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The Federal Reserve Bank of Cleveland is one of 12 regional Reserve Banks in the United States that, together with the Board of Governors in Washington DC, comprise the Federal Reserve System.

The Federal Reserve Bank of Cleveland, including its branch offices in Cincinnati and Pittsburgh, serves the Fourth Federal Reserve District (Ohio, western Pennsylvania, the northern panhandle of West Virginia, and eastern Kentucky).

It is the policy of the Federal Reserve Bank of Cleveland to provide equal employment opportunity for all employees and applicants without regard to race, color, religion, sex, national origin, age, or disability.

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Sandra Pianalto, president and chief executive officer; Alfred M. Rankin Jr., deputy chairman; and Tanny B. Crane, chairwoman.

President's Foreword

The recession that began in late 2007 has broadened and deepened, leading to the greatest financial stress our economy has seen since the 1930s. Many borrowers are still finding it difficult to obtain access to credit under terms and conditions they would find in healthier times. For consumers, the loss of wealth from the collapse of housing and equity prices has been staggering. In 2008, the net worth of U.S. households declined by 18 percent, or by more than \$11 trillion—which amounts to nearly a year's worth of U.S. gross domestic product.

The financial crisis and its sweeping effects on the economy have presented the Federal Reserve System with unique and historic challenges. As a voting member of the Federal Open Market Committee in 2008, I was privileged to contribute to the innovative and unprecedented actions taken to respond to rapidly deteriorating market conditions and to promote an economic recovery. Unfortunately, the need for these efforts continues.

Within the Fourth Federal Reserve District, the Federal Reserve Bank of Cleveland maintained highly attentive regulatory oversight of financial institutions in 2008 and provided research that informed our perspectives on the most pressing public policy issues. Regional outreach activities focused on opportunities to gain firsthand insights on economic and financial conditions.

The Bank also continued to maintain the highest levels of efficiency and effectiveness in our operations while providing leadership to Federal Reserve System and U.S. Treasury strategic objectives. All of these efforts are outlined in the Operational Highlights section of this report, beginning on page 22.

Unusual circumstances call for unusual responses. In addition to the need for innovative thinking about monetary policy, the Bank began to address the rise of home mortgage foreclosures and the collapse of housing markets within the Fourth District from a new perspective. We drew on the knowledge of our management and staff in the Research, Supervision and Regulation, Policy Analysis, Community Development, and Legal functions to assess the housing situation both nationally and regionally. Working together, these experts analyzed the underlying dynamics and evaluated potential solutions in real time as the crisis unfolded.

This year's *Annual Report* essay contains some of the fruits of these efforts. We conclude that the housing market collapse must be viewed as the result of a destructive cycle, and that remedies must be targeted to address multiple points of market dysfunction. We pay particular attention to policies that may be appropriate in relatively weak housing markets. Simple, one-size-fits-all, or short-term solutions will not get the job done and will not restore health to this important sector of the economy. Despite the magnitude of the challenge, however, we express optimism about the steps now being taken to address the situation.

Also helping us to navigate through turbulent economic times in 2008 were our Bank's boards of directors and advisory councils in Cleveland, Pittsburgh, and Cincinnati. I am indebted to them for their dedicated service.

First, I thank Benedict (Bick) Weissenrieder, chairman and CEO of Hocking Valley Bank in Athens, Ohio, who is retiring after eight years of service, first on the Cincinnati Board of Directors and then as a Cleveland director since 2003. Bick has participated on three committees, including serving as chairman of the Operations Committee for the past three years. His many contributions, wise counsel, and unfailing support have been invaluable to our Bank.

I also thank Georgiana Riley, president and CEO of TIGG Corporation in Oakdale, Pennsylvania, who is retiring from our Pittsburgh Board of Directors after two three-year terms. Our Bank has greatly valued her business insights and guidance.

Thanks also go to two retiring members of our Cincinnati Board of Directors. Glenn Leveridge, president of the Winchester Market of the Central Bank and Trust Company in Lexington, Kentucky, served for six years. We thank Glenn for his dedicated service and leadership. In addition, Charlotte Martin, president and CEO of Great Lakes Bankers Bank in Gahanna, Ohio, retired from the Cincinnati Board after six years. I thank Charlotte for her service to date, and I am pleased that she has been elected to serve on the Cleveland Board beginning in 2009.

Finally, I thank Henry L. Meyer III, chairman and CEO of KeyCorp in Cleveland, who served as our Bank's representative on the Federal Advisory Council in 2008 and will continue in that capacity for the coming year. We are grateful beneficiaries of Henry's strong leadership in this important role.

The challenges that the Federal Reserve Bank of Cleveland faced in 2008 were also very personal. In January, we learned that R. Chris Moore, our beloved first vice president, was battling a rare and systemic form of cancer. Throughout the year, we witnessed Chris's extraordinary courage and determination as he fought to regain his health while maintaining a full work schedule. Sadly, we lost Chris on February 20, 2009. This *Annual Report* is dedicated to his memory.

The 1,400 employees at the Cleveland, Cincinnati, and Pittsburgh offices brought a full measure of support and dedication to ensure the Bank's success during this extraordinary and demanding year. Our officers and staff continue to work tirelessly to advance our strategic objectives of leadership in thought and deed, external focus, and operational excellence. I extend my heartiest thanks for their commitment to the Federal Reserve Bank of Cleveland and, more broadly, to our nation's financial system.

Sandra Pianalto

Sandra Pianalto President and Chief Executive Officer



DEDICATION

R. CHRIS MOORE First Vice President and Chief Operating Officer This *Annual Report* is dedicated to a strong and vibrant leader at the Federal Reserve Bank of Cleveland who left us far too soon: First Vice President and Chief Operating Officer R. Chris Moore. Chris passed away on February 20, 2009, at age 53 following a valiant battle with cancer.

