FAQs

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Financial Timeline

Are there any downsides to regulation?

The prospect of systemic regulation poses numerous challenges. Systemic risk is difficult to define or measure. The financial system is global, and many large financial firms have far-flung international operations. Attempts to regulate firms tightly in one country will encourage firms to locate operations where regulation is less stringent. Although regulation can in principle reduce risk, excessive regulation can discourage financial innovation and efficiency to the detriment of economic growth.

Are there any drawbacks to lender-of-last-resort actions?

Some economists argue that central banks should use open market operations to supply the liquidity required to ensure the functioning of payment systems and maintain adequate growth of the money supply, but not lend to individual firms. The presence of a lender of last resort can encourage banks and other financial market participants to take excessive risks. Risk taking can be discouraged to some extent by charging a penalty rate for lender-of-last-resort loans, as argued for by Bagehot, and by imposing losses in the form of deductibles ("haircuts") on firms that receive government or central bank loans.

Are there any reasons why the Fed should not be the systemic risk regulator?

Those who argue that the Fed should not be designated the systemic risk regulator contend that the assignment could interfere with the Fed's ability to conduct monetary policy. In particular, additional regulatory authority could

threaten the Fed's political independence, which is crucial for the conduct of sound monetary policy.

Can government policies cause systemic risk?

If the public expects that the government will protect a firm's creditors from loss if the firm cannot meet its obligations, the firm will have an incentive to take more risks than it otherwise would. The prospect of government protection of a firm's creditors enables the firm to borrow on easier terms and hold less capital than it otherwise could. This in turn increases the likelihood that the firm will fail. Thus, expected government intervention to protect the creditors of large financial firms from losses might increase financial instability. This is why many economists and policymakers argue for limiting, or even eliminating, the number of firms that are considered "too big to fail."

How are commercial bank failures resolved?

The Federal Deposit Insurance Corporation (FDIC) has the authority to identify and dispose of insolvent commercial banks and thrifts and is required to do so in the manner that imposes the least cost on the deposit insurance fund and, ultimately, the taxpayer. The one exception to this is in the case of systemically important banks, which may be resolved in a manner that minimizes systemic risk. When a bank's primary federal regulator (which may be the FDIC) identifies a bank as insolvent, the FDIC immediately steps in and either closes the bank or assumes responsibility for operating the bank. Sometimes the FDIC liquidates the bank and pays off insured deposits. However, it often sells some or all of the bank's assets to another institution, which may assume the bank's liabilities, usually with financial assistance from the FDIC. The entire process is relatively straightforward and nearly transparent to the failed bank's insured depositors and other customers.

How are community banks faring?

Community banks face a number of challenges, including the financial crisis and economic recession. Many community banks are also heavily exposed to commercial real estate. Community banks have expressed concern about the burden of regulation and about recent and prospective increases in deposit insurance premiums.

Most community banks entered the recession strong and well-capitalized. As they have been less heavily involved in complex financial instruments and subprime mortgage lending than their larger counterparts, community banks, in general, have been less vulnerable to the collapse of global financial markets. Nevertheless, community banks now have high loan loss provisions and many have experienced considerable losses on investment securities, especially on holdings of Fannie Mae and Freddie Mac equity. However, despite weakening earnings (community banks' reported net income in 2008 is less half the level of 2007), a striking majority of community banks—over 95 percent—remained well capitalized as of year-end 2008.

How did the stress tests work?

According to the SCAP White Paper released by the Board of Governors of the Federal Reserve System on April 24, "the SCAP is a forward-looking exercise designed to estimate losses, revenues, and reserve needs for BHCs in 2009 and 2010 under two macroeconomic scenarios, including one that is more adverse than expected." Each of the 19 banking institutions conducted the forward-looking exercises using a template provided by bank supervisors. From this template, the banks were asked to "forecast internal resources available to absorb losses, including pre-provision net revenue and the allowance for loan losses."* The BHCs were required to forecast potential losses on their first- and second-lien mortgages, credit cards and other consumer loans, commercial and industrial loans, commercial real estate loans, other loans, securities in available-for-sale and hold-to-maturity portfolios, trading portfolio losses, and counterparty credit risk. The forecasts were based on two scenarios about the likely paths for U.S. GDP, unemployment, and house prices provided by regulators: a baseline scenario and a more adverse scenario. After the banks submitted their initial reports, bank regulators worked with the banks to refine their estimates of required capital. Finally, regulators determined how much, if any, additional capital each bank will be required to raise to comply with regulatory minimums under the adverse economic scenario. Banks found to be capital deficient have six months to raise additional capital from private sources or from the U.S. Treasury.

*Pre-provision net revenue (PPNR) is defined as net interest income plus non-interest income less non-interest expense. According to the Board of Governors' White Paper, PPNR is the income after non-credit-related expenses that would flow into the firms before they take provisions or other write-downs or losses.

How does bank supervision come into play?

A potential drawback of deposit insurance is that it can encourage banks to take excessive risks (a phenomenon referred to as "moral hazard"), which in turn increases the likelihood of failure. Deposit insurance removes a potential source of market discipline in that insured depositors have little incentive to monitor the activities of their banks or to force banks to pay higher interest rates if they assume more risk. Hence, deposit insurance encourages banks to hold less capital and take more risks than they otherwise would, which increases the likelihood of failure. Banking supervision can help ensure the safety and soundness of insured banks and thrifts, and thereby limit potential losses to the deposit insurance funds from failures. Further, banks are subject to "prompt corrective action" measures if their capital falls below required minimums or regulators determine that their risk management practices are inadequate. For example, regulators can force banks to suspend their dividends, replace management, or place them under conservatorship or receivership.

