

Should the Fed Have a Financial Stability Mandate?

Lessons from the Fed's first 100 Years



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OF DECEME

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Message from the President

Crisis Lending by the Federal Reserve Could Undermine Financial Stability

In 2007 and 2008, the United States was gripped by a financial crisis, to which the Fed responded by making extensive use of its emergency-lending powers. This crisis came a century after the Panic of 1907, the event that prompted the establishment of the Federal Reserve in 1913. Now, as we mark the Fed's centennial, and as many countries revisit their central banks' missions in light of the global financial crisis, it is fitting to examine the Federal Reserve's purpose and ask: what is the central bank's role in promoting financial stability? More specifically, is crisis lending an essential component of a stable financial system? In this year's essay, Renee Haltom and I argue that it is not—and that government intervention might actually lead to more financial instability, not less.



Jeffrey M. Lacker President

Chastened by the Great Depression, when it allowed one-third of the nation's banks to fail, the Fed in subsequent decades appeared eager to expand its lending to troubled financial institutions, including nonbanks, during times of crisis. Beginning in 1970, the Fed, in conjunction with other regulators, initiated a series of rescues that protected the creditors of large, distressed firms: Penn Central Transportation in 1970, Bank of the Commonwealth in 1972, Franklin National Bank in 1974, Continental Illinois in 1984, and Long-Term Capital Management in 1998, among others. The rescues continued during the recent crisis with the creation of a variety of emergency lending programs and support for a few select institutions and markets.

Many policymakers and observers have looked to history to justify the Fed's actions before and during the crisis, for example by claiming that the Fed was created to promote financial stability. But as stated in the preamble to the Federal Reserve Act of 1913, the explicit purpose

of the Fed was to "furnish an elastic currency." At that time, it was difficult for banks to respond to sudden increases in the demand for cash. As a result, interest rates were subject to seasonal spikes, and bank panics were frequent because depositors sought to withdraw funds before payments were suspended. But by lending directly to banks through the discount window, the Fed could help ensure that the supply of currency expanded in accord with demand. The Fed's founders designed the Fed to play a stabilizing role by improving the general circulation of currency, not via the targeted channeling of funds to firms that private markets had deemed less than creditworthy.

Policymakers also described the central bank as the "lender of last resort," an idea that comes from the writings of Henry Thornton in the early 1800s and Walter Bagehot in the



1870s regarding the Bank of England. In the 19th century, lending was the primary way the central bank managed the stock of coins and banknotes in circulation. When Bagehot advocated central bank lending during a crisis, he was advocating an expansion in the supply of currency to meet the increase in demand. But the Fed's emergency lending programs during the crisis were not undertaken to increase the net supply of liquid assets to the economy. Instead, they simply reallocated credit. In other words, the Fed's lending performed a fiscal function, not the monetary function Thornton and Bagehot had in mind.

As long as the Fed's actions increase the stability of our financial system, one might ask, why do modern misinterpretations of history matter? The answer is that the Fed's interventions by themselves can contribute to instability. Those who believe government backstops are necessary subscribe to a view of the financial system as inherently fragile. But an alternative view—and in my opinion a more plausible view—is that government policy actually induces fragility. When the government expands its "safety net," it conveys that market participants can take excessive risks without bearing the full costs. On the margin, funding flows are tilted toward markets that seem most likely to receive government support. The expectation of that support reduces the monitoring efforts of creditors in those markets, allowing borrowers to take even greater risks. Then, when firms fail, government support is invoked again—a cycle we saw play out during 2007 and 2008.

How do we end this cycle? As Haltom and I point out, more regulation is hardly a foolproof way to counter moral hazard. Instead, we must realign the incentives that encourage excessive risk-taking in the first place. One promising avenue is the creation of "living wills," detailed plans that describe how a large, complex financial firm could be wound down within the bankruptcy code without government support. In addition, certain reforms of the bankruptcy code could improve prospects for creating credible resolution plans. Even then, expectations of government support may persist as long as there is the legislative authority to provide that support—which argues for rescinding that authority, including the Fed's emergency lending powers.

What lessons should be drawn from the Fed's first 100 years? One option is to look at the history of financial crises in this country and conclude that central bank intervention is the necessary salve for the financial system's inherent fragility. But as you read the essay, I encourage you to consider instead that an overly broad interpretation of the Fed's role in fact undermines financial stability—and that the best contribution we can make during the next 100 years is to provide monetary stability.

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JEFFREY M. LACKER President





Should the Fed Have a Financial Stability Mandate?

Lessons from the Fed's first 100 Years

By Renee Haltom and Jeffrey M. Lacker

The year 2013 marked the 100th anniversary of the Federal Reserve Act that created the Fed. The Act was passed to address recurrent financial crises, so it is ironic that the Fed's centennial nearly coincided with the global financial crisis of 2007–08, the worst financial crisis in generations.

Federal Reserve lending programs were prominent during the crisis, and the Fed supervised important parts of the financial sector prior to the crisis. Understandably, many policymakers and academics have been asking whether changes to the Fed's responsibilities and authorities are needed to create a more stable financial system.

But what should the Fed's role in financial stability be?

The broad context for this question is the movement in the global central banking community toward more formal financial stability mandates.¹ These efforts have tended to focus on prevention, namely looking for signs of excessive risk-taking in an array of financial markets. In the United States, the 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act enhanced the Fed's surveillance powers and imposed new constraints on risk-taking in the financial sector, all aimed at reducing the probability of the type of financial market turmoil experienced during the recent crisis.² One implication of heightened responsibility for financial stability is that a central bank should use all the tools at its disposal to mitigate identified problems, for example, by curtailing risk through targeted regulatory interventions, or even using monetary policy tools to prevent the negative effects that financial distress could have on central banks' objectives for growth and inflation.

before

Bank Runs

1 Will

Before the founding of the Fed, bank runs were common due to legislative flaws in the currency and banking system. Depositors tried to get their money out before the bank suspended cash withdrawals.



Many of the Fed's past actions in the name of financial stability, however, have come in the form of credit extension once crises are underway, as in the case of the Fed's extraordinary lending to firms and markets in 2007 and 2008. A financial stability mandate would seem to imply a central bank obligation to intervene to alleviate potential damage in cases of financial distress.

Is crisis lending necessary for a stable financial system? Some observers have addressed this question by looking to the history of the Federal Reserve. The 1913 legislation creating the Fed grew out of the reaction to the Panic of 1907, an economic contraction in which many banks experienced runs and suspended depositor withdrawals. One central purpose of the Fed was to respond to such panics, which has been said to justify the broad range of Fed responses to modern financial crises.

Another common rationale for the Fed's emergency lending is the doctrine that a central bank should act as a "lender of last resort," an idea associated with the writings of Walter Bagehot, the 19th century British economist. Episodes in which the Fed failed to act aggressively as lender of last resort-most notably during the wave of bank failures at the outset of the Great Depression, which the Fed did little to prevent-are often described as demonstrating the necessity of crisis lending by the central bank.

This essay argues that these justifications for Fed crisis lending are based on erroneous readings of history. The Fed was originally designed and built to solve a monetary problem, not a lending problem. That monetary problem resulted from legislative restrictions that hindered the banking system's ability to issue currency and redistribute it as needed. Bagehot's 19th century work, too, was intended to encourage the Bank of England to provide liquidity to illiquid but otherwise solvent firms during panics. While this may sound similar to the Fed's actions in 2007 and 2008, Bagehot's prescriptions had more to do with providing monetary stability to the financial system as a whole in the face of panics than allocating credit to targeted sectors or firms as the Fed did during the recent crisis. The Great Depression can be misread as well. The Fed's central failing was that it allowed the money supply to fall precipitously, not that it didn't prevent bank failures.

By contrast, when the Fed has used its lending tools to promote financial stability by limiting creditor losses, the results have been less than salutary. In a series of incidents beginning in the 1970s, the Fed, in cooperation with the Federal Deposit Insurance Corporation, intervened to limit bank failures' effect on creditors. Early interventions were relatively small, but they established precedents that led potential creditors to expect to be rescued in future instances of financial distress, weakening their



Federal Reserve Act

Following the Panic of 1907, the United States took steps toward currency reform. Ultimately, Congress created Federal Reserve Banks that could expand or contract the currency supply quickly to meet demand. President Woodrow Wilson signed the Federal Reserve Act on December 23, 1913.



incentives to limit borrower risk-taking and vulnerability. Government-lending programs often appeared to stabilize markets because they confirmed hopes of intervention, and so have been hailed as successes.³ But this has come at the cost of moral hazard, greater risk-taking, and greater instability down the road.

Tougher regulations may seem like a way to overcome the moral hazard that results from the government's safety net, but that strategy has fallen short in the past. Regulations can be helpful in containing risk, but they are fallible and boost the incentive to move risk-taking outside of regulated sectors. Moreover, a mandate for the central bank to prevent excessive risk-taking is likely to give rise to expectations that it will respond if it fails in that objective by ameliorating the effects with crisis lending. The implied government safety net then encourages riskier behavior. When the government steps in to protect creditors with emergency lending, it continues the self-perpetuating cycle of crisis, intervention, regulation, and regulatory bypass. The result has been an ever-expanding government safety net and an ever-expanding interpretation of the Fed's role in financial stability.

Recent regulatory reforms continue our journey down this path. While the Dodd-Frank Act tried to improve the handling of large failing financial institutions, the capacity to use government resources to protect creditors remains. Instances of financial distress are inevitable, but the anticipation of support is likely to turn them into crises, eliciting ever-more rescues and preventative regulation. A broad and ill-defined financial stability mandate for the Fed would contribute to the cycle of crisis and intervention by fostering the expectation that the Fed will respond to financial instability with all the tools at its disposal, including lending to protect the creditors of large financial institutions.

There is a way to correct this course, however, and it requires clarifying the Fed's role in financial stability. We need to break the cycle by which expectations of intervention beget excessive risk-taking, which begets distress and further interventions. The real lesson of the Fed's first 100 years is that the best contribution the Fed can make to financial stability is to pursue its monetary stability mandate faithfully and abstain from credit-market interventions that promote moral hazard. A careful look at the Fed's first 100 years sheds light on reforms that would truly help ensure financial stability.

What problem were the Fed's founders trying to solve?

Today, the Fed's primary goals are to achieve low, stable inflation and healthy employment. But neither of these goals is why the Fed was created. The Fed's purpose in





"Currency Bill"

Newspaper headlines referred to the Federal Reserve Act as "the currency bill" or "the currency law." The Federal Reserve was originally designed and built to solve a monetary problem, not a lending problem.

1913 was to help the monetary and banking system overcome legislative flaws.

At times, the public would want to convert a substantial amount of its bank deposits into currency. The fundamental problem was that it was costly and cumbersome to increase the supply of currency for banks to meet the demands of depositors. The architects of the Federal Reserve Act often stated that the source of the problem was two-fold.⁴ First, currency was issued by banks, not the government, but all currency was required by the National Banking Acts of 1863 and 1864 to be backed by U.S. government bonds. To issue new currency, banks would have to acquire new bonds and wait for new notes to be printed and shipped by the Bureau of Engraving and Printing, the agency that still prints currency today. This cumbersome process meant the supply of currency could not expand quickly.⁵

Second, the banking system was fragmented. Most U.S. states prohibited banks from establishing branches. When the Fed was founded, there were more than 27,000 banks; virtually every town had its own. Other countries, such as Canada, had no branching restrictions, and this allowed banks to diversify their portfolios. In the United States, the health of many banks hinged on the local economy—often on the season's production of a single crop. Country banks kept deposits in city "correspondent"

banks, which in turn kept deposits in the major money center banks and clearinghouses that were mainly in New York.⁶ When currency demand surged, country banks would ask their correspondent banks for shipments of banknotes, to be paid for from their reserve accounts. But sometimes the demands on the money center institutions were too great, and they refused withdrawal requests to preserve cash for themselves. This resulted in suspensions of payments to depositors, who rushed to be first in line when suspension or failure was feared, resulting in "bank runs." A run on one institution sometimes led to runs on others, resulting in what were known as broader "financial panics."

These two problems had serious consequences. The pressure on the currency supply during the autumn harvest season meant interest rates were significantly higher in the fall than the rest of the year, the equivalent today of the Fed significantly tightening monetary policy every Thanksgiving.⁷ Bank panics could be devastating to economic activity because they disrupted the ability to make payments conveniently. Carter Glass, the senator from Lynchburg, Va., who helped design the Federal Reserve, said that panics, "affected not alone the financial institutions immediately involved, but the merchants whose credits were suspended; the industries whose shops were closed; the railroads whose cars were made idle; the farmers whose crops rotted in the fields; the laborer

Elastic Currency

Federal Reserve notes began to circulate when the regional Reserve Banks opened. Reserve Banks were able to issue currency more quickly than commercial banks, and that ability helped prevent runs on banks, which sometimes were caused by unanticipated surges in demand for cash. This note was issued by the Richmond Fed in 1918.



who was deprived of his wage. No business enterprise, if any individual, ever entirely escaped."⁸ Prior to the Fed's founding, major panics occurred in 1873, 1884, 1890, 1893, and 1907, with many smaller panics and bank failures in between. It was that last particularly disastrous panic in 1907 that finally galvanized the political will—after more than three-quarters of a century without a central bank—to create the Fed.

Congressmen, bankers, and economists all participated in the debate over how to reform the banking system. Discussions centered on laws pertaining to currency. Who should issue it? What would back it? How would oversupply be prevented to preserve its value? Some factions wanted banks to issue currency against their own general assets, sidestepping frictions in the U.S. bond-backed system, but there was little agreement on how to prevent over-issue. Others wanted to broaden membership in the system of private clearinghouses that had averted panics in the late 1800s by pooling the reserves of members and issuing emergency credit. However, many vehemently opposed the accompanying centralization of institutional power. Dismantling restrictions on bank branching and consolidation was viewed as clearly desirable but politically infeasible since farmers and small bankers opposed it, and thus it received little attention.9 After considerable debate over the balance between centralized and regional powers, a federated system of regional Reserve Banks was adopted. The Federal Reserve Act was passed in 1913, and the Fed opened its doors in November 1914.

Was the Fed created for financial stability?

The preamble to the Act stated that the Fed was created to "furnish an elastic currency." This was to take place primarily through loans from the Fed to commercial banks. Banks facing a heightened short-term need for currency could obtain it from their regional Reserve Bank. In exchange, the banks would assign the Reserve Bank some of their own assets at a discount that reflected an implied interest rate—hence, the process was called "rediscounting" the bank's initial loan, and the Fed's lending was called the "discount window."¹⁰

A crucial feature was that only a very specific, limited set of assets were eligible for rediscounting. The Federal Reserve Act reflected elements of "real bills," a doctrine dating to the early 18th century that held that banknotes should be backed exclusively by loans that funded legitimate commercial activity, as opposed to speculative investments.¹¹ Currency issued via such lending would be retired naturally when the economy no longer needed it since the underlying loans would be repaid with the sale of goods and services. In the context of the original





More Bank Runs

During the first few years of the Great Depression, the Federal Reserve reacted passively, allowing one-third of the nation's banks to fail and the money supply to plummet. In March 1933, policemen struggled to control a nervous crowd in front of Bowery Savings Bank in Manhattan.

Federal Reserve Act, only short-term paper arising from commercial transactions or international trade was eligible for rediscounting.¹²

The Fed also was given authority to buy certain securities—assets eligible for rediscounting plus government debt—through open market operations. The intent of open market operations was to strengthen the Fed's ability to control gold flows, but it also provided another tool for expanding the supply of bank reserves and circulating notes, and it would become more important later in the Fed's history.¹³ Open market purchases were made by crediting banks' reserve accounts and had the same effect on the supply of monetary assets—Federal Reserve notes, reserve balances with Federal Reserve Banks, and gold coins and bullion—as discount window loans.

We would argue that the primary goal of the Fed's founders was to achieve monetary stability. "Furnishing an elastic currency" meant that the supply of monetary assets would vary with fluctuations in demand. Instead of interest rate spikes and withdrawal suspensions, swings in the need for currency could be accommodated smoothly and interest rate movements would be dampened. In recent decades, the Fed generally has managed the money supply through open market operations. Purchases and sales are designed to keep a short-term interest rate—the federal funds rate—at a target value set by the Federal Open Market Committee.¹⁴ Open market operations have been the main tool of monetary policy and have been used to manage the money supply to keep inflation low and stable.

In 1914, monetary policy was conducted through direct lending to banks. As a result, the distinction between monetary policy and credit allocation—when policymakers choose certain firms or markets to receive credit over others—was blurred in the language the founders often used. A careful reading of the debates over the Federal Reserve Act makes clear, however, that the only intended type of credit allocation was the one embodied in the real bills doctrine. Federal Reserve lending was to channel credit away from uses that would lead to "speculative excesses," such as call loans in the stock market, and toward more productive uses, such as the "needs of commerce."

The Fed has since abandoned the real bills doctrine, but the central bank has engaged in a different type of credit allocation: preventing losses for the creditors of specific distressed financial institutions or asset markets. This type of credit allocation is often conflated with the lending envisioned at the Fed's founding because the tools are the same. The original Federal Reserve Act was not wellsuited to this contemporary form of credit allocation, however. The Act significantly limited the Fed's ability to support many types of financial entities because only

John Kinger





The federal government initiated a number of banking reforms in the 1930s. This photo shows President Franklin Roosevelt joking with congressman Henry Steagall before signing the Banking Act of 1935. Senator Carter Glass is on the far left, and Fed Chairman Marriner Eccles is on the far right.



member banks had access to the Fed's discount window. Nonmember banks were excluded, as were many other types of financial institutions, including the trusts that were at the center of the Panic of 1907. Moreover, it would be surprising if the founders had included such provisions; they generally opposed guarantee schemes for fear they would encourage banks to take greater risks.¹⁵

Before the Fed's creation, panics were simply an acute manifestation of the broader monetary instability problem. With the latter perceived as solved by the Federal Reserve Act, the Fed's founders largely ignored the question of whether the new system would adequately prevent narrower instances of financial distress at individual banks. The hearings over the Glass-Owen bill that became the Federal Reserve Act featured almost no discussion of whether the legislation sufficiently prevented panics, the role of open market operations in providing backstop liquidity, and whether the legislation's restricted discount window access would impair the Fed's ability to avert crises.16 Moreover, the Act included no provision for relaxing lending standards to resolve panics. If firms couldn't obtain credit under the Fed's strict collateralization rules-in a panic or otherwise-then they were considered to be simply unworthy of credit.

All this indicates that the stabilizing role envisioned by the founders was to provide for the general circulation of currency, not to channel funds to targeted institutions or markets in crises. In other words, it is more accurate to say that the Fed was originally created and designed to ensure monetary stability, not financial stability as the latter term is now understood.

What about Bagehot and the central bank as "the lender of last resort"?

If that's the case, then where did the notion of "lender of last resort" come from? The phrase is associated with Bagehot, the classical economist, who in 1873 refined the earlier work of Henry Thornton on the central bank of England.¹⁷ Bagehot's famous dictum on central bank lending in a crisis is often paraphrased as, "lend freely on good collateral at penalty interest rates." Many people have argued that this is what the Fed did during the recent financial crisis.¹⁸

Bagehot is often misinterpreted, though, because our current financial system is very different from the one he confronted. In those days, the central bank's loan to a bank necessarily increased the money supply; once again, direct lending and monetary policy were intertwined. Today, by contrast, direct lending and monetary policy are separate processes with separate objectives. Direct lending is conducted so as not to have any effect on the overall money supply.¹⁹ In Bagehot's time, central bank lending was

JONATHAN KINSER, SMITH CORONA CORF

Emergency Lending

To meet a perceived need for business lending during the Great Depression, Congress gave the Fed authority to lend directly to businesses in "unusual and exigent" circumstances via section 13(3) of the Federal Reserve Act. The largest of these loans provided \$300,000 to L.C. Smith & Corona Typewriters. After 1936, the Fed did not exercise this emergency lending authority again until 2008.

simply the primary way the money stock was managed. What's more, the Bank of England's discount lending was intermediated through "discount houses," which effectively prevented the Bank from knowing the identities of the borrowing institutions, much less allocating credit based on case-by-case analysis of their financial conditions and interconnections within the financial system.²⁰ Thus, when Bagehot advocated central bank lending in a crisis, he was advocating that the central bank expand the money supply to meet the increase in demand.²¹

Moreover, Bagehot advocated crisis lending only under a specific set of rules-only against good collateral and at above-market interest rates to dissuade firms from relying on central bank credit as a substitute for risk management. Bagehot further advised the central bank to allow insolvent firms to fail if they could not meet those terms, even if their failures might shake market confidence, because the expectation of bailouts would only encourage risk-taking and "rashness." If failures threaten to hurt other firms or the economy at large, Bagehot said the central bank should continue to protect the money stock through liberal lending without relaxing its criteria. And importantly, he said, the central bank should make these policies clear ahead of time to reassure the public that currency will be available and to prevent firms from expecting a central bank safety net to protect them from bad investments.22

The context in which Bagehot wrote is often omitted from modern invocations. Bagehot began work on his famous book Lombard Street in the autumn of 1870, during the Franco-Prussian War. The French central bank already had suspended payments, a move that threatened to heighten gold demands on the Bank of England. Bagehot felt the Bank of England needed to maintain a large stock of gold to reassure markets that the currency supply would be protected. In fact, much of Lombard Street was about that need, not panics.²³ However, he wrote, if the large gold stock wasn't enough to allay panic, the Bank of England should follow the "brave plan" and lend liberally. Such lending would be "brave" because the Bank of England was set up to be accountable to stockholders, so the profit motive made it naturally reluctant to lend in riskier times. Bagehot's dictum to "lend freely at a penalty rate" was intended to encourage a risk-averse Bank of England to lend.

The Fed faces the opposite dilemma because it lends taxpayer dollars. The Fed receives no appropriations from Congress, but it remits all profits in excess of operational costs to the U.S. Treasury, so taxpayers bear both profit and losses from the Fed's investments. The challenge for the Fed is how to resist the temptation—and perhaps political pressure—to over-lend.²⁴ Singling out Bagehot's dictum about crises glosses over his emphasis on protecting the overall money stock in both normal and crisis times and his vigilance regarding moral hazard.

