derivatives.

Community financial institution—As provided for in the Gramm-Leach-Bliley Act, a member of the Federal Home Loan Bank System whose deposits are insured under the Federal Deposit Insurance Act and which has assets of less than \$500 million (calculated according to provisions in the law, and in succeeding years to be adjusted for inflation). Such institutions may become members without meeting requirements with regard to the percentage of total assets that must be in residential mortgage loans and may borrow from the Federal Home Loan Banks for small business and agriculture.

Conservatorship—When an insolvent financial institution is reorganized by a regulator with the intent to restoring it to an ongoing business.

Counterparty—The opposite party in a bilateral agreement, contract, or transaction, such as a swap.

Credit Default Swap (CDS)—A tradeable contract in which one party agrees to pay another if a third party experiences a credit event, such as default on a debt obligation, bankruptcy, or credit rating downgrade.

Credit Risk—The risk that a borrower will fail to repay a loan in full, or that a derivatives counterparty will default.

Credit union—A nonprofit financial cooperative of individuals with one or more common bonds (such as employment, labor union membership, or residence in the same neighborhood). May be state or nationally chartered. Credit unions accept deposits of members' savings and transaction balances in the form of share accounts, pay dividends (interest) on them out of earnings, and primarily provide consumer credit to members. The federal regulator for credit unions is the National Credit Union Administration.

Dealer—An individual or financial firm engaged in the purchase and sale of securities and commodities such as metals, foreign exchange, etc., for its own account and at its own risk as principal (see broker). Commercial banks are typically limited to acting as dealers in specified high-quality debt obligations, such as those of the federal government.

Depository institution—Customarily refers to commercial banks, savings institutions, and credit unions, since traditionally the greater part of their funding has been in the form of deposits. Deposits are a customer's funds placed with an institution according to agreed on terms and conditions and represent a credit to the depositor.

Derivatives—Financial contracts whose value is linked to the price of an underlying commodity or financial variable (such as an interest rate, currency price, or stock index). Ownership of a derivative does not require the holder to actually buy or sell the underlying interest. Derivatives are used by hedgers, who seek to shift risk to others, and speculators, who can profit if they can successfully forecast price trends. Examples include futures contracts, options, and swaps.

Discount window—Figurative term for the Federal Reserve facility for extending credit directly to eligible depository institutions. It may be used to relieve temporary cash shortages at banks and other depository institutions. Borrowers are expected to have tried to borrow elsewhere first and must provide collateral as security for loans. The term derives from the practice whereby bankers would come to a Reserve Bank teller window to obtain credit in the early days of the Federal Reserve System.

Dual banking system—The phrase refers to the fact that banks may be either federally or statechartered. In the case of state-chartered banks, the state is the primary regulator; for national banks, the Office of the Comptroller of the Currency is the primary regulator.

Electronic fund transfer (EFT) systems—A variety of systems and technologies for transferring funds electronically rather than by paper check.

Exchange—A central marketplace with established rules and regulations where buyers and sellers meet to trade futures and options contracts or securities.

Federal Home Loan Banks—Twelve regional member-owned federally sponsored organizations that extend credit to their member banking institutions, largely to finance mortgages made to homeowners. The 12 FHLBs make up a single government-sponsored enterprise.

Federal safety net—A broad term referring to protection of banking institutions through deposit insurance, discount window credit, other lender of last resort support, and certain forms of regulations to reduce risk. Commercial and industrial companies generally lack any of these cushions against loss.

Financial businesses—In discussions about financial services modernization, usually refers to commercial banks and savings institutions, securities firms, and insurance companies and agents, as contrasted with commercial and industrial firms.

Financial holding company—A holding company form authorized by the Gramm-Leach-Bliley Act that goes beyond the limits a of bank holding company. It can control one or more banks, securities firms, and insurance companies as permitted by law and/or regulation.

Financial institution—An enterprise that uses its funds chiefly to purchase financial assets such as loans and debt securities, as opposed to tangible property. Financial institutions are differentiated by the manner in which they invest their funds: in loans, bonds, stocks, or some combination; as well as by their sources of funds. Depository financial institutions are differentiated in that they may accept deposits which are federally insured against loss to the depositor. Nondepository financial institutions such as life and property/casualty insurance companies, pension funds, and mutual funds obtain funds through other types of receipts, whose values may fluctuate with market conditions.

Financial subsidiary—Under the Gramm-Leach-Bliley Act, both national and state-chartered banks are authorized to form financial subsidiaries to engage in activities that would not otherwise be permitted within the bank itself, subject to certain limits. Besides the permissible financial activities enumerated in P.L. 106-102, the law provides a mechanism between the U.S. Department of the Treasury and the Federal Reserve to decide what is an appropriate new financial activity for a financial subsidiary.

Firewalls—Barriers to the flow of capital, information, management, and other resources among business units owned by a common entity. In case of financial distress of one operation ("fire"), the "walls" are intended to prevent the spread of loss to the other units—especially to banking units. Example: losses in a securities subsidiary of a holding company could not be covered by any of the holding company's bank subsidiaries.

