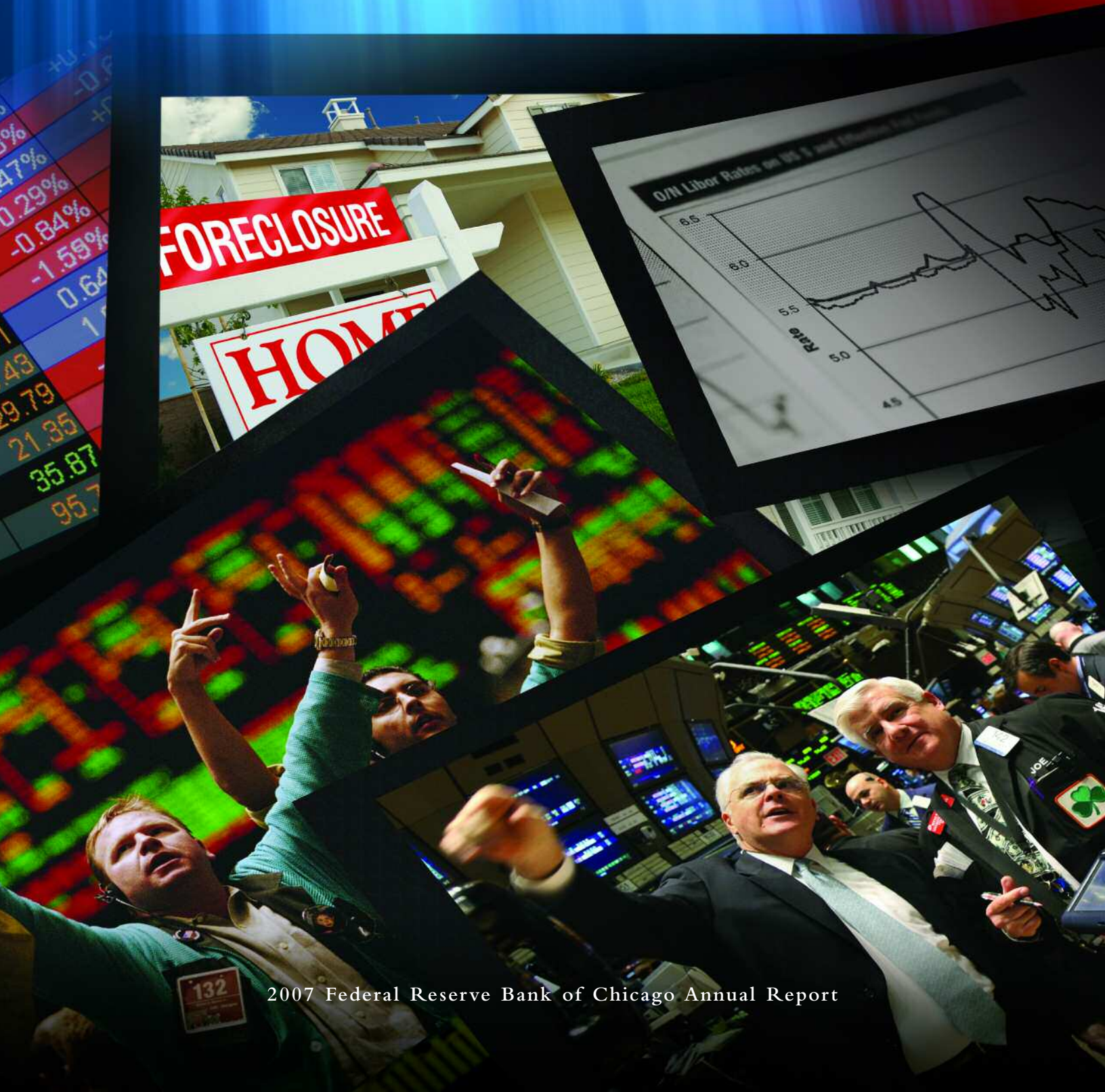


# TURMOIL & INNOVATION

A Look at Financial Markets in 2007



2007 Federal Reserve Bank of Chicago Annual Report

# CONTENTS

<i>Letter from the President</i>	<u>1</u>
<i>The Economy and Monetary Policy</i>	<u>2</u>
<i>Chicago Fed Highlights of 2007</i>	<u>4</u>
<i>Turmoil and Innovation: A Look at Financial Markets in 2007</i>	<u>6</u>
<i>Studying Financial Markets</i>	<u>14</u>
<i>Providing Confidence in Times of Turmoil</i>	<u>16</u>
<i>Directors</i>	<u>18</u>
<i>Management Committee</i>	<u>20</u>
<i>Executive Officers</i>	<u>21</u>
<i>Advisory Councils</i>	<u>22</u>
<i>Executive Changes</i>	<u>23</u>
<i>Operations Volumes</i>	<u>24</u>
<i>Auditor Independence</i>	<u>25</u>
<i>2007 Financial Statements</i>	<u>30</u>
<i>Notes to Financial Statements</i>	<u>33</u>

## LETTER FROM THE PRESIDENT

The Federal Reserve Bank of Chicago has a tradition of strong performance that continued in 2007, a year of leadership transition. I had the honor of succeeding retiring President and CEO Michael Moskow in September. Though I have been president for just over six months, I have been deeply involved in the monetary policy-making process for more than a decade. In fact, most of my research career has involved studying monetary policy decision-making and its effects on the economy. Since 1995, it has been my privilege to attend Federal Open Market Committee (FOMC) meetings — first as a senior staffer and since 2003 as the Bank's Research Director. I have been involved in the policy-making process during a variety of interesting economic and financial periods — experience that suits me well as we deal with current challenges.

The Federal Reserve is responsible for promoting sustainable economic growth, stable prices, maximum employment, and an efficient payment and financial system. The Chicago Fed represents the Seventh Federal Reserve District, a unique population center with significant agri-business, manufacturing, financial service and technology sectors. We work in the public interest, and our strategies and actions are aligned with the needs of our regional and national economy. As the challenges facing the economy become increasingly complex, it is essential that our policies and practices evolve to meet them. The leaders and staff of the Federal Reserve Bank of Chicago are the key element in dealing effectively with these challenges, and I am proud to lead such a talented and innovative group of people.

I am also pleased to be working with the many dedicated individuals who served in 2007 on our boards of directors in both Chicago and at our Detroit Branch (see pages 18 and 19). I greatly appreciate the



counsel of these talented people and how generously they give of their time. In particular is the contribution of Miles White, the Chief Executive Officer at Abbott, who finished his service on the Chicago board after six years, including the last two as chairman.

As for the publication you are holding, this annual report recaps some important economic developments last year. It also features a discussion of financial markets in 2007 and looks at the Federal Reserve's role in responding to developments in these markets. In addition, the report includes a discussion with the leader of our team of researchers dedicated to the study of financial markets. It also looks at the resiliency of our many electronic access products, which contribute to the effective functioning of the financial system. I hope you find the report informative.

A handwritten signature in dark ink that reads "Charles L. Evans". The signature is fluid and cursive, with a long horizontal stroke at the end.

Charles L. Evans  
President and Chief Executive Officer





*From left to right: Board of Directors Deputy Chairman John Canning, President and CEO Charles Evans, Board Chairman Miles White, and First Vice President and COO Gordon Werkema.*

## THE ECONOMY AND MONETARY POLICY<sup>1</sup>

In 2007, the economy, as measured by the increase in real gross domestic product (GDP), grew at an annual rate of 2.2 percent. However, growth was spread unevenly over the year. It started slowly, picked up steam through mid-year, and then experienced weakness at the end of 2007. Overall, economic growth in 2007 was somewhat below what the Federal Reserve Bank of Chicago estimates as the economy's potential growth rate — that is, the rate of growth it can sustain over time given its labor and capital resources. The shortfall from potential in large part reflected a severe decline in residential construction, which reduced real GDP growth by an average of 0.9 percent point per quarter over the year. Solid rates of growth in business fixed investment and household consumption along with rising net exports offset some of the weakness due to the residential sector.

With growth just below potential, labor markets also began to ease in 2007. The unemployment rate rose from 4.4 percent in late 2006 to 4.8 percent in late 2007, and changed little, on balance, in early 2008. Still, the level of resource utilization remained elevated through much of the year, and increases in prices for food and energy and other commodities also put pressure on inflation. As a result, inflation

was elevated last year. The price index for personal consumption expenditures (PCE) rose 3.4 percent over the four quarters of 2007. Core PCE, which excludes food and energy prices, increased 2.1 percent. Although this pace was down slightly from 2006, the improvement reflected developments early in the year, and core inflation rates were higher at the end of 2007 than they were at mid-year.

### SECOND HALF OF 2007

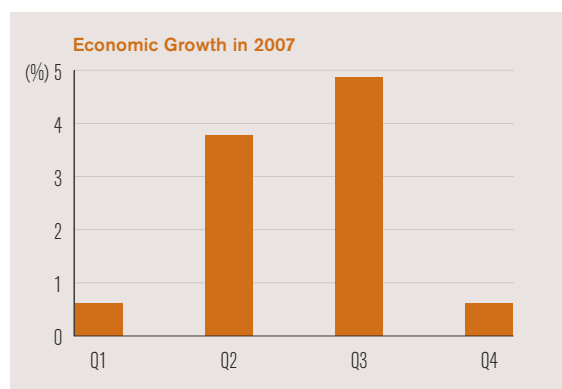
The second half of 2007 was dominated by financial turmoil. As the residential housing market deteriorated, delinquencies and defaults on subprime mortgages increased substantially, jeopardizing the income flows supporting the many layers of securities that had been built upon them. As a result, market participants substantially reduced the perceived value of these instruments, as well as the value of other similar complex securities even if they contained no subprime-related debt. Uncertainty over collateral valuation and counterparty risk boosted the demand for liquidity. In addition, financial intermediaries had to take troubled assets back onto their balance sheets, reducing their willingness to issue new loans. These factors, along with increased concerns about the macroeconomic

environment, resulted in a tightening of terms and costs of credit to some borrowers, thereby reducing their spending capacity. They also induced a sense of caution, which caused some households and firms to pull back on spending plans as they waited to see how events would transpire.

Given the relatively high level of resource utilization in the first half of 2007, the Federal Open Market Committee (FOMC) maintained the slightly restrictive stance it had established in late 2006, holding the target federal funds rate at 5-1/4 percent through August. In light of the developing financial turmoil, the FOMC began lowering the target federal funds rate in early September, bringing the rate to 4-1/4

accommodative; and, because monetary policy operates with a lag, the effects of recent rate cuts should promote growth as the year continues. Fiscal policy will also act as a stimulus. In addition, while not as robust as in the late 1990's and early this decade, the underlying trend in productivity remains solid, providing a sound base for production and income generation over the long term. Accordingly, growth is expected to improve later in 2008 and return to near potential in 2009.

Core inflation should gradually come down in 2008, as the economy operates below its potential level of output. Still, there is a risk that inflation could remain stubbornly high. A particular concern



Real gross domestic product featured strong gains in the second and third quarter partially offsetting weakness in the first and fourth quarters. The annual growth rate for 2007 was 2.2 percent.

Source: Haver Analytics



The total PCE price index finished 2007 3.4 percent higher than the fourth quarter of 2006 (orange line), while the index excluding food and energy prices was 2.1 percent higher (grey line).

Source: Haver Analytics

percent by the end of 2007. As 2008 began, the financial turmoil intensified and the pace of economic growth slowed. With inflation expectations remaining contained, the FOMC then further lowered the target to 2.25 percent by mid-March.

### MOVING FORWARD

For 2008 as a whole, it is expected that the economy will grow, but at a quite sluggish rate. Importantly, the adjustments in housing and financial markets likely will weigh on activity, particularly in the first half of the year. However, the current fed funds rate is

is that increases in food and energy and other commodity prices will be passed on to downstream customers. Persistent food and energy price increases could eventually find their way into inflation expectations. To date, inflation expectations appear to be contained; however, the longer total inflation runs above levels consistent with effective price stability, the greater the danger that inflation expectations will rise. Thus, these inflation developments will be carefully monitored.

<sup>1</sup>This essay reflects information available as of March 21, 2008.

# CHICAGO FED HIGHLIGHTS OF 2007

## ECONOMIC RESEARCH

- In support of the Chicago Fed's monetary policy-making responsibilities, staff devoted considerable time to analyzing sharp declines in residential real estate markets, increases in subprime mortgage defaults, and related disruptions in credit and financial markets.
- Special policy briefings covered topics ranging from the structure of new auto industry labor contracts to the effect on forecasting models of changing inflation trends.
- Twenty-four working papers were produced, and 24 previously written papers were accepted for publication in scholarly journals. Of special note were an acceptance at the *American Economic Review*, two at the *Journal of Political Economy*, and three at the *Review of Economic Studies*.



- Economists also presented research analyzing a range of economic and policy developments in the Chicago Fed publications *Economic Perspectives*, *Ag Letter* and *Chicago Fed Letter*.
- In addition, Economic Research and the Consumer and Community Affairs staff worked together on a conference that brought together researchers and workforce development practitioners to discuss strategies for increasing the economic mobility of disadvantaged workers.

## SUPERVISION AND REGULATION

- Supervision and Regulation needed to respond to the financial turmoil triggered by subprime mortgages as well as to rising numbers of problem banks, driven largely by deterioration of the auto industry in Michigan.



- With regard to financial turmoil, the department continued to monitor mortgage and commercial-real-estate lending as top risks, bolstered examiner training in the credit area,

and closely analyzed the effects on District banks of the stressed market and liquidity environment.

- To address the rising number of problem banks, the department shifted staff resources and enhanced its monitoring of weaker banks. It also strengthened communication and coordination with other bank supervisors, especially those responsible for Michigan banks.
- More than 1050 examinations, inspections and off-site reviews were conducted.
- The department continued to improve its risk analytics by focusing on identification of fundamental (root) causes and the problem-bank resolution process.
- A number of new processes were implemented to increase the efficiency of examinations.

## PREVENTING MORTGAGE FORECLOSURES

Members of the Consumer and Community Affairs Department focused on the mortgage foreclosure crisis.