JOHNSKIEGE



FDIC Coverage

In addition to dividing commercial and investment banking, the Banking Act of 1933 (often called the Glass-Steagall Act) created the Federal Deposit Insurance Corporation (FDIC). In January 1934, the FDIC began insuring bank deposits up to \$2,500. Six months later, the FDIC doubled its coverage limit to \$5,000.



The Fed's lending during the 2007–08 financial crisis bore little resemblance to what Bagehot had in mind. First, it was not monetary in nature. For most of the crisis, the Fed ensured that its unusual lending had no monetary impact by sterilizing the effects on the money supply (that is, simultaneously selling an equivalent amount in Treasury securities). In fact, until interest rates were effectively reduced to zero in late 2008, the Fed's interest rate targeting procedures made the supply of monetary assets vary automatically with movements in demand, without the need for special lending. When the Fed's balance sheet did grow in late 2008, it was primarily a byproduct of its targeted lending to support the flow of credit to particular markets, notably mortgage markets; it did not emerge primarily from a desire to ease monetary conditions.²⁵ Much of the Fed's crisis response was openly about allocating credit to specific sectors and institutions perceived as being in trouble, not about managing the money supply.

The Fed's crisis response departed from Bagehot's recommendations in other ways as well. The Fed provided financing in connection with two arguably failing institutions, Bear Stearns and American International Group. The Fed protected countless other creditors through emergency lending to support asset prices. No pre-announced policy governing intervention was articulated or followed. The Fed failed to charge penalty interest rates in some cases and took on credit risk by accepting troubled and difficult-to-value securities as collateral.²⁶

Bagehot and the traditional conception of a lender of last resort thus provide scant support for the interventions that the Fed undertook in the name of financial stability during the recent crisis.

Would failure to lend have caused another Great Depression?

Advocates of strong central bank actions to promote financial stability often cite the Great Depression, when the Fed reacted passively, allowing a third of the nation's banks to fail between 1930 and the banking holiday of 1933. The Fed's policy failure at the outset of the Depression was a principal finding of Milton Friedman and Anna Schwartz in their famous 1963 book, *A Monetary History of the United States*. It prompted Ben Bernanke, himself a scholar of the Depression, to tell Friedman and Schwartz in 2002, "You're right, we did it. We're very sorry. But thanks to you, we won't do it again." The Fed has never repeated the mistake.

In the 1930s, the Fed could have lent to prevent bank failures but did not. In part, this reluctance reflected the real bills doctrine, which, under the circumstances, encouraged Reserve Banks to be overly conservative.²⁷





Discount Window

After 1951, the discount window became less important for conducting monetary policy and was mostly used for allocating credit to specific firms. In those days, the discount window was a physical window at each Reserve Bank, as shown in this 1960s photo from the New York Fed.

Reserve Banks also resisted conducting open market purchases because that would drive down interest rates and lead to gold outflows, jeopardizing their ability to defend the gold standard.²⁸ The money supply contracted by a third from 1929 to 1933, with a commensurate fall in the overall price level. Friedman and Schwartz emphasized the devastating impact of this dramatic and unanticipated deflation. Loan defaults rose as borrowers struggled to acquire the dollars they needed to repay debts.

Bank failures were less important than the collapse of the money supply. For example, Canada had zero bank runs or failures during the same time period, but it also had a severe depression after its money supply declined by 13 percent.²⁹ To be sure, bank failures hastened withdrawals and reduced deposits, worsening the money supply decline. But the Fed could have offset that by increasing bank reserves through open market operations. Indeed, the contraction slowed when open market operations were conducted in the spring of 1932, and the contraction resumed when the Fed reversed course later that year.³⁰ Friedman and Schwartz concluded that, "If [failures] had occurred to precisely the same extent without producing a drastic decline in the stock of money, they would have been notable but not crucial. If they had not occurred, but a correspondingly sharp decline had been produced in the stock of money by some other means, the contraction would have been at least equally severe and probably even more so."31

The lesson, then, is that central banks should prevent deflation, not necessarily bank failures. The Great Depression was a failure of monetary stability, not financial stability.

WHY IS TOO MUCH LENDING RISKY?

After 1951, the Fed shifted the purpose of the discount window from being a tool for monetary policy to primarily one for allocating credit to specific firms.³² A 1968 Fed report noted that borrowing averaged less than 2 percent of total Fed credit extended from the 1930s to the mid-1960s.³³ The report explicitly adopted, seemingly for the first time, the role of lender of last resort "when liquidity pressures threaten to engulf whole classes of financial institutions." Though the report emphasized that the Fed's function is not to provide a "bail-out operation," it provided great detail on how existing laws might enable the Fed to extend credit to nonmembers and nonbanks in emergencies.

The report was prescient because the Fed was called to perform this function within two short years. In a series of incidents, the Fed and other regulators began intervening in ways that rescued the creditors of large, distressed financial firms. After the Penn Central railroad defaulted on \$82 million in paper obligations in 1970, the Fed indirectly supported securities markets by encouraging banks to borrow from the Fed to purchase

John Kiklege



n Central Support

Penn Central Support

When Penn Central Transportation defaulted on \$82 million in commercial paper, the Fed assured banks that it would provide backstop funding for their loans to commercial paper issuers. The action conveyed that the Fed was willing to support broader financial markets not just banks.



commercial paper. In 1972, the FDIC gave the \$1.2 billion Bank of the Commonwealth a \$60 million line of credit that prevented its failure after rising interest rates produced significant losses on municipal debt. After escalating losses in 1974, the Fed lent \$1.7 billion to Franklin National Bank, accepted deposits from its foreign branch as collateral, and assumed \$725 million of its foreign exchange book. When the \$40 billion bank Continental Illinois was pulled under by bad loans in 1984, it was able to borrow from the discount window even as it was receiving a capital injection from the FDIC. The FDIC committed to guaranteeing deposits even above the statutory limit of \$100,000, and it gave the bank and its parent company a permanent capital infusion.³⁴

These were among the largest examples of government rescues, but there were many others. From 1985 through 1991, 530 discount window borrowers failed within three years of borrowing from the Fed; 437 of them had the lowest possible examiner rating, and 60 percent of them had outstanding discount window loans when they failed.³⁵

The Fed and the FDIC operated in concert. Fed lending bought time for the FDIC to arrange for the institutions to be sold or kept afloat with FDIC funds. Fed lending also provided time for uninsured creditors—that is, those who had not been explicitly promised support before the trouble began—to exit without losses, increasing the cost of the failure to the FDIC. Between 1986 and 1991, the average size of troubled banks that the FDIC liquidated without protection of uninsured creditors was \$65 million, while the average size of banks whose uninsured creditors were protected was \$200 million.³⁶

In the most well-known cases, the government's stated concern was not the welfare of a single institution's creditors, but the possibility that, if the institution failed, funding costs would rise for other market participants.³⁷ In each case, the government intervened rather than test the market's ability to weather spillovers, and these actions successfully quelled the immediate volatility. Note that government intervention was unlikely to prevent knowledge from spreading about a given firm's trouble. The primary spillover that was affected was the inference investors drew about the government's willingness to intervene to support other market participants.

A strong case can be made that these interventions caused greater instability down the road. When the government defines in advance institutions that have access to its liquidity, it can tax and regulate those firms accordingly, offsetting moral hazard and constraining risk-taking. By contrast, when the government suddenly expands its safety net in the face of threats to firms and markets that have not been taxed and regulated, or when it prolongs the life of insolvent firms, it conveys that market



<image>

Too Big to Fail?

The government rescue of Continental Illinois the largest U.S. bank to fail before 2008—gave popular rise to the term "too big to fail" and was followed by a string of government rescues. From 1985 to 1991, more than 500 banks failed within three years of borrowing from the discount window. Most of them had the lowest possible examiner rating. Reforms in 1991 made bank bailouts harder but expanded the Fed's 13(3) authority.

participants can take excessive risks without bearing the full costs. On the margin, funding flows to markets that seem most likely to receive government support. The expectation of that support reduces the monitoring efforts of creditors, so those borrowers can take greater risks. When firms fail, government support is invoked again.

As this narrative suggests, failures and the safety net have grown successively larger. Richmond Fed researchers calculate that, by 1999, approximately 45 percent of the financial sector was either explicitly protected by the government, or investors could reasonably expect protection because of past statements and actions. The protected portion rose to as much as 57 percent after the government's activities during the financial crisis.³⁸ The size of the safety net suggests that moral hazard is a significant presence in our financial system.

IS EMERGENCY LENDING NECESSARY?

Our current financial system has changed dramatically over the past century. Banks and trusts dominated the landscape in 1913. The system now includes an interconnected web of banks and investment companies, including mutual funds, private equity pools, hedge funds, and others. These institutions operate with opaque interconnections and on a global scale, and they ultimately fund the bulk of economic activity.³⁹ They use an array of complex financial instruments, and some perform bank-like functions in the sense that they accept very short-term instruments that function much like "deposits," and use them to fund longer-term investments.

A common argument given for preserving the Fed's emergency lending powers, despite the risks described above, is that the government must retain some way to provide backstop financial assistance to treat the fragilities inherent in banking.40 The essence of the financial crisis, in this view, was that many investors declined to roll over short-term, deposit-like investments in a process resembling a bank run. As the shadow banking system emerged over the past century, no official institution emerged to create an "elastic currency" for it-that is, a reliable supply of short-term credit instruments to fund the shadow banking system.⁴¹ In this narrative, the Fed's special lending programs during the financial crisis of 2007-08 simply provided an elastic currency to protect the needs of commerce. Many observers have described the crisis as a classic banking panic.42

If the fragility we recently observed were due mostly to inherent fragilities in banking, we should expect to see similar financial crises with some consistency across countries over time. Yet history shows that the occurrence of financial crises is very unevenly distributed. They were



Rescuing LTCM

The Federal Reserve helped organize a multibillion-dollar bailout of Long-Term Capital Management (LTCM), a hedge fund whose clients and creditors included the biggest firms on Wall Street. Though the Fed did not fund the bailout, the Fed convened leaders of those firms on the 10th floor of the New York Fed and urged them to devise a private rescue plan.



particularly prevalent during some periods but noticeably less frequent in others. The 1920s and 1930s, for example, and the period since 1973 have seen significantly more frequent crises than the classical gold standard period or the Bretton Woods era.43 And many countries have experienced far fewer crises than the United States, a fact documented in studies by Michael Bordo and Barry Eichengreen, Carmen Reinhart and Kenneth Rogoff, and Charles Calomiris and Stephen Haber.

Canada provides a particularly compelling example of a country that is quite similar to the United States but has avoided systemic banking panics altogether since 1839, despite the lack of a central bank until the mid-1930s. In the late 19th century, Canada allowed bank branching and less-restrictive issuing of banknotes, which made their banking system better able to respond to regional economic shocks. These features afforded Canadian banks an "elastic currency" with no central bank. If needed, Canadian banks could shift reserves between them, and the confidence that this would take place seemed sufficient to ward off runs. The system was concentrated enough that banks could monitor each other's operations to offset the moral hazard that might otherwise arise from this private backstop.44

One reason we may not see crises consistently is that financial institutions face a different set of incentives across countries and time periods to fund themselves with short-term debt. There are alternative funding methods that aren't as vulnerable to sudden demands for withdrawals. If financial institutions choose to fund themselves with short-term, demandable debt, they can include provisions that make them more resilient, therefore reducing the incentive for runs.⁴⁵ Many of these safeguards already exist: contracts often include limits on risk-taking, requirements for borrowers to maintain a degree of liquidity, overcollateralization, and other mechanisms.⁴⁶ Moreover, contractual provisions can explicitly limit investors' ability to flee suddenly, for example, by requiring advance notice of withdrawals or allowing borrowers to restrict investor liquidations. Indeed, many financial entities outside the banking sector, such as hedge funds, avoided financial stress by adopting such measures prior to the crisis.47

Yet, leading up to the crisis, many financial institutions chose funding structures that left them vulnerable to sudden mass withdrawals. Why? Precedents established over the previous four decades arguably convinced market participants of an implicit government commitment to provide liquidity in the event of significant financial distress. Larger bank holding companies relied to a greater extent on the short-term credit markets that ended up receiving government support during the crisis.⁴⁸ As the crisis unfolded, beginning in the summer





Lehman Bankruptcy

The financial crisis escalated quickly after Lehman Brothers declared bankruptcy in September 2008. The federal government and the Federal Reserve had rescued other large financial firms, such as Bear Stearns, but they allowed Lehman to fail.

of 2007, the Federal Reserve took actions that are likely to have further influenced expectations regarding support. In August 2007, the Fed lowered the discount rate and urged banks not to think of borrowing as a sign of weakness. In December 2007, the Fed implemented the Term Auction Facility in order to make credit available on more favorable terms.

The effect of these policy decisions is often underappreciated. They likely dampened the willingness of troubled institutions, such as Bear Stearns and Lehman Brothers, to undertake costly actions to shore up their positions, whether by raising capital, selling assets, or reducing their reliance on short-term funding. These incentives were further entrenched when the New York Fed funded JPMorgan's purchase of Bear Stearns in March 2008; for example, credit rating agencies considered the government's support of Bear Stearns in their decisions to leave Lehman Brothers with high ratings just before its collapse.⁴⁹ When Lehman Brothers was allowed to fail in September 2008, despite being a much larger institution than Bear Stearns, these expectations were reevaluated suddenly, spurring the most volatile days of the financial crisis. Allowing Lehman to fail could have been the start of a new, more credible precedent against bailouts; but that same week, American International Group received assistance from the New York Fed, further confusing already volatile markets.

After decades of expanding the financial safety net, the precedents set during the crisis may have been the most consequential of all.

IS THERE A BETTER PATH TO FINANCIAL STABILITY?

The moral hazard that results from government support is not a new revelation. Dating back to the 1930s, policymakers have acknowledged it with virtually every step that expanded or reinterpreted the government's reach.⁵⁰ From the Depression to the bank failures of the 1970s and 1980s, major crises have prompted sweeping reforms to constrain risk-taking and prevent future financial distress. Yet, at each turn, policymakers have been unwilling to relinquish the ability to funnel credit to particular markets and firms in perceived emergencies.⁵¹ One can understand why, because such lending, by confirming hopes for intervention, appears to stabilize markets, as it did in 2007 and 2008. The approach instead has been to retain that power and attempt to counter moral hazard with enhanced supervision.

The most recent crisis was no exception. The 2010 Dodd-Frank Act tightened limits on risk-taking and increased supervision, especially for "systemically important" financial firms. Title I of the Act allows regulators to constrain the activities of firms if their



Expanding the Safety Net

In October 2008, President George W. Bush signed the Emergency Economic Stabilization Act, which temporarily bolstered FDIC insurance coverage from \$100,000 to \$250,000. Then, in 2010, the federal government permanently increased deposit coverage to "at least \$250,000."



managements are unable to create a credible plan for their orderly wind-down in bankruptcy. Title II gives the FDIC authority to facilitate a firm's resolution if unassisted failure would threaten financial stability. Dodd-Frank prohibits the Fed from extending loans to specific firms under section 13(3) of the Federal Reserve Act, requiring instead that all 13(3) loans have "broadbased eligibility" and advance Treasury approval. The preamble to the Dodd-Frank Act states that one of its objectives is to end "too big to fail," the term often used to describe the government's historical tendency for bailouts of large, interconnected firms.⁵²

Regulation, however, is far from foolproof as a way to counter moral hazard. To be sure, safety and soundness regulation is critically important given the size of the financial safety net. But regulations tend to take the current world as static, when in fact the world changes quickly, especially in response to new regulations. The emergence of the shadow banking system, for example, was a response to risk-taking limits imposed on traditional banks. Surveillance helps but may not keep up with innovation. In each past reform episode, policymakers have hoped they had their arms around risk-taking, and in the next episode, risk showed up in new places.

Thus, the real work of ensuring financial stability must start with addressing the incentives that encourage exces-

sive risk-taking. Dodd-Frank does not accomplish this; like past reforms, policymakers retained broad discretion to conduct bailouts.53 An important difference between resolution authority under Dodd-Frank's Title II and the normal bankruptcy code is that the former gives the FDIC the ability to borrow from the Treasury to pay creditors of a failed firm, and it gives the FDIC broad discretion to determine which creditors to pay.⁵⁴ Thus, creditors still can reasonably expect government support based on the government's past actions, with the attendant deleterious effects on their incentives to monitor a firm's activities. Moreover, Dodd-Frank's restrictions on 13(3) lending do not prevent bailouts. When large firms are in trouble, it can be hard to distinguish between market distress and firm distress, and a broad-based lending program could be particularly attractive for a distressed firm.

At the same time, Dodd-Frank provides one of the most promising avenues for scaling back the perceived government backstop. Title I requires large firms to create "living wills," detailed plans for how each firms' operations could be rapidly wound down in an orderly manner under the U.S. bankruptcy code without government assistance. The Fed and the FDIC can jointly determine that a firm's proposed plan is not credible. In that case, if the firm does not revise the plan to regulators' satisfaction, they can impose changes to the firm's





Dodd-Frank Act

Responding to the financial crisis of 2007-08, Congress passed the Dodd-Frank Wall Street Reform and Consumer Protection Act, the most far-reaching reform of financial regulation since the Great Depression. President Barack Obama signed the Dodd-Frank Act on July 21, 2010.

structure and operations that would make the firm resolvable without government assistance. Establishing credible living wills will be hard work.⁵⁵ However, they currently provide the best hope for ending bailouts of "too big to fail" firms because they prompt regulators to create conditions under which they consistently prefer unassisted bankruptcy to bailouts. With a credible alternative to bailouts available, investors would have reason to expect that unassisted bankruptcy would be the norm, and firms would have a strong incentive to implement their own safeguards against runs.

In addition, certain reforms of the bankruptcy code could improve prospects for credible resolution plans. Currently, if a borrower files for bankruptcy, a provision of the code known as the "automatic stay" prevents creditors from seizing collateral or taking certain other actions against the borrower. The borrower's assets are essentially frozen until bankruptcy courts can oversee the development and adoption of a plan for the distribution of assets to creditors. Certain financial contracts, such as repurchase agreements and some derivatives, are exempt from this provision, and counterparties in such contracts are entitled to immediately liquidate their positions and seize collateral. Exemptions to the automatic stay were added to the bankruptcy code and enhanced in 2005 because it was felt that allowing derivatives counterparties to liquidate their positions

immediately would reduce the incentive for lenders to run before bankruptcy is declared. The exemption creates instability in other ways, however. It reduces creditors' risk, and so distorts incentives toward greater use of exempted contracts, and diminishes the lender's incentive to monitor the firm. It presents the possibility of additional market volatility after a failure as lenders are liquidating their positions, and it can diminish the value of the failed firm, both of which make it more tempting for the government to rescue large firms.⁵⁶ Reforming the bankruptcy code to limit these exemptions would enhance stability.⁵⁷

If expectations of government intervention were to persist, even with credible living wills and a better bankruptcy code, market participants would face dampened incentive to avoid fragile arrangements. Those expectations are likely to persist as long as there is the legislative authority to provide that support, such as the power to use the Orderly Liquidation Fund to protect creditors in a Title II FDIC resolution. This power will be unnecessary and obsolete once credible living wills are in place. At that point, repeal of Title II would enhance financial stability. The Fed still possesses expansive authority to conduct bailouts, however, since it can lend to various parties in the broader financial system without special congressional approval. Rescinding section 13(3) entirely would be a useful step toward establishing a credible commitment

JOHNAKEGE





Centennial Commemoration

The Federal Reserve commemorated its 100th anniversary in December 2013. To learn more about lessons from its first 100 years, visit <u>www.federalreservehistory.org</u>. This website provides hundreds of photos, biographies, and essays illuminating the events, people, and purposes that have influenced Fed decision-making for the past century.



to resolve failing financial institutions without rescuing creditors. The same reasoning suggests imposing clearly articulated restrictions on discount window lending, strictly limiting it to good collateral at penalty interest rates, as Bagehot suggested.⁵⁸

The steps outlined above won't eliminate instances of financial distress. But optimal financial stability does not mean the absence of financial firm failures and creditor losses. Indeed, a well-functioning financial system must allow firms to fail, even if they are large and

interconnected. Financial stability is to be found in the financial system's resilience to potential triggering events—without government assistance. The steps described above may be our best chance at achieving true financial stability.

The Fed's emergency lending authority is anachronistic and unnecessary for the Fed's core mission of providing monetary stability. In a panic, open market operations are capable of flooding the market with liquid assets. For this reason, some economists have argued that the discount window is obsolete.⁵⁹ Removing discretionary lending authority would prevent future policymakers from feeling trapped into lending by the effects of expectations of support.

A critical lesson from the Fed's first 100 years is that an overly broad interpretation of the Fed's role in financial stability in fact undermines financial stability, contributing to a cycle of moral hazard, financial failures, and rescues. The Fed already has the tools and mandate it requires to provide monetary stability, which is its best contribution to financial stability.



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The views expressed are those of the authors and not necessarily those of the Federal Reserve Bank of Richmond or the Federal Reserve System.