Chris joined the Bank in 1977 as an assistant examiner in the Supervision and Regulation Department. He was appointed vice president in 1988, and in 1996, he was appointed senior vice president in charge of the Bank's Supervision and Regulation, Data Services, and Credit Risk Management departments. He was appointed first vice president in March 2003.

As first vice president and chief operating officer, Chris oversaw the Bank's financial services, including cash processing, check clearing, electronic payments, and savings bond processing, as well as related support functions, such as information technology services, financial management, human resources, protection, and facilities. He also led the Bank's culture change efforts.

Chris also served the Federal Reserve System in many leadership positions. Most recently, he was the vice chairman of the Federal Reserve System's Conference of First Vice Presidents and a member of the Conference of Presidents' Committee on Credit and Risk Management.

"Chris was a huge contributor and popular leader," says President and CEO Sandra Pianalto. "We will deeply miss his wonderful blend of wisdom and humor. His many contributions to this Bank and to the Federal Reserve System helped forge our past successes, and his presence in our midst will be sorely missed."

A native of Cleveland, Ohio, Chris earned a BBA in finance from Southern Methodist University in Dallas, Texas, and an MBA in banking and finance from the Weatherhead School of Management at Case Western Reserve University in Cleveland.

An avid curler, Chris competed at the national level and in the trials for the 1992, 1998, and 2002 Olympic Games. He was also a director and, most recently, president of the United States Curling Association.



Breaking THE HOUSING CRISIS CYCLE

Since 2006, the U.S. housing markets have struggled, and Americans have been losing their homes at extraordinary rates. New foreclosures in Ohio alone during the past three years total 170,000—almost as many housing units as in the entire city of Cleveland. The institutions, market forces, and nonprofit community groups that normally come to the rescue of distressed homeowners and their neighborhoods have been overwhelmed with the growing scope of the problem.

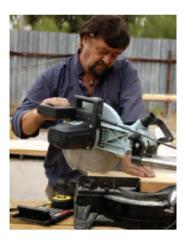
No longer is the housing crisis limited to the borrowers or lenders who simply made poor choices—the uncertainty is affecting nearly everyone. From families who have been uprooted from their homes to fiscally sound homeowners who have nonetheless witnessed their property values plunge, the housing market collapse has eroded what for many of us was a hardwon sense of financial security. Indeed, according to statistics compiled in the Federal Reserve Flow of Funds Accounts, the net worth of American households fell by \$4.2 trillion between the end of 2006 and the end of 2008 as a result of changing fortunes in the residential real estate market.



THE FOCUS IN 2009 AND BEYOND MUST BE ON REPAIR AND RECOVERY.







How do we restore vitality to our housing markets and, by extension, to our communities? In this essay, we depict the housing crisis as the product of a destructive cycle that feeds on itself—from delinquencies to foreclosures to capital losses and back to more delinquencies. Thinking about the housing crisis in the form of a simple, self-feeding circle can help identify the most effective policy responses to weaken specific links in the cycle. In our view, the housing market became engulfed in crisis because several distinct elements of the marketplace failed in ways that made the decline worse. To restore stability to the housing market, we see the need for a set of coordinated policies that attack the problem at multiple points on the cycle.

Our analysis of the housing crisis leads us to three main conclusions. First, the magnitude of the crisis calls for the creation of new government initiatives to help steady the housing market and the provision of public funds to assist some distressed homeowners. Second, to deal with the fundamental problems in the marketplace, we need to craft solutions that are likely to be sustainable over the long term. Finally, national policymakers and regional civic leaders must be aggressive in working collaboratively because no two housing markets are exactly alike, even as we use an all-encompassing framework to describe the housing crisis cycle. For example, in the Fourth Federal Reserve District, which comprises Ohio and parts of Pennsylvania, Kentucky, and West Virginia, policies will need to be tailored to the weak-market conditions that prevail here.

The essay begins with a concise overview of the housing boom and bust. We briefly sketch out recent developments in the mortgage lending market and then describe the geographic diversity of housing dynamics in the country. Next we explain why the housing market's usual balancing forces failed in this cycle, with devastating consequences. We conclude by discussing some of the potential responses to the current situation and our view of the steps being taken to date. Of course, political and logistical realities mean it will take some time and patience to break the housing crisis cycle.

The Problem in Snapshot

To fully understand the housing crisis, we must first understand the national lending boom that preceded it. Between 1990 and 2006, mortgage originations more than tripled in value in the United States. Huge gains were seen everywhere from California to Ohio to New York. It was an out-and-out lending boom, largely attributable to two developments—a long-term, low-interest-rate environment, and financial innovation.

For a period in the early 1980s—leading up to the time known as the "great disinflation" the real 30-year mortgage rate topped 9 percent. But the low and stable interest rate environment over the past two decades helped bring lower mortgage rates as well. By 2005, the real industry benchmark rate had fallen to less than 2.5 percent. This low rate, in turn, stimulated demand for housing by making mortgage payments more affordable. At the same time, real estate was seen as a safe and financially rewarding investment.

Also at work was a revolution in consumer finance, thanks to technological and statistical innovations in the 1990s. Credit was extended to a broader pool of applicants. Among the new mortgage offerings were interest-only loans and small- or zero-down-payment loans. This activity was largely fueled by securitization-the process by which different parties originate, package, guarantee, and service loans. Investment banks pooled mortgages and sold them as mortgagebacked securities. In principle, securitization should help financial institutions share their risk with other institutions around the globe and hold more diversified portfolios. As long as borrowers do not default at the same time, risks can be reduced and everyone benefits (see figure 1).

Figure 1. Mortgage Securitization 1994–2007



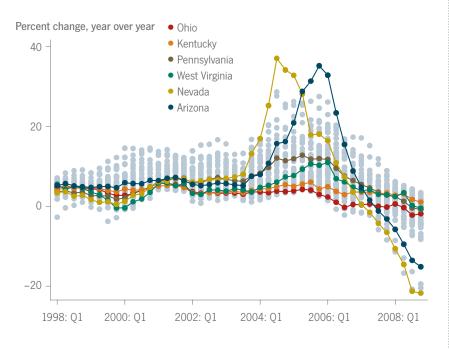
Source: Mortgage Market Statistical Annual, 2008.