Foreign bank—Banks and their holding companies headquartered in other countries may have a variety of financial operations in the United States: U.S.-chartered subsidiary banks, agencies, branches, and representative offices. Their primary federal regulator is the Federal Reserve, under the International Banking Act of 1978 as amended. States and the Office of the Comptroller of the Currency may also regulate them.

Functional regulation—Regulatory arrangements based on activity ("function") rather than organizational structure. The Gramm-Leach-Bliley Act called for more functional regulation than in the past.

Glass-Steagall Act—Part of the Banking Act of 1933; divided the commercial and investment banking industries. The Gramm-Leach-Bliley Act repealed two sections of the act dealing with the relationship between banks and securities firms.

Government-sponsored enterprise (GSE)—GSEs are private companies with government charters. Government sponsorship typically gives them a funding advantage over purely private competitors, while their charters restrict the kinds of businesses they may conduct.

Gramm-Leach-Bliley Act of 1999—P.L. 106-102, also known as the Financial Services Modernization Act, authorized increased affiliations between banks, securities firms, and insurers. Permitted the establishment of financial holding companies, under the regulation of the Federal Reserve. Also addressed privacy protection for consumers' financial data.

Haircut—In computing the value of assets for purposes of capital, segregation, or margin requirements, a percentage reduction from the stated value (e.g., book value or market value) to account for possible declines in value that may occur before assets can be liquidated.

Hedge funds—Hedge funds are essentially unregulated mutual funds. They are pools of invested money that buy and sell stocks and bonds and many other assets, including precious metals, commodities, foreign currencies, and derivatives (contracts whose prices are derived from those of other financial instruments). Hedge funds are limited to qualified investors with high net worth.

Hedging—Investing with the intention of reducing the impact of adverse movements in interest rates, commodities, or securities prices. Typically, the hedging instrument gains value as the hedged item loses value, and vice versa.

Insolvent—A firm whose liabilities exceed its assets.

Institutional regulation—Regulation that is institution-specific as contrasted with activity-specific (see functional regulation).

Investment bank—A financial intermediary, active in the securities business. Investment banking functions include underwriting (marketing newly registered securities to individual or institutional investors), counseling regarding merger and acquisition proposals, brokerage services, advice on corporate financing, and proprietary trading.

Investment bank holding company—A holding company for securities firms authorized under the Gramm-Leach-Bliley Act. Such holding companies are subject to regulation by the Securities and Exchange Commission.

Issuer—A person or entity (including a company or bank) that offers securities for sale. The issuing of securities, where the proceeds accrue to the issuer, is distinct from the secondary, or resale, market, where securities are traded among investors.

Lender of last resort—Governmental lender that acts as the ultimate source of credit in the financial system. In the United States, the Federal Reserve has this role.

Leverage—The ability to control large dollar amounts of a commodity or security with a comparatively small amount of capital. Leverage can be obtained through borrowing or the use of derivatives.

Limited-purpose bank—Although generally commercial firms may not conduct a banking business, some exceptions exist. Examples: Nonbank banks are banks that either accept deposits or make commercial loans but cannot do both. Such banks grew up through a loophole in law which was closed by the Competitive Equality Banking Act of 1987 (CEBA). Credit card banks conduct credit card operations. Industrial loan companies in a few states may offer restricted banking services.

Liquidity—The ability to trade an asset quickly without significantly affecting its price, or the condition of a market with many buyers and sellers present. Also, the ability of a person or firm to access credit markets.

Liquidity risk—The possibility that the market for normally-liquid assets will suddenly dry up, leaving firms unable to convert assets into cash. Also, the risk that other firms will refuse to extend credit on any terms to a firm that is perceived as distressed.

Market risk—The risk that the price of a tradeable security or asset will decline, resulting in a loss to the holder.

Merchant banker—A European style investment banker concentrating on corporate deals, in which it may invest its own funds.

Money market mutual fund (MMF)—A form of mutual fund that pools funds of individuals and other investors for investment in high-grade, short-term debt and bank deposits paying market rates of return. Examples of these money market instruments include U.S. Treasury bills, certificates of deposit, and commercial paper. In addition to the investment features, most MMFs offer check-writing redemption features.

Moral hazard—The tendency of people to take more risks once another party has agreed to provide protection. Regulatory interventions to bail out failing firms are often said to create moral hazard, on the assumption that others will expect to be saved from their mistakes, too.

Mortgage-backed security (MBS)—A bond backed by a pool of mortgage loans. The bondholders receive a share of the interest and principal payments on the underlying mortgages. The cash flows may be divided among different classes of bonds, called tranches.

Mutual fund—An investing company that pools the funds of individuals and other investors, and uses them to purchase large amounts of debt or equity obligations of businesses and sometimes debt obligations of governments. The owners of the mutual fund hold proportional shares in the entire pool of securities in which a fund invests. Owners pay taxes on their distributions from a fund; the mutual fund itself is not normally subject to federal or state income taxation.