ENDNOTES

- 1. For a summary, see Bank for International Settlements (2011).
- 2. There is clear support for a formal financial stability mandate in the United States. A near-final version of the 2010 Dodd-Frank Act almost took this step, stating that, "The Board of Governors shall identify, measure, monitor, and mitigate risks to the financial stability of the United States." For unexplained reasons, the phrase was dropped in conference. Some parties have even argued that a financial stability mandate already exists by virtue of the Fed's other mandates. For example, see Bank for International Settlements (2011), Dudley (2013b), Baxter (2013), and Tarullo (2012).
- 3. For a review of literature on the effectiveness of crisis lending programs, see Fleming (2012).
- 4. For example, see Warburg (1930, 12-13) and Glass (1922, 4-7).
- 5. Cagan (1963)
- 6. Keeping deposits in other banks also facilitated check clearing in the days when physical checks traveled by horse and carriage. Reserves allowed "correspondent" banks to immediately cash each other's checks by drawing down the correspondent's reserve balance (Lacker, Walker, and Weinberg 1999).
- 7. Miron (1986)
- 8. Glass (1922, 5-7)
- 9. Sprague (1910, 249–251); Glass (1922, 5); Calomiris (1990); Wicker (2005, 2–3). Alternatives to currency reform and the Fed were discussed but did not gain traction. In addition to bank branching, deposit insurance was considered, but large banks objected under the argument that it would force them to subsidize the risk-taking of small banks (Flood 1992). For more discussion on how the reform debate evolved prior to the Federal Reserve Act, see Wicker (2005), Warburg (1930, Chapter 1), and Willis (1923).
- 10. To make the loan, the lending Reserve Bank would credit the borrowing bank's reserve account. The bank could then withdraw the reserves in the form of currency (Federal Reserve notes) if so desired.
- 11. To be precise, the real bills doctrine said that if banks lent against only sound, short-term paper, the money supply would automatically match the needs of commerce. The doctrine has since been discredited for ignoring the fact that inflation would itself create a greater demand for currency to fund trade. See Humphrey (1982) for more discussion.
- 12. The Federal Reserve Act itself did not indicate that only "self-liquidating" loans were eligible, a defining component of real bills (Humphrey 1982). However, maturity limits were imposed, and the same month the Fed opened, the Board clarified in its accompanying regulations that notes funding permanent or fixed investments, like land and capital, were ineligible for rediscounting. That exclusion was lifted in 1973, though maturity limits remained (Hackley 1973, 35–37).
- 13. If the Fed created an artificial shortage of reserves through asset sales, banks would be forced to borrow from the Fed at the discount rate,

which would ensure its influence over other market rates, and therefore gold flows. Policymakers at the Fed disagreed over whether open market operations were contradictory to real bills (Meltzer 2003, 263–264).

- 14. Hetzel (2004)
- 15. Carter Glass, who coauthored the Glass-Owen bill that became the Federal Reserve Act, was a well-known opponent of deposit insurance. Federal deposit insurance was nonetheless incorporated into the Glass-Steagall Act of 1933 as an 11th-hour addition in exchange for the support of Alabama Rep. Henry Steagall for the bill's many other provisions that Glass advocated. Steagall represented many small banks that would be kept viable by deposit insurance in the face of increasing bank branching and consolidation (Flood 1992; Economides, Hubbard, and Palia 1996).
- 16. Wicker (2005, 78)
- 17. Thornton and Bagehot never actually used the phrase "lender of last resort." The first popular English usage was in 1932 in Art of Central Banking by R.G. Hawtrey, although Sir Francis Baring in 1797 did refer to the Bank of England as "the dernier resort," a source of liquidity for banks in a crisis (Humphrey 1989).
- 18. For example, see Madigan (2009) and Wolf (2014).
- Discount window loans increase the supply of bank reserves, and in normal times are offset to prevent downward pressures on the federal funds rate, the FOMC's targeted interest rate.
- 20. Capie (2002, 311)
- 21. Goodfriend and King (1988)
- 22. See Humphrey (1989) for more discussion on what Thornton and Bagehot intended. Bordo (1990) reviews how well central banks have adhered to these prescriptions throughout history.
- 23. Rockoff (1986)
- 24. This point is argued by Goodfriend (2012).
- 25. In an October 2009 speech, then-Chairman Ben Bernanke said, "Although the Federal Reserve's approach ... entails substantial increases in bank liquidity, it is motivated less by the desire to increase the liabilities of the Federal Reserve than by the need to address dysfunction in specific credit markets.... For lack of a better term, I have called this approach 'credit easing.""
- 26. Madigan (2009); GAO (2013b); Goodfriend (2012).
- 27. Richardson and Troost (2009)
- 28. Eichengreen (1992)
- 29. Friedman and Schwartz (1963, 352)
- 30. See essays about the Great Depression era on federal reserve history.org.
- 31. Friedman and Schwartz (1963, 352)
- 32. Hackley (1973, 185-188)



- 33. Board of Governors (1968)
- 34. For more on these episodes, see Sprague (1986) and Carlson and Wheelock (2013).
- 35. Schwartz (1992). The appendix in Sprague (1986) lists the 100 largest banks that received FDIC assistance from the Depression through 1985. Continental Illinois and Franklin National were ranked first and fourth, respectively.
- 36. FDIC (1997)
- 37. Sprague (1986) provides detailed insight on the internal discussions that took place among regulators in these instances. The Fed was, more often than not, in complete support. Sprague notes, "What were the real reasons for doing the [bailouts]? Simply put, we were afraid not to."
- 38. Marshall, Pellerin, and Walter (2013)
- 39. Pozsar, Adrian, Ashcraft, and Boesky (2010)
- 40. Dudley (2013a)
- 41. Gorton (2010); Gorton and Metrick (2013)
- 42. See Bernanke (2013b), Gorton (2010), and the Federal Open Market Committee meeting transcripts from 2008, among others.
- 43. Bordo, Eichengreen, Klingebiel, and Martinez-Peria (2001)
- 44. Bordo, Redish, and Rockoff (1996); Williamson (1989)
- 45. Wallace (1988); Green and Lin (2003); Ennis and Keister (2010)
- 46. Bernanke (2012)
- 47. Aragon (2007); Zuckerman (2008)
- 48. GAO (2013b)
- 49. In a September 2009 House subcommittee hearing, Moody's chairman and CEO Raymond McDaniel said, "An important part of our analysis was based on a review of governmental support that had been applied to Bear Stearns earlier in the year. Frankly, an important part of our analysis was that a line had been drawn under the number five firm in the market, and number four would likely be supported as well."
- 50. Moral hazard was acknowledged during the debates surrounding deposit insurance (Flood 1992), the Board's apparent adoption of the lender of last resort role (Board 1968), the first time the Fed purchased mortgage-related securities in 1971 (Haltom and Sharp 2014), the bailouts of the 1970s and 1980s (Sprague 1986), and the actions during the financial crisis that motivated the Dodd-Frank Act—among other instances.
- 51. A notable example was 1991's Federal Deposit Insurance Corporation Improvement Act. FDICIA limited the FDIC's ability to rescue firms and limited the Fed's ability to lend to insolvent ones. However, FDICIA loosened collateral requirements for the Fed's 13(3) emergency lending facility, granting what former Fed Chairman Alan Greenspan in 2010 called "virtually unlimited authority to the Board to lend in 'unusual and exigent circumstances."

- 52. The phrase "too big to fail" was made popular after the failure of Continental Illinois, when Comptroller of the Currency C.T. Conover explicitly stated that regulators were unlikely to allow the nation's 11 largest multinational banks to fail. Congressman Stewart McKinney responded, "let us not bandy words. We have [created] a new kind of bank. It is called too big to fail. TBTF, and it is a wonderful bank."
- 53. Of too big to fail, Bernanke stated in a March 2013 press conference, "I never meant to imply that the problem was solved and gone. It is not solved and gone; it's still here ..."
- 54. Pellerin and Walter (2012)
- 55. Lacker (2013b)
- 56. The Government Accountability Office notes that approximately 80 percent of Lehman's derivative counterparties terminated their contracts after the firm filed for bankruptcy, exacerbating Lehman's losses and leading to run-like behavior in money market mutual funds and other markets (GAO 2013a, 45–46).
- 57. Roe (2011); Duffie and Skeel (2012)
- 58. One example of an attempt to prevent government lending to insolvent firms is the "Prompt Corrective Action" provision of the Federal Deposit Insurance Act. PCA imposes increasingly aggressive restrictions on banks as their capital levels fall, although capital levels may not be sufficient as a measure of solvency because lags in the recognition of losses mean that the book value of capital is a backward-looking measure that can overstate the net worth of a bank. PCA has failed to limit the cost to the FDIC of failed banks, and regulators are considering changes (GAO 2011).
- 59. See Goodfriend and King (1988); Schwartz (1992).

REFERENCES

- Aragon, George O. 2007. "Share Restrictions and Asset Pricing: Evidence from the Hedge Fund Industry," *Journal of Financial Economics* 83: 33–58.
- Bagehot, Walter. 1873. Lombard Street: A Description of the Money Market. London: S. King and Co.
- Bank for International Settlements. May 2011. "Central Bank Governance and Financial Stability." Study Group Report.
- Baxter, Thomas C., Jr. November 15, 2013. "Financial Stability: The Role of the Federal Reserve System." Remarks at the Future of Banking Regulation and Supervision in the EU Conference, Frankfurt, Germany.
- Bernanke, Ben S. November 8, 2002. "On Milton Friedman's Ninetieth Birthday." Remarks at the Conference to Honor Milton Friedman, University of Chicago, Chicago, Ill.
- Bernanke, Ben S. October 8, 2009. "The Federal Reserve's Balance Sheet: An Update." Speech at the Federal Reserve Board Conference on Key Developments in Monetary Policy, Washington, D.C.



- Bernanke, Ben S. April 3, 2012. "Some Reflections on the Crisis and the Policy Response." Speech at the Russell Sage Foundation and The Century Foundation Conference on "Rethinking Finance," New York, N.Y.
- Bernanke, Ben S. March 20, 2013a. Transcript of Chairman Bernanke's Press Conference. Board of Governors of the Federal Reserve System, Washington, D.C.
- Bernanke, Ben S. November 8, 2013b. "The Crisis as a Classic Financial Panic." Speech at the Fourteenth Jacques Polak Annual Research Conference, Washington, D.C.
- Board of Governors of the Federal Reserve System. 1968. "Reappraisal of the Federal Reserve Discount Mechanism." Report of a System Committee.
- Bordo, Michael D. January/February 1990. "The Lender of Last Resort: Alternative Views and Historical Experience." Federal Reserve Bank of Richmond *Economic Review*, 18–29.
- Bordo, Michael D., and Barry Eichengreen. 2003. "Crises Now and Then: What Lessons from the Last Era of Financial Globalization." In *Monetary History, Exchange Rates and Financial Markets: Essays in Honor of Charles Goodhart, Volume 2*, edited by Paul Mizen, 52–91. London: Edward Elgar Publisher.
- Bordo, Michael D., Barry Eichengreen, Daniela Klingebiel, and Maria Soledad Martinez-Peria. April 2001. "Is the Crisis Problem Becoming More Severe?" *Economic Policy* 16 (32): 51–82.
- Bordo, Michael D., Angela Redish, and Hugh Rockoff. April 1996. "A Comparison of the Stability and Efficiency of the Canadian and American Banking Systems, 1870–1925." *Financial History Review* 3 (1): 49–68.
- Bordo, Michael D., and David C. Wheelock. February 2011. "The Promise and Performance of the Federal Reserve as Lender of Last Resort 1914–1933." National Bureau of Economic Research Working Paper No. 16763.
- Cagan, Phillip. 1963. "The First Fifty Years of the National Banking System." *In Banking and Monetary Studies*, edited by Deane Carson, 15–42. Homewood, Ill.: Richard D. Irwin.
- Calomiris, Charles W. June 1990. "Is Deposit Insurance Necessary? A Historical Perspective." *Journal of Economic History* 50 (2): 283–295.
- Calomiris, Charles W., and Stephen H. Haber. 2014. *Fragile By Design*. Princeton, N.J.: Princeton University Press.
- Capie, Forrest. 2002. "The Emergence of the Bank of England as a Mature Central Bank." In *The Political Economy of British Historical Experience 1688–1914*, edited by Donald Winch and Patrick O'Brien, 295–315. London: Oxford University Press.
- Carlson, Mark A., and David C. Wheelock. February 2013 (Revised). "The Lender of Last Resort: Lessons from the Fed's First 100 Years." Federal Reserve Bank of St. Louis Working Paper Series No. 2012-056B.
- Diamond, Douglas W., and Philip H. Dybvig. June 1983. "Bank Runs, Deposit Insurance, and Liquidity." *Journal of Political Economy* 91 (3): 401–419.
- Dudley, William C. February 1, 2013a. "Fixing Wholesale Funding to Build a More Stable Financial System." Remarks at the New York Bankers Association's 2013 Annual Meeting & Economic Forum, New York, N.Y.
- Dudley, William C. June 23, 2013b. "Why Financial Stability is a Necessary Prerequisite for an Effective Monetary Policy." Remarks at the Andrew Crockett Memorial Lecture, Bank for International Settlements 2013 Annual General Meeting, Basel, Switzerland.

- Duffie, Darrell, and David Skeel. 2012. "A Dialogue on the Costs and Benefits of Automatic Stays for Derivatives and Repurchase Agreements." In *Bankruptcy Not Bailout: A Special Chapter 14*, edited by Kenneth E. Scott and John B. Taylor. Stanford, Calif.: Hoover Institution Press.
- Economides, Nicholas R., Glenn Hubbard, and Darius Palia. October 1996.
 "The Political Economy of Branching Restrictions and Deposit Insurance: A Model of Monopolistic Competition among Small and Large Banks." *Journal of Law and Economics* 39 (2): 667–704.
- Eichengreen, Barry. 1992. Golden Fetters: The Gold Standard and the Great Depression, 1919–1939. New York: Oxford University Press.
- Ennis, Huberto, and Todd Keister. First Quarter 2010. "On the Fundamental Reasons for Bank Fragility." Federal Reserve Bank of Richmond *Economic Quarterly* 96 (1): 33–58.
- Federal Deposit Insurance Corporation. 1997. *History of the Eighties, Lessons for the Future, Volume 1.* Washington, D.C.: FDIC.
- Fleming, Michael J. July 2012. "Federal Reserve Liquidity Provision During the Financial Crisis of 2007–2009." Federal Reserve Bank of New York Staff Report No. 563.
- Flood, Mark D. July/August 1992. "The Great Deposit Insurance Debate." Federal Reserve Bank of St. Louis *Review* 74 (4): 51–77.
- Friedman, Milton, and Anna Jacobson Schwartz. 1963. A Monetary History of the United States: 1867–1960. Princeton, N.J.: Princeton University Press.
- Glass, Carter. January 16–17, 1922. "Truth About the Federal Reserve System." Speech in the Senate of the United States, Washington, D.C.
- Goodfriend, Marvin. November 2012. "The Elusive Promise of Independent Central Banking." *Monetary and Economic Studies* 30: 39–54.
- Goodfriend, Marvin, and Robert King. May/June 1988. "Financial Deregulation, Monetary Policy, and Central Banking." Federal Reserve Bank of Richmond *Economic Review*, 3–22.
- Goodfriend, Marvin, and Jeffrey M. Lacker. Fall 1999. "Limited Commitment and Central Bank Lending." Federal Reserve Bank of Richmond *Economic Quarterly* 85 (4): 1–27.
- Gorton, Gary B. 2010. Slapped in the Face By The Invisible Hand: The Panic of 2007. Oxford, England: Oxford University Press.
- Gorton, Gary B., and Andrew Metrick. Fall 2013. "The Federal Reserve and Panic Prevention: The Roles of Financial Regulation and Lender of Last Resort." *Journal of Economic Perspectives* 27 (4): 45–64.
- Government Accountability Office. June 2011. "Modified Prompt Correction Action Framework Would Improve Effectiveness." GAO-11-612.
- Government Accountability Office. January 2013a. "Financial Regulatory Reform: Financial Crisis Losses and Potential Impacts of the Dodd-Frank Act." GAO-13-180.
- Government Accountability Office. November 2013b. "Government Support for Bank Holding Companies: Statutory Changes to Limit Future Support Are Not Yet Fully Implemented." GAO-14-18.
- Green, Edward J., and Ping Lin. March 2003. "Implementing Efficient Allocations in a Model of Financial Intermediation." *Journal of Economic Theory* 109 (1): 1–23.
- Greenspan, Alan. Spring 2010. "The Crisis." Brookings Papers on Economic Activity, 201–261.



- Hackley, Howard. 1973. *Lending Functions of the Federal Reserve Banks: A History*. Washington, D.C.: Board of Governors of the Federal Reserve System.
- Haltom, Renee, and Robert Sharp. April 2014. "The First Time the Fed Bought GSE Debt." Federal Reserve Bank of Richmond *Economic Brief.*
- Hetzel, Robert L. Summer 2004. "How Do Central Banks Control Inflation?" Federal Reserve Bank of Richmond *Economic Quarterly* 90 (3): 47–63.
- Humphrey, Thomas M. September/October 1982. "The Real Bills Doctrine." Federal Reserve Bank of Richmond *Economic Review*, 3–13.
- Humphrey, Thomas M. March/April 1989. "Lender of Last Resort: The Concept in History." Federal Reserve Bank of Richmond *Economic Review*, 8–16.
- Inquiry into Continental Illinois Corp. and Continental Illinois National Bank: Hearings Before the Subcommittee on Financial Institutions Supervision, Regulation and Insurance, 98th Cong. (1984).
- Lacker, Jeffrey M. February 12, 2013a. "Economics and the Federal Reserve After the Crisis." Speech to Franklin & Marshall College, Lancaster, Pa.
- Lacker, Jeffrey M. April 9, 2013b. "Ending 'Too Big To Fail' Is Going to Be Hard Work." Speech to the Global Society of Fellows Conference, University of Richmond, Richmond, Va.
- Lacker, Jeffrey M. November 1, 2013c. "Global Interdependence and Central Banking." Speech to the Global Interdependence Center, The Union League of Philadelphia, Philadelphia, Pa.
- Lacker, Jeffrey M., Jeffrey D. Walker, and John A. Weinberg. Spring 1999. "The Fed's Entry into Check Clearing Reconsidered." Federal Reserve Bank of Richmond *Economic Quarterly* 85 (2): 1–31.
- Madigan, Brian F. August 21, 2009. "Bagehot's Dictum in Practice: Formulating and Implementing Policies to Combat the Financial Crisis." Speech at the Federal Reserve Bank of Kansas City Economic Policy Symposium at Jackson Hole, Wyo.
- Marshall, Elizabeth, Sabrina R. Pellerin, and John R. Walter. February 2013. "2013 Estimates of the Safety Net." www.richmondfed.org/publications/ research/special_reports/safety_net.
- Meltzer, Allan H. 2003. A History of the Federal Reserve, Volume 1: 1913–1951. Chicago: The University of Chicago Press.
- Miron, Jeffrey A. March 1986. "Financial Panics, the Seasonality of the Nominal Interest Rate, and the Founding of the Fed." American Economic Review 76 (1): 125–140
- Pellerin, Sabrina R., and John R. Walter. First Quarter 2012. "Orderly Liquidation Authority as an Alternative to Bankruptcy." Federal Reserve Bank of Richmond *Economic Quarterly* 98 (1): 1–31.
- Pozsar, Zoltan, Tobias Adrian, Adam Ashcraft, and Hayley Boesky. July 2010. "Shadow Banking." Federal Reserve Bank of New York Staff Report No. 458.
- Reforming Credit Rating Agencies: Hearing Before the Subcommittee on Capital Markets, Insurance, and Government Sponsored Enterprises, 111th Cong. (2009).
- Reinhart, Carmen M., and Kenneth S. Rogoff. 2009. *This Time is Different*. Princeton, N.J.: Princeton University Press.

- Richardson, Gary, and William Troost. 2009. "Monetary Intervention Mitigated Banking Panics During the Great Depression: Quasi-Experimental Evidence from a Federal Reserve District Border, 1929–1933." Journal of Political Economy 117 (6): 1031–1073.
- Rockoff, Hugh. 1986. "Walter Bagehot and the Theory of Central Banking." In *Financial Crises and the World Banking System*, edited by Forrest Capie and Geoffrey Wood, 160–180. New York: Macmillan.
- Roe, Mark J. March 6, 2011. "The Derivatives Market's Payment Priorities as Financial Crisis Accelerator." Stanford Law Review 63 (3): 539–590.
- Schwartz, Anna. September/October 1992. "Misuse of the Discount Window." Federal Reserve Bank of St. Louis *Review* 75 (5): 58–69.
- Sprague, Irving H. 1986. Bailout: An Insider's Account of Bank Failures and Rescues. Washington D.C.: Beard Books.
- Sprague, Oliver M.W. 1910. *History of Crises Under the National Banking System*. Washington D.C.: Government Printing Office.
- Stein, Jeremy C. February 7, 2013. "Overheating in Credit Markets: Origins, Measurement, and Policy Responses." Speech to the "Restoring Household Financial Stability after the Great Recession: Why Household Balance Sheets Matter" Research Symposium, Federal Reserve Bank of St. Louis, St. Louis, Mo.
- Tarullo, Daniel K. May 2, 2012. "Regulatory Reform Since the Financial Crisis." Remarks at the Council on Foreign Relations C. Peter McColough Series on International Economics, New York, N.Y.
- Thornton, Henry. 1802. An Enquiry into the Nature and Effects of the Paper Credit of Great Britain. London: Hatchard.
- Wallace, Neil. Fall 1988. "Another Attempt to Explain an Illiquid Banking System: The Diamond and Dybvig Model with Sequential Service Taken Seriously." Federal Reserve Bank of Minneapolis *Quarterly Review* 12 (4): 3–16.
- Warburg, Paul M. 1930. The Federal Reserve System: Its Origin and Growth: Volume One. New York: Macmillan.
- Wicker, Elmus. 2005. The Great Debate on Banking Reform: Nelson Aldrich and the Origins of the Fed. Columbus, Ohio: Ohio State University Press.
- Williamson, Stephen D. 1989. "Restrictions on Financial Intermediaries and Implications for aggregate Fluctuations: Canada and the United States 1870–1913." In NBER Macroeconomics Annual, Vol. 4, edited by Olivier Jean Blanchard and Stanley Fischer, 303–350. Cambridge, Mass.: MIT Press.
- Willis, H. Parker. 1923. The Federal Reserve System: Legislation, Organization, and Operation. New York: Ronald Press Company.
- Wolf, Martin. January 22, 2014. "Model of a Modern Central Banker." *Financial Times.*
- Zuckerman, Gregory. April 10, 2008. "Hedge Funds Make It Hard to Say Goodbye." *Wall Street Journal.*



EMBRACING REGIONAL AND NATIONAL ROLES

joined the Federal Reserve Bank of Richmond last June and wish to convey what a privilege it is to work with such a committed group of central bankers in this, the centennial year of the Federal Reserve. I also would like to congratulate my predecessor, Sally Green, on her mid-2013 retirement and her many contributions as first vice president and chief operating officer of this Bank and in other key roles during her 36-year career with the Federal Reserve System.