What Is a Subprime Loan?

Definitions vary for what constitutes a "subprime" loan. In this essay, we use it to refer to loans that are expected to perform more poorly than prime loans. In general, subprime borrowers have blemished credit histories and pose greater repayment risks. A typical subprime mortgage is offered at rates more than 2 or 3 percentage points higher than a conventional 30-year loan.

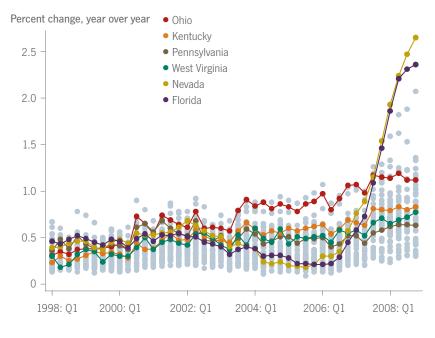
A loan may also fall into the subprime category if it is originated by a lender that specializes in such loans or if it is available only in subprime-type contract terms, such as a 2/28 hybrid mortgage, in which the fixed rate resets after two years to an index rate. Within the nonprime category are so-called Alt-A loans, a credit risk somewhere between prime and subprime.

Figure 2. U.S. Home Price Appreciation



Note: Each dot represents one of the 50 states. Source: Federal Home Financing Agency.

Figure 3. U.S. Foreclosure Start Rates



Note: Each dot represents one of the 50 states. Source: Mortgage Bankers Association. Investors, lenders, brokers, and borrowers all reaped some benefits from securitization, at least in the short run. Securitization of mortgage loans had the most profound impact on subprime borrowers, as increases in securitization coincided with increases in subprime mortgage lending. Such loans carried the possibility of higher returns to investors and were often arranged by largely unregulated mortgage brokers. In a time of rising home prices, concerns about repayments were secondary because most people expected that even the riskiest subprime mortgages contained an implicit escape clause: that the value of the underlying asset-the housewould remain strong. As more and more mortgages were originated, underwriting standards began to slip.1 The initial deterioration in loan quality was masked by rising house prices.² Even the riskiest loans did not result in losses, since the underlying properties were still worth more than the loans themselves.

Then problems surfaced in the subprime market. The rate of serious delinquency (payments at least two months past due) for securitized subprime mortgages at least 12 months old more than tripled between 2003 and 2007—to the point that almost one in every five subprime loans at least a year old was not performing. Although subprime loans account for only 12 percent of the home mortgage loan market, fully half of all U.S. foreclosure starts at the end of March 2008 involved subprime loans, according to the Mortgage Bankers Association.

In the Fourth Federal Reserve District, the timing of the boom and bust played out somewhat differently than in most parts of the country. Fourth District states participated fully in the *lending* boom, but they were largely bystanders to the *housing* boom (*see figure 2*). From 1998 through 2008, home prices were relatively flat in Ohio, Kentucky, Pennsylvania, and West Virginia compared with national trends. But in Ohio, elevated rates of foreclosure starts were evident as early as 2000, well before the national housing bust began (*see figure 3*).

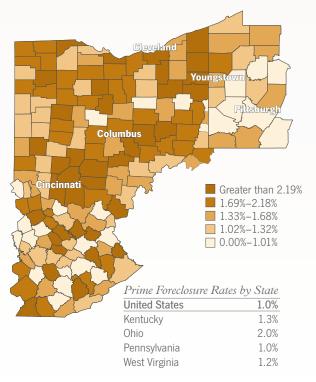
1. Mayer, Pence, and Sherlund (2008).

2. Demyanyk and Van Hemert (2008).

What sets Ohio apart from the national housing market? In general, differences in regional home prices are a function of population change, land availability, the regulatory environment, and overall economic conditions. The way mortgage markets were regulated may have played an important role in the Fourth District's experience, and it is quite clear that population change and economic conditions were important.³ Unemployment was a problem in many parts of Ohio well before the current recession, and the ongoing flight of manufacturing jobs led to an accompanying population flight. Cuyahoga County, which encompasses Cleveland, has lost almost 7 percent of its population—nearly 100,000 people—since 2000, the steepest decline in the state and among the steepest in the nation.

The same counties that endured significant unemployment and population loss also suffered some of the highest foreclosure rates. Moreover, in these struggling counties, high percentages of borrowers held subprime mortgage loans.⁴ Some of the highest foreclosure rates are seen in Northeast Ohio, around the cities of Cleveland and Youngstown. In Cuyahoga County, for example, almost 3 percent of prime mortgages and nearly 14 percent of subprime mortgages were in foreclosure at the end of 2008, according to figures provided by LPS Applied Analytics.⁵

Figure 5. Prime Foreclosure Rates in the Fourth District



By comparison, the national foreclosure rate for prime mortgage loans was 1 percent at the end of December, and 8.8 percent for subprime loans (*see figures 4, 5, and 6*).

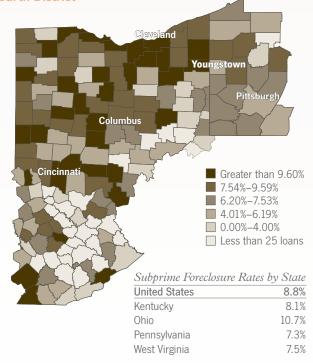
One might think that the effects of the mortgage crisis are being inflicted exclusively on the subprime borrowers and lenders who entered into flawed contracts in the first place. Not so. Researchers have found that foreclosures can have serious spillover effects—decreasing the values of neighboring houses, incurring costs to governments,⁶ and leading to increased crime.⁷ Troubled housing markets put prices under downward pressure, which can lead to more foreclosures and even abandoned properties.