Long active in this area, the department broadened its partnership with the Chicago-based Home Ownership Preservation Initiative (HOPI), co-hosting two meetings with representatives of banks, investment companies, mortgage service companies, and local government agencies.

These meetings led to the development of new strategies for loan work-out and counseling, agreements with servicers to incorporate loss-mitigation techniques, and plans to move foreclosed property more quickly to



productive use. The lessons learned and strategies developed were shared throughout the Seventh Federal Reserve District through a series of confer-

ences widely attended by industry leaders, community development practitioners and government officials. These meetings also identified other issues for consideration that are being addressed by additional working groups.

#### CENTRAL BANK SERVICES

■ In response to pressures evident in short-term funding markets, the Board of Governors in December announced plans to establish a temporary Term Auction Facility (TAF) program to auction term funds to depository institutions. Central Bank Services facilitates these auctions for the Seventh District.

#### FINANCIAL MARKET GROUP

■ The Chicago Fed's Financial Markets Group provided multidisciplinary expertise in financial markets and the clearing and settlement operations that support them, with a particular focus on Chicago derivatives exchanges and clearinghouses.

#### FINANCIAL SERVICES

■ The District Check operation was a System leader. The Des Moines office remained among the top performers, and the Midway office improved its efficiency, productivity, and quality.

■ Seventh District sales of check-processing services played a vital role in supporting, selling and implementing Check 21 products.

■ District Cash operations aggressively pursued efficiency improvements throughout the year. A process-improvement initiative was implemented in both the Chicago and Detroit offices, significantly improving high-speed machine utilization.

#### OTHER ACTIVITIES

■ Charles L. Evans succeeded Michael H. Moskow as president and CEO.

■ A record 27,814 people toured Chicago's Visitor Center.

■ Teams from 35 high schools and 15 colleges took part in the High School and College-level Fed Challenge programs, and the Chicago Fed sponsored 10 economic teacher workshops.

■ Executives from across the Federal Reserve System gathered in Chicago twice during the year for Senior Leadership Conferences.

■ The District's Money Smart Week program expanded into Iowa and central Illinois and increased participation in existing programs in Chicago, Indiana, Michigan, and Wisconsin. Approximately 1,000 partner organizations worked together to bring over 1,500 seminars, classes, and special events on personal finance topics to thousands of consumers.



#### CUSTOMER RELATIONS AND SUPPORT OFFICE

The Federal Reserve's national Customer Relations and Support Office is headquartered at the Chicago Fed.

■ The Customer Relations and Support Office (CRSO) exceeded National Account Program and System revenue targets and the Electronic Access cost recovery target.



■ The CRSO redesigned its Web site, FRBservices.org, launching Check 21 interactive forms and a Federal Reserve Financial Services contact look-up tool called My FedDirectory. The site was developed in 2007 and unveiled in January of 2008.

■ The CRSO successfully achieved 2007 goals for converting customers to an all IP Fedline connection environment by mid-2009.

### CONFERENCES CONTRIBUTE TO PUBLIC POLICY RESEARCH

Conferences remained integral to the development and dissemination of high-quality public policy research.

Economic Research organized 16 conferences, some with co-sponsors such as the Federal Deposit Insurance Corporation, the International Monetary Fund, the Upjohn Institute, and Chicago Metropolis 2020.

Topics covered included:

- The economic outlook.
- The mixing of banking and commerce.

- The implications of globalization for systemic risk to financial institutions.
- Mergers and acquisitions in the financial services industry.
- The changing structure of the U.S. auto industry.
- The evolution of the use of payment innovations to improve transportation networks.
- Developments in state business taxation.
- The impact of Medicaid on state budgets.
- Cost-effective carbon reduction.



**INNOVATION**  
A Look at Financial Markets in 2007  
**INVESTOR**



Financial markets have been characterized by significant turmoil since the summer of 2007. Even as this annual report went to press in April of 2008, credit conditions remained tight, and market volatility continued to be high. These market disruptions raise many issues, but one of particular importance to the Federal Reserve System is the appropriate role of public policy in response. As the premier public policy institution for addressing financial stability issues in the U.S., the Fed must understand the underlying causes of financial disruption in order to design an appropriate policy response.

---

By Charles L. Evans, President and CEO

---

This article focuses on one such underlying cause of financial disruptions: innovation. This is a source of great benefit for our economy and our standard of living. But, like any sort of innovation, financial innovation can be disruptive. To quote Joseph Schumpeter, economies progress via a process of “creative destruction.” Financial turmoil can be a way in which this sort of creative destruction works in the financial sector.

This article discusses recent market turmoil, looks at the role that financial innovation plays in such disruptions, and then explores why even highly beneficial innovations may be disruptive when first introduced. It concludes with some thoughts about the role of the Fed in responding to disruptions.

#### RECENT TURMOIL IN FINANCIAL MARKETS

Over the last fifteen years, financial markets have been characterized by a remarkable variety of innovative instruments and practices, including securitized

---

*Senior Vice President David Marshall, head of the Chicago Fed's Financial Markets Group, contributed to the development of this essay. It is derived from a speech given by Charles Evans in Chicago in late November of 2007. The opinions expressed herein represent the opinions of the author, and do not necessarily reflect the views of the Federal Open Market Committee or the Federal Reserve System. The essay was strongly influenced by the ideas of Riccardo Caballero and Arvind Krishnamurthy. (See R. Caballero and A. Krishnamurthy, 2008, “Collective Risk Management in a Flight to Quality Episode,” forthcoming, Journal of Finance.)*

cash flows, structured investment vehicles, and a veritable explosion of derivative contracts. These innovations not only enabled the creation of new financial products and opened up new sources of funding for businesses and consumers, but also directed these funds to a broader range of borrowers. Businesses and consumers who were previously unable to tap a wide range of funding sources gained access to credit at a lower cost. Financial institutions also benefited from these developments, increasing their fee-based income and overall profitability while economizing on expensive capital.

As we entered 2007, benign conditions generally prevailed. There was substantial liquidity in financial markets, and investors continued to place an unusually low price on risk. This state of affairs came to an end suddenly in the summer of 2007. In response to increased default rates on subprime mortgages, risk avoidance rose sharply, and market participants reduced their perceived value of all financial instruments with subprime exposure.

In addition, market participants started to question the value of other securities. This could be seen in the market for asset-backed commercial paper—known as ABCP—where rates soared even for paper supported by assets unrelated to subprime mortgages. Many ABCP issuers and other borrowers had to turn to very short-term financing, as lenders were unwilling to commit funds at normal terms because of uncertainty over collateral valuation and other counterparty risks. Moreover, there were periods in August when markets in certain debt instruments virtually disappeared. Without actual market transactions, it became difficult to assess the fair value of the more complex securities.

#### **THE LINK BETWEEN FINANCIAL INNOVATION AND FINANCIAL TURMOIL**

Economic history has much to teach us about financial crises. Banking panics were common in the nineteenth and early twentieth centuries. The Panic of 1907 was particularly severe and ultimately led to the

establishment of the Federal Reserve System six years later. More recent episodes include the Penn Central commercial paper default in 1970, the stock market crash of 1987, and the disruption associated with the Russian default in 1998.

Each of these episodes, as well as the recent turmoil, had unique features. But there is an important common element to them: In each case, the event was associated with a drying up of liquidity. The most liquid assets are those that can be immediately used to discharge indebtedness: cash, bank reserves, and the like. When liquidity is said to “dry up,” market participants find it increasingly difficult to convert otherwise sound assets into these more liquid media of exchange. This would be the case if lenders are unwilling to accept the illiquid assets as collateral, if dealers in these assets substantially widen bid–ask spreads, or if transactions in these securities simply cease to occur.

Why do periods of financial stress occur periodically, and why is liquidity an integral part of these events? Surprisingly, innovation in financial markets can play an important role. Continuous innovation is one of the key strengths of our economy. Financial innovation enhances markets’ ability to allocate capital and risk. But during periods of rapid financial innovation, it can take time for market participants to learn how these innovative instruments and practices operate, especially in the event of falling asset prices.

To elaborate on this theme a bit, think about a financial innovation, say, the development of some new type of derivative contract introduced at a time when markets are expanding. The innovation performs well and becomes widely used, and market participants look at this record of success when designing risk-management systems. Now suppose that something happens to stress the market. The new contract may interact with market forces in ways that are largely unexpected. The strategies that market participants had used to quantify and manage risk may not adequately encompass the events and interactions

now taking place, making these risk-management strategies inadequate to address the unexpected developments. A natural response may be to pull back, conserve liquidity, and curtail trading in risky markets until a clearer picture of the level of risk emerges. If market participants were to withdraw from risk-taking in this way *en masse*, the result would be a liquidity crisis. Interestingly, a body of academic research exists that explores precisely this process: That when investors can't quantify a particular type of risk, they may respond by avoiding that risk entirely.<sup>1</sup>

Recent financial events seem to fit this narrative in many ways. The innovation behind the recent difficulties relates to the widespread use of the originate-to-distribute business model, in which mortgages are funded by selling them bundled together in highly structured securities. Of course, mortgages have been securitized for many years, but there are two features of this business model that are relatively new and that are particularly important for the current situation. The first is the extension of the originate-to-distribute model to subprime mortgages. Subprime mortgages represented only 8.5 percent of the mortgage-backed securities (MBSs) issued in 2000. By the end of 2006, this fraction had increased to 20 percent.

The second feature is the increasing use of multiple layers of structure. For example, a mortgage originator may sell a portfolio of mortgages to an intermediary, who in turn divides up the cash flow into collateralized debt obligations (CDOs) of different risk tranches. These CDOs can be sold directly or can be combined with other securities to back instruments such as ABCP, and so on. In all, there may be numerous layers of structure between the original mortgage loans and the ultimate providers of funds.

The benefit of this complex structuring is that it accommodates different levels of risk tolerance on the part of different investors, thus tapping a wider range of funding sources. However, these multiple layers of structure can be extremely opaque, making it more

difficult for the ultimate providers of funds to assess the true level of risk they are taking on.

These innovations in structured housing finance had never been tested in a period of widespread weakness in housing markets. But with the recent declines in housing prices, these structured securities have behaved quite differently than they did during better times. For example, many investors appeared to have assumed that the triple-A tranche of a sub-prime MBS would act like a triple-A corporate bond, which carries little default risk and low downgrade risk. We now know that these highly rated MBSs have a risk profile rather different from a comparably rated corporate obligation. The rating of an MBS is less certain than that of a corporate bond, so MBSs have much greater downgrade risk. In addition, most of the default risk of a corporate bond is idiosyncratic to the firm, so it can be readily diversified away by investors. In contrast, a security backed by a diverse pool of mortgages has little idiosyncratic risk. Most of the risk in these securities is due to common systematic factors, such as the general movements in home prices. This sort of risk is considerably more problematic for investors than idiosyncratic risk, because it can't be diversified away.

These characteristics of MBSs were unanticipated during the quiescent period before the summer of 2007, but they became apparent during the ensuing turmoil. We saw abrupt and unexpectedly large ratings downgrades of triple-A-rated MBSs and other collateralized mortgage debt obligations, with ratings declines of ten notches or more not uncommon. The perceived downside risk of these securities increased in a highly correlated fashion, as would be expected for securities sharing the same systematic risk factors. Many market participants started calling into question the safety of securities that had received high scores from the ratings agencies. For example, even the so-called super-senior tranches of CDOs, thought to be extremely well insulated from losses, were shunned by investors. These investors also began to



shun other types of structured securities, even those completely free of mortgage-related collateral.

An important factor influencing these developments was the complexity of the structured credit products used to finance mortgages. This complexity made it difficult and costly for the ultimate investors to learn about the underwriting standards being applied to the original mortgages. There were few defaults during the long period of rising home prices, and investors paid little attention to the growing evidence of lax underwriting, such as high loan-to-



The Fed and other public policy institutions play an important role in monitoring and facilitating efficient market functioning.



value ratios, negative amortization, and deficient documentation. But when housing markets weakened, the consequences became apparent. Default rates on subprime loans rose far beyond those anticipated by the risk-management models commonly in use.

History provides us with other examples of linkages between financial innovations and liquidity crises, and there are some interesting common elements between them and the current situation.<sup>2</sup> Consider the unexpected bankruptcy in 1970 of Penn Central, a major railroad that was an important issuer of commercial paper. The Friday before its collapse,

Penn Central was seen to be in financial trouble, but the company was expected to receive a government loan guarantee that would keep it afloat. Over the weekend, it became evident that no government support was forthcoming, and Penn Central declared bankruptcy. Investors woke up Monday morning with commercial paper that was essentially worthless. Penn Central's failure raised doubts about the integrity of the commercial paper market in general. A predictable flight to quality ensued: Treasury yields declined, and corporate debt yields rose.

The financial innovation in the Penn Central example was the use of commercial paper to substitute for bank loans. Commercial paper had become an important source of funds for large firms in the 1960s, but risk-management systems for commercial paper remained untested until the recession of 1969–70. The Penn Central bankruptcy was a rude awakening that these systems were inadequate.

The stock market crash of October 19, 1987, may also be associated with financial innovation. While there is no universally accepted explanation for the sharp drop, a widely held theory focuses on the innovation of portfolio insurance.<sup>3</sup> Portfolio insurance is a form of computerized dynamic hedging that can involve automatic selling after certain market declines. Portfolio insurance implicitly relies on the availability of market liquidity—that is, the ability to sell shares at the prevailing price—when the automatic selling kicks in. Prior to October 1987, this innovation seemed to work well. But on October 19, liquidity was grossly inadequate. It appears that computerized selling into the declining market turned the morning's losses into a wholesale rout that was completely unforeseen by existing risk-management models. As with the Penn Central episode, a flight to quality followed, with Treasury yields falling dramatically.

A third example is the market crisis in the fall of 1998 that was triggered by the Russian bond default. This shock caused bond spreads to widen in both

emerging and developed countries, and induced a major liquidity crisis. The financial innovation that magnified this shock was the growth of highly leveraged and opaque hedge funds, notably Long Term Capital Management (LTCM). The possibility that failing hedge funds would respond to falling market prices with a fire sale of available assets led intermediaries to withdraw liquidity from the market and reinforced the initial shock.