How does the current financial crisis compare with the financial crisis of the Great Depression?

The current financial crisis is certainly the most severe since the 1930s. During the Depression, the stock market lost over 80 percent of its value and thousands of banks failed. Approximately one-half of all residential mortgages were delinquent as of January 1, 1934, though the residential mortgage foreclosure rate was a comparatively modest 1.3 percent at its peak in 1933.

The stock market has declined sharply during the current crisis. For example, the S&P 500 Composite Index fell 43 percent between October 2007 and December 2008, which is similar to the decline during the bear market of 1973-74. Several large financial firms have experienced multibillion dollar losses and a few have failed. Still, only 25 banks failed during 2008, and most of them were very small. By contrast, more than 100 banks failed in every year from 1985 to 1992, including 221 in 1988, and many more savings and loan associations failed. Of course, most of those banks and S&Ls were also small, but many large banks also experienced substantial losses.

In the mortgage market, as of the third quarter of 2008, 12.5 percent of (conventional) subprime mortgages were in foreclosure and another 7.2 percent were 90 or more days past due. However, just 1.6 percent of prime mortgages were in foreclosure and another 1.3 percent were 90 or more days past due. Delinquency and foreclosure rates of prime mortgages are much higher than normal, but the problems in the smaller subprime market remain much more acute. Unfortunately, the data on mortgage delinquency and foreclosure rates for the

Great Depression are not strictly comparable with the data for the current crisis. However, while severe, the current level of distress in U.S. mortgage markets is not as severe as the distress in those markets during the Great Depression.

How does the current recession compare with the Great Depression?

The Great Depression of the 1930s was the most severe U.S. economic downturn of the 20th century. Between 1929 and 1933, the nation's production of goods and services (GDP) fell nearly 30 percent, the unemployment rate reached 25 percent of the labor force, and the consumer price level also declined by some 30 percent.

Most economists do not expect the current recession to rival the Great Depression in its severity, though some predict a rather severe recession by recent standards. The current recession began in the fourth quarter of 2007, and GDP actually increased during the first half of 2008. GDP fell at a modest 0.5 percent annual rate in the third quarter of 2008, but at a 6.3 percent annual rate in the fourth quarter. Many economists expect that GDP will contract still further in the first half of 2009 before the economy starts to expand. The unemployment rate was 7.2 percent in December 2008, a full percentage point higher than it had been in September. Many analysts expect that the unemployment rate will climb still higher, but few expect the unemployment rate to reach Depression levels, or even the 10.8 percent rate of November-December 1982, which was the highest monthly rate since the 1930s. Finally, the consumer price level was essentially unchanged over the year ending in December. Some observers expect the price level to fall in the months ahead, but few predict deflation on the scale of the Great Depression.

For more information about the Great Depression, geared toward educators, see the St. Louis Fed's Great Depression Curriculum web site.

How easy will it be to unwind the various programs that have expanded the Fed's balance sheet?

Some programs, such as the Term Auction Facility (TAF), would be easy to terminate. TAF loans have short, limited terms (e.g., 84 days), and the Fed could simply choose not to continue TAF auctions. Other programs may take longer to eliminate. For example, it might be difficult for the Fed to dispose of loans made under the Term Asset-

Backed Loan Facility (TALF) or the loans made to rescue Bear Stearns or AIG. Conceivably, it might be difficult to sell mortgage-backed securities acquired through open-market operations. The Federal Reserve and Treasury Department have discussed possible measures that would enable the Fed to effectively prevent its lending programs from expanding the monetary base. Those discussions are continuing. On June 25, 2009, the Board of Governors announced various changes to its programs and facilities due to improving financial conditions and other developments within specific markets. Some programs were expanded; some were reduced or stopped. For example, the size of TAF auctions was trimmed as these auctions were undersubscribed. See additional details in the Board's press release at: http://www.federalreserve.gov/newsevents/press/monetary/20090625a.htm.

How has FDIC insurance coverage changed as a result of the financial crisis?

In October 2008, Congress enacted The Emergency Economic Stabilization Act (EESA), which temporarily raised deposit insurance coverage limits from $100,000 to $250,000 through the end of 2009. The coverage limits were extended through the end of 2013 under the Helping Families Save their Homes Act of 2009, which President Obama signed on May 20, 2009. The FDIC also temporarily expanded its insurance coverage to provide unlimited coverage for non-interest-bearing deposit transaction accounts for banks participating in the FDIC's Temporary Liquidity Guarantee Program. This expanded coverage means that payment processing accounts such as payroll accounts, demand deposit accounts, and low-interest NOW accounts have unlimited insurance coverage.

How has the financial crisis affected the Fed's monetary policy?

The financial crisis has interfered with the Fed's ability to operate a conventional monetary policy. Lender-of-last-resort measures have been a primary focus. The FOMC has reduced its target for the federal funds rate essentially to zero—"conventional" monetary policy is now off the table. The Federal Reserve has pursued unconventional policy options, such as the purchase of long-term Treasury securities and mortgage-backed securities.

How have the Fed's lender-of-last-resort activities affected its monetary policy?

The Federal Reserve began to ease monetary policy in late 2007 when it became apparent that financial market strains threatened the broader economy. The FOMC reduced its target for the federal funds rate in a series of steps to its current near-zero level. Before September 2008, however, the Fed did not permit the operations of the various lending facilities to increase the size of the Fed's balance sheet or growth of the monetary base. Since then, however, continued expansion of some of the special lending facilities and open market purchases of Treasury and other securities authorized by the FOMC have caused the size of the balance sheet and the monetary base to increase sharply.