Mark L. Mullinix First Vice President and Chief Operating Officer

One of the enduring strengths of the System is its regional structure, which contributes to banking supervision, payments services, and monetary policymaking in a variety of ways. Most importantly, the regional structure ensures that diverse views are brought to bear on issues that are critical to the nation's economy and the Federal Reserve's central banking mission. The preceding pages of this annual report are a prime example. The essay by President Jeffrey M. Lacker and Research Publications Content Manager Renee Haltom questions the System's increasing role in financial stability. They make a good case for ending crisis lending and focusing on monetary stability, but there are economists at other Reserve Banks who might disagree. This is one example of our ability to discuss and deliberate freely, which is perhaps the greatest strength of our regional structure.

Notwithstanding our differences of opinion on some economic and policy issues, Reserve Banks have joined together to deliver services

to financial institutions more efficiently and to centralize common support services across the System. Our aim for some time has been to present a consistent national face to our customers in product offerings and support services. As a result, our organization today is designed to provide national leadership and direction to our payments services and to meet our obligations as fiscal agents for the U.S. Treasury Department. Reserve Banks also are sharing banking supervision expertise and key national support services. By leveraging the benefits of technology and by sharing the talents of staff across the System, Reserve Banks are increasing their ability to build value and gain efficiencies.

At the Richmond Fed, we have the privilege of hosting and providing leadership to business operations for four nationally provided support services: Centralized Payroll Operations, the National Procurement Office, the Currency Technology Office, and Federal Reserve Information Technology (FRIT). Each of these national support functions operates and performs essential services for Reserve Banks. The payroll group provides payroll services to the Reserve Banks' employees, while the national procurement group leverages the combined buying power of Reserve Banks.

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The Richmond Fed plays a significant technology role in the Federal Reserve System. The Currency Technology Office is responsible for providing the equipment, software, and support for the Reserve Banks' currency-processing equipment and the currency sensors that reside on those machines. The currency-technology team has provided this centralized service to Reserve Banks for more than three decades. Today, the team gives the Reserve Banks an efficient and highly effective platform to process and authenticate more than 34 billion pieces of U.S. currency annually as they support and distribute more than \$1.3 trillion in currency circulating globally.

Another major technology responsibility rests with FRIT, a group that is led in Richmond by the Federal Reserve System's chief information officer. FRIT is responsible for providing enterprise information technology architecture and standards, enterprise information security policy and assurance, computing and network operations, project services, and enduser services to all the Reserve Banks and their national product and support offices. FRIT also provides services to the Federal Reserve's Board of Governors and the U.S. Treasury.

Although not a national support function, another role we are proud to have taken is coordinating the <u>federalreservehistory.org</u> site on behalf of the Federal Reserve System. This site commemorates the Federal Reserve's centennial by allowing scholars and the general public to access archives, essays, biographical information, and other facts about our nation's central bank. We will continue to work with colleagues at other Reserve Banks and the Board of Governors to add content, so I encourage you to visit and revisit the site to learn more about the Fed's first 100 years.

In 2013, the Federal Reserve Bank of Richmond continued to deliver on commitments we believe are vital to our region, our nation, and the communities we serve. The Fed's regional structure has proven flexible in meeting the needs of customers and improving the overall effectiveness of our operations. One hundred years after our founding, the Richmond Fed remains committed to maximizing its contributions to both the Fifth District and the Federal Reserve System.

Shark Thule -+-

MARK L. MULLINIX First Vice President and Chief Operating Officer

Delving into Workforce Development

uring the 2007–09 recession and ongoing recovery, the Federal Reserve employed a variety of monetary policy tools in an effort to promote economic growth and reduce unemployment, but unemployment has decreased only slowly.

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As president of the Federal Reserve Bank of Richmond, Jeffrey Lacker has argued against various aspects of these expansionary monetary policies. One reason is that at least some portion of persistent long-term unemployment can be attributed to nonmonetary factors, such as structural shifts in the labor market. And one of those structural changes is an apparent mismatch between the skills that employers seek and the skills (human capital) that unemployed workers possess.

In a 2012 speech to business and community leaders in Greensboro, N.C., Lacker suggested that investments in building human capital could be more effective in the long run than highly accommodative monetary policy.

"While perhaps not a quick resolution to the current unemployment problem, I believe such investments are likely to yield greater benefits for both workers and the economy as a whole than efforts aimed at providing short-term stimulus," he said. "Improvement in the skill level of the workforce eventually leads to both higher productivity and wages."

Lacker's speech, "Technology, Unemployment and Workforce Development in a Rapidly Changing World," can be found at <u>www.richmondfed.org/press_room/</u> <u>speeches/president_jeff_lacker/2012/lacker_speech</u> <u>20120507.cfm</u>. Also, the Bank's most recent thinking on using monetary stimulus to reduce unemployment can be found in "Labor Market Conditions and Policy," an essay in the Bank's "Our Perspective" series at <u>www.richmondfed.org/research/our_perspective/labor-</u> markets/index.cfm.

REGIONAL PERSPECTIVES

Workforce development has been an important topic of research and discussion throughout the Federal Reserve System in recent years. In 2010, then-Fed Chairman Ben Bernanke highlighted the issue in a speech to members of Virginia's Community College Workforce Alliance at a conference co-sponsored by the Richmond Fed.

"As the labor market recovers, innovative workforce development programs can play important roles in anticipating future job market demands and by helping workers improve their skills to meet the requirements of businesses as they adopt more advanced technologies," Bernanke said. "Although forecasting future job opportunities can be difficult, ... the Bureau of Labor Statistics anticipates that the demand for workers in health-related occupations will continue to outpace demand in many other industries. According to the Bureau, many of the prospective opportunities in health, as well as others expected to be added in transportation and administrative areas, do not require a full four-year degree. Community colleges have responded to these specific training needs by offering condensed courses in medical billing and training to become a pharmacy technician."

Bernanke's speech, "Fostering Workforce Development," is available at <u>www.federalreserve.gov/newsevents/</u> speech/bernanke20100609a.htm.

In the two years following Bernanke's speech, the Richmond Fed collaborated with eight other Reserve Banks and the Board of Governors to gather regional perspectives on the causes of long-term unemployment—particularly in low- and moderate-income communities—and to identify promising workforce development strategies. At forums throughout the United States, the Reserve Banks collected a large quantity of anecdotal evidence that indicates a mismatch between worker skills and job requirements.





An apprentice sponsored by Siemens Energy works in the computer-integrated machining lab at Central Piedmont Community College.

The Richmond Fed hosted a meeting in West Virginia, for example, where hospital administrators said that many job applicants with other workforce experience lacked the "hard" skills—particularly basic computer knowledge—required to fill vacant health care positions. Younger employees, on the other hand, were said to be "distracted by technology, often ignoring policies about cell phone and social media usage during work hours." This comment was part of a broader discussion on a nationwide shortage of "soft" skills, such as professionalism and punctuality.

These and many other regional insights appear in the Board of Governors' final report, "A Perspective from Main Street: Long-Term Unemployment and Workforce Development." It is available at <u>www.federalreserve.</u> <u>gov/communitydev/long-term-unemployment-and-</u> <u>workforce-development.htm</u>. The Board of Governors completed the report in 2012, but the Richmond Fed has continued to seek regional information about workforce development throughout the Fifth Federal Reserve District. In November 2013, workforce development was high on the agenda when a delegation of Bank leaders and economists visited Charlotte, N.C. They participated in two roundtables: one about developing innovators, entrepreneurs, and professionals and one about other workforce training programs in the area. They also toured a Siemens Energy facility, where 15 apprentices are enrolled in a two-year program run by Central Piedmont Community College. Siemens pays for their education and hires them when they complete the program.

"It is exciting to see the growing number of high schools and community colleges that are partnering with businesses to offer vocational training and apprenticeship

DESTRUCT





Richmond Fed volunteer Steve McCarther (right) mentors Dominique Rivers in the Bank's Lunch Buddies program.

programs," Lacker said in a speech to community leaders on the following day. Providing students with more information about such programs also might reduce the high school dropout rate. Nationally, more than 20 percent of high school students do not graduate in four years, and many of those students never graduate at all. That measure climbs to more than 40 percent in some large urban school districts. "If the only reason to graduate from high school is to enroll in college, then students who do not wish to attend college, or perceive large barriers to doing so, might not see much value in graduating," Lacker added. "For these students, learning about viable career and educational alternatives could improve their appreciation of the value of finishing high school." This speech, "Starting Early in Workforce Development," is available at www. richmondfed.org/press_room/speeches/president_jeff_ lacker/2013/lacker_speech_20131105.cfm.

RICHMOND INITIATIVES

In 2013, the Richmond Fed formed an internal workforce development group to study the topic in a more systematic way and to identify immediate and future opportunities for the Bank to make a bigger difference in the Fifth District communities it serves. The interdisciplinary team surveyed the most prominent academic research, reviewed government policies and programs, studied existing workforce development initiatives, and inventoried the Bank's current efforts to address the problem.

The group defined workforce development to include the entire range of human capital acquisition. The research served mostly internal purposes, but it identified three areas for public policy consideration.

- Early intervention: The value of this approach is well-established in early childhood studies, but the team suggested that the concept also applies later in life. For example, young workers who develop flexible skills (the ability to adapt to new technologies and environments) might be protected from long-term unemployment even when their job-specific skills become obsolete.
- Better information: The group recommended providing better information to help students and their families understand the economic consequences of dropping out of high school and the potential risks and rewards associated with enrolling in a four-year college versus other types of higher education and





This is a preview of an online course the Bank is developing to help students plan for "life after high school."

training. An *Economic Brief* on this topic can be found at <u>www.richmondfed.org/publications/research/</u> <u>economic_brief/2013/eb_13-06.cfm</u>.

 Greater role for community colleges: The team noted that community colleges are especially well-positioned to assist with college and workforce preparedness. Community colleges provide a cost-effective way for students who are uncertain about going to college or not fully prepared for college to evaluate their chances of earning a bachelor's degree. Community colleges also have the ability to help workers develop flexible skills that apply to rapidly changing industries such as health care and advanced manufacturing.

The Richmond Fed's workforce development group found that many of the Bank's current efforts align well with one or more of these public policy areas. For example, working through the Bank's new Office of Civic Engagement, as well as on their own, many employees already invest their time and talent in early intervention and dropout prevention. They mentor at-risk students in public schools and volunteer at a variety of nonprofit organizations such as Smart Beginnings, the Virginia Early Childhood Foundation, Big Brothers Big Sisters, and Boys and Girls Clubs of America. The Bank also provides economic education resources, such as an online course it is designing to help students make well-informed decisions about which path to pursue after high school. Instead of a one-size-fits-all, four-year-college prescription, the course provides a series of exploratory lessons that culminate in an individualized plan for each student.

The Bank also supports community colleges and other workforce development organizations throughout the Fifth District by providing labor force information and analysis and by convening events where leaders of community colleges and other workforce development organizations share ideas and best practices.

CONNECTING THE DOTS

In recent years, workforce development has become a greater area of emphasis in several areas of the Richmond Fed, including research, outreach, community development, economic education, and civic engagement. These departments have developed initiatives independently over the years, but in 2013, the Bank started making a more concerted effort to connect its workforce development dots and to look for the most effective areas of emphasis in human capital policy.

The Bank will continue to provide information designed to help students and their families weigh the risks and rewards of various education decisions. The Richmond Fed will continue to engage with community colleges and other organizations in the realm of human capital policy to exchange ideas and best practices. And the Bank will continue to explore the role of early investments in human capital.

Speaking to the Council for Economic Education in October 2013, Lacker said that early interventions "could help ensure that future choices about how much to invest in a student's human capital aren't limited by family background and that more people have the opportunity to achieve their potential." This speech, "Human Capital Investment as a Major Financial Decision," is available at www.richmondfed.org/press_room/speeches/president _jeff_lacker/2013/lacker_speech_20131004.cfm. ■

FIFTH DISTRICT CONTINUES TO EXPERIENCE Slow, Steady Economic Growth

he year 2013 marked the continuation of slow, steady growth in the Fifth District and throughout the nation. Private sector firms hired at a modest pace, while government employment and purchasing continued to be a drag on the economy. The housing recovery persisted, and there were increased, although still somewhat scattered, reports of new investment and construction in residential and commercial real estate. In general, businesses reported expanded activity and increased sales, but the environment continued to be somewhat volatile and unpredictable, particularly for retailers. In addition, the pace of the recovery varied considerably by region within the Fifth District. Urban areas generally outperformed rural areas, and certain parts of West Virginia continued to suffer from the contraction of coal mining.

LABOR MARKETS

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Much like the overall economy, labor markets in the Fifth District grew slowly and steadily. On net, firms in the Fifth District added 170,200 jobs (1.2 percent), which was slightly below the 205,800 jobs added in 2012 but above net job creation during the five previous years. The District also underperformed the United States, where payroll employment grew 1.7 percent. The biggest contributions to the District's net job gain came from education and health services (43,100 jobs), leisure and hospitality (41,900 jobs), trade, transportation, and utilities (35,600 jobs), and professional and business services (19,400 jobs). Other industries saw sizeable percentage growth in employment, such as natural resources/mining/construction (2.1 percent) and finance (1.5 percent). The only segments that posted job declines in 2013 were the information industry, which shed 2,100 jobs (0.9 percent) and the government sector, which cut 1,200 jobs (0.0 percent).

Year-over-year employment gains in the District were evident across all five states and the District of Columbia. North Carolina experienced the sharpest absolute gain— 85,600 new jobs, while South Carolina saw the highest percentage increase—2.5 percent growth.

District-wide trends included the expansion of payrolls in education and health services, financial services, and the trade, transportation, and utilities segment. In addition, federal government payrolls contracted in every jurisdiction across the District. Other industries varied widely in different states. For example, professional and business services in North Carolina added 27,600 net new jobs (5.1 percent) while that industry lost 16,500 net jobs (2.4 percent) in Virginia.

In the household employment survey, however, there were more consistent trends across states. Notably, both the unemployment rate and the labor force participation rate fell during 2013 in every state in the District. The unemployment rate for the District fell from 7.4 percent in December 2012 to 6.2 percent in December 2013, remaining below the national rate of 6.7 percent at the end of the year. Again, the greatest improvement in unemployment rates occurred in the Carolinas, where the North Carolina rate dropped from 8.9 percent to 6.9 percent and the South Carolina rate fell from 8.3 percent to 6.6 percent. Unfortunately, labor force participation also dropped in the District-from 63.9 percent in December 2012 to 62.7 percent in December 2013, as every District state posted sharp declines. Participation also fell in the United States to 62.8 percent by the end of 2013. Still, the number of unemployed people in the District decreased over the year by more than the number of people in the labor force decreased, indicating (along with the results of the establishment survey) some real improvement in labor markets.

FIGURE 1: DECLINES IN UNEMPLOYMENT RATES AND LABOR FORCE PARTICIPATION RATES IN 2013



Real Estate

Housing markets across the Fifth District continued along the recovery trend they established in 2012. According to the CoreLogic Information Solutions house price index, year-over-year house price growth has been consistently positive in the District since February 2012, with an acceleration in 2013 that resulted in 5.7 percent appreciation from December 2012 to December 2013. The house price rebound was evident across states, with almost every state posting consistent year-over-year appreciation since at least May 2012. (West Virginia had two months-July and August—with year-over-year house price declines, but West Virginia house price growth is generally more volatile than that of other states in the District.) Reports from real estate agents across the District also indicated stronger demand and pricing for homes than they had seen in a while. The share of mortgages in delinquency and foreclosure was also lower in District states at the end of 2013 than at the end of 2012.

Early in 2013, reports of low inventories were limited to the Washington, D.C., area, although some contacts in other areas remarked on inventory declines. As 2013 progressed, however, more and more real estate agents across the District reported low inventories and multiple offers on homes. In addition, there were increasing numbers of reports on new construction for the first time in years, and builders in some markets bemoaned shortages in lots and in residential building materials. The issuance of residential building permits, although a volatile measure, continued to trend upward. For the whole year, real estate agents reported rising foot traffic, fewer days on the market, increased sales (except perhaps in the most expensive bracket), and higher selling-to-asking price ratios. 33

There were also more reports of construction in commercial real estate, particularly in multifamily and, toward the end of the year, in industrial real estate. Reports of construction in the office and retail





segments were more scattered, but even in those segments, contacts reported increased lending activity, declining vacancy rates, firming rental rates, and fewer concessions from landlords. In many markets, there were reports of particular tightening in the availability of class-A office space. Multifamily activity was the strongest, although it seemed to slow toward the end of the year, and more than a few contacts expressed concern

BUSINESS CONDITIONS

regarding overbuilding in that segment.

Manufacturing activity has been volatile, but it generally ended the year stronger. The Federal Reserve Bank of Richmond maintains a composite manufacturing index based on the Bank's Fifth District Survey of Manufacturing Activity. It is a diffusion index, meaning that a positive reading indicates that the share of firms reporting expansion exceeds the share of firms reporting contraction. This index was at or above zero for the last five months of the year and was well above zero for three of those five months. It was driven up by reports of increases in shipments and in the volume of new orders. (The manufacturing index is available at www.richmondfed.org/research/ regional_economy/surveys_of_business_conditions/ manufacturing.) Although reports indicated that growth continued to vary by industry, by region, and by manufacturer, there were some overall trends in 2013. Auto and auto parts manufacturing continued to be strong, as did lumber production, furniture and flooring manufacturing, and other manufacturing firms that stood to benefit from improvements in residential real estate markets. However, there were reports of an inability to raise prices, which squeezed margins for some manufacturers. Furthermore, there continued to be cuts in government spending and considerable uncertainty around government contracts
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Regional Forums

Twice a year, several of the Bank's leaders and economists visit regions within the Fifth District to gain first-hand knowledge of local economies. In 2013, delegations from the Bank visited Baltimore, Maryland, and Charlotte, North Carolina. They gained insight about each metropolitan area by meeting with business executives, education officials, community leaders, students, workers, and government officials. More information about these regional forums is available at www.richmondfed. org/press_room/our_news/2013/

<u>baltimore_tour_20130705.cfm</u> (for Baltimore) and at <u>www.richmondfed.org/press_room/</u> <u>our_news/2013/char_reg_recap_20131212.cfm</u> (for Charlotte).



President Jeffrey Lacker (left) listens to Louisa Taylor, a student at Johnson C. Smith University in Charlotte. To view a brief video about the 2013 regional forums, please go to <u>http://bcove.me/e7ueknfp</u>.

that negatively impacted certain manufacturers, although some of those same firms noted strength in their nongovernment business.

A few manufacturers during the year reported that although domestic demand remained too weak to enable strong growth, exports to Europe, Latin America, and Asia helped boost their sales. Over the year, port contacts indicated that port activity in both exports and imports was generally strong, with export growth somewhat outpacing import growth. Anecdotes indicated that coal exports were not as strong as in 2012. In general, the southern part of West Virginia continued to suffer from a decline in coal mining, while the northern part of the state benefitted from expansion in natural gas drilling.

Retail activity continued to be volatile in 2013, according to both the retail revenues index generated from the Richmond Fed's Service Sector Survey and to comments and anecdotes from contacts across the District. (The service sector survey and the retail revenues index are available at www.richmondfed.org/research/ regional_economy/surveys_of_business_conditions/ service_sector/index.cfm.) However, there were some comments during the middle of the year that certain retailers faced "less of a roller coaster" in 2013 than in other recent years. Auto and truck sales continued to be strong, while furniture and home goods sales continued to benefit from the improvement in residential real estate. There was conjecture among some retailers that consumers were buying bigger-ticket items and not spending money on clothing, electronics, or other smaller items. The major concerns among smaller retailers in the District were the effect of the rise in online sales on brick-and-mortar stores, the increased inability to predict traffic and sales from week to week, and implementation

of the Affordable Care Act. Reports on the nonretail service sector were more steadily positive than in the retail sector. The nonretail revenues diffusion index spent most of 2013 above zero, indicating that more firms reported increased revenues than reported decreased revenues.

BANKING MARKETS

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Throughout 2013, Fifth District banks experienced modest improvements in condition. The overall banking environment was tempered by ongoing slow growth, low overall interest rates, and slowing residential mortgage demand during the second half of 2013. In spite of these challenges, continued improvements to asset quality contributed to increased earnings and capital for the year.

Balance sheets of Fifth District banks reflected tepid but improving growth during 2013. Median commercial bank loan growth increased from 0.48 percent in 2012 to 2 percent in 2013, despite the negative effect that rising interest rates had on mortgage lending during the second half of the year. This growth was primarily driven by the commercial real estate and commercial-industrial categories. Of particular note is that year-over-year loan growth remained positive for five consecutive quarters, the longest period since 2009. While loan growth increased, median nonperforming loans and loan losses declined 37 percent and 42 percent, respectively. Continued improvement in asset quality allowed banks to further reduce loan-loss provisions, which contributed to an increase in the median return on average assets from 0.57 percent in 2012 to 0.66 percent in 2013. Overall, 89.7 percent of Fifth District banks were profitable in 2013, up from 83.2 percent in 2012. Although earnings showed some improvement in 2013, the low interest rate environment continued to hamper banks through compressed net interest margins, leading to earnings performance that remained considerably below pre-recession levels.

Capital levels remained strong in the District despite a full year of risk-weighted asset growth, a reversal of the trend from the previous three years. While risk-weighted assets increased, earnings improved, providing a boost to capital positions. Liquidity remained solid for Fifth District banks even though noncore funding increased slightly during the second half of the year, primarily due to an increase in short-term borrowing. Despite this increase, overall reliance on noncore funding remained low as banks continued to fund growth largely from core deposits. Although such deposits have been the primary funding source over the past several years, an eventual shift in the rate environment could result in changes to bank-funding strategies.