In each of these cases, markets eventually learned from the crises. This resulted in improved approaches to risk management that could address the new types of market risks. The commercial paper default of Mercury Financing in 1997 was much larger than Penn Central, yet caused virtually no disruption to the markets. Similarly, the 6 percent fall in stock prices that occurred on October 13, 1989, had nowhere near the impact of the market break two years earlier. Finally, the failure of the Amaranth hedge fund in 2006 was twice the size of LTCM's failure, yet this default was absorbed by the markets without turmoil. And market participants undoubtedly will learn important lessons from the turmoil of 2007 and 2008 that will improve their structure and functioning in the future.

#### **THE ROLE OF THE FED IN RESPONSE TO FINANCIAL DISRUPTIONS**

Ultimately, financial market participants have the strongest incentives to sort things out when a liquidity crisis hits. However, the Fed and other public policy institutions play an important role in monitoring and facilitating efficient market functioning. The Federal Reserve seeks to foster policies that mitigate the possible fallout from the financial market to the broader macroeconomy. This means that our policy should account for how events might affect the attainment of monetary policy objectives, which are to facilitate financial conditions that help the economy obtain both maximum sustainable growth and price stability.

The Fed has a number of tools at its disposal. First, through its authority as a bank supervisor, the

Fed sets regulatory standards aimed at fostering the safety and soundness of the banking system. This process serves an important role during times of turmoil because well-capitalized banks can act as shock absorbers for financial markets. Second, the Fed operates Fedwire, which is one of the key large-value payment systems supporting financial markets. Periods of financial stress tend to be associated with spikes in payments volume, so ensuring that interbank payments are made in a safe, reliable, and timely fashion removes a potential source of uncertainty (see related story on page 16). Third, the Federal Reserve Banks do major work to mitigate the impact of financial turmoil in the community. During the subprime disruption the Federal Reserve Bank of Chicago has worked closely with lenders, community leaders, and government officials to assist borrowers confronting foreclosures. In particular, we have strongly supported and contributed to the Home Ownership Preservation Initiative (HOPI). HOPI was originated and launched at our Reserve Bank in 2003, and is a partnership of Neighborhood Housing Services of Chicago, the City of Chicago, and the Fed (see related story on page 4). It works with all areas of the mortgage lending business, from Wall Street to Main Street, to reduce the number and impact of foreclosures in Chicago, and provides a model for service to the community that is adaptable to other areas of the country.

Our most powerful tool for addressing a liquidity crisis is monetary policy. In setting the stance of monetary policy, the Fed has a dual mandate: to help foster maximum employment and price stability. Monetary policy is concerned with mitigating financial market stress to the extent that the stress impedes fulfillment of this dual mandate. Broadly speaking, our response to a financial shock is similar to the way we respond to other shocks to the economy. First, we consider the most likely effects of the shock on the future paths for economic activity and inflation. Second, we take a risk-management approach to policy. This means we consider less likely, but more costly, alternative outcomes that we may want to

insure against. We then may adjust the stance of policy to guard against the risk of events that may have low probability but, if they did occur, would present an especially notable threat to sustainable growth or price stability. In this way we set policy to best fulfill our dual mandate.

With regard to shocks to the financial system, the risks we must guard against concern the ability of financial markets to carry out their core functions of efficiently allocating capital to its most productive uses and allocating risk to those market participants most willing to bear that risk. Well-functioning financial markets perform these tasks by discovering the valuations consistent with investors' thinking about the fundamental risks and returns to various assets. A widespread shortfall in liquidity could cause assets to trade at prices that do not reflect these fundamental valuations, impairing the ability of the market mechanism to efficiently allocate capital and risk. Furthermore, reduced availability of credit could reduce both business investment and the purchases of consumer durables and housing by creditworthy households.

We clearly must be vigilant about these risks to economic growth. However, overly accommodative liquidity provision could endanger price stability, which is the second component of the dual mandate. After all, inflation is a monetary phenomenon. Indeed, one of the many reasons for the Fed's commitment to low and stable inflation is that inflation itself can destabilize financial markets. For example, in the late 1970s and early 1980s, high and variable inflation contributed to large fluctuations in both nominal and real interest rates.

The Fed has kept these various risks to growth and inflation in mind when responding to the financial turmoil that started in August of 2007. We have taken a number of monetary policy actions to insure against the risk of costly contagion from financial markets to the real economy. Our response to the onset of the turmoil focused on ensuring that the financial markets had adequate liquidity. For example, on August 10, the Fed injected \$38 billion in reserves via

open market trading. In one sense, this was a routine action to inject sufficient reserves to maintain the target federal funds rate, which at that time was 5-1/4 percent. The nonroutine part was the size of the injection required to do so (the largest such injection since the days following September 11, 2001). On August 16, with conditions having deteriorated further, the Federal Reserve Board, in consultation with the District Reserve Banks, moved to improve the functioning of money markets by cutting the discount rate by 50 basis points and extending the allowable term for discount window loans to 30 days. The Board also reiterated the Fed's policy that high-quality ABCP is acceptable collateral for borrowing at the discount window.

At its regular meeting on September 18, the FOMC cut the federal funds rate 50 basis points, the first in a series of rate cuts that brought the target funds rate to 2.25 percent by mid-March of 2008. This target funds rate was a full 300 basis points below the level that prevailed at the onset of the financial turmoil. In addition, the Fed inaugurated a new Term Auction Facility (TAF) that allocates Federal Reserve credit via an auction mechanism. The TAF allows banks to borrow for a longer term than the usual discount window practice, and the auction mechanism can deliver an interest rate for these term loans that is below the posted discount rate. It appears that the \$140 billion provided by the TAF in December of 2007 through February of 2008 was useful in alleviating funding pressures around the start of 2008.

As the turmoil continued through the first three months of 2008, the Fed undertook several initiatives to help provide liquidity to stressed markets. On March 7, the Fed announced an expansion of the TAF, increasing the size of the two March auctions to \$50 billion each. That same day, the Fed announced its intention to conduct a series of term repurchase (RP) transactions with primary dealers totaling \$100 billion. These RPs could be collateralized by a variety of securities, including Treasury debt, agency debt, and agency mortgage-backed securities. On March



11, the Fed increased its existing dollar swap lines with the European Central Bank and the Swiss National Bank. And on March 16, the Fed increased the maximum maturity of primary credit loans to 90 days from 30 days.

Two other policy innovations in mid-March are particularly noteworthy, in that they expanded liquidity provision to institutions other than commercial banks. First, on March 11 the Fed announced a new Term Securities Lending Facility (TSLF). Under the TSLF, the Fed can lend up to \$200 billion of Treasury securities to primary dealers for a term of 28 days, collateralized by assets that include both agency and AAA-rated private-label mortgage-backed securities. Second, on March 16 the Fed created a lending facility that extends overnight credit directly to primary dealers. These loans can be collateralized by a broad range of investment-grade debt securities. Since the primary dealers are nondepository institutions, these loans required the Fed to invoke its authority to lend to nonbanks under section 13(3) of the Federal Reserve Act. Under this act, such lending is only permissible under “unusual and exigent circumstances.” Such loans are the first extensions of credit by the Federal Reserve to nondepository institutions since the 1930s.

Together, these policy actions expand the Fed’s role of providing liquidity in exchange for sound but illiquid securities. While these actions represent major innovations in Fed practice, they are in the spirit of the oldest traditions of central banking. As described by Walter Bagehot in his 1873 treatise *Lombard Street*, the job of the central bank is to “lend freely, against good collateral” whenever there is a shortage of liquidity in markets. These actions by the Fed will provide support to financial markets and to the economy as a whole during this period of turmoil.

But we certainly cannot rule out the possibility of continued market difficulties. We cannot be sure how long it will take for financial intermediaries to complete the process of re-evaluating the risks in their portfolios and restructuring their balance sheets

accordingly. Moreover, further mortgage defaults due to declines in house prices and the fact that many sub-prime adjustable rate mortgages will see their rates rise over the next few months could have negative feedbacks onto housing and financial markets. Furthermore, there remains a good deal of uncertainty about the creditworthiness of many key market participants.

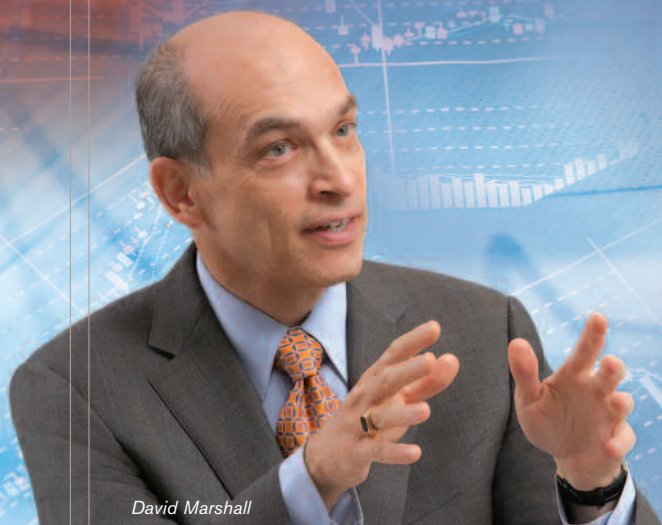
Given these risks going forward, the Fed must be diligent in applying the risk-management approach to policy formulation, in order to ensure that the economy is well cushioned against financial turmoil that seems to be an occasional concomitant to the beneficial process of financial innovation.

---

<sup>1</sup>See I. Gilboa and D. Schmeidler, 1989, “Maxmin expected utility with non-unique prior,” *Journal of Mathematical Economics*, Vol. 18, No. 2, April, pp. 141–153; L. Hansen and T. Sargent, 2003, “Robust control of forward-looking models,” *Journal of Monetary Economics*, Vol. 50, No. 3, April, pp. 581–604; and R. Caballero and A. Krishnamurthy, 2008, “Collective risk management in a flight to quality episode,” *forthcoming*, *Journal of Finance*.

<sup>2</sup>For a further discussion of these examples, see Caballero and Krishnamurthy, *op. cit.*

<sup>3</sup>See G. Gennotte and H. Leland, 1990, “Market liquidity, hedging, and crashes,” *American Economic Review*, Vol. 80, No. 5, December, pp. 999–1021.



David Marshall

# Studying Financial Markets

In 2006, the Chicago Fed created a special group to study the behavior of financial markets. Members include researchers with backgrounds in economics, law, financial regulation and financial market operations. They look at a wide range of issues related to financial markets, and they also examine the clearing, settlement and large-value payment operations that support the markets—with a focus on Chicago derivatives exchanges and clearinghouses. In a Q&A, Senior Vice President David Marshall discusses the group's work.

---

**Q.** *Is the Chicago Fed's interest in financial market policy motivated by recent market disturbances?*

**A.** The turmoil that has characterized financial markets since August of 2007 certainly illustrates why financial market expertise is vital to the public policy process. But it's important to remember that financial market turmoil is hardly a new phenomenon. There have been four major financial crises in the last 28 years—the 1980 crisis involving Mexico's default, the market crash in October of 1987, the liquidity crisis following the Russian default and devaluation in the fall of 1998, and the September 11 terrorist attacks. We've also identified 35 potential market disruptions over the last 25 years that could well have materialized into full-blown crises. Each one had the potential to adversely affect economic activity, with a real impact on people's standard of living. Clearly, it's imperative

that we better understand the dynamics of these disruptions to have a better chance of avoiding them—and to mitigate their impact when they do occur.

---

**Q.** *What is the Fed's role when financial crises occur?*

**A.** The Fed has a critical role. While each crisis may look very different from the preceding crisis, one thing they all have in common is a shortfall of liquidity. In other words, many otherwise sound institutions can't obtain the means to make needed payments. This is where the Fed comes in. The Fed is the ultimate source of liquidity in the economy because the liabilities of the Fed (currency and bank reserves) constitute the key means of payment. So when there is a shortage of liquidity, the Fed is generally called upon as first responder. The Federal Reserve Act of 1913 said one of the key reasons for establishing the

Fed was the need for an “elastic currency.” This means the Fed is expected to add or withdraw liquidity as needed to facilitate economic activity.

**Q.** *Why is it important for the Chicago Fed to have a Financial Markets Group?*

**A.** There is a contribution to be made by looking at financial market policy issues from a Chicago perspective. Chicago is the second most important center of financial activity in the U.S., behind New York. But Chicago’s role in finance is not simply to act as a miniature New York. Rather, Chicago is the global leader in a small but important slice of the financial pie: exchange-traded derivative contracts (mostly futures and options). The total volume of derivative contracts traded on Chicago’s exchanges last year vastly exceeded the volumes traded on exchanges in any other global financial center. Most is traded on the Chicago Board Options Exchange and on the exchanges now affiliated with CME Group (a newly formed combination of the Chicago Mercantile Exchange and the Chicago Board of Trade). But there are a number of small and nascent derivatives exchanges based in Chicago that add to the vibrancy of the Chicago financial markets, including the Chicago Climate Exchange (a venue for trading carbon emission permits), OneChicago (a venue for trading single-stock futures), the United States Futures Exchange, the Merchants Exchange, and the Actuarial Exchange.

**Q.** *Are there policy concerns particularly relevant to derivatives exchanges and clearinghouses as opposed to financial activities such as banking or securities trading?*

**A.** Certain characteristics of derivatives trading are particularly noteworthy. For example, derivatives trading and clearing require high-frequency risk and liquidity management to ensure the continued creditworthiness of market participants. They depend on

reliable execution of time-critical margin payments on a daily and sometimes twice-daily basis. Much of the trading on these exchanges is done via direct computer-to-computer connections (so called “black box” trading), with trade execution times on the order of microseconds. The liquidity in these markets resides, to a large extent, with relatively small proprietary trading firms whose structure and incentives are very different from the large banks and brokerage houses that dominate securities trading. Given these special characteristics, it is important that financial market policy analysis be informed by a Chicago point of view. The Chicago Fed’s Financial Markets Group seeks to provide this perspective.