How is the FDIC's special assessment calculated?

Banks will be required to pay the 5-basis-point special assessment in September 2009 based on June 2009 deposits. The amount of the assessment, however, cannot exceed 10 basis points times the institution's assessment base for its regular second quarter 2009 risk-based assessment.

The FDIC Board also allowed for the possibility of charging additional emergency 5-basis-point assessments after June 2009 if the Board determines that assessments are necessary to maintain public confidence in the deposit insurance system. The FDIC has indicted that at least one additional 5-basis-point assessment before January 1, 2010 is "probable."*

In reducing the special assessment, the FDIC also changed how the assessment would be calculated by imposing the charge based on a depository institution's assets minus Tier 1 capital (as of June 30, 2009) rather than on its deposit base. Smaller banks have argued that larger banks that pose greater risks to the entire banking system should be required to pay a higher premium. The change in calculation for this special assessment is being viewed by smaller banks as accomplishing this.

*See the May 22, 2009, FDIC Financial Institution Letter FIL-23-2009 "Special Assessment Final Rule."

How large is the Fed's balance sheet?

In mid-2008, the balance sheet (total assets) was approximately $900 billion. For the week ending July 8, 2009, the balance sheet stood at close to $1.99 trillion. Balance sheet information is updated every Thursday afternoon in the H.4.1 report, which can be found on the Board's web site at http://www.federalreserve.gov/releases/h41/.

How large is the monetary base?

The monetary base as of mid-2008 was approximately $800 billion. As of the two-week period ending July 1, 2009, the base stood at close to $1.62 trillion. The latest monetary base data are available on the Board's web site at: http://www.federalreserve.gov/releases/h3/.*

*As of July 1, 2009, the base totaled $1.618 trillion. (View a chart of the monetary base at http://research.stlouisfed.org/fred2/series/BOGUMBNS.) The monetary base, adjusted for changes in reserve requirements, totaled $1.622 trillion. (View a chart of the monetary base adjusted for changes in reserve requirements at http://research.stlouisfed.org/fred2/series/BOGAMBNS.)

If Bear Stearns and AIG were deemed too big to fail, why was Lehman Brothers allowed to fail?

The Federal Reserve and Treasury Department have intervened to prevent the failure of firms that posed significant systemic risks to the financial system and broader economy. In the case of American International Group (AIG), Chairman Bernanke has noted that "at best, the consequences of AIG's failure would have been a significant intensification of an already severe financial crisis and a further worsening of global economic conditions. Conceivably, its failure could have resulted in a 1930s-style global financial and economic meltdown, with catastrophic implications for production, income, and jobs." By contrast, Bernanke has stated, "the troubles at Lehman had been well known for some time, and investors clearly recognized ... that the failure of the firm was a significant possibility. Thus, we judged that investors and counterparties had time to take precautionary measures." It should also be noted, however, that the Federal Reserve and Treasury Department did try to facilitate an acquisition of Lehman Brothers by another bank, but ultimately were unsuccessful. Lehman Brothers filed for Chapter 11 bankruptcy protection on September 15, 2008. Chairman Bernanke has since stated that "Lehman proved that you cannot let a large internationally active firm fail in the middle of a financial crisis."*

*The source is the *60 Minutes* interview that aired on March 15, 2009. Bernanke went on to say that the Fed could not have prevented Lehman's failure at the time because it could not have injected capital in Lehman—only Treasury could do that. Rather, the Fed was restricted to making loans collateralized by high-quality financial assets, such as U.S. Treasury securities or agency securities.

Is it important that bank deposits at the Fed now are the Fed's largest liability?

The Fed extends credit under its new programs by increasing the deposits of banks and other depository institutions at the Federal Reserve. The Fed pays interest on these deposits at approximately the overnight market rate on federal funds to reduce the burden on banks of holding these deposits. As long as the economy is weak and demand for loans is low, the extra deposits held at the Fed carry little risk of igniting inflation. However, the Fed must seek ways to reduce these deposits as economic activity rebounds to limit the potential risk they pose for causing an undesirably large increase in bank lending and growth of the nation's money supply.

Is it possible to measure systemic risk?

Economists, regulatory agencies, and institutions such as the International Monetary Fund (IMF) have attempted to develop forward-looking indicators designed to warn policymakers of developing instabilities that could pose a systemic risk to the financial system. One common measure of risk is the difference between the yield on a U.S. Treasury security (considered free from default risk) and the yield on an asset that is not free from default risk, such as a corporate bond or commercial paper. Known as credit risk spreads, these indicators typically increase during times of financial market stress. Other measures of risk in financial markets include measures of volatility in stock and bond markets, and the prices of credit default insurance contracts for individual firms.*

*These and other measures are discussed in the IMF's Global Financial Stability Report issued in April 2009.

Is my bank deposit safe?

The Federal Deposit Insurance Corporation protects depositors against loss of their insured deposits if an FDIC-insured bank or savings association fails. If a depositor's accounts at one FDIC-insured bank or savings association total $250,000 or less, the deposits are fully insured. A depositor can have more than $250,000 at one insured bank or savings association and still be fully insured provided the accounts meet certain requirements. Share accounts at federally insured credit unions are similarly insured by the National Credit Union Administration. For more information, see the myFDICinsurance.gov web site and NCUA's Share Insurance Toolkit.

Should regulators attempt to control systemic risk?