SUMMARY

The Fifth District experienced another year of slow, steady economic growth in 2013. Business conditions were somewhat unpredictable and volatile during the year, but most industries reported improved sales and revenues, and employment grew at a modest pace. In addition, the gradual residential real estate recovery continued, and in some segments there were hints of recovery in commercial real estate as well. Although the rebound in growth following the 2007–09 recession has not been as strong as the nation or District might have hoped, the slow recovery continued in 2013. ■

BOARDS, COUNCILS, OFFICERS, AND SENIOR PROFESSIONALS

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BOARDS OF DIRECTORS AND ADVISORY COUNCILS

FEDERAL RESERVE BANK OF RICHMOND BOARD OF DIRECTORS

The Bank's board of directors oversees management of the Bank and its Fifth District offices, provides timely business and economic information, participates in the formulation of national monetary and credit policies, and serves as a link between the Federal Reserve System and the private sector. Six directors are elected by banks in the Fifth District that are members of the Federal Reserve System, and three are appointed by the Board of Governors. Directors who are not bankers appoint the Bank's president and first vice president with approval from the Board of Governors.

The Bank's board of directors annually appoints the Fifth District's representative to the Federal Advisory Council, which consists of one member from each of the 12 Federal Reserve Districts. The council meets four times a year with the Board of Governors to consult on business conditions and issues related to the banking industry.

BALTIMORE AND CHARLOTTE BRANCHES BOARDS OF DIRECTORS

The Bank's Baltimore and Charlotte branches have separate boards that oversee operations at their respective locations and, like the Richmond Board, contribute to policymaking and provide timely business and economic information about the District. Four directors on each of these boards are appointed by the Richmond directors, and three are appointed by the Board of Governors.

Community Depository Institutions Advisory Council

Created in 2011, the Bank's Community Depository Institutions Advisory Council advises the Bank's management and the Board of Governors on the economy, lending conditions, and other issues from the perspective of banks, thrifts, and credit unions with total assets under \$10 billion. The council's members are appointed by the Bank's president.

COMMUNITY INVESTMENT COUNCIL

Established in 2011, the Community Investment Council advises the Bank's management about emerging issues and trends in communities across the Fifth District, including low- and moderate-income neighborhoods in urban and rural areas. The council's members are appointed by the Bank's president.

PAYMENTS ADVISORY COUNCIL

Created in 1978, the Payments Advisory Council serves as a forum for communication with financial institutions about financial services provided by the Federal Reserve. The council helps the Bank respond to the evolving needs of its banking constituency. Council members are appointed by the Bank's first vice president.

Listings of boards and councils include members and titles as of December 31, 2013, unless otherwise noted.

THANK YOU

Thank you to those directors who have completed their service: Alan L. Brill and Patrick C. Graney, III of the Richmond Board; James T. Brady, William B. Grant, and Jana Wheatley of the Baltimore Board; and David J. Zimmerman of the Charlotte Board.

The Bank also welcomes four new directors: Margaret G. Lewis, C. Richard Miller, Jr., and Charles R. Patton have joined the Richmond Board, and Richard Bernstein and Mary Ann Scully have joined the Baltimore Board.



BOARD OF DIRECTORS, FEDERAL RESERVE BANK OF RICHMOND



From the left: Wilbur E. Johnson, Russell C. Lindner, Linda D. Rabbitt, Marshall O. Larsen, Patrick C. Graney, III, Brad E. Schwartz, Margaret G. Lewis, Edward L. Willingham, IV, Alan L. Brill

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Note: The council's membership year runs from June 1 to May 31, but this listing includes all members who served during 2013.



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PHILLIP C. WATTS Central Point of Contact, BB&T



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The Board of Governors engaged Deloitte & Touche LLP (D&T) to audit the 2013 combined and individual financial statements of the Reserve Banks and those of the consolidated LLC entities.¹ In 2013, D&T also conducted audits of internal controls over financial reporting for each of the Reserve Banks. Fees for D&T's services totaled \$7 million, of which \$1 million was for the audits of the consolidated LLC entities. To ensure auditor independence, the Board of Governors requires that D&T be independent in all matters relating to the audits. Specifically, D&T may not perform services for the Reserve Banks or others that would place it in a position of auditing its own work, making management decisions on behalf of the Reserve Banks, or in any other way impairing its audit independence. In 2013, the Bank did not engage D&T for any non-audit services.

¹ In addition, D&T audited the Office of Employee Benefits of the Federal Reserve System (OEB), the Retirement Plan for Employees of the Federal Reserve System (System Plan), and the Thrift Plan for Employees of the Federal Reserve System (Thrift Plan). The System Plan and the Thrift Plan provide retirement benefits to employees of the Board of Governors, the Federal Reserve Banks, and the OEB.

MANAGEMENT'S REPORT

Management's Report on Internal Control Over Financial Reporting March 14, 2014

TO THE BOARD OF DIRECTORS:

The management of the Federal Reserve Bank of Richmond (Bank) is responsible for the preparation and fair presentation of the Statements of Condition as of December 31, 2013 and 2012, and the Statements of Income and Comprehensive Income, and Statements of Changes in Capital for the years then ended (the financial statements). The financial statements have been prepared in conformity with the accounting principles, policies, and practices established by the Board of Governors of the Federal Reserve System as set forth in the *Financial Accounting Manual for Federal Reserve Banks* (FAM), and, as such, include some amounts that are based on management judgments and estimates. To our knowledge, the financial statements are, in all material respects, fairly presented in conformity with the accounting principles, policies and practices documented in the FAM and include all disclosures necessary for such fair presentation.

The management of the Bank is responsible for establishing and maintaining effective internal control over financial reporting as it relates to the financial statements. The Bank's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with the FAM. The Bank's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the Bank's assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with FAM, and that the Bank's receipts and expenditures are being made only in accordance with authorizations of its management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Bank's assets that could have a material effect on its financial statements.

Even effective internal control, no matter how well designed, has inherent limitations, including the possibility of human error, and therefore can provide only reasonable assurance with respect to the preparation of reliable financial statements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The management of the Bank assessed its internal control over financial reporting based upon the criteria established in the *Internal Control—Integrated Framework (1992)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, we believe that the Bank maintained effective internal control over financial reporting.

Federal Reserve Bank of Richmond

Jeffrey M. Lacker President

Mark L. Mullinix First Vice President and Chief Operating Officer

Claudia R. Mochwain

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Claudia N. MacSwain Senior Vice President and Chief Financial Officer



INDEPENDENT AUDITORS' REPORT

To the Board of Governors of the Federal Reserve System and the Board of Directors of the Federal Reserve Bank of Richmond:

We have audited the accompanying financial statements of the Federal Reserve Bank of Richmond ("FRB Richmond"), which are comprised of the statements of condition as of December 31, 2013 and 2012, and the related statements of income and comprehensive income, and of changes in capital for the years then ended, and the related notes to the financial statements. We also have audited the FRB Richmond's internal control over financial reporting as of December 31, 2013, based on criteria established in *Internal Control—Integrated Framework* (1992) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Management's Responsibility

The FRB Richmond's management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles established by the Board of Governors of the Federal Reserve System (the "Board") as described in Note 3 to the financial statements. The Board has determined that this basis of accounting is an acceptable basis for the preparation of the FRB Richmond's financial statements in the circumstances. The FRB Richmond's management is also responsible for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error. The FRB Richmond's management is also responsible for its assertion of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements and an opinion on the FRB Richmond's internal control over financial reporting based on our audits. We conducted our audits of the financial statements in accordance with auditing standards generally accepted in the United States of America and in accordance with the auditing standards of the Public Company Accounting Oversight Board (United States) ("PCAOB") and we conducted our audit of internal control over financial reporting in accordance with attestation standards established by the American Institute of Certified Public Accountants and in accordance with the auditing standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement and whether effective internal control over financial reporting was maintained in all material respects.

An audit of the financial statements involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the FRB Richmond's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances. An audit of the financial statements also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. An audit of internal control over financial reporting involves obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.



Definition of Internal Control Over Financial Reporting

The FRB Richmond's internal control over financial reporting is a process designed by, or under the supervision of, the FRB Richmond's principal executive and principal financial officers, or persons performing similar functions, and effected by the FRB Richmond's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the accounting principles established by the Board. The FRB Richmond's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the FRB Richmond; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with the accounting principles established by the Board, and that receipts and expenditures of the FRB Richmond are being made only in accordance with authorizations of management and directors of the FRB Richmond; and (3) provide reasonable assurance regarding prevention or timely detection and correction of unauthorized acquisition, use, or disposition of the FRB Richmond's assets that could have a material effect on the financial statements.

Inherent Limitations of Internal Control Over Financial Reporting

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected and corrected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the FRB Richmond as of December 31, 2013 and 2012, and the results of its operations for the years then ended in accordance with the basis of accounting described in Note 3 to the financial statements. Also, in our opinion, the FRB Richmond maintained, in all material respects, effective internal control over financial reporting as of December 31, 2013, based on the criteria established in *Internal Control — Integrated Framework (1992)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Basis of Accounting

We draw attention to Note 3 to the financial statements, which describes the basis of accounting. The FRB Richmond has prepared these financial statements in conformity with accounting principles established by the Board, as set forth in the *Financial Accounting Manual for Federal Reserve Banks*, which is a basis of accounting other than accounting principles generally accepted in the United States of America. The effects on such financial statements of the differences between the accounting principles established by the Board and accounting principles generally accepted in Note 3 to the financial statements. Our opinion is not modified with respect to this matter.

eloitte + Touche UP

Deloitte & Touche LLP March 14, 2014 Richmond, Virginia



STATEMENTS OF CONDITION

(IN MILLIONS)

As of December 31,	2013	2012
Assets		
Gold certificates	\$ 856	\$ 890
Special drawing rights certificates	412	412
Coin	335	373
Loans to depository institutions	1	-
System Open Market Account:		
Treasury securities, net (of which \$1,067 and \$650 is lent as of December 31, 2013 and 2012, respectively)	146,712	128,762
Government-sponsored enterprise debt securities, net (of which \$68 and \$50 is lent as of December 31, 2013 and 2012, respectively)	3,676	5,657
Federal agency and government-sponsored enterprise mortgage-backed securities, net	95,377	67,636
Foreign currency denominated investments, net	4,982	5,145
Central bank liquidity swaps	57	1,839
Accrued interest receivable	1,474	1,369
Other investments	-	2
Bank premises and equipment, net	353	346
Other assets	122	108
Total assets	\$ 254,357	\$ 212,539
Liabilities and Capital		
Federal Reserve notes outstanding, net	\$ 95,718	\$ 91,659
System Open Market Account:		
Securities sold under agreements to repurchase	19,645	7,629
Other liabilities	83	226
Deposits:		
Depository institutions	94,182	72,657
Other deposits	113	76
Interest payable to depository institutions	4	10
Accrued benefit costs	263	296
Accrued remittances to Treasury	192	51
Interdistrict settlement account	32,634	28,388
Other liabilities	51	55
Total liabilities	242,885	201,047
Capital paid-in	5,736	5,746
Surplus (including accumulated other comprehensive loss of \$26 and \$77 at December 31, 2013 and 2012, respectively)	5,736	5,746
Total capital	11,472	11,492
Total liabilities and capital	\$ 254,357	\$ 212,539

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The accompanying notes are an integral part of these financial statements.



Statements of Income and Comprehensive Income (in millions)

For the years ended December 31,	2013	2012
Interest income		
System Open Market Account:		
Treasury securities, net	\$ 3,328	\$ 3,883
Government-sponsored enterprise debt securities, net	141	223
Federal agency and government-sponsored enterprise mortgage-backed securities, net	2,359	2,677
Foreign currency denominated assets, net	20	29
Central bank liquidity swaps	5	50
Total interest income	5,853	6,862
Interest expense		
System Open Market Account:		
Securities sold under agreements to repurchase	4	11
Deposits:		
Depository institutions	215	227
Total interest expense	219	238
Net interest income	5,634	6,624
Non-interest income		
System Open Market Account:		
Treasury securities gains, net	_	1,073
Federal agency and government-sponsored enterprise mortgage-backed securities gains, net	3	23
Foreign currency translation losses, net	(264)	(231)
Compensation received for service costs provided	20	19
Reimbursable services to government agencies	49	49
Other	5	4
Total non-interest (loss) income	(187)	937
Operating expenses		
Salaries and benefits	403	367
Occupancy	50	50
Equipment	71	76
Other	(159)	(133)
Assessments:		
Board of Governors operating expenses and currency costs	184	167
Bureau of Consumer Financial Protection	118	78
Total operating expenses	667	605
Net income before providing for remittances to Treasury	4,780	6,956
Earnings remittances to Treasury	4,496	6,414
Net income	284	542
Change in prior service costs related to benefit plans	(4)	(4)
Change in actuarial losses related to benefit plans	55	(24)
Total other comprehensive income (loss)	51	(28)
Comprehensive income	\$ 335	\$ 514

The accompanying notes are an integral part of these financial statements.



(IN MILLIONS, EXCEPT SHARE DATA)

		Surplus							
For the years ended December 31, 2013, and December 31, 2012	Capital paid—in		Net income retained		Accumulated other comprehensive loss		tal surplus	То	tal capital
Balance at December 31, 2011 (111,284,473 shares)	\$ 5,564	\$	5,613	\$	(49)	\$	5,564	\$	11,128
Net change in capital stock issued (3,634,516 shares)	182		_		_		_		182
Comprehensive income:									
Net income	_		542		_		542		542
Other comprehensive loss	_		_		(28)		(28)		(28)
Dividends on capital stock	_		(332)		_		(332)		(332)
Net change in capital	182		210		(28)		182		364
Balance at December 31, 2012 (114,918,989 shares)	\$ 5,746	\$	5,823	\$	(77)	\$	5,746	\$	11,492
Net change in capital stock redeemed (196,231 shares)	(10)		_		_		_		(10)
Comprehensive income:									
Net income	_		284		_		284		284
Other comprehensive income	_		_		51		51		51
Dividends on capital stock	_		(345)		_		(345)		(345)
Net change in capital	(10)		(61)		51		(10)		(20)
Balance at December 31, 2013 (114,722,758 shares)	\$ 5,736	\$	5,762	\$	(26)	\$	5,736	\$	11,472

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The accompanying notes are an integral part of these financial statements.

NOTES TO FINANCIAL STATEMENTS

STRUCTURE

The Federal Reserve Bank of Richmond (Bank) is part of the Federal Reserve System (System) and is one of the 12 Federal Reserve Banks (Reserve Banks) created by Congress under the Federal Reserve Act of 1913 (Federal Reserve Act), which established the central bank of the United States. The Reserve Banks are chartered by the federal government and possess a unique set of governmental, corporate, and central bank characteristics. The Bank serves the Fifth Federal Reserve District, which includes Maryland, North Carolina, South Carolina, Virginia, District of Columbia, and portions of West Virginia.

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In accordance with the Federal Reserve Act, supervision and control of the Bank is exercised by a board of directors. The Federal Reserve Act specifies the composition of the board of directors for each of the Reserve Banks. Each board is composed of nine members serving three-year terms: three directors, including those designated as chairman and deputy chairman, are appointed by the Board of Governors of the Federal Reserve System (Board of Governors) to represent the public, and six directors are elected by member banks. Banks that are members of the System include all national banks and any state-chartered banks that apply and are approved for membership. Member banks are divided into three classes according to size. Member banks in each class elect one director representing member banks and one representing the public. In any election of directors, each member bank receives one vote, regardless of the number of shares of Reserve Bank stock it holds.

In addition to the 12 Reserve Banks, the System also consists, in part, of the Board of Governors and the Federal Open Market Committee (FOMC). The Board of Governors, an independent federal agency, is charged by the Federal Reserve Act with a number of specific duties, including general supervision over the Reserve Banks. The FOMC is composed of members of the Board of Governors, the president of the Federal Reserve Bank of New York (FRBNY), and, on a rotating basis, four other Reserve Bank presidents.

OPERATIONS AND SERVICES

The Reserve Banks perform a variety of services and operations. These functions include participating in formulating and conducting monetary policy; participating in the payment system, including large-dollar transfers of funds, automated clearinghouse (ACH) operations, and check collection; distributing coin and currency; performing fiscal agency functions for the U.S. Department of the Treasury (Treasury), certain federal agencies, and other entities; serving as the federal government's bank; providing short-term loans to depository institutions; providing loans to participants in programs or facilities with broad-based eligibility in unusual and exigent circumstances; serving consumers and communities by providing educational materials and information regarding financial consumer protection rights and laws and information on community development programs and activities; and supervising bank holding companies, state member banks, savings and loan holding companies, U.S. offices of foreign banking organizations, and designated financial market utilities pursuant to authority delegated by the Board of Governors. Certain services are provided to foreign and international monetary authorities, primarily by the FRBNY.

The FOMC, in conducting monetary policy, establishes policy regarding domestic open market operations, oversees these operations, and issues authorizations and directives to the FRBNY to execute transactions. The FOMC authorizes and directs the FRBNY to conduct operations in domestic markets, including the direct purchase and sale of Treasury securities, government-sponsored enterprise (GSE) debt securities, and federal agency and GSE mortgage-backed securities (MBS); the purchase of these securities under agreements to resell; and the sale of these securities under agreements to repurchase. The FRBNY holds the resulting securities and agreements in a portfolio known as the System Open Market Account (SOMA). The FRBNY is authorized and directed to lend the Treasury securities and GSE debt securities that are held in the SOMA.

To counter disorderly conditions in foreign exchange markets or to meet other needs specified by the FOMC to carry out the System's central bank responsibilities, the FOMC has authorized and directed the FRBNY to execute spot and forward foreign exchange transactions in 14 foreign currencies, to hold balances in those currencies, and to invest such foreign currency holdings, while maintaining adequate liquidity. The FOMC has also authorized the FRBNY to maintain reciprocal currency arrangements with the Bank of Canada and the Bank of Mexico in the maximum amounts of \$2 billion and \$3 billion, respectively, and to warehouse foreign currencies for the Treasury and the Exchange Stabilization Fund in the maximum amount of \$5 billion.

Because of the global character of bank funding markets, the System has at times coordinated with other central banks to provide liquidity. The FOMC authorized and directed the FRBNY to establish temporary U.S. dollar liquidity swap lines with



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the Bank of Canada, the Bank of England, the European Central Bank, the Bank of Japan, and the Swiss National Bank. In addition, as a contingency measure, the FOMC authorized and directed the FRBNY to establish temporary foreign currency liquidity swap arrangements with these five central banks to allow for the System to access liquidity, if necessary, in any of the foreign central banks' currencies. On October 31, 2013, the Federal Reserve and five other central banks agreed to convert their existing temporary liquidity swap arrangements to standing agreements that will remain in effect until further notice.

Although the Reserve Banks are separate legal entities, they collaborate on the delivery of certain services to achieve greater efficiency and effectiveness. This collaboration takes the form of centralized operations and product or function offices that have responsibility for the delivery of certain services on behalf of the Reserve Banks. Various operational and management models are used and are supported by service agreements between the Reserve Banks. In some cases, costs incurred by a Reserve Bank for services provided to other Reserve Banks are not shared; in other cases, the Reserve Banks are reimbursed for costs incurred in providing services to other Reserve Banks. Major services provided by the Bank on behalf of the System for which the costs were not reimbursed by the other Reserve Banks include Standard Cash Automation, Currency Technology Office, IT Transformation Initiatives, Enterprise-wide Security Projects, Enterprise Security Operations Coordination, the Payroll Central Business Administration Function, Daylight Overdraft Reporting and Pricing, and the National Procurement Office. Costs are, however, redistributed to the other Reserve Banks for computing and support services the Bank provides for the System. The Bank's total reimbursement for these services was \$335 million and \$295 million for the years ended December 31, 2013 and 2012, respectively, and is included in "Operating expenses: Other" on the Statements of Income and Comprehensive Income.

SIGNIFICANT ACCOUNTING POLICIES

Accounting principles for entities with the unique powers and responsibilities of the nation's central bank have not been formulated by accounting standard-setting bodies. The Board of Governors has developed specialized accounting principles and practices that it considers to be appropriate for the nature and function of a central bank. These accounting principles and practices are documented in the *Financial Accounting Manual for Federal Reserve Banks* (FAM), which is issued by the Board of Governors. The Reserve Banks are required to adopt and apply accounting policies and practices that are consistent with the FAM. The financial statements have been prepared in accordance with the FAM.

Limited differences exist between the accounting principles and practices in the FAM and accounting principles generally accepted in the United States of America (GAAP), due to the unique nature of the Bank's powers and responsibilities as part of the nation's central bank and given the System's unique responsibility to conduct monetary policy. The primary differences are the presentation of all SOMA securities holdings at amortized cost, adjusted for credit impairment, if any, and the recording of all SOMA securities on a settlement-date basis. Amortized cost, rather than the fair value presentation, more appropriately reflects the Bank's securities holdings given the System's unique responsibility to conduct monetary policy. Although the application of fair value measurements to the securities holdings may result in values substantially greater or less than their carrying values, these unrealized changes in value have no direct effect on the quantity of reserves available to the banking system or on the ability of the Reserve Banks, as the central bank, to meet their financial obligations and responsibilities. Both the domestic and foreign components of the SOMA portfolio may involve transactions that result in gains or losses when holdings are sold before maturity. Decisions regarding securities and foreign currency transactions, including their purchase and sale, are motivated by monetary policy objectives rather than profit. Accordingly, fair values, earnings, and gains or losses resulting from the sale of such securities and currencies are incidental to open market operations and do not motivate decisions related to policy or open market activities. Accounting for these securities on a settlement-date basis, rather than the trade-date basis required by GAAP, better reflects the timing of the transaction's effect on the quantity of reserves in the banking system. The cost bases of Treasury securities, GSE debt securities, and foreign government debt instruments are adjusted for amortization of premiums or accretion of discounts on a straight-line basis, rather than using the interest method required by GAAP.

In addition, the Bank does not present a Statement of Cash Flows as required by GAAP because the liquidity and cash position of the Bank are not a primary concern given the Reserve Banks' unique powers and responsibilities as a central bank. Other information regarding the Bank's activities is provided in, or may be derived from, the Statements of Condition, Income and Comprehensive Income, and Changes in Capital, and the accompanying notes to the financial statements. Other than

those described above, there are no significant differences between the policies outlined in the FAM and GAAP.