**Q.** *What does the future hold for the city of Chicago’s financial markets?*

**A.** Derivatives markets represent a rapidly growing segment of the financial sector. Over the last eight years, the total value of derivatives contracts outstanding has grown by over 20 percent per year. Each year, it seems that new types of derivative contracts are created and traded. Just look at the phenomenal growth of credit derivatives over the past five years. So Chicago, as the world’s center of derivatives exchange activity, is well positioned to benefit from this growth trend. But remember that while Chicago has the lion’s share of exchange-traded derivatives activity, this represents only 15 percent of the derivatives market. The remaining 85 percent of derivatives trading is in the over-the-counter market based in New York and London. And the over-the-counter market is looking more and more exchange-like, with high-liquidity, screen-based trading, and even central clearing. So the big question for Chicago is how successfully Chicago’s institutions will meet the challenge of an increasingly innovative over-the-counter market. We don’t know how all this will play out, but I feel confident that the ultimate winner from this competition will be the U.S. economy.





## Providing Confidence in Times of Turmoil

With spikes in payment volume often prevalent in times of economic stress, the Federal Reserve strives to ensure that payments can be made in a secure, reliable and timely fashion. Removing uncertainty about the payment system gives confidence to financial institutions and results in more stable and efficient markets.

A stable and healthy U.S. payments system depends on providing financial institutions with secure, reliable access to Fedwire®, FedACH® and Check 21 Services. By operating several channels that provide electronic access to these services, the Customer Relations and Support Office (CRSO) at the Chicago Fed helps support an efficient payment system.

The ongoing evolution of the Federal Reserve's FedLine® access channels helps to provide greater usability through enhanced operating speed, efficiency, security and reliability, which in turn help foster secure and stable operations for the nation's payment system. These channels are designed to help support stable, efficient payment operations for the smallest to the largest financial institution.

The Federal Reserve is continuously seeking ways to incorporate contemporary technologies into its offerings in order to help financial institutions better manage their payments business, and has introduced two such large-scale upgrades to IP-based technologies.

In recent years, the CRSO has also led the migration of more than 7,000 financial institutions to the new systems.

In 2006, the CRSO completed the migration of customers from the now-retired DOS-based FedLine® platform to the Web-based FedLine Advantage® access solution. The focus has now shifted to managing the migration of computer-to-computer interface customers to an IP-based solution called FedLine Direct®. This solution plays a critical part in the day-to-day operations of high-volume financial institutions.

### CUSTOMERS APPRECIATE SUPPORT DURING CONVERSION

Both of these recent efforts to migrate to IP-based technologies have helped position the Federal Reserve as a leader in innovative technology offerings that meet financial institutions' needs for reliable and secure payment operations. The U.S. Postal Service and Agribank were among the first to migrate to the

FedLine Direct access solution and realize the benefits of the Federal Reserve's next-generation technology.

The U.S. Postal Service uses the Federal Reserve's FedACH Services to handle an average of 2.5 million ACH transactions per month for payroll and other payments to its approximately 700,000 employees. Its high transaction volume made the U.S. Postal Service a natural candidate to complete its migration to FedLine Direct as soon as it became available.

Streamlined technical support and maintenance are key benefits for financial institutions as they migrate to FedLine Direct, said Richard Kotenberg, project manager in the U.S. Postal Service's Data Transfer group.

"It allows us to upgrade to take advantage of current technology," he explained. "There's more flexibility in this type of solution."

The U.S. Postal Service's IP-based FedLine Direct connection has been up and running since the third quarter of 2006.

One of the first financial institutions to use FedLine Direct to conduct Fedwire Funds transactions was AgriBank, a unique institution cooperatively owned by 18 regional farm credit associations in 15 states. AgriBank facilitates wholesale loans and other financial services to promote agriculture and agribusiness.

Because FedLine Direct was designed to integrate with financial institutions' existing systems, the migration resulted in almost no changes to AgriBank's daily operations. Now that the migration is complete, AgriBank uses FedLine Direct to process an average of 8,500 wire transfers per month.

#### IMPROVING THE CAPABILITIES OF A VARIETY OF PRODUCTS

Innovative technology is not the only area in which the Federal Reserve receives high marks from financial institutions. Customer satisfaction surveys show financial institutions appreciate the Federal Reserve's

efforts to develop and deploy contemporary technology to improve the capabilities and benefits of FedACH, Fedwire Funds, Check and FedCash Services, Account Management Information (AMI) and FedLine Advantage.

In addition, being able to continue operations during emergency situations is one of the most important aspects of the support provided to financial institutions. The Federal Reserve maintains business continuity plans to address possible operational threats and has undertaken rigorous contingency planning and testing to help ensure resiliency.



There's more flexibility  
in this type of solution.



The Federal Reserve also provides advice and direction to financial institutions to help ensure they have plans in place to help maintain the flow of electronic payments. Recommended contingency arrangements include back-up personnel, alternate Internet Service Provider (ISP) and access connection setup, and substitute network components and arrangements.

These efforts and others help to contribute to an efficient payment system, which in turn helps to support well-functioning financial markets. Helping make both resilient and effective will drive the efforts of the Federal Reserve Bank of Chicago and the CRSO in the coming year and well into the future.

---

## BOARD OF DIRECTORS FEDERAL RESERVE BANK OF CHICAGO



**CHAIRMAN**  
**Miles D. White**  
Chairman and  
Chief Executive Officer  
Abbott  
Abbott Park, Illinois



**DEPUTY CHAIRMAN**  
**John A. Canning, Jr.**  
Chairman  
Madison Dearborn  
Partners, LLC  
Chicago, Illinois



**William C. Foote**  
Chairman and  
Chief Executive Officer  
USG Corporation  
Chicago, Illinois



**Mark T. Gaffney**  
President  
Michigan AFL-CIO  
Lansing, Michigan



**Valerie B. Jarrett\***  
President and  
Chief Executive Officer  
The Habitat Company  
Chicago, Illinois



**Michael L. Kubacki**  
Chairman, President and  
Chief Executive Officer  
Lake City Bank and  
Lakeland Financial Corp.  
Warsaw, Indiana



**Dennis J. Kuester**  
Chairman  
Marshall & Ilsley  
Corporation  
Milwaukee, Wisconsin



**Ann D. Murtlow**  
President and CEO  
Indianapolis Power  
and Light Company  
Indianapolis, Indiana  
Vice President  
AES Corporation



**Jeff Plagge**  
Chairman,  
Chief Executive Officer  
and President  
Midwest Heritage Bank  
Clive, Iowa



### Three new directors joined the Chicago Board in 2008:

**Anthony K. Anderson**, Vice Chair & Midwest Managing Partner of Ernst & Young in Chicago, Illinois, replaced **Valerie Jarrett**, who resigned from the board in April of 2007.

**Mark C. Hewitt** (middle), President and Chief Executive Officer of Clear Lake Bank & Trust Company in Clear Lake, Iowa, replaced **Jeff Plagge**, who completed his service on the board at the end of 2007.

**Thomas J. Wilson** (right), President and Chief Executive Officer of The Allstate Corporation in Northbrook, Illinois, replaced **Miles D. White**, who completed his service on the board at the end of 2007.

*\*Valerie Jarrett resigned from the Board of Directors in April of 2007.*



---

## BOARD OF DIRECTORS DETROIT BRANCH



**CHAIRMAN**  
**Timothy M. Manganello**  
Chairman and  
Chief Executive Officer  
Borgwarner, Inc.  
Auburn Hills, Michigan



**Ralph W. Babb, Jr.\***  
Chairman, President and  
Chief Executive Officer  
Comerica, Inc.  
Detroit, Michigan



**Roger A. Cregg**  
Executive Vice President  
and Chief Financial Officer  
Pulte Homes, Inc.  
Bloomfield Hills, Michigan



**Linda S. Likely**  
Director of Housing and  
Community Development  
Kent County Community  
Development Department  
and Housing Commission  
Grand Rapids, Michigan



**Michael M. Magee, Jr.**  
President and  
Chief Executive Officer  
Independent Bank Corp.  
Ionia, Michigan



**Irvin D. Reid**  
President  
Wayne State University  
Detroit, Michigan



**Tommi A. White**  
Chief Executive Officer  
ER-One, Inc.  
Livonia, Michigan



### Two new directors joined the Detroit Branch Board in 2008:

Carl T. Camden (left), President and Chief Executive Officer of Kelly Service, Inc. in Troy, Michigan, replaced Irvin D. Reid, who completed his service on the board at the end of 2007.

William R. Hartman, Chief Executive Officer of Citizens Republic Bancorp in Flint, Michigan, replaced Ralph W. Babb, Jr., who resigned from the board in December of 2007.

*\*Ralph Babb resigned from the Board of Directors in December of 2007.*

---

## MANAGEMENT COMMITTEE FEDERAL RESERVE BANK OF CHICAGO



**Charles L. Evans**  
President and  
Chief Executive Officer



**Gordon Werkema**  
First Vice President and  
Chief Operating Officer



**William A. Barouski**  
Senior Vice President  
Customer Relations and  
Support Office (CRSO)  
and Technology Group



**Barbara D. Benson**  
Senior Vice President  
Strategy and  
People Practices



**Elizabeth A. Knospe**  
Senior Vice President  
and General Counsel  
Legal Relations,  
Board of Directors,  
Risk Management  
and Law Enforcement



**Margaret K. Koenigs**  
Vice President  
and General Auditor  
Internal Audit



**Catharine Lemieux**  
Senior Vice President  
Supervision and Regulation



**David Marshall**  
Senior Vice President  
Financial Markets Group



**Angela D. Robinson**  
Senior Vice President  
Central Bank Services,  
Finance and Administrative  
Services



**Daniel G. Sullivan**  
Senior Vice President  
and Director of Research  
Economic Research  
and Programs



**Robert G. Wiley**  
Senior Vice President  
and Branch Manager  
District Operations  
and Detroit Branch

## EXECUTIVE OFFICERS

**Charles L. Evans**  
President and  
Chief Executive Officer

**Gordon Werkema**  
First Vice President and  
Chief Operating Officer

### ECONOMIC RESEARCH AND PROGRAMS

**Daniel G. Sullivan**  
Senior Vice President  
and Director of Research

**Regional Economics**  
**William A. Testa**  
Vice President and  
Economic Advisor

**Banking and Financial  
Markets**  
**Douglas D. Evanoff**  
Vice President and  
Economic Advisor

**Macroeconomic Policy  
Research**  
**Jonas D. Fisher**  
Senior Professional II  
and Economic Advisor

**Spencer D. Krane**  
Vice President and  
Economic Advisor

**Microeconomic Policy  
Research**  
**Daniel R. Aaronson**  
Senior Professional II  
and Economic Advisor

**Payments Studies**  
**Richard D. Porter**  
Vice President

**Consumer and  
Community Affairs**  
**Alicia Williams**  
Vice President

**Public Affairs**  
**G. Douglas Tillett**  
Vice President

### FINANCIAL MARKETS GROUP

**David Marshall**  
Senior Vice President

**Adrian D'Silva**  
Vice President

**Edward J. Nosal**  
Vice President

### SUPERVISION AND REGULATION

**Catharine Lemieux**  
Senior Vice President

**Community Bank**  
**Mark H. Kawa**  
Vice President

**Large Bank**  
**Raymond A. Bacon**  
Vice President

**Risk Specialists**  
**Richard C. Cahill**  
Vice President

**Operations**  
**Douglas J. Kasl**  
Vice President

**Strategy and  
Workforce Practices**  
**Pamela S. Rieger**  
Vice President

### CUSTOMER RELATIONS AND SUPPORT OFFICE (CRSO) AND TECHNOLOGY GROUP

**William A. Barouski**  
Senior Vice President

**Program Management**  
**Ellen J. Bromagen**  
Vice President and  
Program Director

**National Marketing**  
**Laura J. Hughes**  
Vice President and  
Program Director

**National Sales**  
**Sean Rodriguez**  
Vice President and  
Program Director

**Michael J. Hoppe**  
Vice President and  
National Account Manager

**Technology Group**  
**Ira R. Zilist**  
Vice President

### DISTRICT OPERATIONS AND DETROIT BRANCH

**Robert G. Wiley**  
Senior Vice President  
and Branch Manager

**District Cash**  
**Donna M. Dziak**  
Vice President

**District Check**  
**Kimberly A. Clark**  
Vice President

**Business Development**  
**Mary H. Sherburne**  
Vice President and  
Regional Sales Manager

**Cynthia L. Rasche**  
Vice President  
(Dedicated to the Retail  
Payments Office)

### CENTRAL BANK SERVICES, FINANCE, AND ADMINISTRATIVE SERVICES

**Angela D. Robinson**  
Senior Vice President

**Central Bank Services**  
**Valerie J. Van Meter**  
Vice President and  
EEO Officer

**Finance & Accounting**  
**Jeffery S. Anderson**  
Vice President

**Jeffrey Marcus**  
Vice President and  
Corporate Controller

**District Administrative  
Services**  
**Kristi L. Zimmermann**  
Vice President

### STRATEGY AND PEOPLE PRACTICES

**Barbara D. Benson**  
Senior Vice President

### LEGAL RELATIONS, BOARD OF DIRECTORS, RISK MANAGEMENT AND LAW ENFORCEMENT

**Elizabeth A. Knospe**  
Senior Vice President  
and General Counsel

**Kathy Hilton Schrepfer**  
Vice President,  
Associate General  
Counsel, Ethics Officer,  
and Chicago Board  
Secretary

**Yurii Skorin**  
Vice President and  
Associate General  
Counsel

**Anna M. Voytovich**  
Vice President and  
Associate General Counsel

### OFFICE OF THE GENERAL AUDITOR

**Margaret K. Koenigs**  
Vice President and  
General Auditor

*As of December 31, 2007*



## ADVISORY COUNCILS

### FEDERAL ADVISORY COUNCIL SEVENTH DISTRICT REPRESENTATIVE

**William A. Downe**  
President and Chief  
Executive Officer  
BMO Financial Group,  
parent of Chicago-based  
Harris Bank

### SEVENTH DISTRICT ADVISORY COUNCIL ON AGRICULTURE, SMALL BUSINESS AND LABOR

#### Illinois

**Margaret Blackshire**  
AFL-CIO Of Illinois  
Chicago, Illinois

**Richard Jaffee**  
Oil-Dri Corporation  
Chicago, Illinois

**Jeff Martin**  
Bluestem Farm  
Mt. Pulaski, Illinois

**Jim McConoughey**  
Heartland Partnership  
Peoria, Illinois

**Alejandro Silva**  
Evans Food Group Ltd.  
Chicago, Illinois

#### Indiana

**John D. Hardin, Jr.**  
Hardin Farms  
Danville, Indiana

**Grant M. Monahan**  
Indiana Retail Council  
Indianapolis, Indiana

#### Iowa

**Mary Andringa**  
Vermeer Manufacturing Co.  
Pella, Iowa

**Jack B. Evans**  
The Hall-Perrine  
Foundation  
Cedar Rapids, Iowa

**Leslie Smith Miller**  
Iowa State Savings Bank  
Knoxville, Iowa

**Gary Wells**  
Wells' Dairy, Inc.  
Lemars, Iowa

#### Michigan

**Carl T. Camden**  
Kelly Services, Inc.  
Troy, Michigan

**Clarence Nixon, Jr.**  
CNC Group  
Detroit, Michigan

**Donald Snider**  
Paper – Plas Corporation  
Detroit, Michigan

#### Wisconsin

**William Beckett**  
CHRYSPAC (Chrysalis  
Packaging & Assembly  
Corporation)  
Milwaukee, Wisconsin

**Robert Mariano**  
Roundy's Supermarkets, Inc.  
Milwaukee, Wisconsin

**David Newby**  
Wisconsin State AFL-CIO  
Milwaukee, Wisconsin

## EXECUTIVE CHANGES

### DIRECTORS

Members of the Federal Reserve Bank of Chicago's boards of directors are selected to represent a cross section of the Seventh District economy, including consumers, industry, agriculture, the service sector, labor and commercial banks of various sizes.