There is scope for government intervention to limit risk taking by firms whose failure would impose significant losses on other firms or markets. When the losses resulting from the failure of a firm extend beyond the firm's shareholders and creditors, the firm will have an incentive to assume more risk than is socially desirable. Private solutions to mitigate systemic risk may be infeasible or undesirable.

Should the Federal Reserve be the systemic risk regulator?

Those who advocate lodging responsibility for systemic regulation within the Federal Reserve note that the Fed's responsibilities, experience, and resources make it uniquely suited to be a systemic risk regulator. Importantly, the Federal Reserve is the lender of last resort for the banking system and exercises considerable oversight of the nation's payments system. Further, the Federal Reserve already monitors broad economic and financial trends in carrying out its monetary policy responsibilities.

Should the United States have a systemic risk regulator?

Currently, there is no single regulatory agency with authority to supervise or regulate all systemically important firms and markets, and many economists and policymakers have argued for the creation of a systemic

risk regulator to assume that responsibility. Most proposals are not specific about the authority and responsibility that would be assigned to the systemic regulator. However, many argue that a regulator should have the authority to resolve systemically important insolvent nonbank financial firms (similar to the authority that the FDIC has to close and resolve insolvent banks and thrifts), as well as authority to monitor and regulate practices that pose systemic risks to the financial system. On June 17, 2009, the U.S Treasury Department released a proposal for reforming the financial regulatory system. The proposal called for the creation of a Financial Services Oversight Council and for new authority for the Federal Reserve to supervise all firms that pose a threat to financial stability, including firms that do not own a bank. See the proposal at: http://www.financialstability.gov/docs/regs/FinalReport_web.pdf.

What are community banks?

Any bank with assets of $1 billion or less is commonly referred to as a community bank. There is considerable variety among this group of banks, however, in terms of their size, location (e.g., urban vs. rural), and scope of operations.

Community banks play a key role in the provision of credit to small businesses and retail customers across the nation and are therefore important to the U.S. economy. They are particularly important in rural communities and smaller cities—and in the Eighth Federal Reserve District.

Most community banks generate a higher percentage of their earnings from traditional banking activities—i.e., taking deposits and offering loans—than do larger banks. Their business model, known as "relationship lending," emphasizes ongoing bank-client personal interactions. Community banks usually have a good understanding of the communities they serve and build on their reputation and personalized service.

What are some examples of how the Federal Reserve has served as lender of last resort during the current financial crisis?

The Federal Reserve has taken several measures to ameliorate the financial crisis. In addition to providing loans to banks and other depository institutions through its discount window lending programs, the Fed has established several new facilities to provide liquidity to banks and primary dealers since the fall of 2007, including the Term Auction Facility, the Primary Dealer Credit Facility, and the Term Securities Lending Facility.*

The Fed has also established programs to provide liquidity to various markets, including the Commercial Paper Funding Facility, the Money Market Investor Funding Facility, and the Term Asset Backed Loan Facility. Finally, under authority granted in Section 13(3) of the Federal Reserve Act, the Fed has provided loans to support specific institutions in order to avert their disorderly failures, which could have led to severe dislocations and strains in the financial system as a whole and harmed the U.S. economy.**

*Primary dealers are banks and securities broker-dealers that trade in U.S. government securities with the Federal Reserve Bank of New York.

**Section 13(3) of the Federal Reserve Act authorizes the Federal Reserve to lend in "unusual and exigent circumstances" to any individual, partnership, or corporation, provided that the party is unable to obtain adequate credit from other banking institutions.

What are the possible implications of Commercial Real Estate (CRE) exposures to community banks?

Community banks tend to have limited opportunities for diversification due to the narrower scope of their businesses. For the past two decades, community banks have demonstrated a steady increase in exposure to commercial real estate loans, with the average share of CRE loans out of total loans rising from about 21 percent in 1989 to about 46 percent in 2008. At the same time, consumer lending has gradually diminished in importance, with the average share of consumer loans out of total loans decreasing from about 21 percent in 1989 to 5 percent in 2008.

Credit quality data indicate a continued worsening in the fundamentals for the commercial real estate sector (occupancy, rental rates, etc.) and challenging liquidity environment. Delinquency rates and watch-list loans are increasing. As CRE property prices are likely to follow the residential real-estate cycle by about a year, community banks' CRE exposures may become a serious problem in the near future.

What are the stress tests?

Formally known as the Supervisory Capital Assessment Program (SCAP), the stress tests were designed as forward-looking exercises to inform banks and their federal regulators if the banks had sufficient capital in place to weather a normal recession or a relatively severe

recession—in short, they were "what if" scenarios. Under current regulations, the ratio of a bank's capital—its net worth, or equity capital—to its risk-weighted assets (designated either Tier 1 or Tier 2) must exceed 10 percent for the bank to be considered well capitalized. A bank's capital ratio must exceed 6 percent to avoid supervisory intervention ("prompt corrective action").*

*To be considered well capitalized, Tier 1 capital must exceed 6 percent of total risk-weighted assets, and to avoid prompt corrective action, Tier 1 capital must exceed 3 percent of assets.

What assets does the Federal Reserve own?

In normal economic conditions, the Federal Reserve's largest asset class is securities issued by the Treasury. Other assets may include securities issued by federal agencies, loans to depository financial institutions, and foreign currencies. In extraordinary times, other assets may be held, including loans to private firms and loans to special purpose corporations that are owned by the Federal Reserve to reduce stress in certain credit markets.

What caused the financial crisis?