Preparing the financial statements in conformity with the FAM requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of income and expenses during the reporting period. Actual results could differ from those estimates.

In 2013, the description of certain line items presented in the Statements of Income and Comprehensive Income and the Statements of Condition have been revised to better reflect the nature of these items. Amounts related to these line items were not changed from the prior year, only the nomenclature for the line item was revised, as further noted below:

- The line item, "Accrued interest on Federal Reserve notes," has been revised in the Statements of Condition to "Accrued remittances to Treasury."
- The line item, "Net income before interest on Federal Reserve notes expense remitted to Treasury," has been revised in the Statements of Income and Comprehensive Income to "Net income before providing for remittances to Treasury."
- The line item, "Interest on Federal Reserve notes expense remitted to Treasury," has been revised in the Statements of Income and Comprehensive Income to "Earnings remittances to Treasury."

Certain amounts relating to the prior year have been reclassified in the Statements of Condition to conform to the current year presentation. The amount reported as "System Open Market Account: Accrued interest receivable" for the year ended December 31, 2012, (\$1,369 million) was previously reported as a component of "System Open Market Account: Foreign currency denominated assets, net" (\$21 million) and "Accrued interest receivable" (\$1,348 million).

Significant accounts and accounting policies are explained below.

a. Consolidation

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank Act) established the Bureau of Consumer Financial Protection (Bureau) as an independent bureau within the System that has supervisory authority over some institutions previously supervised by the Reserve Banks in connection with those institutions' compliance with consumer protection statutes. Section 1017 of the Dodd-Frank Act provides that the financial statements of the Bureau are not to be consolidated with those of the Board of Governors or the System. The Board of Governors funds the Bureau through assessments on the Reserve Banks as required by the Dodd-Frank Act. Section 152 of the Dodd-Frank Act established the Office of Financial Research (OFR) within the Treasury and required the Board of Governors to fund the OFR for the two-year period ended July 21, 2012. The Reserve Banks reviewed the law and evaluated the design of and their relationships to the Bureau and the OFR and determined that neither should be consolidated in the Bank's financial statements.

b. Gold and Special Drawing Rights Certificates

The Secretary of the Treasury is authorized to issue gold certificates to the Reserve Banks. Upon authorization, the Reserve Banks acquire gold certificates by crediting equivalent amounts in dollars to the account established for the Treasury. The gold certificates held by the Reserve Banks are required to be backed by the gold owned by the Treasury. The Treasury may reacquire the gold certificates at any time, and the Reserve Banks must deliver them to the Treasury. At such time, the Treasury's account is charged, and the Reserve Banks' gold certificate accounts are reduced. The value of gold for purposes of backing the gold certificates is set by law at \$42 2/9 per fine troy ounce. Gold certificates are recorded by the Banks at original cost. The Board of Governors allocates the gold certificates among the Reserve Banks once a year based on each Reserve Bank's average Federal Reserve notes outstanding during the preceding twelve months.

Special drawing rights (SDR) are issued by the International Monetary Fund (IMF) to its members in proportion to each member's quota in the IMF at the time of issuance. SDRs serve as a supplement to international monetary reserves and may be transferred from one national monetary authority to another. Under the law providing for U.S. participation in the SDR system, the Secretary of the Treasury is authorized to issue SDR certificates to the Reserve Banks. When SDR certificates are issued to the Reserve Banks, equivalent amounts in U.S. dollars are credited to the account established for the Treasury and the Reserve Banks' SDR certificate accounts are increased. The Reserve Banks are required to purchase SDR certificates, at the direction of



the Treasury, for the purpose of financing SDR acquisitions or for financing exchange-stabilization operations. At the time SDR certificate transactions occur, the Board of Governors allocates the SDR certificates among the Reserve Banks based upon each Reserve Bank's Federal Reserve notes outstanding at the end of the preceding calendar year. SDR certificates are recorded by the Banks at original cost. There were no SDR certificate transactions during the years ended December 31, 2013 and 2012.

c. Coin

The amount reported as coin in the Statements of Condition represents the face value of all United States coin held by the Bank. The Bank buys coin at face value from the U.S. Mint in order to fill depository institution orders.

d. Loans

Loans to depository institutions are reported at their outstanding principal balances and interest income is recognized on an accrual basis.

Loans are impaired when current information and events indicate that it is probable that the Bank will not receive the principal and interest that are due in accordance with the contractual terms of the loan agreement. Impaired loans are evaluated to determine whether an allowance for loan loss is required. The Bank has developed procedures for assessing the adequacy of any allowance for loan losses using all available information to identify incurred losses. This assessment includes monitoring information obtained from banking supervisors, borrowers, and other sources to assess the credit condition of the borrowers and, as appropriate, evaluating collateral values. Generally, the Bank would discontinue recognizing interest income on impaired loans until the borrower's repayment performance demonstrates principal and interest would be received in accordance with the terms of the loan agreement. If the Bank discontinues recording interest on an impaired loan, cash payments are first applied to principal until the loan balance is reduced to zero; subsequent payments are applied as recoveries of amounts previously deemed uncollectible, if any, and then as interest income.

e. Securities Purchased Under Agreements to Resell, Securities Sold Under Agreements to Repurchase, and Securities Lending

The FRBNY may engage in purchases of securities with primary dealers under agreements to resell (repurchase transactions). These repurchase transactions are settled through a tri-party arrangement. In a tri-party arrangement, two commercial custodial banks manage the collateral clearing, settlement, pricing, and pledging, and provide cash and securities custodial services for and on behalf of the FRBNY and counterparty. The collateral pledged must exceed the principal amount of the transaction by a margin determined by the FRBNY for each class and maturity of acceptable collateral. Collateral designated by the FRBNY as acceptable under repurchase transactions primarily includes Treasury securities (including Treasury Inflation-Protected Securities and Separate Trading of Registered Interest and Principal of Securities Treasury securities); direct obligations of several federal and GSE-related agencies, including Federal National Mortgage Association, Federal Home Loan Mortgage Corporation, and Federal Home Loan Banks; and pass-through federal agency and GSE MBS. The repurchase transactions with the associated interest income recognized over the life of the transaction. These transactions are reported at their contractual amounts as "System Open Market Account: Securities purchased under agreements to resell" and the related accrued interest receivable is reported as a component of "System Open Market Account: Accrued interest receivable" in the Statements of Condition.

The FRBNY may engage in sales of securities under agreements to repurchase (reverse repurchase transactions) with primary dealers and with the set of expanded counterparties which includes banks, savings associations, GSEs, and domestic money market funds. These reverse repurchase transactions, when arranged as open market operations, are settled through a tri-party arrangement, similar to repurchase transactions. Reverse repurchase transactions may also be executed with foreign official and international account holders as part of a service offering. Reverse repurchase agreements are collateralized by a pledge of an amount of Treasury securities, GSE debt securities, and federal agency and GSE MBS that are held in the SOMA. Reverse repurchase transactions are accounted for as financing transactions, and the associated interest expense is recognized over the life of the transaction. These transactions are reported at their contractual amounts as "System Open Market Account: Securities sold under agreements to repurchase" and the related accrued interest payable is reported as a component of "Other liabilities" in the Statements of Condition.

Treasury securities and GSE debt securities held in the SOMA may be lent to primary dealers, typically overnight, to facilitate the effective functioning of the domestic securities markets. The amortized cost basis of securities lent continues to be reported as "Treasury securities, net" and "Government-sponsored enterprise debt securities, net," as appropriate, in the Statements of Condition. Securities lending transactions are fully collateralized by Treasury securities that have fair values in excess of the securities lent. The FRBNY charges the primary dealer a fee for borrowing securities, and these fees are reported as a component of "Non-interest (loss) income: Other" in the Statements of Income and Comprehensive Income.

Activity related to securities purchased under agreements to resell, securities sold under agreements to repurchase, and securities lending is allocated to each of the Reserve Banks on a percentage basis derived from an annual settlement of the interdistrict settlement account that occurs in the second quarter of each year.

f. Treasury Securities; Government-Sponsored Enterprise Debt Securities; Federal Agency and Government-Sponsored Enterprise Mortgage-Backed Securities; Foreign Currency Denominated Assets; and Warehousing Agreements

Interest income on Treasury securities, GSE debt securities, and foreign currency denominated assets included in the SOMA is accrued on a straight-line basis. Interest income on federal agency and GSE MBS is accrued using the interest method and includes amortization of premiums, accretion of discounts, and gains or losses associated with principal paydowns. Premiums and discounts related to federal agency and GSE MBS are amortized or accreted over the term of the security to stated maturity, and the amortization of premiums and accretion of discounts are accelerated when principal payments are received. Gains and losses resulting from sales of securities are determined by specific issue based on average cost. Treasury securities, GSE debt securities, and federal agency and GSE MBS are reported net of premiums and discounts in the Statements of Condition and interest income on those securities is reported net of the amortization of premiums and accretion of discounts in the Statements of Income and Comprehensive Income.

In addition to outright purchases of federal agency and GSE MBS that are held in the SOMA, the FRBNY enters into dollar roll transactions (dollar rolls), which primarily involve an initial transaction to purchase or sell "to be announced" (TBA) MBS for delivery in the current month combined with a simultaneous agreement to sell or purchase TBA MBS on a specified future date. During the years ended December 31, 2013 and 2012, the FRBNY executed dollar rolls primarily to facilitate settlement of outstanding purchases of federal agency and GSE MBS. The FRBNY accounts for dollar rolls as purchases or sales on a settlement-date basis. In addition, TBA MBS transactions may be paired off or assigned prior to settlement. Net gains resulting from these MBS transactions are reported as "Non-interest (loss) income: System Open Market Account: Federal agency and government-sponsored enterprise mortgage-backed securities gains, net" in the Statements of Income and Comprehensive Income.

Foreign currency denominated assets, which can include foreign currency deposits, securities purchased under agreements to resell, and government debt instruments, are revalued daily at current foreign currency market exchange rates in order to report these assets in U.S. dollars. Foreign currency translation gains and losses that result from the daily revaluation of foreign currency denominated assets are reported as "Non-interest (loss) income: System Open Market Account: Foreign currency translation losses, net" in the Statements of Income and Comprehensive Income.

Because the FRBNY enters into commitments to buy Treasury securities, federal agency and GSE MBS, and foreign government debt instruments and records the related securities on a settlement-date basis in accordance with the FAM, the related outstanding commitments are not reflected in the Statements of Condition.

Activity related to Treasury securities, GSE debt securities, and federal agency and GSE MBS, including the premiums, discounts, and realized gains and losses, is allocated to each Reserve Bank on a percentage basis derived from an annual settlement of the interdistrict settlement account that occurs in the second quarter of each year. Activity related to foreign currency denominated assets, including the premiums, discounts, and realized and unrealized gains and losses, is allocated to each Reserve Bank based on the ratio of each Reserve Bank's capital and surplus to the Reserve Banks' aggregate capital and surplus at the preceding December 31.

Warehousing is an arrangement under which the FOMC has approved the exchange, at the request of the Treasury, of U.S. dollars for foreign currencies held by the Treasury over a limited period. The purpose of the warehousing facility is to supplement the U.S. dollar resources of the Treasury for financing purchases of foreign currencies and related international



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operations. Warehousing agreements are valued daily at current market exchange rates. Activity related to these agreements is allocated to each Reserve Bank based on the ratio of each Reserve Bank's capital and surplus to the Reserve Banks' aggregate capital and surplus at the preceding December 31.

g. Central Bank Liquidity Swaps

Central bank liquidity swaps, which are transacted between the FRBNY and a foreign central bank, can be structured as either U.S. dollar or foreign currency liquidity swap arrangements.

Central bank liquidity swaps activity, including the related income and expense, is allocated to each Reserve Bank based on the ratio of each Reserve Bank's capital and surplus to the Reserve Banks' aggregate capital and surplus at the preceding December 31. The foreign currency amounts associated with these central bank liquidity swap arrangements are revalued daily at current foreign currency market exchange rates.

U.S. dollar liquidity swaps

At the initiation of each U.S. dollar liquidity swap transaction, the foreign central bank transfers a specified amount of its currency to a restricted account for the FRBNY in exchange for U.S. dollars at the prevailing market exchange rate. Concurrent with this transaction, the FRBNY and the foreign central bank agree to a second transaction that obligates the foreign central bank to return the U.S. dollars and the FRBNY to return the foreign currency on a specified future date at the same exchange rate as the initial transaction. The Bank's allocated portion of the foreign currency amounts that the FRBNY acquires are reported as "System Open Market Account: Central bank liquidity swaps" in the Statements of Condition. Because the swap transaction will be unwound at the same U.S. dollar amount and exchange rate that were used in the initial transaction, the recorded value of the foreign currency amounts is not affected by changes in the market exchange rate.

The foreign central bank compensates the FRBNY based on the amount outstanding and the rate under the swap agreement. The Bank's allocated portion of the amount of compensation received during the term of the swap transaction is reported as "Interest income: System Open Market Account: Central bank liquidity swaps" in the Statements of Income and Comprehensive Income.

Foreign currency liquidity swaps

The structure of foreign currency liquidity swap transactions involves the transfer by the FRBNY, at the prevailing market exchange rate, of a specified amount of U.S. dollars to an account for the foreign central bank in exchange for its currency. The foreign currency amount received would be reported as a liability by the Bank.

h. Bank Premises, Equipment, and Software

Bank premises and equipment are stated at cost less accumulated depreciation. Depreciation is calculated on a straight-line basis over the estimated useful lives of the assets, which range from 2 to 50 years. Major alterations, renovations, and improvements are capitalized at cost as additions to the asset accounts and are depreciated over the remaining useful life of the asset or, if appropriate, over the unique useful life of the alteration, renovation, or improvement. Maintenance, repairs, and minor replacements are charged to operating expense in the year incurred.

Costs incurred to acquire software are capitalized based on the purchase price. Costs incurred during the application development stage to develop internal-use software are capitalized based on the cost of direct services and materials associated with designing, coding, installing, and testing the software. Capitalized software costs are amortized on a straight-line basis over the estimated useful lives of the software applications, which generally range from two to five years. Maintenance costs related to software are charged to operating expense in the year incurred.

Capitalized assets, including software, buildings, leasehold improvements, furniture, and equipment, are impaired and an adjustment is recorded when events or changes in circumstances indicate that the carrying amount of assets or asset groups is not recoverable and significantly exceeds the assets' fair value.

i. Interdistrict Settlement Account

At the close of business each day, each Reserve Bank aggregates the payments due to or from other Reserve Banks. These payments result from transactions between the Reserve Banks and transactions that involve depository institution accounts held by other Reserve Banks, such as Fedwire funds and securities transfers and check and ACH transactions. The cumulative net amount due to or from the other Reserve Banks is reflected in the "Interdistrict settlement account" in the Statements of Condition.

An annual settlement of the interdistrict settlement account occurs in the second quarter of each year. As a result of the annual settlement, the balance in each Bank's interdistrict settlement account is adjusted by an amount equal to the average balance in the account during the previous 12-month period ended March 31. An equal and offsetting adjustment is made to each Bank's allocated portion of SOMA assets and liabilities.

j. Federal Reserve Notes

Federal Reserve notes are the circulating currency of the United States. These notes, which are identified as issued to a specific Reserve Bank, must be fully collateralized. All of the Bank's assets are eligible to be pledged as collateral. The collateral value is equal to the book value of the collateral tendered with the exception of securities, for which the collateral value is equal to the par value of the securities tendered. The par value of securities sold under agreements to repurchase is deducted from the eligible collateral value.

The Board of Governors may, at any time, call upon a Reserve Bank for additional security to adequately collateralize outstanding Federal Reserve notes. To satisfy the obligation to provide sufficient collateral for outstanding Federal Reserve notes, the Reserve Banks have entered into an agreement that provides for certain assets of the Reserve Banks to be jointly pledged as collateral for the Federal Reserve notes issued to all Reserve Banks. In the event that this collateral is insufficient, the Federal Reserve Act provides that Federal Reserve notes become a first and paramount lien on all the assets of the Reserve Banks. Finally, Federal Reserve notes are obligations of the United States government.

"Federal Reserve notes outstanding, net" in the Statements of Condition represents the Bank's Federal Reserve notes outstanding, reduced by the Bank's currency holdings of \$8,774 million and \$11,462 million at December 31, 2013 and 2012, respectively.

At December 31, 2013 and 2012, all Federal Reserve notes outstanding, reduced by the Reserve Bank's currency holdings, were fully collateralized. At December 31, 2013, all gold certificates, all special drawing rights certificates, and \$1,182 billion of domestic securities held in the SOMA were pledged as collateral. At December 31, 2013, no investments denominated in foreign currencies were pledged as collateral.

k. Deposits

Depository Institutions

Depository institutions' deposits represent the reserve and service-related balances in the accounts that depository institutions hold at the Bank. The interest rates paid on required reserve balances and excess balances are determined by the Board of Governors, based on an FOMC-established target range for the federal funds rate. Interest payable is reported as a component of "Interest payable to depository institutions" in the Statements of Condition.

The Term Deposit Facility (TDF) consists of deposits with specific maturities held by eligible institutions at the Reserve Banks. The Reserve Banks pay interest on these deposits at interest rates determined by auction. Interest payable is reported as a component of "Interest payable to depository institutions" in the Statements of Condition. There were no deposits held by the Bank under the TDF at December 31, 2013 and 2012.

Other

Other deposits include the Bank's allocated portion of foreign central bank and foreign government deposits held at the FRBNY.

I. Capital Paid-in

The Federal Reserve Act requires that each member bank subscribe to the capital stock of the Reserve Bank in an amount equal to 6 percent of the capital and surplus of the member bank. These shares are nonvoting, with a par value of \$100, and may not be transferred or hypothecated. As a member bank's capital and surplus changes, its holdings of Reserve Bank stock



must be adjusted. Currently, only one-half of the subscription is paid in, and the remainder is subject to call. A member bank is liable for Reserve Bank liabilities up to twice the par value of stock subscribed by it.

By law, each Reserve Bank is required to pay each member bank an annual dividend of 6 percent on the paid-in capital stock. This cumulative dividend is paid semiannually.

m. Surplus

The Board of Governors requires the Reserve Banks to maintain a surplus equal to the amount of capital paid-in. On a daily basis, surplus is adjusted to equate the balance to capital paid-in. Accumulated other comprehensive income is reported as a component of "Surplus" in the Statements of Condition and the Statements of Changes in Capital. Additional information regarding the classifications of accumulated other comprehensive income is provided in Notes 9 and 10.

n. Remittances to Treasury

The Board of Governors requires the Reserve Banks to transfer excess earnings to the Treasury as interest on Federal Reserve notes after providing for the costs of operations, payment of dividends, and reservation of an amount necessary to equate surplus with capital paid-in. Currently, remittances to the Treasury are made on a weekly basis. This amount is reported as "Earnings remittances to Treasury" in the Statements of Income and Comprehensive Income. The amount due to the Treasury is reported as "Accrued remittances to Treasury" in the Statements of Condition. See Note 12 for additional information on interest on Federal Reserve notes.

If earnings during the year are not sufficient to provide for the costs of operations, payment of dividends, and equating surplus and capital paid-in, remittances to the Treasury are suspended. A deferred asset is recorded that represents the amount of net earnings a Reserve Bank will need to realize before remittances to the Treasury resume. This deferred asset is periodically reviewed for impairment.

o. Income and Costs Related to Treasury Services

When directed by the Secretary of the Treasury, the Bank is required by the Federal Reserve Act to serve as fiscal agent and depositary of the United States Government. By statute, the Treasury has appropriations to pay for these services. During the years ended December 31, 2013 and 2012, the Bank was reimbursed for all services provided to the Treasury as its fiscal agent.

p. Compensation Received for Service Costs Provided

The Federal Reserve Bank of Atlanta has overall responsibility for managing the Reserve Banks' provision of check and ACH services to depository institutions, the FRBNY has overall responsibility for managing the Reserve Banks' provision of Fedwire funds and securities services, and the Federal Reserve Bank of Chicago has overall responsibility for managing the Reserve Banks' provision of electronic access services to depository institutions. The Reserve Bank that has overall responsibility for managing these services recognizes the related total System revenue in its Statements of Income and Comprehensive Income. The Bank is compensated for costs incurred to provide these services by the Reserve Banks responsible for managing these services and reports this compensation as "Non-interest (loss) income: Compensation received for service costs provided" in its Statements of Income and Comprehensive Income.

q. Assessments

The Board of Governors assesses the Reserve Banks to fund its operations, the operations of the Bureau and, for a two-year period following the July 21, 2010, effective date of the Dodd-Frank Act, the OFR. These assessments are allocated to each Reserve Bank based on each Reserve Bank's capital and surplus balances. The Board of Governors also assesses each Reserve Bank for expenses related to producing, issuing, and retiring Federal Reserve notes based on each Reserve Bank's share of the number of notes comprising the System's net liability for Federal Reserve notes on December 31 of the prior year.

The Dodd-Frank Act requires that, after the transfer date of July 21, 2011, the Board of Governors fund the Bureau in an amount not to exceed a fixed percentage of the total operating expenses of the System as reported in the Board of Governors' 2009 annual report, which totaled \$4.98 billion. The fixed percentage of total operating expenses of the System for the years ended December 31, 2013 and 2012, was 12 percent (\$597.6 million) and 11 percent (\$547.8 million), respectively. After 2013, the

amount will be adjusted in accordance with the provisions of the Dodd-Frank Act. The Bank's assessment for Bureau funding is reported as "Assessments: Bureau of Consumer Financial Protection" in the Statements of Income and Comprehensive Income.