The Chicago board consists of nine members. Member banks elect three bankers and three non-bankers. The Board of Governors appoints three additional non-bankers and designates the Reserve Bank chair and deputy chair from among its three appointees.

The Detroit Branch has a seven-member board of directors. The Board of Governors appoints three non-bankers, and the Chicago Reserve Bank board appoints four additional directors. The Branch board selects its own chair each year, with the approval of the Chicago board. All Reserve Bank and Branch directors may serve three-year terms, with a two-term maximum. Director appointments and elections at the Chicago Reserve Bank and its Detroit Branch effective in 2007 were:

**Miles D. White** was re-appointed to a one-year term as Chicago board chairman

**John A. Canning, Jr.** was re-appointed to a one-year term as Chicago board deputy chairman

**Dennis J. Kuester** was elected to a two-year term as a Chicago director

**William C. Foote** was appointed to a three-year term as a Chicago director

**Ann D. Murtlow** was elected to a one-year term as a Chicago director

**Michael L. Kubacki** was re-elected to a three-year term as a Chicago director

**Linda S. Likely** was re-appointed to serve a three-year term as Detroit Branch director

**Timothy M. Manganello** was appointed to a one-year term as chairman of the Detroit Branch board

**Roger A. Cregg** was re-appointed to a two-year term as Detroit Branch director

**Ralph W. Babb, Jr.** was re-appointed to a three-year term as a Detroit Branch director

At the end of 2007 the following appointments and elections beginning in 2008 were announced:

**John A. Canning, Jr.** was appointed to a one-year term as Chicago board chairman

**William C. Foote** was appointed to a one-year term as Chicago board deputy chairman

**Thomas J. Wilson** was appointed to a three-year term as a Chicago director

**Mark C. Hewitt** was elected to a three-year term as a Chicago director

**Anthony K. Anderson** was elected to a one-year term as a Chicago director

**Ann D. Murtlow** was elected to a three-year term as a Chicago director

**Carl T. Camden** was appointed to serve a three-year term as a Detroit Branch director

**William R. Hartman** was appointed to serve a two-year term as a Detroit Branch director

**Michael M. Magee, Jr.** was re-appointed to serve a three-year term as a Detroit Branch director

**Timothy M. Manganello** was re-appointed to a one-year term as chairman of the Detroit Branch board

### ADVISORY COUNCILS

The Federal Advisory Council, which meets quarterly to discuss business and financial conditions with the Board of Governors in Washington, D.C., is composed of one person from each of the 12 Federal Reserve Districts.

Each year the Chicago Reserve Bank's board of directors selects a representative to this group. William A. Downe, President and Chief Executive Officer of BMO Financial Group, Chicago, Illinois, was selected to be the 2008 representative. He also served in 2007.

### EXECUTIVE OFFICERS

The Bank's board of directors acted on the following promotions during 2007:

**Charles L. Evans** to President

**Daniel Sullivan** to Senior Vice President, Economic Research and Programs

**Kim Clark** to Vice President, District Check

**Donna Dziak** to Vice President, District Cash

**Pamela Rieger** and **Raymond Bacon** to Vice President, Supervision and Regulation

The Bank's board of directors acted on the following vice president transfer from the Fourth District:

**Edward Nosal** appointed as Vice President, Financial Markets Group

The following officers retired from the Bank:

**Glenn Hansen**, Senior Vice President and Detroit Branch Manager, 25 years

**Michael Moskow**, Bank President, 13 years

**Gerard Nick**, Vice President and Controller, 36 years

**Jerome Nicolas**, Vice President, District Cash, 38 years

In addition, **Brian Egan**, Vice President for the Retail Payments Office, transferred to the Federal Reserve Bank of Atlanta.

## OPERATIONS VOLUMES

	Dollar Amount		Number of Items	
	2007	2006	2007	2006
<b>CHECK AND ELECTRONIC PAYMENTS</b>				
Checks, NOWs, & Share Drafts Processed	1.1 Trillion	1.5 Trillion	0.9 Billion	1.2 Billion
Legacy Images Captured	—	—	72.2 Million	110.6 Million
Check 21 Images Presented	—	—	213.0 Million	84.0 Million
Check 21 IRD Printed	—	—	319.7 Million	144.2 Million
Check 21 Items Received	1.4 Trillion	734.6 Billion	722.6 Million	233.6 Million
<b>CASH OPERATIONS</b>				
Currency Counted	51.9 Billion	56.6 Billion	3.6 Billion	4.0 Billion
Unfit Currency Destroyed	5.2 Billion	5.9 Billion	561.0 Million	674.0 Million
Coin Bags Paid and Received	1.8 Billion	1.7 Billion	4.1 Million	3.9 Million
Number of Notes Paid and Received	126.4 Billion	139.8 Billion	8.9 Billion	9.4 Billion
<b>LOANS TO DEPOSITORY INSTITUTIONS</b>				
Total Loans Made During Year	3.5 Billion	1.5 Billion	1.0 Thousand	1.5 Thousand

## AUDITOR INDEPENDENCE

The firm engaged by the Board of Governors for the audits of the individual and combined financial statements of the Reserve Banks for 2007 was Deloitte & Touche LLP (D&T). Fees for these services totaled \$ 4.7 million. 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 2007, the Bank did not engage D&T for any material advisory services.



## MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

March 20, 2008

To the Board of Directors of the Federal Reserve Bank of Chicago

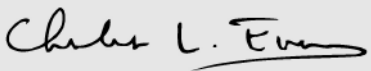
The management of the Federal Reserve Bank of Chicago ("FRBC") is responsible for the preparation and fair presentation of the Statement of Financial Condition, Statements of Income and Comprehensive Income, and Statement of Changes in Capital as of December 31st, 2007 (the "Financial Statements"). The 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 and as set forth in the Financial Accounting Manual for the Federal Reserve Banks ("Manual"), and as such, include amounts, some of which 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 Manual and include all disclosures necessary for such fair presentation.

The management of the FRBC is responsible for establishing and maintaining effective internal control over financial reporting as it relates to the Financial Statements. Such internal control is designed to provide reasonable assurance to management and to the Board of Directors regarding the preparation of the Financial Statements in accordance with the Manual. Internal control contains self-monitoring mechanisms, including, but not limited to, divisions of responsibility and a code of conduct. Once identified, any material deficiencies in internal control are reported to management and appropriate corrective measures are implemented.

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 FRBC assessed its internal control over financial reporting reflected in the Financial Statements, based upon the criteria established in the "Internal Control — Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, we believe that the FRBC maintained effective internal control over financial reporting as it relates to the Financial Statements.

Federal Reserve Bank of Chicago



Charles Evans  
President



Gordon Werkema  
First Vice President



Jeffrey Marcus  
Vice President and Controller

## REPORT OF INDEPENDENT AUDITORS



**Deloitte & Touche LLP**  
111 S. Wacker Drive  
Chicago, IL 60606  
USA

Tel: +1 312 486 1000  
Fax: +1 312 486 1486  
[www.deloitte.com](http://www.deloitte.com)

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

We have audited the accompanying statement of condition of the Federal Reserve Bank of Chicago ("FRB Chicago") as of December 31, 2007 and the related statements of income and comprehensive income and changes in capital for the year then ended, which have been prepared in conformity with accounting principles established by the Board of Governors of the Federal Reserve System. We also have audited the internal control over financial reporting of FRB Chicago as of December 31, 2007, based on criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. FRB Chicago's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on these financial statements and an opinion on FRB Chicago's internal control over financial reporting based on our audit. The financial statements of FRB Chicago for the year ended December 31, 2006 were audited by other auditors whose report, dated March 12, 2007, expressed an unqualified opinion on those statements.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audit of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinions.

FRB Chicago's internal control over financial reporting is a process designed by, or under the supervision of, FRB Chicago's principal executive and principal financial officers, or persons performing similar functions, and effected by FRB Chicago'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 of Governors of the Federal Reserve System. FRB Chicago's internal control over financial reporting includes those policies and procedures that (1) pertain to

(continued on page 28)

(continued from page 27)

the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of FRB Chicago; (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 of Governors of the Federal Reserve System, and that receipts and expenditures of FRB Chicago are being made only in accordance with authorizations of management and directors of FRB Chicago; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of FRB Chicago's assets that could have a material effect on the financial statements.

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 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.

As described in Note 3 to the financial statements, FRB Chicago has prepared these financial statements in conformity with accounting principles established by the Board of Governors of the Federal Reserve System, as set forth in the *Financial Accounting Manual for Federal Reserve Banks*, which is a comprehensive 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 of Governors of the Federal Reserve System and accounting principles generally accepted in the United States of America are also described in Note 3.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of FRB Chicago as of December 31, 2007, and the results of its operations for the year then ended, on the basis of accounting described in Note 3. Also, in our opinion, FRB Chicago maintained, in all material respects, effective internal control over financial reporting as of December 31, 2007, based on the criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Deloitte & Touche LLP

March 20, 2008

## REPORT OF INDEPENDENT AUDITORS



PricewaterhouseCoopers LLP  
One North Wacker  
Chicago, IL 60606  
Telephone (312) 298-2000  
Facsimile (312) 298-2001

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

We have audited the accompanying statement of condition of the Federal Reserve Bank of Chicago (the "Bank") as of December 31, 2006, and the related statements of income and changes in capital for the year then ended, which have been prepared in conformity with the accounting principles, policies, and practices established by the Board of Governors of the Federal Reserve System. These financial statements are the responsibility of the Bank's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards as established by the Auditing Standards Board (United States) and in accordance with the auditing standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

As described in Note 3, these financial statements were prepared in conformity with the accounting principles, policies, and practices established by the Board of Governors of the Federal Reserve System. These principles, policies, and practices, which were designed to meet the specialized accounting and reporting needs of the Federal Reserve System, are set forth in the *Financial Accounting Manual for Federal Reserve Banks* which is a comprehensive basis of accounting other than accounting principles generally accepted in the United States of America.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Bank as of December 31, 2006, and the results of its operations for the year then ended, on the basis of accounting described in Note 3.

A large, stylized, handwritten signature in black ink. The signature appears to be a cursive representation of the company name 'PricewaterhouseCoopers'.