Figure 4. Five Highest Subprime Foreclosure Rates in Large* Fourth District Counties

| Percent | |
|-----------------------|------|
| Mahoning (Youngstown) | 14.8 |
| Summit (Akron) | 14.2 |
| Cuyahoga (Cleveland) | 13.7 |
| Stark (Canton) | 12.4 |
| Montgomery (Dayton) | 12.3 |

* Populations greater than 250,000. Source: LPS Applied Analytics; as of December 2008.

Figure 6. Subprime Foreclosure Rates in the Fourth District



Note for figures 5 and 6: The distribution is broken down into quantiles, with each class containing an equal number of data points. Source for figures 5 and 6: LPS Applied Analytics; as of December 2008.

Richter (2008).
Cooley (2008).

5. The LPS Applied Analytics database is the industry's largest, including information from seven of the 10 major servicers. It encompasses federal and local foreclosure filing information.

6. Agpar and Duda (2005).

7. Immergluck and Smith (2006).



Foreclosures are expensive for lenders too. The cost of a typical foreclosure to a lender is up to 25 percent of the loan balance.

In a 1998 study of home values in Cleveland, researchers found that a 1 percent increase in tax delinquencies was associated with a \$788 decline in average sale prices within a two-block area.⁸ A recent study on the Columbus metro area revealed that foreclosures and abandonment have ripple effects in their neighborhoods, negatively affecting the sale prices of neighboring houses.⁹

The magnitude of the foreclosure spillover effect seems to depend in part on the health of the local housing market. In bust times, foreclosures have twice the effect on nearby prices as they do during boom times.¹⁰ The effect is not as strong in regions where labor markets have been robust or where housing supply has not kept up with demand.¹¹

Taken together, these studies strongly indicate that foreclosures inflict a significant toll on their communities. The implied social costs may justify government interventions to bolster demand for housing and limit foreclosures. But will this be enough to stabilize the housing market? Are we tackling independent problems or are they all pieces of a bigger puzzle? To answer these questions, we describe how the housing crisis has taken the form of a self-feeding cycle. We then use this cycle as a framework for assessing potential policy responses.

The Housing Crisis Cycle

In normal housing markets, people enter and exit the ranks of homeownership constantly, with minimal negative consequences beyond the parties immediately involved. Backstops exist at every step of the process to help borrowers and to deal with vacated properties:

- Lenders and community groups provide borrower counseling, financial education, and foreclosure prevention programs, helping to slow the pace of defaults (*see "Foreclosure Prevention in Action," p. 12*).
- Governments and private-sector lenders offer purchaseassistance programs for first-time homeowners, helping to keep prices stable by creating demand to match the supply.
- Homebuilders slow the growth of the housing stock by easing up on new developments.
- Lenders refinance or modify loans for some of the relatively few borrowers faced with extreme mortgage distress.
- If all else fails, government-operated land banks step in to acquire abandoned properties. Cleveland's pioneering land bank was one of the first to deal with tax-delinquent properties in this way. We will explain the function of land banks in further detail later in this essay.

In weak markets, these backstops were already stretched to their limits before the housing crisis hit. Since the crisis began, many regions have been unable to beat back the wave of properties heading quickly from delinquency to abandonment. A natural recovery has become more difficult, especially given the unlikely prospect of increased demand for housing in areas with declining populations.

In fact, the shock has been so large and widespread that our national housing market is currently trapped in a cycle of deterioration. As we see it, the cycle contains six main components, each one leading to the next. In the real world, these components may interact with each other in ways that are much more complex than what our illustration suggests (*see figure 7*). But even this simple description of the housing crisis provides a framework for understanding how the crisis builds on itself.

One might think that the effects of the mortgage crisis are being inflicted exclusively on the subprime borrowers and lenders who entered into flawed contracts in the first place. Not so. Researchers have found that foreclosures can have serious spillover effects—decreasing the values of neighboring houses, incurring costs to governments, and leading to increased crime.

8. Simons, Quercia, and Maric (1998).

9. Mikelbank (2008).

Lin, Rosenblatt, and Yao (2009).
Been, Greene, and Schuetz (2007).

Foreclosure Prevention in Action

For years, organizations in the Fourth District and nationwide have provided assistance to homeowners in danger of foreclosure. The housing crisis has recently pushed many of these organizations to a breaking point.

At Neighborhood Housing Services (NHS) of Greater Cleveland, Executive Director Lou Tisler recalls that 75 percent of his clients four years ago sought pre-homeownership counseling. Today, 75 percent require foreclosure prevention assistance.



NHS is headquartered in Cleveland's Slavic Village, where foreclosures are affecting as many as one in four homes. "We're at the epicenter of where it all started," Tisler says. As before, many of the agency's applicants have recently suffered job loss or other shocks to their incomes. Today, only about one out of every three applicants is accepted for mortgage assistance funds. But of those who are accepted, only 1 percent default on their loans.

One of the longest-running foreclosure prevention efforts is administered by the Pennsylvania Housing Finance Agency (PHFA). The Homeowners' Emergency Mortgage Assistance Program, or HEMAP, launched in 1983 and has helped keep 42,000 families in their homes. Funded by \$234 million in government appropriations, the program has lent \$430 million over the years to borrowers who have experienced job loss, medical bills, and other shocks to their incomes. It pays partial or full mortgage payments for up to 24 months or \$60,000 in assistance, whichever comes first. The idea is that the assistance will provide homeowners time to get back on their feet with employment or health.

Applications have surged from about 8,000 in 2004 to more than 12,000 in 2008. "The crisis is putting a strain on our program, which means we can approve fewer applications," says Brian Hudson, PHFA executive director. "It's going to be a very challenging year."