Many analysts blame the financial crisis on at least three interrelated causes: 1) Rapid growth and subsequent collapse of U.S. house prices; 2) a general decline in mortgage underwriting standards, reflected in a growing proportion of home purchases financed by nonprime mortgages; and 3) widespread mismanagement of financial risks by firms engaged in originating, distributing, and investing in mortgages, mortgage-backed securities, and derivative financial instruments.

Mortgage delinquencies and foreclosures rose sharply after U.S. house prices peaked and began to fall in early 2007. Banks and other financial intermediaries then began to experience large losses on their holdings of nonprime residential mortgages and mortgage-backed securities. By August 2007, these losses sparked a widespread loss of confidence in banks and other financial intermediaries, as investors suddenly became much less willing to bear credit risks. Banks tightened their lending standards, which reduced the availability of loans and increased their cost. As investors retreated to the safety of government bonds and other low-risk securities, the market yields on risky debt securities were driven up relative to yields on U.S. Treasury securities. Investor concerns intensified during 2008 as financial losses continued to mount. The crisis reached a boiling point in September 2008 when the bankruptcy of Lehman

Brothers and near-bankruptcy of American International Group (AIG) sparked panic selling in the stock market and drove the yields on risky securities sharply higher relative to those on risk-free securities.

What causes increases and decreases in the size of the monetary base?

In normal times, the monetary base increases and decreases roughly dollar-for-dollar with changes in the amount of assets held by the Federal Reserve because, when the Federal Reserve purchases an asset such as a Treasury security, it writes a check drawn on itself. Unless the amount of at least one liability changes on the Federal Reserve's balance sheet, the monetary base does not (and cannot) change; that is, actions of households, businesses, and financial institutions alone cannot change the size of the monetary base. The recipient deposits the check at his bank, which sends the check to the Fed so that the check's amount may be credited to its Federal Reserve account. The funds at the Fed are valuable because they may be used to pay debts due, on behalf of customers, to other banks.

What explains the enormous increase in the total assets and liabilities of the Federal Reserve System since September 2008?

The Federal Reserve has supported the financial system in part by lending to a variety of banks and other firms. These loans, which are assets of Federal Reserve Banks, increase the deposits of banks and other depository institutions held at Federal Reserve Banks. Those deposits are liabilities of the Federal Reserve Banks. In the absence of offsetting transactions, such as open-market sales of government securities from the Federal Reserve System portfolio, these loans increase the stock of bank reserves.,

What happens to a bank that fails a stress test?

Banks cannot "fail" the stress test. However, those determined to have insufficient capital to weather likely losses under the adverse economic scenario are required to raise additional capital, either privately or by converting preferred stock held by the federal government under the Treasury's Capital Purchase Program. The latter funds

would take the form of mandatory convertible preferred shares that can be converted to common equity (at the bank's discretion but with regulatory approval) at a conversion price set at a 10 percent discount from the prevailing price of the BHC's stock price as of February 9, 2009.

What impact does regulation have on community banks?

The cost of regulation is particularly high for community banks with their small asset bases and income streams. Although large institutions have in-house experts and departments dedicated to risk management and compliance, a community bank may have only one person responsible for addressing these issues. Some community banks outsource technology and experts at great cost.

What impact will increased assessment rates have on banks?

The FDIC determined that a one-time 5-basis-point special assessment on insured institutions would reduce equity capital for the industry as a whole by approximately 0.2 percent. The FDIC also determined that the assessment would cause two institutions' equity-to-assets ratios to fall below 4 percent (the ratio below which an institution is considered undercapitalized by regulators), with one falling below 2 percent. The FDIC also determined that the special assessment would reduce 2009 pre-tax income for profitable institutions by 5.1 percent, and increase average pre-tax losses for unprofitable banks by 2 percent.

What is "credit easing"?

Federal Reserve Chairman Ben Bernanke describes the Fed's monetary policy as "credit easing."* This approach emphasizes the composition of the Fed’s balance sheet, as well as its size. Proponents of credit easing argue that the Fed can have more impact through targeted lending to specific institutions and markets than it can simply by adding to the size of its balance sheet by purchasing Treasury securities. For example, purchases of mortgage-backed securities may have more impact on mortgage rates and the housing market than do purchases of Treasury securities. There is limited evidence, however,

that changes in the composition of the Fed balance sheet have significant effects apart from changes in the total size of the balance sheet, and some economists have questioned the efficacy of targeted lending programs.*

*"The Crisis and the Policy Response," The Stamp Lecture, London, England, Jan. 13, 2009 (http://www.federalreserve.gov/newsevents/speech/bernanke20090113a.htm).

What is meant by the term "lender of last resort"?

A lender of last resort is the ultimate source of credit for a country's banking or financial system. The 19th century British banker and journalist Walter Bagehot asserted that in a financial crisis, a lender of last resort should lend freely against collateral at a penalty rate—that is, an interest rate higher than the market rate. The Federal Reserve System and other central banks were established in part to serve as lender of last resort to the banking system by providing liquidity when banks are unable to obtain funds from other banks or in credit markets. Traditionally, central banks carried out the lender-of-last-resort function by lending directly to banks. However, in modern times, the lender-of-last-resort role has expanded to include the provision of emergency liquidity through various channels such as open market operations to ensure the continued functioning of financial markets and payments systems.

What is meant by "too big to fail"?