March 12, 2007



## 2007 FINANCIAL STATEMENTS

STATEMENTS OF CONDITION (in millions)	As of December 31,	2007	2006
<b>Assets</b>			
Gold certificates	\$	903	\$ 947
Special drawing rights certificates		212	212
Coin		137	100
Items in process of collection		155	241
Loans to depository institutions		2,339	24
Securities purchased under agreements to resell		3,900	–
U.S. government securities, net		62,541	71,952
Investments denominated in foreign currencies		2,648	1,357
Accrued interest receivable		534	617
Interdistrict settlement account		6,133	–
Bank premises and equipment, net		233	241
Other assets		25	29
<b>Total Assets</b>	<b>\$</b>	<b>79,760</b>	<b>\$ 75,720</b>
<b>Liabilities and Capital</b>			
<b>Liabilities:</b>			
Federal Reserve notes outstanding, net	\$	72,705	\$ 65,616
Securities sold under agreements to repurchase		3,689	2,719
Deposits:			
Depository institutions		910	1,395
Other deposits		3	3
Deferred credit items		517	277
Interest on Federal Reserve notes due to U.S. Treasury		160	104
Interdistrict settlement account		–	3,742
Accrued benefit costs		119	122
Other liabilities		29	26
<b>Total Liabilities</b>		<b>78,132</b>	<b>74,004</b>
<b>Capital:</b>			
Capital paid-in		814	858
Surplus (including accumulated other comprehensive loss of \$27 million and \$41 million at December 31, 2007 and 2006, respectively)		814	858
<b>Total Capital</b>		<b>1,628</b>	<b>1,716</b>
<b>Total Liabilities and Capital</b>	<b>\$</b>	<b>79,760</b>	<b>\$ 75,720</b>

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

## 2007 FINANCIAL STATEMENTS

### STATEMENTS OF INCOME AND COMPREHENSIVE INCOME (in millions) For the years ended December 31,

	2007	2006
<b>Interest Income:</b>		
Interest on U.S. government securities	\$ 3,336	\$ 3,217
Interest on securities purchased under agreements to resell	121	–
Interest on investments denominated in foreign currencies	33	24
Interest on loans to depository institutions	2	3
<b>Total Interest Income</b>	<b>3,492</b>	<b>3,244</b>
<b>Interest Expense:</b>		
Interest expense on securities sold under agreements to repurchase	145	123
<b>Net Interest Income</b>	<b>3,347</b>	<b>3,121</b>
<b>Other Operating Income:</b>		
Income from services	59	55
Compensation received for services provided	82	59
Reimbursable services to government agencies	5	5
Foreign currency gains, net	102	78
Other income	12	11
<b>Total Other Operating Income</b>	<b>260</b>	<b>208</b>
<b>Operating Expenses:</b>		
Salaries and other benefits	161	142
Occupancy expense	24	24
Equipment expense	13	13
Compensation paid for services costs incurred	9	–
Assessments by Board of Governors	73	71
Other expenses	119	94
<b>Total Operating Expenses</b>	<b>399</b>	<b>344</b>
<b>Net Income Prior to Distribution</b>	<b>3,208</b>	<b>2,985</b>
Change in funded status of benefit plans	14	–
<b>Comprehensive Income Prior to Distribution</b>	<b>\$ 3,222</b>	<b>\$ 2,985</b>
<b>Distribution of Comprehensive Income:</b>		
Dividends paid to member banks	\$ 53	\$ 52
Transferred (from) to surplus and change in accumulated other comprehensive loss	(44)	23
Payments to U.S. Treasury as interest on Federal Reserve notes	3,213	2,910
<b>Total Distribution</b>	<b>\$ 3,222</b>	<b>\$ 2,985</b>

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

## 2007 FINANCIAL STATEMENTS

### STATEMENTS OF CHANGES IN CAPITAL (in millions)

For the years ended December 31, 2007 and December 31, 2006

	Capital Paid-In	Net Income Retained	Surplus		Total Capital
			Accumulated Other Comprehensive Loss	Total Surplus	
<b>Balance at January 1, 2006</b> <b>(18 million shares)</b>	\$ 876	\$ 876	\$ -	\$ 876	\$ 1,752
Net change in capital stock redeemed (364 thousand shares)	(18)	-	-	-	(18)
Transferred to surplus	-	23	-	23	23
Adjustment to initially apply SFAS No. 158	-	-	(41)	(41)	(41)
<b>Balance at December 31, 2006</b> <b>(17 million shares)</b>	\$ 858	\$ 899	\$ (41)	\$ 858	\$ 1,716
Net change in capital stock redeemed (1 million shares)	(44)	-	-	-	(44)
Transferred (from) to surplus and change in accumulated other comprehensive loss	-	(58)	14	(44)	(44)
<b>Balance at December 31, 2007</b> <b>(16 million shares)</b>	\$ 814	\$ 841	\$ (27)	\$ 814	\$ 1,628

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

---

## NOTES TO FINANCIAL STATEMENTS

### 1. STRUCTURE

The Federal Reserve Bank of Chicago ("Bank") is part of the Federal Reserve System ("System") and one of the twelve 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 and its branch in Detroit, Michigan serve the Seventh Federal Reserve District, which includes Iowa, and portions of Michigan, Illinois, Wisconsin and Indiana.

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 in the System. 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.

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.

### 2. OPERATIONS AND SERVICES

The Reserve Banks perform a variety of services and operations. Functions include participation in formulating and conducting monetary policy; participation in the payments system, including large-dollar transfers of funds, automated clearing-house ("ACH") operations, and check collection; distribution of coin and currency; performance of fiscal agency functions for the U.S. Treasury, certain federal agencies, and other enti-

ties; serving as the federal government's bank; provision of short-term loans to depository institutions; service to the consumer and the community by providing educational materials and information regarding consumer laws; and supervision of bank holding companies, state member banks, and U.S. offices of foreign banking organizations. Certain services are provided to foreign and international monetary authorities, primarily by the FRBNY.

The FOMC, in the conduct of monetary policy, establishes policy regarding domestic open market operations, oversees these operations, and annually issues authorizations and directives to the FRBNY for its execution of transactions. The FRBNY is authorized and directed by the FOMC to conduct operations in domestic markets, including the direct purchase and sale of U.S. government securities, the purchase of securities under agreements to resell, the sale of securities under agreements to repurchase, and the lending of U.S. government securities. The FRBNY executes these open market transactions at the direction of the FOMC and holds the resulting securities and agreements in the portfolio known as the System Open Market Account ("SOMA").

In addition to authorizing and directing operations in the domestic securities market, the FOMC authorizes and directs the FRBNY to execute operations in foreign markets for major currencies in order to counter disorderly conditions in exchange markets or to meet other needs specified by the FOMC in carrying out the System's central bank responsibilities. The FRBNY is authorized by the FOMC to hold balances of, and to execute spot and forward foreign exchange ("FX") and securities contracts for, nine foreign currencies and to invest such foreign currency holdings ensuring adequate liquidity is maintained. The FRBNY is authorized and directed by the FOMC to maintain reciprocal currency arrangements ("FX swaps") with four central banks and "warehouse" foreign currencies for the U.S. Treasury and Exchange Stabilization Fund ("ESF") through the Reserve Banks. In connection with its foreign currency activities, the FRBNY may enter into transactions that contain varying degrees of off-balance-sheet market risk that results from their future settlement and counter-party credit risk. The FRBNY controls credit risk by obtaining credit approvals, establishing transaction limits, and performing daily monitoring procedures.

Although the Reserve Banks are separate legal entities, in the interests of greater efficiency and effectiveness they collaborate in the delivery of certain operations and services.



The 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 Bank providing the service and the other eleven 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 billed for services provided to them by another Reserve Bank.

Major services provided on behalf of the System by the Bank, for which the costs were not redistributed to the other Reserve Banks, include national business development and customer support.

### 3. 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, which differ significantly from those of the private sector. These accounting principles and practices are documented in the *Financial Accounting Manual for Federal Reserve Banks* ("Financial Accounting Manual"), which is issued by the Board of Governors. All of the Reserve Banks are required to adopt and apply accounting policies and practices that are consistent with the Financial Accounting Manual and the financial statements have been prepared in accordance with the Financial Accounting Manual.

Differences exist between the accounting principles and practices in the Financial Accounting Manual and generally accepted accounting principles in the United States ("GAAP"), primarily due to the unique nature of the Bank's powers and responsibilities as part of the nation's central bank. The primary difference is the presentation of all securities holdings at amortized cost, rather than using the fair value presentation required by GAAP. U.S. government securities and investments denominated in foreign currencies comprising the SOMA are recorded at cost, on a settlement-date basis, and adjusted for amortization of premiums or accretion of discounts on a straight-line basis. Amortized cost more appropriately reflects the Bank's securities holdings given the System's unique responsibility to conduct monetary policy. While the application of current market prices to the securities holdings may result in values substantially above or below their carrying values, these unrealized changes in value would have no direct effect on the quantity of reserves available to the banking system or on the prospects for future Bank

earnings or capital. Both the domestic and foreign components of the SOMA portfolio may involve transactions that result in gains or losses when holdings are sold prior to maturity. Decisions regarding securities and foreign currency transactions, including their purchase and sale, are motivated by monetary policy objectives rather than profit. Accordingly, market values, earnings, and any gains or losses resulting from the sale of such securities and currencies are incidental to the open market operations and do not motivate decisions related to policy or open market activities.

In addition, the Bank has elected not to present a Statement of Cash Flows because the liquidity and cash position of the Bank are not a primary concern given the Reserve Banks' unique powers and responsibilities. A Statement of Cash Flows, therefore, would not provide additional meaningful information. 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. There are no other significant differences between the policies outlined in the Financial Accounting Manual and GAAP.

The preparation of the financial statements in conformity with the Financial Accounting Manual 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. Unique accounts and significant accounting policies are explained below.

#### a. Gold and Special Drawing Rights Certificates

The Secretary of the U.S. Treasury is authorized to issue gold and special drawing rights ("SDR") certificates to the Reserve Banks.

Payment for the gold certificates by the Reserve Banks is made by crediting equivalent amounts in dollars into the account established for the U.S. Treasury. The gold certificates held by the Reserve Banks are required to be backed by the gold of the U.S. Treasury. The U.S. Treasury may reacquire the gold certificates at any time and the Reserve Banks must deliver them to the U.S. Treasury. At such time, the U.S. 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 a fine troy ounce. The Board of Governors allocates the gold certificates among Reserve Banks once a year based on the average Federal Reserve notes outstanding in each Reserve Bank.

SDR certificates are issued by the International Monetary Fund ("Fund") to its members in proportion to each

member's quota in the Fund at the time of issuance. SDR certificates serve as a supplement to international monetary reserves and may be transferred from one national monetary authority to another. Under the law providing for United States participation in the SDR system, the Secretary of the U.S. Treasury is authorized to issue SDR certificates somewhat like gold certificates to the Reserve Banks. When SDR certificates are issued to the Reserve Banks, equivalent amounts in dollars are credited to the account established for the U.S. Treasury, and the Reserve Banks' SDR certificate accounts are increased. The Reserve Banks are required to purchase SDR certificates, at the direction of the U.S. Treasury, for the purpose of financing SDR acquisitions or for financing exchange stabilization operations. At the time SDR transactions occur, the Board of Governors allocates SDR certificate transactions among Reserve Banks based upon each Reserve Bank's Federal Reserve notes outstanding at the end of the preceding year. There were no SDR transactions in 2007 or 2006.

*b. Loans to Depository Institutions*

Depository institutions that maintain reservable transaction accounts or nonpersonal time deposits, as defined in regulations issued by the Board of Governors, have borrowing privileges at the discretion of the Reserve Bank. Borrowers execute certain lending agreements and deposit sufficient collateral before credit is extended. The Bank offers three discount window programs to depository institutions: primary credit, secondary credit, and seasonal credit, each with its own interest rate. Interest is accrued using the applicable discount rate established at least every fourteen days by the board of directors of the Reserve Bank, subject to review and determination by the Board of Governors.

In addition, depository institutions that are eligible to borrow under the Reserve Bank's primary credit program are also eligible to participate in the temporary Term Auction Facility ("TAF") program. Under the TAF program, the Reserve Banks conduct auctions for a fixed amount of funds, with the interest rate determined by the auction process, subject to a minimum bid rate. All advances under the TAF must be fully collateralized.

Outstanding loans are evaluated for collectibility, and currently all are considered collectible and fully collateralized. If loans were ever deemed to be uncollectible, an appropriate reserve would be established.

*c. U.S. Government Securities and Investments Denominated in Foreign Currencies*

Interest income on U.S. government securities and investments denominated in foreign currencies comprising the

SOMA is accrued on a straight-line basis. Gains and losses resulting from sales of securities are determined by specific issues based on average cost. Foreign-currency-denominated assets are revalued daily at current foreign currency market exchange rates in order to report these assets in U.S. dollars. Realized and unrealized gains and losses on investments denominated in foreign currencies are reported as "Foreign currency gains (losses), net" in the Statements of Income and Comprehensive Income.

Activity related to U.S. government securities, including the premiums, discounts, and realized and unrealized 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 April of each year. The settlement also equalizes Reserve Bank gold certificate holdings to Federal Reserve notes outstanding in each District. Activity related to investments denominated in foreign currencies is allocated to each Reserve Bank based on the ratio of each Reserve Bank's capital and surplus to aggregate capital and surplus at the preceding December 31.

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

The FRBNY may engage in tri-party purchases of securities under agreements to resell ("tri-party agreements"). Tri-party agreements are conducted with two commercial custodial banks that manage the clearing and settlement of collateral. Collateral is held in excess of the contract amount. Acceptable collateral under tri-party agreements primarily includes U.S. government securities, pass-through mortgage securities of the Government National Mortgage Association, Federal Home Loan Mortgage Corporation, and Federal National Mortgage Association, STRIP securities of the U.S. Government, and "stripped" securities of other government agencies. The tri-party agreements are accounted for as financing transactions, with the associated interest income accrued over the life of the agreement.

Securities sold under agreements to repurchase are accounted for as financing transactions and the associated interest expense is recognized over the life of the transaction. These transactions are reported in the Statements of Condition at their contractual amounts and the related accrued interest payable is reported as a component of "Other liabilities."

U.S. government securities held in the SOMA are lent to U.S. government securities dealers in order to facilitate the effective functioning of the domestic securities market. Securities-lending transactions are fully collateralized by other U.S. government securities and the collateral taken is in

excess of the market value of the securities loaned. The FRBNY charges the dealer a fee for borrowing securities and the fees are reported as a component of "Other income."

Activity related to 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. On February 15, 2007 the FRBNY began allocating to the other Reserve Banks the activity related to securities purchased under agreements to resell.

*e. FX Swap Arrangements and Warehousing Agreements*

FX swap arrangements are contractual agreements between two parties, the FRBNY and an authorized foreign central bank, whereby the parties agree to exchange their currencies up to a prearranged maximum amount and for an agreed-upon period of time (up to twelve months), at an agreed-upon interest rate. These arrangements give the FOMC temporary access to the foreign currencies it may need to support its international operations and give the authorized foreign central bank temporary access to dollars. Drawings under the FX swap arrangements can be initiated by either party and must be agreed to by the other party. The FX swap arrangements are structured so that the party initiating the transaction bears the exchange rate risk upon maturity. Foreign currencies received pursuant to these agreements are reported as a component of "Investments denominated in foreign currencies" in the Statements of Condition.

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

FX swap arrangements and warehousing agreements are revalued daily at current market exchange rates. Activity related to these agreements, with the exception of the unrealized gains and losses resulting from the daily revaluation, is allocated to each Reserve Bank based on the ratio of each Reserve Bank's capital and surplus to aggregate capital and surplus at the preceding December 31. Unrealized gains and losses resulting from the daily revaluation are recorded by FRBNY and not allocated to the other Reserve Banks.

*f. 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 two to fifty 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 for software during the application development stage, either developed internally or acquired for internal use, are capitalized based on the cost of direct services and materials associated with designing, coding, installing, or testing software. Capitalized software costs are amortized on a straight-line basis over the estimated useful lives of the software applications, which range from two to five years. Maintenance costs related to software are charged to expense in the year incurred.