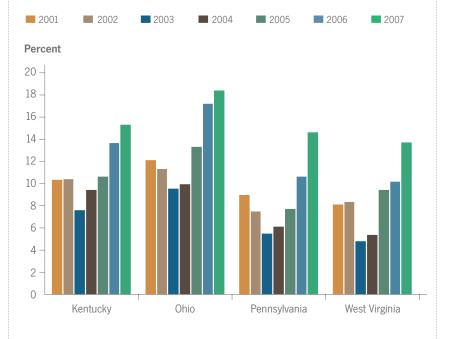
Federal Reserve Bank of Cleveland

Figure 7: Cycle of Deterioration Disruptions to Lending and Housing Market Entry and Exit Capital Losses 6 6 6 7 1 2 3

Figure 8: Seriously Delinquent Subprime Loans in the Fourth District^a

Oversupply of Housing

Foreclosures



a. By origination year, at the age of 12 months (60-plus day delinquent loans, including foreclosures and real-estate-owned [REO] properties).

Source: Loan Performance.

Home Price

Depreciation

1. Lending and Housing Market Disruptions

Our economy is trying to find its footing after an extended period of credit misallocation. In boom markets, home prices were bid up to record levels. In weak markets, free-flowing credit buttressed prices that otherwise would have fallen given underlying economic conditions. When lending and housing markets are disrupted, everyone tries to discover what homes and mortgages are really worth. The uncertainty makes mortgage lenders and investors more cautious, so that many prospective homebuyers can no longer get the financing they need. Others put off purchases until they can see some sign of stability. Existing homeowners who can no longer keep up with payments—perhaps because of job loss-may wish to sell their homes but cannot find buyers. Homeowners forced to move in search of new work may keep their properties on the market for a long time, waiting for the market to recover.

In this way, disruptions to the lending and housing markets spin in two directions: to defaults and delinquencies, leading to foreclosure, or to an oversupply of housing.

2. Delinquencies and Defaults

The recent rash of delinquencies and defaults was years in the making. Increasingly relaxed underwriting practices led to a nosedive in mortgage loan performance by 2004. In Ohio, for example, 10 percent of all subprime mortgages that year were seriously delinquent (more than two months late) within 12 months of origination. By 2007, this delinquency rate approached 19 percent (*see figure 8*).

In the past, borrowers and investors could have counted on painless refinancings and brisk housing markets to save troubled mortgages from foreclosure. In this crisis, those options are no longer available.

3. Foreclosures

When the emergency exits of the housing market are blocked, foreclosure is the last remaining option. By the end of 2008, a record-setting 3.3 percent of U.S. mortgage loans were in foreclosure, according to the Mortgage Bankers Association. For the year, an estimated 2.2 million foreclosures were expected nationwide. Within certain neighborhoods, foreclosures became even more rampant and concentrated.

Even though foreclosure starts seem to have peaked recently, these numbers may underestimate the underlying problem. Financial institutions and investors, overwhelmed by foreclosure proceedings, are declaring a moratorium on additional foreclosure filings. This situation creates a misleading signal about the actual magnitude of loan delinquencies and borrowers' stress.

4. Oversupply of Housing

After foreclosure (or in some cases, direct disruptions to the lending and housing markets), the next step on the housing crisis cycle is an oversupply of houses on the market. In some regions, the oversupply problem may prove to be temporary. Vacant housing in healthier markets will eventually be absorbed by growing populations as the economy rebounds. Economists refer to this type of problem as "cyclical"—it can fix itself over time even though the process may be slow and painful.

In weaker markets, long-abandoned properties have little hope of finding new buyers because houses for sale do not meet the needs and preferences of potential buyers. The homes may reflect the tastes of many decades ago, or may simply be too numerous given current and expected population levels. This is the type of problem economists call "structural"—it lies in the structure of the market itself, and some policy action will be necessary to put the market on a more sustainable path.

A different type of problem currently exists in all markets, whether they are growing or declining—the uncertainty about the path of future home prices. Economists refer to this as a "frictional" problem. Lenders are worried and buyers are timid, creating a friction that seizes up the process of moving homes from sellers to buyers. Frictional problems may heal on their own when prices reach a bottom, or some policy assistance may be needed to speed up the adjustments.

5. Home Price Depreciation

When the oversupply of houses collides with a market of buyers who have diminished expectations about the future and reduced access to credit, the result is falling home prices.

In some markets, depreciation motivated borrowers who had bought homes as investments to unload them en masse, which led to further depreciation. In other markets, like



When the oversupply of houses collides with a market of buyers who have diminished expectations about the future and reduced access to credit, the result is falling home prices.

Cuyahoga County, depreciation revealed a market built on shaky subprime mortgages. Now, foreclosures of homes purchased with these subprime mortgages are spreading across neighborhoods, further dragging down prices.

At worst, foreclosed homes become abandoned homes, and blight ensues, promoting further abandonment. In a single city block with even just a handful of abandoned homes the sort of blocks that are all too easy to find in parts of the Fourth District—neighboring homeowners are faced with strong economic incentives to walk away from their own increasingly worthless houses.

6. Capital Losses

Saddled with foreclosed homes and depreciating mortgagebacked securities on their balance sheets, lenders take steep losses. According to Bloomberg, banks and brokerages worldwide have sustained more than \$935 billion in credit losses so far in the crisis. The resulting hits to capital, together with the difficulty of raising new equity funds, have cut the bloodline of credit creation.

Capital is a cushion that financial institutions maintain to absorb unexpected losses. As the cushion thins, financial institutions reduce their lending and risk exposures so that whatever is left of their capital will be enough to cover potential losses.

This decline in lending creates another disruption to the mortgage and housing markets. And so we return to the beginning of the housing crisis cycle—further delinquencies, foreclosures, oversupply of housing, home price declines, and additional capital losses. It then becomes a destructive, self-reinforcing cycle.

Federal Reserve Bank of Cleveland

Potential Responses

Suppose we find a way to cure delinquencies and, thus, new foreclosures. But if the housing inventory overhang is not corrected, the uncertainty about home prices will persist. Lenders will continue to be saddled with foreclosed properties, potential buyers will continue to sit on the sidelines, and new delinquencies will arise as troubled homeowners cannot exit the housing market. We are back in the full cycle.