A firm is deemed too big to fail (TBTF) if its failure would likely cause significant damage to the financial system and broader economy. Such firms are often referred to as "systemically important" because of their size or complexity. In practice, TBTF implies that the government will protect a firm's creditors from loss if the firm is unable to meet its obligations. A joint statement by the U.S. Treasury Secretary and the heads of the federal bank regulatory agencies on February 10, 2009, indicated that "the U.S. government remains committed to preventing the failure of any financial institutions where that failure would pose a systemic risk to the economy."* The 19 bank holding companies subjected to the "stress test" are among those firms widely thought to be too big to fail.

TBTF does not necessarily imply that the firm's shareholders, management, or employees will be protected from loss. During the recent period of financial turmoil, the Federal Reserve and Treasury Department have intervened to prevent the failure of Fannie Mae, Freddie Mac, and AIG; to facilitate the acquisition of Bear

Stearns by JPMorgan Chase; and to assist Citigroup and Bank of America. In several cases the shareholders of the firm lost most or all of their investment and the firm's senior executives were dismissed. However, officials believed that it was necessary to protect the creditors of these firms to avoid imposing severe losses on other firms and seriously disrupting financial markets, which would threaten the broader economy.

*http://www.treas.gov/press/releases/tg21.htm

What is "moral hazard" and is it related to TBTF?

Moral hazard refers to the incentive for increased risk-taking created by insurance. For example, a firm would more likely locate in a flood plain if it expects that the government will protect it from flood losses. Similarly, creditors are more willing to lend to a firm when they expect to be protected from loss if the firm is unable to meet its financial obligations. When investors expect that a firm is too big to fail, they expect that the government will protect the firm's creditors from loss. As a result, other firms will be more willing to lend to the firm or purchase the firm's debt than if they do not anticipate such protection. Very large financial firms are able to issue more debt at lower cost than smaller firms because the public expects government protection from loss. An explicit or implicit government guarantee enables (and encourages) very large financial firms to finance their operations with debt to a much greater extent than they could without a government guarantee, which in turn makes them more likely to fail. Many economists are concerned about the incentive for excessive risk taking created by TBTF and thus argue that TBTF must be limited to avoid future crises.

What is "quantitative easing"?

Quantitative easing refers to a monetary policy of increasing the growth of a monetary aggregate. Some economists, including some Federal Reserve economists and policymakers, advocate using open market purchases of U.S. Treasury securities to systematically increase the size of the monetary base. The Fed has continued to purchase Treasury and other securities since the intended fed funds rate was cut to zero. Such purchases increase the size of the Fed's balance sheet and thus the monetary base. St. Louis Fed President James Bullard has advocated a policy of systematically expanding the "permanent" components of the Fed's balance sheet and monetary base to reduce the likelihood of deflation, and then slowing base growth as deflation risks recede.*

*President Bullard's views are elaborated in "Dial 'M' for Monetary Policy," remarks before the New York Association for Business Economics, New York, Feb. 17, 2009 (http://www.stlouisfed.org/newsroom/speeches/2009_02_17.cfm). The permanent components include long-term Treasury securities, agency debt, mortgage-backed securities, and other assets that the Fed will likely hold over several years. By contrast, short-term loan programs, such as credit extended under the Term Auction Facility (TAF), can be terminated quickly and thus are considered temporary components.

What is systemic risk?

There is no universally accepted definition of systemic risk. However, the general idea is that systemic risk reflects the potential for some sudden, unforeseen economic event—what economists call a shock—to cause considerable disruption and turmoil in financial markets. The shock may be the failure of a large bank or other financial firm, a default by a country on its outstanding debt, an act of war, or a natural disaster. The ensuing turmoil spreads to the broader economy through changes in interest rates, stock prices, lending activity, and expectations about future economic growth that influence spending decisions by households and firms.

What is systemic risk, and what role has it played in the responses of the Federal Reserve and other agencies to the financial crisis?

Systemic risk refers to a risk to an entire financial market or system, not just to a single or small number of firms. Systemic risk reflects the potential for the failure of one firm or market to severely impair or even cause the failure of other healthy firms or markets-and possibly the entire economy. The failure of a large financial firm is more likely to pose systemic risk than the failure of a large nonfinancial firm for several reasons, including 1) the large volume and speed of financial transactions that large financial firms engage in with each other, 2) the high leverage (i.e., high level of debt relative to total assets) of many large financial firms, and 3) their tendency to fund holdings of long-term assets with short-term debt. In providing loans and other assistance to stabilize certain troubled firms (such as Bear Stearns and AIG), the Federal Reserve and Treasury acted to avoid systemic risks associated with the disruptions that the failure of those firms could have had on financial markets and the economy.

What is the Federal Reserve balance sheet?

Similar to other businesses, the Federal Reserve System has assets and liabilities. The balance sheet lists the Fed's assets and liabilities. The term "balance sheet" refers to the fact that total assets equal the sum of liabilities plus capital. This is true no matter how the various items on the balance sheet change. For example: If the Fed purchases an asset, no other asset changes, and capital is unchanged, then one or more liability items must change. Or, in some cases, one asset might increase and another decrease, or one or more liability items might increase and others decrease. Regardless of which items change, accounting rules force the balance sheet to "balance" with total assets equal to the sum of total liabilities plus capital.

What is the Fed's role in supervising community banks?

The Federal Reserve is responsible for supervising state-chartered community banks that are members of the Federal Reserve System, as well as all bank holding companies. As of the third quarter of 2008, the Fed supervised 783 community banks across the nation, accounting for about 12 percent of all community banks. The Fed strives to promote safety and soundness among state-member community banks through effective inspections, monitoring of risk and management practices, rule-making, and issuing guidelines.

What is the monetary base?