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

*g. Interdistrict Settlement Account*

At the close of business each day, each Reserve Bank assembles the payments due to or from other Reserve Banks. These payments result from transactions between 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.

*h. Federal Reserve Notes*

Federal Reserve notes are the circulating currency of the United States. These notes are issued through the various Federal Reserve agents (the chairman of the board of directors of each Reserve Bank and their designees) to the Reserve Banks upon deposit with such agents of specified classes of collateral security, typically U.S. government securities. These notes are identified as issued to a specific Reserve Bank. The Federal Reserve Act provides that the collateral security tendered by the Reserve Bank to the Federal Reserve agent must be at least equal to the sum of the notes applied for by such Reserve Bank.

Assets eligible to be pledged as collateral security include all of the Bank's assets. 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 pledged for securities sold under agreements to repurchase is deducted.

The Board of Governors may, at any time, call upon a Reserve Bank for additional security to adequately collateralize the 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. At December 31, 2007, all Federal Reserve notes issued to the Reserve Banks were fully collateralized.

"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 \$13,560 million and \$14,202 million at December 31, 2007 and 2006, respectively.

*i. Items in Process of Collection and Deferred Credit Items*

Items in process of collection in the Statements of Condition primarily represents amounts attributable to checks that have been deposited for collection and that, as of the balance sheet date, have not yet been presented to the paying bank. Deferred credit items are the counterpart liability to items in process of collection, and the amounts in this account arise from deferring credit for deposited items until the amounts are collected. The balances in both accounts can vary significantly.

*j. 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. To reflect the Federal Reserve Act requirement that annual dividends are deducted from net earnings, dividends are pre-

sented as a distribution of comprehensive income in the Statements of Income and Comprehensive Income.

*k. Surplus*

The Board of Governors requires the Reserve Banks to maintain a surplus equal to the amount of capital paid-in as of December 31 of each year. This amount is intended to provide additional capital and reduce the possibility that the Reserve Banks would be required to call on member banks for additional capital.

Accumulated other comprehensive income is reported as a component of surplus in the Statements of Condition and the Statements of Changes in Capital. The balance of accumulated other comprehensive income is comprised of expenses, gains, and losses related to defined benefit pension plans and other postretirement benefit plans that, under accounting standards, are included in other comprehensive income but excluded from net income. Additional information regarding the classifications of accumulated other comprehensive income is provided in Notes 9 and 10.

The Bank initially applied the provisions of SFAS No. 158, *Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans*, at December 31, 2006. This accounting standard requires recognition of the overfunded or underfunded status of a defined benefit postretirement plan in the Statements of Condition, and recognition of changes in the funded status in the years in which the changes occur through comprehensive income. The transition rules for implementing the standard required applying the provisions as of the end of the year of initial implementation, and the effect as of December 31, 2006 is recorded as "Adjustment to initially apply SFAS No. 158" in the Statements of Changes in Capital.

*l. Interest on Federal Reserve Notes*

The Board of Governors requires the Reserve Banks to transfer excess earnings to the U.S. 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. This amount is reported as "Payments to U.S. Treasury as interest on Federal Reserve notes" in the Statements of Income and Comprehensive Income and is reported as a liability, or as an asset if overpaid during the year, in the Statements of Condition. Weekly payments to the U.S. Treasury may vary significantly.

In the event of losses or an increase in capital paid-in at a Reserve Bank, payments to the U.S. Treasury are suspended and earnings are retained until the surplus is equal to the capital paid-in.



In the event of a decrease in capital paid-in, the excess surplus, after equating capital paid-in and surplus at December 31, is distributed to the U.S. Treasury in the following year.

*m. Income and Costs Related to U.S. Treasury Services*

The Bank is required by the Federal Reserve Act to serve as fiscal agent and depository of the United States. By statute, the Department of the Treasury is permitted, but not required, to pay for these services. During the years ended December 31, 2006 and 2007, the Bank was reimbursed for all services provided to the Department of Treasury.

*n. Compensation Received for Services Provided and Compensation Paid for Services Costs Incurred*

The Federal Reserve Bank of Atlanta ("FRBA") has overall responsibility for managing the Reserve Banks' provision of check and ACH services to depository institutions, and, as a result, recognizes total System revenue for these services on its Statements of Income and Comprehensive Income. Similarly, the FRBNY manages the Reserve Banks' provision of Fedwire funds and securities transfer services, and recognizes total System revenue for these services on its Statements of Income and Comprehensive Income. The FRBA and FRBNY compensate the other Reserve Banks for the costs incurred to provide these services. The Bank reports this compensation as "Compensation received for services provided" in the Statements of Income and Comprehensive Income.

The Bank has overall responsibility for managing the Reserve Banks' provision of electronic access services to depository institutions, and as a result, recognizes total System revenue for these services on its Statements of Income and Comprehensive Income. In 2007, the Bank compensated the other Reserve Banks for the costs incurred to provide these services. Compensation paid by the Bank for electronic access services is reported as "Compensation paid for services costs incurred" in the Statements of Income and Comprehensive Income.

*o. Assessments by the Board of Governors*

The Board of Governors assesses the Reserve Banks to fund its operations based on each Reserve Bank's capital and surplus balances as of December 31 of the prior year. The Board of Governors also assesses each Reserve Bank for the expenses incurred for the U.S. Treasury to prepare and retire 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.

*p. Taxes*

The Reserve Banks are exempt from federal, state, and local taxes, except for taxes on real property. The Bank's real prop-

erty taxes were \$2 million and \$4 million for the years ended December 31, 2007 and 2006, respectively, and are reported as a component of "Occupancy expense."

*q. 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.

Note 11 describes the Bank's restructuring initiatives and provides information about the costs and liabilities associated with employee separations and contract terminations. The costs associated with the impairment of certain of the Bank's assets are discussed in Note 6. Costs and liabilities associated with enhanced pension benefits in connection with the restructuring activities for all of the Reserve Banks are recorded on the books of the FRBNY. Costs and liabilities associated with enhanced postretirement benefits are discussed in Note 9.

*r. Recently Issued Accounting Standards*

In September 2006, the FASB issued SFAS No. 157, Fair Value Measurements ("SFAS No. 157"). SFAS No. 157 establishes a single authoritative definition of fair value, sets out a framework for measuring fair value, and expands on required disclosures about fair value measurement. SFAS No. 157 is generally effective for the Bank on January 1, 2008, though the effective date of some provisions is January 1, 2009. The provisions of SFAS No. 157 will be applied prospectively and are not expected to have a material effect on the Bank's financial statements.

**4. U.S. GOVERNMENT SECURITIES, SECURITIES PURCHASED UNDER AGREEMENTS TO RESELL, SECURITIES SOLD UNDER AGREEMENTS TO REPURCHASE, AND SECURITIES LENDING**

The FRBNY, on behalf of the Reserve Banks, holds securities bought outright in the SOMA. The Bank's allocated share of SOMA balances was approximately 8.388 percent and 9.182 percent at December 31, 2007 and 2006, respectively.

The Bank's allocated share of U.S. Government securities, net, held in the SOMA at December 31, was as follows (in millions):

	2007	2006
<b>Par value:</b>		
U.S. government:		
Bills	\$ 19,110	\$ 25,436
Notes	33,700	36,945
Bonds	9,310	9,139
<b>Total par value</b>	<b>62,120</b>	<b>71,520</b>
Unamortized premiums	670	800
Unaccreted discounts	(249)	(368)
<b>Total allocated to the Bank</b>	<b>\$ 62,541</b>	<b>\$ 71,952</b>

At December 31, 2007 and 2006, the fair value of the U.S. government securities allocated to the Bank, excluding accrued interest, was \$65,184 million and \$73,079 million, respectively, as determined by reference to quoted prices for identical securities.

The total of the U.S. government securities, net, held in the SOMA was \$745,629 million and \$783,619 million at December 31, 2007 and 2006, respectively. At December 31, 2007 and 2006, the fair value of the U.S. government securities held in the SOMA, excluding accrued interest, was \$777,141 million and \$795,900 million, respectively, as determined by reference to quoted prices for identical securities.

Although the fair value of security holdings can be substantially greater 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 central bank, to meet their financial obligations and responsibilities, and should not be misunderstood as representing a risk to the Reserve Banks, their shareholders, or the public. The fair value is presented solely for informational purposes.

Financial information related to securities purchased under agreements to resell and securities sold under agreements to repurchase for the year ended December 31, 2007 was as follows (in millions):

	Securities purchased under agreements to resell	Securities sold under agreements to repurchase
<b>Allocated to the Bank:</b>		
Contract amount outstanding, end of year	\$ 3,900	\$ 3,689
Weighted average amount outstanding, during the year	2,942	2,923
Maximum month-end balance outstanding, during the year	4,320	3,689
Securities pledged, end of year	-	3,695
<b>System total:</b>		
Contract amount outstanding, end of year	\$ 46,500	\$ 43,985
Weighted average amount outstanding, during the year	35,073	34,846
Maximum month-end balance outstanding, during the year	51,500	43,985
Securities pledged, end of year	-	44,048

At December 31, 2006, the total contract amount of securities sold under agreements to repurchase was \$29,615 million, of which \$2,719 million was allocated to the Bank. The total par value of SOMA securities that were pledged for securities sold under agreements to repurchase at December 31, 2006 was \$29,676 million, of which \$2,725 million was allocated to the Bank.

The contract amounts for securities purchased under agreements to resell and securities sold under agreements to repurchase approximate fair value.

The maturity distribution of U.S. government securities bought outright, securities purchased under agreements to resell, and securities sold under agreements to repurchase that were allocated to the Bank at December 31, 2007, was as follows (in millions):

	U.S. Government Securities (Par value)	Securities Purchased Under Agreements to Resell (Contract amount)	Securities Sold Under Agreements to Repurchase (Contract amount)
Within 15 days	\$ 2,289	\$ 3,900	\$ 3,689
16 days to 90 days	12,559	-	-
91 days to 1 year	12,772	-	-
Over 1 year to 5 years	20,178	-	-
Over 5 years to 10 years	6,873	-	-
Over 10 years	7,449	-	-
<b>Total allocated to the Bank</b>	<b>\$ 61,120</b>	<b>\$ 3,900</b>	<b>\$ 3,689</b>

At December 31, 2007 and 2006, U.S. government securities with par values of \$16,649 million and \$6,855 million, respectively, were loaned from the SOMA, of which \$1,396 million and \$629 million, respectively, were allocated to the Bank.

## 5. INVESTMENTS DENOMINATED IN FOREIGN CURRENCIES

The FRBNY, on behalf of the Reserve Banks, holds foreign currency deposits with foreign central banks and with the Bank for International Settlements and invests in foreign government debt instruments. Foreign government debt instruments held include both securities bought outright and securities purchased under agreements to resell. These investments are guaranteed as to principal and interest by the issuing foreign governments.

The Bank's allocated share of investments denominated in foreign currencies was approximately 5.599 percent and 6.626 percent at December 31, 2007 and 2006, respectively.

The Bank's allocated share of investments denominated in foreign currencies, including accrued interest, valued at foreign currency market exchange rates at December 31, was as follows (in millions):

	2007	2006
<i>Euro:</i>		
Foreign currency deposits	\$ 1,539	\$ 413
Securities purchased under agreements to resell	143	147
Government debt instruments	261	270
<i>Japanese Yen:</i>		
Foreign currency deposits	157	172
Government debt instruments	320	355
<i>Swiss Franc:</i>		
Foreign currency deposits	228	-
<b>Total allocated to the Bank</b>	<b>\$ 2,648</b>	<b>\$ 1,357</b>

At December 31, 2007, the total amount of foreign currency deposits held under FX contracts was \$24,381 million of which \$1,365 million was allocated to the Bank. At December 31, 2006, there were no open foreign exchange contracts.

At December 31, 2007 and 2006, the fair value of investments denominated in foreign currencies, including accrued interest, allocated to the Bank was \$2,647 million and \$1,354 million, respectively. The fair value of government debt instruments was determined by reference to quoted prices for identical securities. The cost basis of foreign currency deposits and securities purchased under agreements to resell, adjusted for accrued interest, approximates fair value. Similar to the U.S. government securities discussed in Note 4, unrealized gains or losses have no effect on the ability of a Reserve Bank, as central bank, to meet its financial obligations and responsibilities.

Total System investments denominated in foreign currencies were \$47,295 million and \$20,482 million at December 31, 2007 and 2006, respectively. At December 31, 2007 and 2006, the fair value of the total System investments denominated in foreign currencies, including accrued interest, was \$47,274 million and \$20,434 million, respectively.

The maturity distribution of investments denominated in foreign currencies that were allocated to the Bank at December 31, 2007, was as follows (in millions):

	European Euro	Japanese Yen	Swiss Franc	Total
Within 15 days	\$ 280	\$ 167	\$ -	\$ 447
16 days to 90 days	1,294	23	228	\$ 1,545
91 days to 1 year	154	113	-	\$ 267
Over 1 year to 5 years	215	174	-	\$ 389
<b>Total allocated to the Bank</b>	<b>\$ 1,943</b>	<b>\$ 477</b>	<b>\$ 228</b>	<b>\$ 2,648</b>

At December 31, 2007 and 2006, the authorized warehousing facility was \$5,000 million, with no balance outstanding.

## 6. BANK PREMISES, EQUIPMENT, AND SOFTWARE

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

	2007	2006
Bank premises and equipment:		
Land	\$ 14	\$ 14
Buildings	238	231
Building machinery and equipment	31	31
Construction in progress	4	7
Furniture and equipment	62	65
Subtotal	349	348
Accumulated depreciation	(116)	(107)
<b>Bank premises and equipment, net</b>	<b>\$ 233</b>	<b>\$ 241</b>
Depreciation expense, for the year ended December 31	\$ 16	\$ 16

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

	2007	2006
Leased premises and equipment under capital leases	\$ 622	\$ 622
Accumulated depreciation	(596)	(492)
<b>Leased premises and equipment under capital leases, net</b>	<b>\$ 26</b>	<b>\$ 130</b>

Depreciation expense related to leased premises and equipment under capital leases was \$104 thousand for the year ended December 31, 2007.