Alternatively, suppose we raze all excess housing supply and prices are ready to recover. But unless we recapitalize our financial system, new loans will not be forthcoming. Without loans, new buyers cannot enter the housing market and sellers cannot exit. We are back to the cycle with increasing delinquencies, foreclosures, and vacant properties.

Unless we attack the cycle at multiple points, there is a chance that our efforts will fall short. We also know that some efforts will be more effective or necessary in some regions of the country than others. Moreover, the wider effects of the housing crisis compel us to undertake public interventions aimed at stabilizing the housing market and our neighborhoods (*see "Federal Reserve Actions"*).

In this section, we review proposals that address specific points in the cycle and then consider whether they together constitute a full-scale attack on the crisis.

1. Loan Modifications

Foreclosures are expensive. The cost of a typical foreclosure to a lender is up to 25 percent of the loan balance.¹² In times of falling prices, loan modifications look increasingly attractive to lenders, servicers, and investors not to mention defaulting borrowers. In our cycle, loan modifications specifically target the links between market disruptions, defaults, and foreclosures.

A loan modification is a permanent change in the terms of a mortgage loan. Typically, the new terms—which may include an extension of the maturity of the loan, forgiveness or delay in the collection of missed payments, lowering of interest rates, or the elimination of prepayment penalties make the mortgage more affordable for the borrower.

However, securitization has made the loan modification process more difficult and expensive than it was in earlier decades. Loan servicers, for example, are contractually required to allow a modification only if it is in the best interest of investors. Defining "investors' best interest" is hardly straightforward. Some pooling contracts allow for modifications only in the event of default and forbid proactive modifications of high-risk loans. Others may allow, for example, only up to 5 percent of the loans in a pool to undergo modifications each year.

Federal Reserve Actions

The Federal Reserve System has already undertaken a number of efforts to address the foreclosure crisis. First, we have asked mortgage lenders and servicers to consider loan workouts in appropriate situations. Also, in partnership with the national nonprofit NeighborWorks[®] America, we are developing programs to ease the problem of foreclosures and vacant properties.

In July 2008, the Federal Reserve acted to address unfair and deceptive mortgage lending with approval of a final rule under the Home Ownership and Equity Protection Act. More recently, we have sought public comment on revisions to the Truth in Lending Act. Consumer protection is important, but it is not possible to ensure complete safety. The Federal Reserve's job is to ensure as much information and transparency as possible while restoring an appropriate appetite for risk.

To get credit markets functioning again, we have taken actions ranging from lowering the federal funds target rate to developing a set of policy tools to support borrowers and investors in key markets. In March 2009, the Federal Reserve announced plans to purchase up to \$1.25 trillion of mortgage-backed securities from government-sponsored enterprises by the end of the year. This program in particular is intended to improve the flow of credit to homebuyers and to allow existing homeowners to refinance at lower rates.

12. Mason (2007).

To understand why such severe restrictions were put in place, consider the state of the housing market during the boom. Any troubled borrower could try to refinance his mortgage and lower his payments. Borrowers who did not qualify for refinancing were most likely to be such poor risks that most would not be helped by a modification; a foreclosure would be the most efficient outcome. However, if servicers had unlimited power to modify mortgages, they would have an incentive to modify every loan and avoid foreclosure to maximize their compensation for loans serviced. To limit this type of behavior, investors imposed heavy restrictions on the number of modifications and, in most cases, provided no compensation to the servicer for the extra costs of modifying a loan. With the expectation of relatively few foreclosures and healthy housing markets, these contracts were designed to favor foreclosures over modifications.

It is a different world today, but the old contracts are still in force. Servicers and most investors would probably prefer removing those restrictions and restoring some cash flow from these loans to being stuck with unwanted properties. However, some investors would likely be disadvantaged by loan modifications. With millions of mortgages and thousands of investors involved, obtaining an agreement to modify the rules would be practically impossible.

This type of coordination problem creates an opportunity for constructive policy action. First, servicers need to receive compensation for loan modifications because investors will not reimburse them for some of the costs. Second, when loans are modified, some investors will be forced to take losses. Currently, the threat of investor litigation to prevent such losses tends to freeze any modification effort in its tracks, or makes modifications too superficial to help the borrower. Indeed, re-default rates are high among modified loans: 46 percent of U.S. borrowers whose mortgages were modified during the second quarter of 2008 were delinquent after eight months.13 Thus, a temporary shielding of servicers from investor lawsuits may be necessary to get modifications done right and on a large scale. Third, removing restrictions on servicers brings us back to the original problem of too many modifications at investors' expense. Policymakers must put a mechanism in place that rewards successful modifications. One such program announced by the Treasury would pay \$1,000 per year for three years to servicers for each modified mortgage that remains current in that period. While we cannot conclude that this policy is the only way or the best way to incentivize servicers, it is likely to be helpful.



Allowing some people to continue living in their homes as renters would help neighborhoods by keeping homes occupied and avoiding vacancy and abandonment.



Land banks are government entities that can acquire distressed properties, clear title defects, and convert the properties to alternative uses.

13. Office of the Comptroller of the Currency and Office of Thrift Supervision (2009).

Federal Reserve Bank of Cleveland

A Unique Partnership

Hiring a team of expert, certified inspectors to check code compliance one property at a time is expensive. So last year, the Cleveland Neighborhood Development Coalition, the nonprofit umbrella group for the city's community development corporations (CDCs), partnered with the city's Department of Building and Housing to create a new code enforcement program.

Now, city code enforcement staff work in tandem with about 20 participating CDCs. The city diverts routine complaints to the CDCs for screening. In neighborhoods, CDCs have developed a "good cop" reputation that helps ensure that properties are maintained. Meanwhile, city inspectors are free to handle and follow up on more serious cases.

"It works really well," says Cleveland Councilman Jay Westbrook. "I think of it in public health terms. The mortgage crisis is an epidemic, and code enforcement is your frontline defense. It's your country doctors—your general practitioners on the frontlines—who are detecting the disease and triaging the treatments."