The monetary base is the narrowest measure of money used by economists. It consists of deposits held at the Federal Reserve by depository financial institutions (including commercial banks, savings banks and credit unions) plus all coin and currency held by households and businesses, including depository institutions.

What liabilities does the Federal Reserve have?

The Fed's largest liability is Federal Reserve notes; that is, currency held by banks and the public. Other liabilities

include deposits held at the Fed by depository institutions and by the Treasury.

What might be done about TBTF?

Fixing TBTF is a difficult problem. Several proposals have been suggested for discouraging financial firms from growing too large or complex, including progressive capital requirements and increased supervision. Minneapolis Fed President Gary Stern has argued that "systemic focused supervision" is necessary to address systemic risks posed by very large financial firms. In his view, this would include (i) early identification of possible problems through initiatives such as stress tests, (ii) enhanced prompt corrective action that would allow supervisors to take specific action against an institution if its capital fell below certain standards, and (iii) explicit communication from policymakers to the capital markets. Another proposal calls for requiring all systemically important firms to have a "shelf-ready" bankruptcy plan in place that would require them to track and document their potential losses and counterparty risk in the event a quick dissolution of the company was required (say, over a weekend).* However, because many large financial firms have global operations, any comprehensive regulation is difficult if not impossible.

* See the 2008 Homer Jones Memorial Lecture by Raghu Rajan on the St. Louis Fed's web site: http://www.stlouisfed.org/newsroom/fiyc/assets/2009HomerJones.pdf.

What role has deposit insurance played in the current financial crisis?

Deposit insurance has been a stabilizing influence during the financial crisis. Before the advent of federal deposit insurance in 1933, the U.S. banking system had suffered several banking panics and crises. In many instances, the failure of a major bank or other firm triggered runs on all banks by frightened depositors. Bank runs sometimes forced banks to curtail lending or close altogether, and reduced the nation's money supply. Many economists believe that banking panics were a principal cause of the financial crisis and economic depression of the early 1930s. The Banking Act of 1933 established a temporary system of federal deposit insurance, which was later made permanent and extended to thrift institutions and credit unions. There have been no major banking panics in the United States since 1933.

What were the results of the stress test?

The assessment found that, as of December 31, 2008, nine of the 19 firms examined had adequate capital to maintain Tier 1 capital in excess of 6 percent of total assets and common equity capital in excess of 4 percent under the more adverse economic scenario. However, the remaining 10 firms must raise a total of $75 billion of additional capital to establish the capital buffer required under the program. These banks must raise the additional capital by early November 2009.

Where can I learn more about home mortgage foreclosures, especially what is being done to assist homeowners facing foreclosure?

For information about mortgage foreclosures, including data, analysis, and consumer information, see the St. Louis Fed's Foreclosure Resource Center.

Which financial institutions were subject to a stress test?

The SCAP was limited to the 19 largest bank holding companies (BHCs) in the United States with assets that exceed $100 billion. As of December 31, 2008, these institutions collectively held about two-thirds of the banking assets and more than half of the loans in the U.S. banking system.

The following BHCs were subject to the stress test:

- JP Morgan Chase & Co.
- Citigroup
- Bank of America Corp.
- Wells Fargo & Co.
- Goldman Sachs Group
- Morgan Stanley
- MetLife
- PNC Financial
- Services Group
- US Bancorp
- Bank of NY Mellon Corp.
- SunTrust Banks Inc.
- State Street Corp.
- Capital One
- Financial Corp.
- BB&T Corp.
- Regions Financial Corp.
- American Express Co.
- Fifth Third Bancorp
- Keycorp
- GMAC LLC

Which firms are "systemically important"?

Systemically important firms are those whose failure would likely impose severe losses on other firms or markets. The failure of a large financial firm is more likely to pose systemic risk than the failure of a large nonfinancial firm for several reasons, including: (i) the large volume and speed of financial transactions that large financial firms engage in with each other; (ii) the high leverage—that is, high level of debt relative to total assets—of many large financial firms; and (iii) their tendency to fund holdings of long-term assets, such as residential or commercial mortgages, with short-term debt such as commercial paper and demand deposit accounts.

Why did the FDIC increase its deposit insurance premiums?

With 25 bank failures in 2008, the FDIC's Deposit Insurance Fund (DIF) had dropped to $18.7 billion by the end of 2008, its lowest level since 1993. These failures caused the DIF reserve ratio to decline from 1.19 percent as of March 30, 2008, to 0.40 percent as of December 31, 2008. To ensure that the DIF reserve ratio is restored to at least 1.15 percent, and anticipating between 100 and 500 failures in 2009, the FDIC's Board voted in February 2009 to set the quarterly initial base assessment rate at 12 to 45 basis points beginning in the second quarter of 2009. The previous base rate ranged from 2 to 40 basis points depending on the risk category of the institution. In general, banks with a rapid asset growth and significant reliance on brokered deposits will pay premiums on the higher end of the range since these factors tend to make bank resolutions more costly for the FDIC.

The FDIC Board also voted in February to impose a 20-basis-point special assessment on insured institutions to prevent the Fund from running out of money. The assessment was lowered to 5 basis points by the FDIC's Board on May 22, 2009, following an increase in the FDIC's borrowing authority with the U.S. Treasury.*

*The Helping Families Save Their Homes Act of 2009 increases the FDIC's borrowing authority with the U.S. Treasury to $100 billion from $30 billion (where it has stood since 1991). The Act also creates a mechanism by which the FDIC's borrowing authority could be temporarily increased to $500 billion. Although the FDIC has never used its borrowing authority in its more than 75-year history, FDIC Chairwoman Sheila Bair has testified before the Senate that this increase would allow the FDIC to reduce the extra premiums banks would have to pay to replenish the insurance fund.