The Board of Governors assessed the Reserve Banks to fund the operations of the OFR for the two-year period ended July 21, 2012, following enactment of the Dodd-Frank Act; thereafter, the OFR is funded by fees assessed on bank holding companies and nonbank financial companies that meet the criteria specified in the Dodd-Frank Act.

r. Taxes

The Reserve Banks are exempt from federal, state, and local taxes, except for taxes on real property. The Bank's real property taxes were \$3 million for each of the years ended December 31, 2013 and 2012, and are reported as a component of "Operating expenses: Occupancy" in the Statements of Income and Comprehensive Income.

s. Restructuring Charges

The Reserve Banks recognize restructuring charges for exit or disposal costs incurred as part of the closure of business activities in a particular location, the relocation of business activities from one location to another, or a fundamental reorganization that affects the nature of operations. Restructuring charges may include costs associated with employee separations, contract terminations, and asset impairments. Expenses are recognized in the period in which the Bank commits to a formalized restructuring plan or executes the specific actions contemplated in the plan and all criteria for financial statement recognition have been met.

The Bank had no significant restructuring activities in 2013 and 2012.

t. Recently Issued Accounting Standards

In December 2011, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2011-12, *Comprehensive Income* (Topic 220): *Deferral of the Effective Date for Amendments to the Presentation of Reclassifications of Items out of Accumulated Other Comprehensive Income in Accounting Standards Update No. 2011-05*. This update indefinitely deferred the requirements of ASU 2011-05, which required an entity to report the effect of significant reclassifications out of accumulated other comprehensive income on the respective net income line items. Subsequently, in February 2013, the FASB issued ASU 2013-02, *Comprehensive Income* (Topic 220): *Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income*, which established an effective date for the requirements of ASU 2011-05 related to reporting of significant reclassification adjustments from accumulated other comprehensive income. This update improves the transparency of changes in other comprehensive income and items reclassified out of accumulated other comprehensive income in the financial statements. These presentation requirements of ASU 2011-05 and the required disclosures in ASU 2013-02 are effective for the Bank for the year ending December 31, 2013, and are reflected in the Bank's 2013 financial statements and Note 10.

LOANS

Loans to Depository Institutions

The Bank offers primary, secondary, and seasonal loans to eligible borrowers, and each program has its own interest rate. Interest is accrued using the applicable interest rate established at least every 14 days by the Bank's board of directors, subject to review and determination by the Board of Governors. Primary and secondary loans are extended on a short-term basis, typically overnight, whereas seasonal loans may be extended for a period of up to nine months.

Primary, secondary, and seasonal loans are collateralized to the satisfaction of the Bank to reduce credit risk. Assets eligible to collateralize these loans include consumer, business, and real estate loans; Treasury securities; GSE debt securities; foreign sovereign debt; municipal, corporate, and state and local government obligations; asset-backed securities; corporate bonds; commercial paper; and bank-issued assets, such as certificates of deposit, bank notes, and deposit notes. Collateral is assigned a lending value that is deemed appropriate by the Bank, which is typically fair value reduced by a margin. Loans to depository institutions are monitored daily to ensure that borrowers continue to meet eligibility requirements for these programs. If a



borrower no longer qualifies for these programs, the Bank will generally request full repayment of the outstanding loan or, for primary or seasonal loans, may convert the loan to a secondary credit loan. Collateral levels are reviewed daily against outstanding obligations, and borrowers that no longer have sufficient collateral to support outstanding loans are required to provide additional collateral or to make partial or full repayment.

Loans to depository institutions were \$550 thousand as of December 31, 2013, with a remaining maturity within 15 days. The Bank had no loans outstanding as of December 31, 2012.

At December 31, 2013 and 2012, the Bank did not have any loans that were impaired, restructured, past due, or on non-accrual status, and no allowance for loan losses was required. There were no impaired loans during the years ended December 31, 2013 and 2012.

System Open Market Account

a. Domestic Securities Holdings

The FRBNY conducts domestic open market operations and, on behalf of the Reserve Banks, holds the resulting securities in the SOMA.

During the years ended December 31, 2013 and 2012, the FRBNY continued the purchase of Treasury securities and federal agency and GSE MBS under the large-scale asset purchase programs authorized by the FOMC. In September 2011, the FOMC announced that the Federal Reserve would reinvest principal payments from the SOMA portfolio holdings of GSE debt securities and federal agency and GSE MBS in federal agency and GSE MBS. In June 2012, the FOMC announced that it would continue the existing policy of reinvesting principal payments from the SOMA portfolio holdings of GSE debt securities and federal agency and GSE MBS in federal agency and GSE MBS. In September 2012, the FOMC announced that the Federal Reserve would purchase additional federal agency and GSE MBS. In September 2012, the FOMC announced that the Federal Reserve would purchase additional federal agency and GSE MBS at a pace of \$40 billion per month. In December 2012, the FOMC announced that the Federal Reserve would purchase longer-term Treasury securities initially at a pace of \$45 billion per month after its program to extend the average maturity of its holdings of Treasury securities was completed at the end of 2012. In December 2012, the FOMC announced that the Federal Reserve would continue the policy of rolling over maturing Treasury securities into new issues at auction.

During the year ended December 31, 2012, the FRBNY also continued the purchase and sale of SOMA portfolio holdings under the maturity extension programs authorized by the FOMC. In September 2011, the FOMC announced that the Federal Reserve would extend the average maturity of the SOMA portfolio holdings of securities by purchasing \$400 billion par value of Treasury securities with maturities of 6 to 30 years and selling or redeeming an equal par amount of Treasury securities with remaining maturities of three years or less by the end of June 2012. In June 2012, the FOMC announced that the Federal Reserve would continue through the end of 2012 its program to extend the average maturity of securities by purchasing \$267 billion par value of Treasury securities with maturities of 6 to 30 years and selling or redeeming an equal par amount of Treasury securities with maturities of three and a quarter years or less by the end of 2012.

The Bank's allocated share of activity related to domestic open market operations was 6.218 percent and 7.117 percent at December 31, 2013 and 2012, respectively.

	2013									
		Unamortized Unaccre Par premiums discour								
Notes	\$	91,246	\$	2,076	\$	(354)	\$	92,968		
Bonds		46,098		7,993		(347)		53,744		
Total Treasury securities	\$	137,344	\$	10,069	\$	(701)	\$	146,712		
GSE debt securities	\$	3,558	\$	118	\$	_	\$	3,676		
Federal agency and GSE MBS	\$	92,659	\$	2,785	\$	(67)	\$	95,377		

The Bank's allocated share of Treasury securities, GSE debt securities, and federal agency and GSE MBS, net, excluding accrued interest, held in the SOMA at December 31 was as follows (in millions):

	2012										
		Par		amortized remiums		ccreted scounts	Total amortized cost				
Notes	\$	79,029	\$	2,315	\$	(51)	\$	81,293			
Bonds		39,553		7,926		(10)		47,469			
Total Treasury securities	\$	118,582	\$	10,241	\$	(61)	\$	128,762			
GSE debt securities	\$	5,465	\$	193	\$	(1)	\$	5,657			
Federal agency and GSE MBS	\$	65,952	\$	1,734	\$	(50)	\$	67,636			

The FRBNY enters into transactions for the purchase of securities under agreements to resell and transactions to sell securities under agreements to repurchase as part of its monetary policy activities. In addition, transactions to sell securities under agreements to repurchase are entered into as part of a service offering to foreign official and international account holders.

There were no material transactions related to securities purchased under agreements to resell during the years ended December 31, 2013 and 2012. Financial information related to securities sold under agreements to repurchase for the years ended December 31 was as follows (in millions):

	Allocated t	o the B	lank	Total SOMA					
	2013		2012		2013		2012		
Contract amount outstanding, end of year	\$ 19,645	\$	7,629	\$	315,924	\$	107,188		
Average daily amount outstanding, during the year	6,439		7,683		99,681		91,898		
Maximum balance outstanding, during the year	19,645		11,537		315,924		122,541		
Securities pledged (par value), end of year	19,304		6,658		310,452		93,547		
Securities pledged (market value), end of year	19,581		7,629		314,901		107,188		



NOTES TO FINANCIAL STATEMENTS

The remaining maturity distribution of Treasury securities, GSE debt securities, federal agency and GSE MBS bought outright, and securities sold under agreements to repurchase that were allocated to the Bank at December 31, 2013 and 2012, was as follows (in millions):

	thin 15 days	days to) days	91 days to 1 year		er 1 year 5 years		er 5 years 10 years	Over 10 years	Total
December 31, 2013:									
Treasury securities (par value)	\$ _	\$ 19	\$ 11	\$	47,464	\$	53,768	\$ 36,082	\$ 137,344
GSE debt securities (par value)	144	470	539		2,255		4	146	3,558
Federal agency and GSE MBS (par value) ¹	_	_	_		_		158	92,501	92,659
Securities sold under agreements to repurchase (contract amount)	19,645	_	_		_		_	_	19,645
December 31, 2012:									
Treasury securities (par value)	\$ _	\$ _	\$ 1	\$	26,937	\$	61,379	\$ 30,265	\$ 118,582
GSE debt securities (par value)	111	199	1,082		3,760		146	167	5,465
Federal agency and GSE MBS (par value) ¹	_	_	_		_		169	65,783	65,952
Securities sold under agreements to repurchase									
(contract amount)	7,629	_	-		_	-	_	_	7,629

¹ The par amount shown for federal agency and GSE MBS is the remaining principal balance of the securities.

Federal agency and GSE MBS are reported at stated maturity in the table above. The estimated weighted average life of these securities, which differs from the stated maturity primarily because it factors in scheduled payments and prepayment assumptions, was approximately 6.5 and 3.3 years as of December 31, 2013 and 2012, respectively.

The amortized cost and par value of Treasury securities and GSE debt securities that were loaned from the SOMA at December 31 was as follows (in millions):

	Allocated t	Total	Total SOMA				
	2013	:	2012		2013		2012
Treasury securities (amortized cost)	\$ 1,067	\$	650	\$	17,153	\$	9,139
Treasury securities (par value)	961		602		15,447		8,460
GSE debt securities (amortized cost)	68		50		1,099		697
GSE debt securities (par value)	66		48		1,055		676

The FRBNY enters into commitments to buy and sell Treasury securities and records the related securities on a settlement-date basis. As of December 31, 2013, there were no outstanding commitments.

The FRBNY enters into commitments to buy and sell federal agency and GSE MBS and records the related securities on a settlement-date basis. As of December 31, 2013, the total purchase price of the federal agency and GSE MBS under outstanding purchase commitments was \$59,350 million, of which \$479 million was related to dollar rolls. The total purchase price of outstanding purchase commitments allocated to the Bank was \$3,690 million, of which \$30 million was related to dollar rolls. As of December 31, 2013, there were no outstanding sales commitments for federal agency and GSE MBS. These commitments, which had contractual settlement dates extending through February 2014, are for the purchase of TBA MBS for which the number and identity of the pools that will be delivered to fulfill the commitment are unknown at the time of the trade. These commitments are subject to varying degrees of off-balance-sheet market risk and counterparty credit risk that result from their future settlement. The FRBNY requires the posting of cash collateral for commitments as part of the risk management practices used to mitigate the counterparty credit risk.

Other investments consist of cash and short-term investments related to the federal agency and GSE MBS portfolio. Other liabilities, which are related to federal agency and GSE MBS purchases and sales, includes the FRBNY's obligation to return cash margin posted by counterparties as collateral under commitments to purchase and sell federal agency and GSE MBS. In addition, other liabilities includes obligations that arise from the failure of a seller to deliver securities to the FRBNY on the settlement date. Although the FRBNY has ownership of and records its investments in the MBS as of the contractual settlement date, it is not obligated to make payment until the securities are delivered, and the amount included in other liabilities represents the FRBNY's obligation to pay for the securities when delivered. The amount of other investments and other liabilities allocated to the Bank and held in the SOMA at December 31 was as follows (in millions):

		Allocated t	o the B	ank	Total SOMA					
	:	2013		2012		2013	2012			
Other investments	\$	-	\$	2	\$	2	\$	23		
Other liabilities:										
Cash margin	\$	82	\$	220	\$	1,320	\$	3,092		
Obligations from MBS transaction fails		1		6		11		85		
Total other liabilities	\$	83	\$	226	\$	1,331	\$	3,177		

Accrued interest receivable on domestic securities holdings was \$23,405 million and \$18,924 million as of December 31, 2013 and 2012, respectively, of which \$1,455 million and \$1,348 million, respectively, was allocated to the Bank. These amounts are reported as a component of "System Open Market Account: Accrued interest receivable" in the Statements of Condition.



NOTES TO FINANCIAL STATEMENTS

Information about transactions related to Treasury securities, GSE debt securities, and federal agency and GSE MBS during the years ended December 31, 2013 and 2012, is summarized as follows (in millions):

	Allocated to the Bank												
		Bills		Notes		Bonds		Total Treasury securities		GSE debt securities		Federal agency and GSE MBS	
Balance at December 31, 2011	\$	2,128	\$	151,513	\$	48,498	\$	202,139	\$	12,453	\$	97,965	
Purchases ¹		11,448		34,201		22,158		67,807		_		35,265	
Sales ¹		_		(42,586)		(957)		(43,543)		_		-	
Realized gains, net ²		_		971		102		1,073		_		_	
Principal payments and maturities		(12,760)		(6,010)		_		(18,770)		(2,326)		(26,290)	
Amortization of premiums and accretion of discounts, net		_		(459)		(621)		(1,080)		(97)		(417)	
Inflation adjustment on inflation-indexed securities		_		50		81		131		_		_	
Annual reallocation adjustment ⁴		(816)		(56,386)		(21,793)		(78,995)		(4,373)		(38,887)	
Balance at December 31, 2012	\$	_	\$	81,294	\$	47,468	\$	128,762	\$	5,657	\$	67,636	
Purchases ¹		_		23,249		13,396		36,645		_		56,417	
Sales ¹		_		_		—		_		_		-	
Realized gains, net ²		_		_		_		_		_		-	
Principal payments and maturities		_		(1)		_		(1)		(1,259)		(17,839)	
Amortization of premiums and accretion of discounts, net		_		(390)		(613)		(1,003)		(52)		(454)	
Inflation adjustment on inflation-indexed securities		_		18		40		58		_		_	
Annual reallocation adjustment ⁴		_		(11,202)		(6,547)		(17,749)		(670)		(10,383)	
Balance at December 31, 2013	\$	_	\$	92,968	\$	53,744	\$	146,712	\$	3,676	\$	95,377	
Year-ended December 31, 2012													
Supplemental information—par value of transactions:													
Purchases ³	\$	11,449	\$	32,835	\$	17,246	\$	61,530	\$	_	\$	33,808	
Sales ³		_		(41,355)		(741)		(42,096)		_		-	
Year-ended December 31, 2013													
Supplemental information—par value of transactions:													
Purchases ³		\$ -	\$	23,080	\$	11,969	\$	35,049	\$	_	\$	54,627	
Sales ³		_		_		_		_		_		_	

¹ Purchases and sales may include payments and receipts related to principal, premiums, discounts, and inflation compensation adjustments to the basis of inflation-indexed securities. The amount reported as sales includes the realized gains and losses on such transactions. Purchases and sales exclude MBS TBA transactions that are settled on a net basis.

² Realized gains, net offset the amount of realized gains and losses included in the reported sales amount.

³ Includes inflation compensation.

⁴ Reflects the annual adjustment to the Bank's allocated portion of the related SOMA securities that results from the annual settlement of the interdistrict settlement account, as discussed in Note 3i.


NOTES TO FINANCIAL STATEMENTS

					Total	SOMA			
		Bills		Notes	Bonds	Total Treasury securities	GSE debt securities		Federal Jency and SSE MBS
Balance at December 31, 2011	\$	18,423	\$ 1	1,311,917	\$ 419,937	\$ 1,750,277	\$ 107,828	\$	848,258
Purchases ¹		118,886		397,999	263,991	780,876	_		431,487
Sales ¹		_		(507,420)	(11,727)	(519,147)	_		-
Realized gains, net ²		_		12,003	1,252	13,255	_		-
Principal payments and maturities		(137,314)		(67,462)	_	(204,776)	(27,211)		(324,181)
Amortization of premiums and accretion of discounts, net		5		(5,461)	(7,531)	(12,987)	(1,138)		(5,243)
Inflation adjustment on inflation-indexed securities		_		643	1,047	1,690	_		-
Balance at December 31, 2012	\$	_	\$ 1	1,142,219	\$ 666,969	\$ 1,809,188	\$ 79,479	\$	950,321
Purchases ¹		_		358,656	206,208	564,864	_		864,537
Sales ¹		_		_	_	_	_		-
Realized gains, net ²		_		_	_	_	_		-
Principal payments and maturities		_		(21)	_	(21)	(19,562)		(273,990)
Amortization of premiums and accretion of discounts, net		_		(6,024)	(9,503)	(15,527)	(795)		(7,008)
Inflation adjustment on inflation-indexed securities		_		285	645	930	_		-
Balance at December 31, 2013	\$	_	\$ 1	1,495,115	\$ 864,319	\$ 2,359,434	\$ 59,122	\$:	1,533,860
Year-ended December 31, 2012									
Supplemental information—par v	/alue	of transact	ions	:					
Purchases ³	\$	118,892	\$	383,106	\$ 205,115	\$ 707,113	\$ _	\$	413,160
Sales ³		_		(492,234)	(9,094)	(501,328)	_		-
Year-ended December 31, 2013									
Supplemental information—par v	/alue	of transact	ions	:					
Purchases ³	\$	_	\$	356,766	\$ 184,956	\$ 541,722	\$ _	\$	837,490
Sales ³						_			-

¹ Purchases and sales may include payments and receipts related to principal, premiums, discounts, and inflation compensation adjustments to the basis of inflation-indexed securities. The amount reported as sales includes the realized gains and losses on such transactions. Purchases and sales exclude MBS TBA transactions that are settled on a net basis.

² Realized gains, net offset the amount of realized gains and losses included in the reported sales amount.

³ Includes inflation compensation.



NOTES TO FINANCIAL STATEMENTS

b. Foreign Currency Denominated Investments

The FRBNY conducts foreign currency operations and, on behalf of the Reserve Banks, holds the resulting foreign currency denominated assets in the SOMA.

The FRBNY holds foreign currency deposits with foreign central banks and the Bank for International Settlements and invests in foreign government debt instruments of Germany, France, and Japan. These foreign government debt instruments are guaranteed as to principal and interest by the issuing foreign governments. In addition, the FRBNY enters into transactions to purchase Euro-denominated government debt securities under agreements to resell for which the accepted collateral is the debt instruments issued by the governments of Belgium, France, Germany, Italy, the Netherlands, and Spain.

The Bank's allocated share of activity related to foreign currency operations was 21.001 percent and 20.685 percent at December 31, 2013 and 2012, respectively.

Information about foreign currency denominated investments valued at amortized cost and foreign currency market exchange rates at December 31 was as follows (in millions):

	Allocate	d to Bank	Total	SOMA
	2013	2012	2013	2012
Euro:				
Foreign currency deposits	\$ 1,581	\$ 1,846	\$ 7,530	\$ 8,925
Securities purchased under agreements to resell	535	136	2,549	659
German government debt instruments	503	441	2,396	2,133
French government debt instruments	504	501	2,397	2,421
Japanese yen:				
Foreign currency deposits	615	735	2,927	3,553
Japanese government debt instruments	1,244	1,486	5,925	7,182
Total	\$ 4,982	\$ 5,145	\$ 23,724	\$ 24,873

Accrued interest receivable on foreign currency denominated assets was \$88 million and \$99 million as of December 31, 2013 and 2012, respectively, of which \$18 million and \$21 million, respectively, was allocated to the Bank. These amounts are reported as a component of "System Open Market Account: Accrued interest receivable" in the Statements of Condition.

The remaining maturity distribution of foreign currency denominated investments that were allocated to the Bank at December 31, 2013 and 2012, was as follows (in millions):

	Withiı 15 day		ays to days	ays to year	er 1 year 5 years	Total
December 31, 2013:						
Euro	\$ 1,4	78	\$ 378	\$ 454	\$ 813	\$ 3,123
Japanese yen	6	54	80	393	732	1,859
Total	\$ 2,1	32	\$ 458	\$ 847	\$ 1,545	\$ 4,982
December 31, 2012:						
Euro	\$ 1,30	63	\$ 357	\$ 445	\$ 759	\$ 2,924
Japanese yen	78	86	102	442	891	2,221
Total	\$ 2,14	49	\$ 459	\$ 887	\$ 1,650	\$ 5,145

There were no foreign exchange contracts related to open market operations outstanding as of December 31, 2013.

As of December 31, 2013, there were no outstanding commitments to purchase foreign government debt instruments. During 2013, there were purchases, sales, and maturities of foreign government debt instruments of \$3,539 million, \$0, and \$3,431 million, respectively, of which \$742 million, \$0, and \$719 million, respectively, were allocated to the Bank.

In connection with its foreign currency activities, the FRBNY may enter into transactions that are subject to varying degrees of off-balance-sheet market risk and counterparty credit risk that result from their future settlement. The FRBNY controls these risks by obtaining credit approvals, establishing transaction limits, receiving collateral in some cases, and performing daily monitoring procedures.

At December 31, 2013 and 2012, there was no balance outstanding under the authorized warehousing facility.

There were no transactions related to the authorized reciprocal currency arrangements with the Bank of Canada and the Bank of Mexico during the years ended December 31, 2013 and 2012.

c. Central Bank Liquidity Swaps

U.S. Dollar Liquidity Swaps

The Bank's allocated share of U.S. dollar liquidity swaps was approximately 21.001 percent and 20.685 percent at December 31, 2013 and 2012, respectively.

The total foreign currency held under U.S. dollar liquidity swaps in the SOMA at December 31, 2013 and 2012, was \$272 million and \$8,889 million, respectively, of which \$57 million and \$1,839 million, respectively, was allocated to the Bank.

The remaining maturity distribution of U.S. dollar liquidity swaps that were allocated to the Bank at December 31 was as follows (in millions):

	2013					2012					
		nin 15 ays	16 d 90	ays to days	то	otal		thin 15 days	16 9	days to 0 days	Total
Euro	\$	24	\$	33	\$	57	\$	360	\$	1,479	\$ 1,839

Foreign Currency Liquidity Swaps

There were no transactions related to the foreign currency liquidity swaps during the years ended December 31, 2013 and 2012.

d. Fair Value of SOMA Assets

The fair value amounts are presented solely for informational purposes. Although the fair value of SOMA security holdings can be substantially greater than or less than the recorded value at any point in time, these unrealized gains or losses have no effect on the ability of the Reserve Banks, as the central bank, to meet their financial obligations and responsibilities.