2. Converting Owners to Renters

While loan modifications may succeed at severing the link between market disruptions and delinquencies and foreclosures, in many weak markets of the Fourth District, we are still left with a large inventory of vacant housing units.

In growing communities, one way to deal with the inventory problem is to convert existing vacant units into rental properties. In calmer times, private investors would purchase vacant units and make the changes themselves given the opportunity for profit. However, these are not calm times, and the inventory is massive. The first investor to attempt such conversions will test the survivability of a neighborhood—but followers will come only if the first succeeds. Therefore, policymakers may find it necessary to subsidize the first movers.

An alternative policy would be to allow some people to continue living in their homes as renters. Some former homeowners may have the option of buying back the property in the future. For example, Fannie Mae and Freddie Mac recently announced that renters of foreclosed properties and some owners will be allowed to remain in their houses as renters on month-to-month leases. This policy would help neighborhoods by keeping homes occupied and avoiding vacancy and abandonment. To be clear, some rent-to-own programs are little more than investment scams that do little good in neighborhoods. By contrast, well-established community development corporations have a history of reliably managing such programs and might be useful resources in future efforts on this front.



As an approach to preventing vacancy and abandonment, code enforcement—compelling property owners to maintain their properties—may be among the most effective.

3. The Land Bank Approach

Dealing with the oversupply problem in weak-market areas may require further government involvement such as land banks. Given that the housing stock is larger than the population in some Fourth District counties, for example, there is no profit in conversion to rental use. Therefore, some vacant and abandoned properties must be repaired and sold (or rented) if there is still value left in the neighborhood; others may need to be demolished.

The costs of dealing with vacant and abandoned properties fall mainly to local governments, which are often unable to break the cycle of foreclosure to abandonment to blight. They are thwarted by heavy costs, the lack of a timely legal mechanism to acquire properties, liability concerns, and no overarching strategy to address the problem at a regional level. Land banks provide that mechanism.

At their simplest, land banks are government entities that can acquire distressed properties, clear title defects, and convert the properties to alternative uses. All of these tools require legislation to award government entities with appropriate powers.

Ohio's recently adopted land bank legislation, which applies to Cuyahoga County over two years, aims to give such entities the powers they need to address vacant and abandoned housing on a regional basis.¹⁴ These powers include streamlining the property acquisition process via tax foreclosure; securing funding sources without creating new taxes; and providing the ability to organize as corporations that are legally distinct from local governments. Among other benefits, the new Ohio rules help land banks act as repositories for data, allowing for region-by-region evaluation of the vacant and abandoned housing problem. In addition, the time it takes for Ohio land banks to acquire vacant properties should shorten, which in turn should speed the properties' return to real property tax rolls if possible.

The land bank system has its own pitfalls, however. In the rush to help people in need, it is easy to lose sight of which neighborhoods are viable and which are not. A land bank that renovates homes in an otherwise blighted area is unlikely to promote wider revitalization. The home may very quickly be abandoned anew, if foreclosures and abandoned properties are growing much faster than the land bank can fix and use them. Therefore, a transparent and accountable triage process is necessary to identify the neighborhoods that can benefit from a land bank's involvement. If the new Ohio land bank legislation can be measured as effective in Cuyahoga County, a statewide and permanent rollout should be considered.

4. Code Enforcement

As an approach to preventing vacancy and abandonment, code enforcement—compelling property owners to maintain their properties—may be among the most effective. The "broken window" theory tells us that damaged properties can lead to further deterioration on their streets, ultimately spurring a spiral of disinvestment. Code enforcement can weaken the link between housing oversupply and home price depreciation.

The devil, of course, is in the details. Often, the data sources that local governments use to track the condition, ownership, and legal status of distressed or abandoned properties are fragmented and inaccurate.¹⁵ Local governments spend large amounts of time and money to locate and serve notices of code violations, search warrants, demolition notices, nuisance abatement assessments, or legal actions. In addition, there can be delays in the recording of deeds on properties, or assignments and transfers of liens.

Securitization of mortgages has made tracking lien holders an expensive challenge. Considering the vast numbers of abandoned houses and lots where the liens have less value than the cost of the legal process to clear them, this recordkeeping chaos imposes a steep cost on taxpayers. Beyond new funding, code enforcement efforts might benefit from more creative approaches (*see "A Unique Partnership," p. 17*).

5. Recapitalization

As all of these efforts carry on, financial institutions absorb significant damage. With capital levels low, new funds are harder to come by, as institutions appear to be at greater risk than before. Financial institutions that cannot raise new capital cannot resume lending, so offsetting losses with new reserves is an important step in breaking the cycle. Thus, government programs aimed at stabilizing financial institutions and strengthening their capacity to lend should not be regarded as a strategy that is independent from stabilizing housing markets. Improving borrowers' access to housing credit on favorable terms requires that financial institutions have the capacity and confidence to lend. Of course, if banks and other financial institutions are to be recapitalized with taxpayer money, the infusions should be provided through programs that are both transparent and adequately sized to the problem. These programs should also provide an upside to taxpayers if and when profitability returns.

The details of how to recapitalize the banking system are complex—and well beyond the scope of this essay. Economists at the Federal Reserve Bank of Cleveland continue to study recapitalization strategies. We encourage further investigation of this necessary step in halting the housing crisis cycle.

Youngstown's Reinvention

Over the past three years, the city of Youngstown has demolished more than 1,500 structures, most of them homes. None of that old housing stock has been replaced.

To Youngstown Mayor Jay Williams, this is progress. The "Youngstown 2010" plan he has championed for nearly a decade aims to re-size the city to better fit its population. Youngstown was designed to hold as many as 250,000 people within its 35 square miles; at its peak, 175,000 lived there. Today it has 80,000 residents.