Why did the Federal Reserve provide loans to American International Group (AIG) but not to Lehman Brothers?

The Federal Reserve has made loans to prevent the failure of firms that posed significant systemic risks to the financial system and broader economy. In the case of AIG, Chairman Bernanke has noted that "at best, the consequences of AIG's failure would have been a significant intensification of an already severe financial crisis and a further worsening of global economic conditions. Conceivably, its failure could have resulted in a 1930s-style global financial and economic meltdown, with catastrophic implications for production, income, and jobs." By contrast, Bernanke states, "the troubles at Lehman had been well known for some time, and investors clearly recognized ... that the failure of the firm was a significant possibility. Thus, we judged that investors and counterparties had time to take precautionary measures."

Why has the Federal Reserve balance sheet increased so rapidly since September 2008?

Since December 2007, the Fed has introduced a number of programs to assist depository institutions facing difficulty raising funds in private markets, and credit markets outside the banking system stressed by extreme investor uncertainty regarding future economic conditions. Prior to mid-September 2008, Fed actions under these programs that tended to increase the balance sheet were offset by the Fed selling Treasury securities from its portfolio. Since mid-September, it has not been possible to offset the effects of additional programs, and the balance sheet has expanded. More recently, the Fed has begun a program to purchase large amounts of U.S. Treasury and agency (Fannie Mae and Freddie Mac) securities. Each purchase is made with funds drawn against Federal Reserve Bank accounts. When these are cleared and presented to the Fed, bank deposits held at the Fed increase dollar-for-dollar.

Why has the monetary base grown during the past year?

During the past year and a half, the Federal Reserve has introduced a number of programs to reduce stress in financial markets. These programs have greatly increased the amount of assets held by the Federal Reserve—and, in

turn, the monetary base. The assets in these nontraditional programs have been paid for with deposits at the Federal Reserve. Paying for purchased assets with deposits at the Fed causes increases in the monetary base dollar-for-dollar.

Why is the government reluctant to let large financial firms file for bankruptcy protection?

Federal Reserve and Treasury officials believe that bankruptcy is not a viable option for resolving very large financial firms because, under current law, bankruptcy proceedings can be protracted and entail considerable uncertainty, which would tend to exacerbate a financial crisis. FDIC Chairman Sheila Bair recently argued that "the legal features of a bankruptcy filing itself triggered asset fire sales and destroyed the liquidity of a large share of claims against Lehman ... The liquidity and asset fire sale shock from the Lehman bankruptcy caused a market-wide liquidity shortage."* Federal Reserve and Treasury officials have asked Congress to enact legislation for new authority and procedures for resolving failures of large financial institutions.

*Congressional testimony, May 6, 2009. See http://www.fdic.gov/news/news/speeches/chairman/spmay0609.html.

Why is the monetary base important?

Financial assets included in the monetary base are used for "final" settlement of transactions in the economy—currency for hand-to-hand payment among persons and businesses and deposits at the Fed for bank-to-bank settlement that is irrevocable (including check clearing and wire payments—hence, the label of "base" (that is, basic) money. The components of the monetary base also may be used to satisfy statutory reserve requirements. Historically, too rapid an increase in the monetary base during periods of economic prosperity has been followed by increased inflation. Economic models suggest that, during financial crises, the monetary base may expand greatly without generating higher inflation.

Why were the stress tests performed?

The stress tests were conducted to identify the likely capital needs of the 19 large banking organizations under alternative economic scenarios, including a scenario involving worse economic conditions than are presently

forecast. Uncertainty about the value of real estate loans and other impaired assets (mostly asset-backed securities) in bank portfolios has made it difficult for supervisors and market participants to assess the true condition of the largest banks.

Will the large increase in the Fed's balance sheet and monetary base cause inflation?

Many economists consider deflation to be a greater risk than inflation in the current environment, and a systematic expansion of the Fed's balance sheet and the monetary base is one approach that could help reduce the risk of deflation in the short term. However, base growth must be slowed as deflation risks abate to ensure price stability in the long run. Monetary policymakers cannot lose sight of the longer-term effects of their policies. Monetary policy should address current financial and economic risks, but not compromise long-run price stability and maximum economic growth. The experience of the 1970s showed that the cost of unduly expansionary policies in the short run is higher inflation and greater economic instability in the long run.

Will the stress tests become the new capital standard?

The stress test does not represent a new capital standard and it is not expected to be maintained on an ongoing basis.

With the federal funds rate near zero, is monetary policy still relevant?

Monetary policy remains potent. Even with the fed funds rate at zero, the Fed can continue to influence financial markets and the economy through open market operations and various lending programs. The Federal Reserve's balance sheet expanded rapidly in the fall of 2008, reflecting the Fed's lending initiatives to combat the financial crisis. Fed lending has declined somewhat in 2009, but could increase again if the Term Asset Backed Loan Facility (TALF) or other programs expand. In addition, the Fed has committed to further purchases of long-term Treasury securities, agency debt (i.e., securities issued by Fannie Mae and Freddie Mac), and mortgage-

backed securities, which will further expand the Fed's balance sheet.*

*The monetary base is the sum of currency in circulation and the deposits of banks and other depository institutions with Federal Reserve Banks ("reserves"). The "adjusted monetary base" reflects an adjustment to the monetary base for changes in legal reserve requirements.