The fair value of the Treasury securities, GSE debt securities, federal agency and GSE MBS, and foreign government debt instruments in the SOMA's holdings is subject to market risk, arising from movements in market variables such as interest rates and credit risk. The fair value of federal agency and GSE MBS is also affected by the expected rate of prepayments of mortgage loans underlying the securities. The fair value of foreign government debt instruments is also affected by currency risk. Based on evaluations performed as of December 31, 2013, there are no credit impairments of SOMA securities holdings.



Notes to Financial Statements

The following table presents the amortized cost and fair value of and cumulative unrealized gains (losses) on the Treasury securities, GSE debt securities, and federal agency and GSE MBS, net held in the SOMA at December 31 (in millions):

			Allocated t	o the Bank		
		2013			2012	
	Amortized cost	Fair value	Cumulative unrealized gains (losses)	Amortized cost	Fair value	Cumulative unrealized gains
Treasury securities:						
Notes	\$ 92,968	\$ 93,209	\$ 241	\$ 81,293	\$ 86,344	\$ 5,051
Bonds	53,744	52,377	(1,367)	47,469	54,171	6,702
Total Treasury securities	\$ 146,712	\$ 145,586	\$ (1,126)	\$ 128,762	\$ 140,515	\$ 11,753
GSE debt securities	3,676	3,870	194	5,657	6,050	393
Federal agency and GSE MBS	95,377	92,996	(2,381)	67,636	70,744	3,108
Total domestic SOMA portfolio securities holdings	\$ 245,765	\$ 242,452	\$ (3,313)	\$ 202,055	\$ 217,309	\$ 15,254
Memorandum— Commitments for:						
Purchases of Treasury securities	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Purchases of Federal agency and GSE MBS	3,690	3,677	(13)	8,414	8,427	13
Sales of Federal agency and GSE MBS	_	_	_	_	_	_



Notes to Financial Statements

				Total	SOMA			
		2013				2012		
	Amortized cost	Fair value	u	umulative nrealized gains (losses)	Amortized cost	Fair value	Cumulative unrealized gains	
Treasury securities:								
Notes	\$ 1,495,115	\$ 1,499,000	\$	3,885	\$ 1,142,219	\$ 1,213,177	\$	70,958
Bonds	864,319	842,336		(21,983)	666,969	761,138		94,169
Total Treasury securities	\$ 2,359,434	\$ 2,341,336	\$	(18,098)	\$ 1,809,188	\$ 1,974,315	\$	165,127
GSE debt securities	59,122	62,236		3,114	79,479	85,004		5,525
Federal agency and GSE MBS	1,533,860	1,495,572		(38,288)	950,321	993,990		43,669
Total domestic SOMA portfolio securities holdings	\$ 3,952,416	\$ 3,899,144	\$	(53,272)	\$ 2,838,988	\$ 3,053,309	\$	214,321
Memorandum— Commitments for:							•	
Purchases of Treasury securities	\$ —	\$ —	\$	_	\$ —	\$ —	\$	_
Purchases of Federal agency and GSE MBS	59,350	59,129		(221)	118,215	118,397		182
Sales of Federal agency and GSE MBS	_	_		_	_	_		_

The fair value of Treasury securities and GSE debt securities was determined using pricing services that provide market consensus prices based on indicative quotes from various market participants. The fair value of federal agency and GSE MBS was determined using a pricing service that utilizes a model-based approach that considers observable inputs for similar securities.

At December 31, 2013 and 2012, the fair value of foreign currency denominated investments was \$23,802 million and \$25,042 million, respectively, of which \$4,999 million and \$5,180 million, respectively, was allocated to the Bank. The fair value of government debt instruments was determined using pricing services that provide market consensus prices based on indicative quotes from various market participants. The fair value of foreign currency deposits and securities purchased under agreements to resell was determined by reference to market interest rates.

The cost basis of securities purchased under agreements to resell, securities sold under agreements to repurchase, and other investments held in the SOMA approximate fair value.



Notes to Financial Statements

The following table provides additional information on the amortized cost and fair values of the federal agency and GSE MBS portfolio at December 31 (in millions):

		2(013			2(012	
Distribution of MBS holdings by coupon rate	Amo	ortized cost	F	air value	Amo	ortized cost	F	air value
Allocated to the Bank:								
2.0%	\$	882	\$	841	\$	60	\$	60
2.5%		7,700		7,366		2,673		2,688
3.0%		32,447		30,113		11,431		11,513
3.5%		21,744		21,039		12,781		13,149
4.0%		14,317		14,371		9,805		10,388
4.5%		11,555		12,155		18,681		20,083
5.0%		5,179		5,470		8,904		9,410
5.5%		1,337		1,413		2,845		2,976
6.0%		190		200		402		419
6.5%		26		28		54		58
Total	\$	95,377	\$	92,996	\$	67,636	\$	70,744
Total SOMA:								
2.0%	\$	14,191	\$	13,529	\$	845	\$	846
2.5%	ŗ	123,832	•	118,458	Ť	37,562	r	37,766
3.0%		521,809		484,275		160,613		161,757
3.5%		349,689		338,357		179,587		184,752
4.0%		230,256		231,113		137,758		145,955
4.5%		185,825		195,481		262,484		282,181
5.0%		83,290		87,968		125,107		132,213
5.5%		21,496		22,718		39,970		41,819
6.0%		3,051		3,225		5,642		5,888
6.5%		421		448		753		813
Total	\$	1,533,860	\$	1,495,572	\$	950,321	\$	993,990

Because SOMA securities are recorded at amortized cost, the change in the cumulative unrealized gains (losses) is not reported in the Statements of Income and Comprehensive Income. The following tables present the realized gains and the change in the cumulative unrealized losses, presented as "Fair value changes unrealized losses," of the domestic securities holdings during the years ended December 31, 2013 and 2012 (in millions):

		Allocated to Bank							
		201	.3		201	.2			
	Total portfolio holdings realized gains ¹		Fair value changes unrealized losses	Total portfolio holdings realized gains ¹		Fair value changes unrealized losses			
Treasury securities	\$	_	\$ (11,342)	\$ 1	,073	\$	(654)		
GSE debt securities		_	(154)		_		(76)		
Federal agency and GSE MBS		3	(5,144)		23		(188)		
Total	\$	3	\$ (16,640)	\$ 1	,096	\$	(918)		

	Total SOMA								
	20:	13	2012						
	Total portfolio holdings realized gains ¹	Fair value changes unrealized losses	Total portfolio holdings realized gains ¹	Fair value changes unrealized losses					
Treasury securities	\$ —	\$ (183,225)	\$ 13,255	\$ (1,142)					
GSE debt securities	-	(2,411)	-	(885)					
Federal agency and GSE MBS	51	(81,957)	241	(3,568)					
Total	\$ 51	\$ (267,593)	\$ 13,496	\$ (5,595)					

¹ Total portfolio holdings realized gains are reported in "Non-interest (loss) income: System Open Market Account" in the Statements of Income and Comprehensive Income.

The amount of change in unrealized gains position, net, related to foreign currency denominated assets was a decrease of \$90 million and an increase of \$3 million for the years ended December 31, 2013 and 2012, respectively, of which \$19 million and \$1 million, respectively, were allocated to the Bank.

Accounting Standards Codification (ASC) Topic 820 (ASC 820) defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. ASC 820 establishes a three-level fair value hierarchy that distinguishes between assumptions developed using market data obtained from independent sources (observable inputs) and the Bank's assumptions developed using the best information available in the circumstances (unobservable inputs). The three levels established by ASC 820 are described as follows:

- Level 1 Valuation is based on quoted prices for identical instruments traded in active markets.
- Level 2 Valuation is based on quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-based valuation techniques for which all significant assumptions are observable in the market.
- Level 3 Valuation is based on model-based techniques that use significant inputs and assumptions not observable in the market. These unobservable inputs and assumptions reflect the Bank's estimates of inputs and assumptions that market participants would use in pricing the assets and liabilities. Valuation techniques include the use of option pricing models, discounted cash flow models, and similar techniques.



NOTES TO FINANCIAL STATEMENTS

Treasury securities, GSE debt securities, Federal agency and GSE MBS, and foreign government debt instruments are classified as Level 2 within the ASC 820 hierarchy because the fair values are based on indicative quotes and other observable inputs obtained from independent pricing services. The fair value hierarchy level of SOMA financial assets is not necessarily an indication of the risk associated with those assets.

6 BANK PREMISES, EQUIPMENT, AND SOFTWARE

Bank premises and equipment at December 31 were as follows (in millions):

	2013	2012
Bank premises and equipment:		
Land and land improvements	\$ 48	\$ 48
Buildings	244	238
Building machinery and equipment	84	79
Construction in progress	2	4
Furniture and equipment	353	336
Subtotal	731	705
Accumulated depreciation	(378)	(359)
Bank premises and equipment, net	\$ 353	\$ 346
Depreciation expense, for the years ended December 31	\$ 51	\$ 58

Bank premises and equipment at December 31 included the following amounts for capitalized leases (in millions):

	2013	2012
Leased premises and equipment under capital leases	\$ 27	\$ 33
Accumulated depreciation	(18)	(20)
Leased premises and equipment under capital leases, net	\$ 9	\$ 13
Depreciation expense related to leased premises and equipment under capital leases, for the years ended December 31	\$6	\$7

The Bank leases space to outside tenants with remaining lease terms ranging from one to five years. Rental income from such leases was \$1.5 million and \$1.4 million for the years ended December 31, 2013 and 2012, respectively, and is reported as a component of "Non-interest (loss) income: Other" in the Statements of Income and Comprehensive Income. Future minimum lease payments that the Bank will receive under noncancelable lease agreements in existence at December 31, 2013, are as follows (in thousands):

Total	\$ 2,928
2018	56
2017	316
2016	762
2015	818
2014	\$ 976

The Bank had capitalized software assets, net of amortization, of \$35 million and \$39 million at December 31, 2013 and 2012, respectively. Amortization expense was \$18 million and \$16 million for the years ended December 31, 2013 and 2012, respectively. Capitalized software assets are reported as a component of "Other assets" in the Statements of Condition and the related amortization is reported as a component of "Operating expenses: Other" in the Statements of Income and Comprehensive Income.

COMMITMENTS AND CONTINGENCIES

In conducting its operations, the Bank enters into contractual commitments, normally with fixed expiration dates or termination provisions, at specific rates and for specific purposes.

At December 31, 2013, the Bank was obligated under noncancelable leases for premises and equipment with remaining terms of approximately two years.

Rental expense under operating leases for certain operating facilities, warehouses, and data processing and office equipment (including taxes, insurance, and maintenance when included in rent), net of sublease rentals, was \$423 thousand and \$445 thousand for the years ended December 31, 2013 and 2012, respectively. Certain of the Bank's leases have options to renew.

Future minimum lease payments under noncancelable operating leases, net of sublease rentals, with terms of one year or more, at December 31, 2013, were not material.

At December 31, 2013, there were no material unrecorded unconditional purchase commitments or obligations in excess of one year.

Under the Insurance Agreement of the Reserve Banks, each of the Reserve Banks has agreed to bear, on a per-incident basis, a share of certain losses in excess of 1 percent of the capital paid-in of the claiming Reserve Bank, up to 50 percent of the total capital paid-in of all Reserve Banks. Losses are borne in the ratio of a Reserve Bank's capital paid-in to the total capital paid-in of all Reserve Banks at the beginning of the calendar year in which the loss is shared. No claims were outstanding under the agreement at December 31, 2013 and 2012.

The Bank is involved in certain legal actions and claims arising in the ordinary course of business. Although it is difficult to predict the ultimate outcome of these actions, in management's opinion, based on discussions with counsel, the legal actions and claims will be resolved without material adverse effect on the financial position or results of operations of the Bank.



RETIREMENT AND THRIFT PLANS

Retirement Plans

The Bank currently offers three defined benefit retirement plans to its employees, based on length of service and level of compensation. Substantially all of the employees of the Reserve Banks, Board of Governors, and Office of Employee Benefits of the Federal Reserve System participate in the Retirement Plan for Employees of the Federal Reserve System (System Plan). Under the Dodd-Frank Act, newly hired Bureau employees are eligible to participate in the System Plan. In addition, employees at certain compensation levels participate in the Benefit Equalization Retirement Plan (BEP) and certain Reserve Bank officers participate in the Supplemental Retirement Plan for Select Officers of the Federal Reserve Banks (SERP).

The FRBNY, on behalf of the System, recognizes the net asset or net liability and costs associated with the System Plan in its consolidated financial statements. During the years ended December 31, 2013 and 2012, certain costs associated with the System Plan were reimbursed by the Bureau.

The Bank's projected benefit obligation, funded status, and net pension expenses for the BEP and the SERP at December 31, 2013 and 2012, and for the years then ended, were not material.

Thrift Plan

Employees of the Bank participate in the defined contribution Thrift Plan for Employees of the Federal Reserve System (Thrift Plan). The Bank matches 100 percent of the first 6 percent of employee contributions from the date of hire and provides an automatic employer contribution of 1 percent of eligible pay. The Bank's Thrift Plan contributions totaled \$16 million and \$15 million for the years ended December 31, 2013 and 2012, respectively, and are reported as a component of "Operating expenses: Salaries and benefits" in the Statements of Income and Comprehensive Income.

POSTRETIREMENT BENEFITS OTHER THAN RETIREMENT PLANS AND POSTEMPLOYMENT BENEFITS

Postretirement Benefits Other Than Retirement Plans

In addition to the Bank's retirement plans, employees who have met certain age and length-of-service requirements are eligible for both medical and life insurance benefits during retirement.

The Bank funds benefits payable under the medical and life insurance plans as due and, accordingly, has no plan assets. Following is a reconciliation of the beginning and ending balances of the benefit obligation (in millions):

	2013	2012
Accumulated postretirement benefit obligation at January 1	\$ 265.2	\$ 221.9
Service cost benefits earned during the period	14.1	11.0
Interest cost on accumulated benefit obligation	10.1	10.3
Net actuarial (gain) loss	(47.3)	29.7
Special termination benefits loss	-	0.1
Contributions by plan participants	2.9	2.7
Benefits paid	(11.7)	(11.2)
Medicare Part D subsidies	0.7	0.7
Plan amendments	(0.8)	_
Accumulated postretirement benefit obligation at December 31	\$ 233.2	\$ 265.2

At December 31, 2013 and 2012, the weighted-average discount rate assumptions used in developing the postretirement benefit obligation were 4.79 percent and 3.75 percent, respectively.

Discount rates reflect yields available on high-quality corporate bonds that would generate the cash flows necessary to pay the plan's benefits when due. Beginning in 2013, the System Plan discount rate assumption setting convention changed from rounding the rate to the nearest 25 basis points to using an unrounded rate.

Following is a reconciliation of the beginning and ending balance of the plan assets, the unfunded postretirement benefit obligation, and the accrued postretirement benefit costs (in millions):

	2013	2012
Fair value of plan assets at January 1	\$ —	\$ —
Contributions by the employer	8.1	7.8
Contributions by plan participants	2.9	2.7
Benefits paid	(11.7)	(11.2)
Medicare Part D subsidies	0.7	0.7
Fair value of plan assets at December 31	\$ —	\$ —
Unfunded obligation and accrued postretirement benefit cost	\$ 233.2	\$ 265.2
Amounts included in accumulated other comprehensive loss are shown below:		
Prior service cost	\$ 9.6	\$ 13.0
Net actuarial loss	(35.4)	(90.3)
Total accumulated other comprehensive loss	\$ (25.8)	\$ (77.3)

Accrued postretirement benefit costs are reported as a component of "Accrued benefit costs" in the Statements of Condition. For measurement purposes, the assumed health-care cost trend rates at December 31 are as follows:

	2013	2012
Health-care cost trend rate assumed for next year	7.00%	7.00%
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	5.00%	5.00%
Year that the rate reaches the ultimate trend rate	2019	2018

Assumed health-care cost trend rates have a significant effect on the amounts reported for health-care plans. A one percentage point change in assumed health-care cost trend rates would have the following effects for the year ended December 31, 2013 (in millions):

	One percentage point increase	One percentage point decrease
Effect on aggregate of service and interest cost components of net periodic postretirement benefit costs	\$ 5.3	\$ (4.1)
Effect on accumulated postretirement benefit obligation	35.1	(28.7)



The following is a summary of the components of net periodic postretirement benefit expense for the years ended December 31 (in millions):

	2013	2012
Service cost-benefits earned during the period	\$ 14.1	\$ 11.0
Interest cost on accumulated benefit obligation	10.1	10.3
Amortization of prior service cost	(4.2)	(4.2)
Amortization of net actuarial loss	7.7	5.6
Total periodic expense	27.7	22.7
Special termination benefits loss	_	0.1
Net periodic postretirement benefit expense	\$ 27.7	\$ 22.8

Estimated amounts that will be amortized from accumulated other comprehensive loss into net periodic postretirement benefit expense in 2014 are shown below:

Total	\$ (2.5)	
Net actuarial loss	1.5	
Prior service cost	\$ (4.0)	

Net postretirement benefit costs are actuarially determined using a January 1 measurement date. At January 1, 2013 and 2012, the weighted-average discount rate assumptions used to determine net periodic postretirement benefit costs were 3.75 percent and 4.50 percent, respectively.

Net periodic postretirement benefit expense is reported as a component of "Operating expenses: Salaries and benefits" in the Statements of Income and Comprehensive Income.

The Medicare Prescription Drug, Improvement and Modernization Act of 2003 established a prescription drug benefit under Medicare (Medicare Part D) and a federal subsidy to sponsors of retiree health-care benefit plans that provide benefits that are at least actuarially equivalent to Medicare Part D. The benefits provided under the Bank's plan to certain participants are at least actuarially equivalent to the Medicare Part D prescription drug benefit. The estimated effects of the subsidy are reflected in actuarial loss in the accumulated postretirement benefit obligation and net periodic postretirement benefit expense.

Federal Medicare Part D subsidy receipts were \$525 thousand and \$546 thousand in the years ended December 31, 2013 and 2012, respectively. Expected receipts in 2014, related to benefits paid in the years ended December 31, 2013 and 2012, are \$485 thousand.

Following is a summary of expected postretirement benefit payments (in millions):

	Without subsidy	With subsidy
2014	\$ 9.6	\$ 9.0
2015	10.4	9.6
2016	11.0	10.1
2017	11.9	10.9
2018	12.9	11.9
2019-2023	79.6	72.7
Total	\$ 135.4	\$ 124.2

Postemployment Benefits

The Bank offers benefits to former or inactive employees. Postemployment benefit costs are actuarially determined using a December 31 measurement date and include the cost of medical, dental, and vision insurance; survivor income; disability benefits; and self-insured workers' compensation expenses. The accrued postemployment benefit costs recognized by the Bank at December 31, 2013 and 2012, were \$22 million and \$23 million, respectively. This cost is included as a component of "Accrued benefit costs" in the Statements of Condition. Net periodic postemployment benefit expense included in 2013 and 2012 operating expenses were \$2 million and \$5 million, respectively, and are recorded as a component of "Operating expenses: Salaries and benefits" in the Statements of Income and Comprehensive Income.

10 Accumulated Other Comprehensive Income and Other Comprehensive Income

Following is a reconciliation of beginning and ending balances of accumulated other comprehensive loss as of December 31 (in millions):

	2013	2012	
	Amount related to postretirement benefits other than retirement plans	Amount related to postretirement benefits other than retirement plans	
Balance at January 1	\$ (77)	\$ (49)	
Change in funded status of benefit plans:			
Amortization of prior service cost	(4) ¹	(4)1	
Change in prior service costs related to benefit plans	(4)	(4)	
Net actuarial gain (loss) arising during the year	47	(30)	
Amortization of net actuarial loss	81	61	
Change in actuarial losses related to benefit plans	55	(24)	
Change in funded status of benefit plans— other comprehensive loss	51	(28)	
Balance at December 31	\$ (26)	\$ (77)	

¹ Reclassification is reported as a component of "Operating Expenses: Salaries and benefits" in the Statements of Income and Comprehensive Income.

Additional detail regarding the classification of accumulated other comprehensive loss is included in Note 9.

11 BUSINESS RESTRUCTURING CHARGES

The Bank had no business restructuring charges in 2013 or 2012.



NOTES TO FINANCIAL STATEMENTS

Distribution Of Comprehensive Income

In accordance with Board policy, Reserve Banks remit excess earnings, after providing for dividends and the amount necessary to equate surplus with capital paid-in, to the U.S. Treasury as earnings remittances to Treasury. The following table presents the distribution of the Bank's comprehensive income in accordance with the Board's policy for the years ended December 31 (in millions):

	2013	2012
Dividends on capital stock	\$ 345	\$ 332
Transfer (from) to surplus—amount required to equate surplus with capital paid-in	(10)	182
Earnings remittances to Treasury	4,496	6,414
Total distribution	\$ 4,831	\$ 6,928

During the year ended December 31, 2013, the Bank recorded a reduction in the amount of capital paid-in and a corresponding reduction of surplus, which is presented in the above table as "Transfer from surplus – amount required to equate surplus with capital paid-in." The reduction of surplus resulted in an equivalent increase in "Earnings remittances to Treasury" and a reduction in "Comprehensive income" for the year ended December 31, 2013.

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SUBSEQUENT EVENTS

There were no subsequent events that require adjustments to or disclosures in the financial statements as of December 31, 2013. Subsequent events were evaluated through March 14, 2014, which is the date that the financial statements were available to be issued.



THE FEDERAL RESERVE BANK OF RICHMOND 2013 ANNUAL REPORT was produced by the Research Department, Publications Division.

MANAGING EDITOR: Karl Rhodes

DESIGN: MillerCox Design, Inc.

PHOTOGRAPHY: Larry Cain

PRINTING: Federal Reserve Bank of Richmond

Special thanks to Anne Davlin, Lisa Kenney, Amanda Kramer, Urvi Neelakantan, and Sonya Ravindranath Waddell.

The Annual Report also is available on the Bank's website, www.richmondfed.org.



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