Naked option—The sale of a call or put option without holding an equal and opposite position in the underlying instrument.

Operational risk—The possibility that a financial institution will suffer losses from a failure to process transactions properly, from accounting mistakes, from rogue traders or other forms of insider fraud, or from other causes arising inside the institution.

Over-the-counter (OTC)—Trading that does not occur on a centralized exchange or trading facility. OTC transactions can occur electronically or over the telephone.

Ponzi Scheme—Named after Charles Ponzi, a man with a remarkable criminal career in the early 20th century, the term has been used to describe pyramid arrangements whereby an enterprise makes payments to investors from the proceeds of a later investment rather than from profits of the underlying business venture, as the investors expected, and gives investors the impression that a legitimate profit-making business or investment opportunity exists, where in fact it is a mere fiction.

Receivership—When an insolvent financial institution is taken over with the intent to liquidate its assets.

Resolution Trust Corporation (RTC) - The agency set up to resolve savings and loans declared failed beginning in 1989. Between 1989 and mid-1995, the Resolution Trust Corporation closed or otherwise resolved 747 thrifts with total assets of \$394 billion.

Savings association—A savings and loan association, mutual savings bank, or federal savings bank, whose primary function has traditionally been to encourage personal saving (thrift) and home buying through mortgage lending. In recent years, such institutions' charters have been expanded to allow them to provide commercial loans and a broader range of consumer financial services. The federal regulator for most savings associations is the Office of Thrift Supervision. Also known as savings and loans, thrifts, and mutual savings banks.

Securities Investor Protection Corporation (SIPC)—A private nonprofit membership corporation set up under federal law to provide financial protection for the customers of failed brokers and/or dealers. SIPC is a liquidator; it has no supervisory or regulatory responsibilities for its members, nor is it authorized to bail out or in other ways assist a failing firm.

Securitization—The process of transforming a cash flow, typically from debt repayments, into a new marketable security. Holders of the securitized instrument receive interest and principal payments as the underlying loans are repaid. Types of loans that are frequently securitized are home mortgages, credit card receivables, student loans, small business loans, and car loans.

Self-regulatory organizations (SROs)—National securities or futures exchanges, national securities or futures associations, clearing agencies and the Municipal Securities Rulemaking Board are all authorized to make and enforce rules governing market participants. The respective federal regulatory agency has authority in connection with SROs and may require them to adopt or modify their rules. Examples of SROs in the securities industry include the Financial Industry Regulatory Authority (FINRA), and the New York Stock Exchange.

Special-purpose entities (SPEs)—Also referred to as off–balance-sheet arrangements, SPEs are legal entities created to perform a specific financial function or transaction. They isolate financial risk from the sponsoring institution and provide less-expensive financing. The assets, liabilities, and cash flows of an SPE do not appear on the sponsoring institution's books.

Speculation—a venture or undertaking of an enterprising nature, especially one involving considerable financial risk on the chance of unusual profit.

State regulation—Under the dual system of bank regulation, states as well as the federal government may charter, regulate, and supervise depository institutions. States are the primary regulators in the insurance field. States also have authority over securities companies, mortgage lending companies, personal finance companies, and other types of companies offering financial services.

Structured debt—Debt that has been customized for the buyer, often by incorporating complex derivatives.

Subordinated debt—Debt over which senior debt takes priority. In the event of bankruptcy, subordinated debtholders receive payment only after senior debt claims are paid in full.

Subsidiary—A company whose controlling shares are owned 50% or more by another ("parent") corporation. Like companies with less than 50% ownership, it is an affiliate of the controlling company. A subsidiary is usually consolidated for regulatory and reporting purposes with its parent.

Thrift holding company—Also known as a savings and loan holding company, a business that controls one or more savings associations. These holding companies are regulated under the Home Owners' Loan Act by the Office of Thrift Supervision.

Too-big-to-fail doctrine—an implicit regulatory policy holding that very large financial institutions must be rescued by the government, because their failure would destabilize the entire financial system. (See "moral hazard.")

Umbrella supervision—The term applied to comprehensive regulation of a holding company and its parts by one or more holding company regulator(s).

Underwriter—For securities markets, see investment bankers. For insurance, underwriters are the life, health and property-casualty companies that receive premiums and pay off losses and other risks as they occur. The underwriters bear the risks of losses and expenses exceeding receipts.

Unitary thrift holding company (UTHC)—A holding company that owns a single thrift institution. A distinction between UTHCs and other thrift holding companies has been that a UTHC could be involved in any lines of business, whereas the others have been restricted to certain activities primarily financial in nature. The Gramm-Leach-Bliley Act limits the commercial activities and affiliations of new UTHCs.

Universal bank—An organizational model typical of some foreign countries whereby a bank can exist as an operating enterprise and own directly a variety of other businesses (See Subsidiary). It contrasts with the banking model typical in the United States where the parent holding company owns several different businesses, all structurally separate (See "affiliate."). In practice, the two approaches are not exclusive.

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