The Bank leases space to outside tenants with remaining lease terms ranging from 1 to 13 years. Rental income from such leases was \$5 million and \$6 million for the years ended December 31, 2007 and 2006, respectively, and is reported as a component of "Other income." Future minimum lease payments that the Bank will receive under noncancelable lease agreements in existence at December 31, 2007, are as follows (in millions):

2008	\$ 5
2009	5
2010	5
2011	5
2012	4
Thereafter	20
<b>Total</b>	<b>\$ 44</b>

The Bank has capitalized software assets, net of amortization, of \$2 million and \$4 million at December 31, 2007

and 2006, respectively. Amortization expense was \$2 million for each of the years ended December 31, 2007 and 2006. Capitalized software assets are reported as a component of "Other assets" and the related amortization is reported as a component of "Other expenses."

Assets impaired as a result of the Bank's restructuring plan, as discussed in Note 11, include check equipment, leasehold improvements, furniture and software. Asset impairment losses of \$9.7 million for the period ending December 31, 2007 were determined using fair values based on quoted market values or other valuation techniques and are reported as a component of "Other expenses." The Bank had no impairment losses in 2006.

## 7. COMMITMENTS AND CONTINGENCIES

At December 31, 2007, the Bank was obligated under non-cancelable leases for premises and equipment with remaining terms ranging from 1 to approximately 5 years. These leases provide for increased rental payments based upon increases in real estate taxes, operating costs, or selected price indices.

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 \$2 million and \$3 million for the years ended December 31, 2007 and 2006, respectively.

Future minimum rental payments under noncancelable operating leases and capital leases, net of sublease rentals, with remaining terms of one year or more, at December 31, 2007 are as follows (in thousands):

	Operating	Capital
2008	\$ 524	\$ 22
2009	413	-
2010	415	-
2011	319	-
2012	10	-
Thereafter	-	-
Future minimum rental payments	\$ 1,681	22
<b>Present value of net minimum lease payments</b>		<b>\$ 22</b>

At December 31, 2007, there were no material unrecorded unconditional purchase commitments or long-term obligations in excess of one year.

Under the Insurance Agreement of the Federal Reserve Banks, each of the Reserve Banks has agreed to bear, on a per incident basis, a pro rata share of losses in excess of one 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, 2007 or 2006.

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 aforementioned litigation and claims will be resolved without material adverse effect on the financial position or results of operations of the Bank.

## 8. 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 Bank's employees participate in the Retirement Plan for Employees of the Federal Reserve System ("System Plan"). Employees at certain compensation levels participate in the Benefit Equalization Retirement Plan ("BEP") and certain Reserve Bank officers participate in the Supplemental Employee Retirement Plan ("SERP").

The System Plan provides retirement benefits to employees of the Federal Reserve Banks, the Board of Governors, and the Office of Employee Benefits of the Federal Reserve Employee Benefits System. The FRBNY, on behalf of the System, recognizes the net asset and costs associated with the System Plan in its financial statements. Costs associated with the System Plan are not redistributed to other participating employers.

The Bank's projected benefit obligation, funded status, and net pension expenses for the BEP and the SERP at December 31, 2007 and 2006, and for the years then ended, were not material.

### *Thrift Plan*

Employees of the Bank may also participate in the defined contribution Thrift Plan for Employees of the Federal Reserve System ("Thrift Plan"). The Bank's Thrift Plan contributions totaled \$5 million for each of the years ended December 31, 2007 and 2006, and are reported as a component of "Salaries and other benefits" in the Statements of Income and Comprehensive Income. The Bank matches employee contributions based on a specified formula. For the years ended December 31, 2007 and 2006, the Bank matched 80 percent on the first 6 percent of employee contributions for employees with less than five years of service and 100 percent on the first 6 percent of employee contributions for employees with five or more years of service.

## 9. POSTRETIREMENT BENEFITS OTHER THAN PENSIONS AND POSTEMPLOYMENT BENEFITS

### *Postretirement Benefits other than Pensions*

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

	2007	2006
Accumulated postretirement benefit obligation at January 1	\$ 110.9	\$ 98.6
Service cost-benefits earned during the period	2.5	1.7
Interest cost on accumulated benefit obligation	6.6	5.4
Net actuarial (gain) loss	(7.2)	11.4
Curtailment gain	(3.9)	-
Special termination benefits loss	3.2	-
Contributions by plan participants	1.6	1.6
Benefits paid	(8.6)	(8.3)
Medicare Part D subsidies	0.5	0.5
<b>Accumulated postretirement benefit obligation at December 31</b>	<b>\$ 105.6</b>	<b>\$ 110.9</b>

At December 31, 2007 and 2006, the weighted-average discount rate assumptions used in developing the postretirement benefit obligation were 6.25 percent and 5.75 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.

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):

	2007	2006
Fair value of plan assets at January 1	\$ -	\$ -
Contributions by the employer	6.5	6.2
Contributions by plan participants	1.6	1.6
Benefits paid, net of Medicare Part D subsidies	(8.1)	(7.8)
<b>Fair value of plan assets at December 31</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Unfunded obligation and accrued postretirement benefit cost</b>	<b>\$ 105.6</b>	<b>\$ 110.9</b>
Amounts included in accumulated other comprehensive loss are shown below:		
Prior service cost	\$ 5.6	\$ 9.4
Deferred curtailment gain	1.6	-
Net actuarial loss	(33.3)	(50.2)
<b>Total accumulated other comprehensive loss</b>	<b>\$ (26.1)</b>	<b>\$ (40.8)</b>

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:

	2007	2006
Health care cost trend rate assumed for next year	8.00%	9.00%
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	2013	2012

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, 2007 (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	\$ 1.3	\$ (1.1)
Effect on accumulated postretirement benefit obligation	11.9	(10.0)

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

	2007	2006
Service cost-benefits earned during the period	\$ 2.5	\$ 1.7
Interest cost on accumulated benefit obligation	6.6	5.4
Amortization of prior service cost	(2.3)	(2.5)
Amortization of net actuarial loss	5.9	3.2
Total periodic expense	12.7	7.8
Special termination benefits loss	3.2	-
<b>Net periodic postretirement benefit expense</b>	<b>\$ 15.9</b>	<b>\$ 7.8</b>
Estimated amounts that will be amortized from accumulated other comprehensive loss into net periodic postretirement benefit expense in 2008 are shown below:		
Prior service cost	\$ (1.8)	-
Net actuarial gain	3.2	-
<b>Total</b>	<b>\$ 1.4</b>	<b>\$ -</b>

Net postretirement benefit costs are actuarially determined using a January 1 measurement date. At January 1, 2007 and 2006, the weighted-average discount rate assumptions used to determine net periodic postretirement benefit costs were 5.75 percent and 5.50 percent, respectively.



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

The recognition of special termination losses is primarily the result of enhanced retirement benefits provided to employees during the restructuring described in Note 11. A deferred curtailment gain was recorded in 2007 as a component of accumulated other comprehensive loss; the gain will be recognized in net income in future years when the related employees terminate employment.

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, retroactive to January 1, 2004, are reflected in actuarial gain in the accumulated postretirement benefit obligation and net periodic postretirement benefit expense.

There were no receipts of federal Medicare Part D subsidies in the year ended December 31, 2006. Receipts in the year ending December 31, 2007, related to benefits paid in the years ended December 31, 2006 and 2007 were \$0.5 million and \$0.4 million, respectively. Expected receipts in 2008, related to benefits paid in the year ended December 31, 2007 are \$0.2 million.

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

	Without Subsidy	With Subsidy
2008	\$ 7.2	\$ 6.6
2009	7.7	7.0
2010	8.0	7.3
2011	8.3	7.5
2012	8.6	7.7
2013-2017	45.0	39.7
<b>Total</b>	<b>\$ 84.8</b>	<b>\$ 75.8</b>

#### 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 and dental insurance, survivor income, and disability benefits. The accrued postemployment benefit costs recognized by the Bank at December 31, 2007 and 2006 were \$11 million and \$10 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 2007 and 2006 operating expenses were \$2.5 million and \$299 thousand, respectively, and are recorded as a component of "Salaries and other 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 income (loss) (in millions):

	Amount Related to Postretirement Benefits other than Pensions
Balance at January 1, 2006	\$ -
Adjustment to initially apply SFAS No. 158	(41)
<b>Balance at December 31, 2006</b>	<b>\$ (41)</b>
Change in funded status of benefit plans:	
Prior service costs arising during the year	\$ (2)
Net actuarial gain arising during the year	11
Deferred curtailment gain	2
Amortization of prior service cost	(2)
Amortization of net actuarial loss	5
<b>Change in funded status of benefits plans - other comprehensive income</b>	<b>\$ 14</b>
<b>Balance at December 31, 2007</b>	<b>\$ (27)</b>

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

#### 11. BUSINESS RESTRUCTURING CHARGES

##### 2007 Restructuring Plans

In 2007, the Reserve Banks announced a restructuring initiative to align the check processing infrastructure and operations with declining check processing volumes. The new infrastructure will involve consolidation of operations into four regional Reserve Bank processing sites in Philadelphia, Cleveland, Atlanta, and Dallas.

##### 2006 Restructuring Plans

In 2006, the Bank announced consolidation and restructuring initiatives in check adjustment operations.

##### 2005 and Prior Restructuring Costs

The Bank incurred various restructuring charges prior to 2006 related to the restructuring of check operations to streamline operations and reduce costs.

Following is a summary of financial information related to the restructuring plans (in millions):

	2005 & Prior Restructuring Plans	2006 Restructuring Plans	2007 Restructuring Plans	Total
<i>Information related to restructuring plans as of December 31, 2007:</i>				
Total expected costs related to restructuring activity	\$ 6.9	\$ 0.4	\$ 6.0	\$ 13.3
Expected completion date	2006	2009	2012	-
<i>Reconciliation of liability balances:</i>				
Balance at January 1, 2006	\$ 0.1	\$ -	\$ -	\$ 0.1
Employee separation costs and adjustments	(0.1)	1.0	-	0.9
Payments	-	-	-	-
Balance at December 31, 2006	\$ -	\$ 1.0	\$ -	\$ 1.0
Employee separation costs	-	-	6.0	6.0
Adjustments	-	(0.5)	-	(0.5)
Payments	-	(0.4)	-	(0.4)
Balance at December 31, 2007	\$ -	\$ 0.1	\$ 6.0	\$ 6.1

Employee separation costs are primarily severance costs for identified staff reductions associated with the announced restructuring plans. Separation costs that are provided under terms of ongoing benefit arrangements are recorded based on the accumulated benefit earned by the employee. Separation costs that are provided under the terms of one-time benefit arrangements are generally measured based on the expected benefit as of the termination date and recorded ratably over the period to termination. Restructuring costs related to employee separations are reported as a component of "Salaries and other benefits" in the Statements of Income and Other Comprehensive Income.

Adjustments to the accrued liability are primarily due to changes in the estimated restructuring costs and are shown as a component of the appropriate expense category in the Statements of Income and Other Comprehensive Income.

Restructuring costs associated with the impairment of certain Bank assets, including software, leasehold improvements, furniture, and equipment, are discussed in Note 6. Costs associated with enhanced pension benefits for all Reserve Banks are recorded on the books of the FRBNY as discussed in Note 8. Costs associated with enhanced postretirement benefits are disclosed in Note 9.

## 12. SUBSEQUENT EVENTS

In March 2008, the Board of Governors announced several initiatives to address liquidity pressures in funding markets and promote financial stability, including increasing the Term Auction Facility (see Note 3b) to \$100 billion and initiating a series of term repurchase transactions (see Notes 3d and 4) that may cumulate to \$100 billion. In addition, the Reserve Banks' securities lending program (see Notes 3d and 4) was expanded to lend up to \$200 billion of Treasury securities to primary dealers for a term of 28 days, secured by federal agency debt, federal agency residential mortgage-backed securities, agency collateralized mortgage obligations, non-agency AAA/Aaa-rated private-label residential mortgage-backed securities, and AAA/Aaa-rated commercial mortgage-backed securities. The FOMC also authorized increases in its existing temporary reciprocal currency arrangements (see Notes 3e and 5) with specific foreign central banks. These initiatives will affect 2008 activity related to loans to depository institutions, securities purchased under agreements to resell, U.S. government securities, net, and investments denominated in foreign currencies, as well as income and expenses. The effects of the initiatives do not require adjustment to the amounts recorded as of December 31, 2007.

## OUR MISSION

The Federal Reserve Bank of Chicago is one of 12 regional Reserve Banks across the United States that, together with the Board of Governors in Washington, D.C., serve as the nation's central bank. The role of the Federal Reserve System, since its establishment by an act of Congress passed in 1913, has been to foster a strong economy, supported by a stable financial system.

To this end, the Federal Reserve Bank of Chicago participates in the formulation and implementation of national monetary policy; supervises and regulates state-member banks, bank holding companies and foreign bank branches; and provides financial services to depository institutions and the U.S. government. Through its head office in Chicago, branch in Detroit, regional office in Des Moines, and facility in Bedford Park, Ill., the Federal Reserve Bank of Chicago serves the Seventh Federal Reserve District, which includes major portions of Illinois, Indiana, Michigan and Wisconsin, plus all of Iowa.

## OUR VISION

- Further the public interest by fostering a sound economy and stable financial system
- Provide products and services of unmatched value to those we serve
- Set the standard for excellence in the Federal Reserve System
- Work together, value diversity, communicate openly, be creative and fair
- Live by our core values of integrity, respect, responsibility and excellence

## FEDERAL RESERVE BANK OF CHICAGO

Head Office  
230 South LaSalle Street  
P.O. Box 834  
Chicago, Illinois 60690-0834  
312-322-5322

Detroit Branch  
1600 East Warren Avenue  
Detroit, Michigan 48207-1063  
313-961-6880

Des Moines Office  
2200 Rittenhouse Street  
Suite 150  
Des Moines, Iowa 50321  
515-256-6100

Midway Facility  
4944 West 73rd Street  
Bedford Park, Illinois 60638  
708-924-8900