"Getting smaller doesn't have to be a bad thing," Williams says. *"It doesn't necessarily mean inferior."*

Youngstown was once the nation's steel mill hub, teeming with industry. The slow-motion decline began in the 1970s. Amid mounting evidence that there would be no economic comeback, Williams began pushing the notion that a readjustment of expectations and plans for the future was in order.

At its core, Youngstown 2010 is a land-use plan. The ground underneath many of the demolished properties is held in the city land bank. Formerly residential neighborhoods are being rezoned for recreation or "green" industry. In some cases, back taxes are forgiven on abandoned lots so that neighboring landowners can take over upkeep. New residential construction is managed with a greater degree of oversight, particularly residential housing financed with low-income housing tax credits.

Other guiding principles of the Youngstown 2010 plan include preserving historical structures, clearing access to the Mahoning River, and improving neighborhood safety. Funding has come primarily through Housing and Urban Development block grants.

The reviews to date have been largely positive. City managers from around the country have visited Youngstown to replicate its model. Williams admits that it remains challenging to allocate increasingly scarce resources given the city's shrinking tax base. But as the plan becomes technically obsolete with the impending arrival of 2010, Williams is looking forward to development of Youngstown 2020. As he sees it, the old plan will simply be updated and roll over into the new plan.

"It's a journey," Williams says, "not a destination."



Several communities are following Youngstown's lead in rethinking their neighborhoods. In this rendering, the Cleveland Urban Design Collaborative imagines existing housing integrated with new waterways and green space created from formerly vacant housing.

The Way Forward

The breadth and depth of the housing market decline call for a massive, multifaceted response—one that takes into account the different needs of different communities with a constant eye on the long term. A set of coordinated policies that attacks multiple points in the housing crisis cycle can help to balance the supply of housing with the demand for homeownership. A multipronged approach is also useful because it recognizes that some programs even well-designed ones with all the right incentives may take longer than others to bring relief.

What works in Cleveland may not be necessary or useful in Cincinnati, or even Chicago. This reality underlines the desirability for flexible approaches to the problem, region by region, neighborhood by neighborhood. Our intent has been to provide a framework for evaluating policy options more generally.

The Administration's Homeowner Affordability and Stability Plan, as proposed in February 2009, takes aim at many of the links we identify in the cycle. The plan addresses at-risk homeowners who are already behind on their mortgage payments or who are struggling to keep their loans current. This program is voluntary, but it provides incentives to loan servicers to modify loans, and incentives to borrowers to stay current on their modified loans. Another feature of the plan directs the housing agencies Fannie Mae and Freddie Mac to refinance conforming loans they hold or securitize for certain eligible borrowers.¹⁶

Policymakers are also considering whether to enact legislation to allow judges to modify loan terms and balances due on mortgage loans for principal residences as part of a bankruptcy proceeding, and whether to extend a "safe harbor" to loan servicers who modify loans "in good faith on behalf of investors" even though the modifications are outside the scope of their existing discretion. Although these actions effectively upset prior contractual agreements between borrowers and lenders, they might be necessary in a time of crisis. However, this type of legislation may affect the willingness of lenders and investors to provide housing credit long after the current crisis has ended. We urge that the long-term health of the housing markets be kept in mind, so that changes made to address today's crisis are consistent with the future availability of private mortgage credit on reasonable terms and conditions.

The textbook rules of economics still apply during this crisis. We want to avoid policies that produce "deadweight loss"—providing incentives like tax breaks or loan workouts for people to do things they would have done anyway. We want to stay out of the way of resource reallocation.

16. Loans on single-unit properties as high as \$729,750 will qualify.17. Glaeser and Gyourko (2005).

Why build more housing when the market is sending strong signals that demand lies elsewhere? Indeed, the sharp pullback in subprime lending and the return of sound underwriting practices we are witnessing today are necessary and expected steps in the recovery process.

Even under the best of circumstances, a housing recovery will not be immediate, so short-term policy actions will take time to work their way through the system. Also, recovery in the housing markets does not necessarily mean that our neighborhoods will go back to the way they were in their most vibrant heyday. Some neighborhoods will undergo an unwinding, not a revival. This is especially true for regions with declining populations (*see "Youngstown's Reinvention," p. 19*). People may leave, but the housing stock remains. To clear the market, house prices must fall. Consequently, shrinking cities tend to have inexpensive housing disproportionately occupied by poor people.¹⁷



It is far too easy to say that recoveries happen because they always do. We can and should help our communities in their time of need.

Shrinking cities wishing to ensure their viability must be assertive about removing blighted housing from the market, using land banks, and enforcing building codes. Cities that cannot expect to grow out of their excessive housing stock might also benefit from new ways of working together with business leaders, community organizations, and community development lenders on land-use strategy. Coming to grips with new views of the future is perhaps the greatest challenge.

It is far too easy to say that recoveries happen because they always do. We can and should help our communities in their time of need. A first step is breaking the housing crisis cycle. Then the recovery can really begin.

A first step is breaking the housing crisis cycle.

THEN THE RECOVERY CAN REALLY BEGIN.

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2008 Operational Highlights

The Federal Reserve Bank of Cleveland responded to unprecedented economic challenges in 2008 while maintaining the highest levels of operational excellence in serving the needs of the U.S. Treasury and the public and adapting to an evolving payments system.

Central Bank Operations

The Supervision and Regulation function responded to the financial crisis by strengthening its monitoring and oversight of Fourth District institutions and by providing support to other Federal Reserve district offices. Through our **Credit Risk Management** function, the Bank adapted its operations and risk management processes to implement the Federal Reserve's new credit facilities, managing significant growth in new collateral arrangements and additional monitoring of intraday credit. **The Statistics and Analysis** function ensured that reports received from Fourth District institutions, upon which many decisions and actions were based, were timely and accurate.

The Research function maintained comprehensive support for the president's policy contributions to the Federal Open Market Committee and advanced original research in many subject areas. Concepts presented in the Bank's 2007 *Annual Report* essay on central banks and crisis management were further advanced by a joint conference with the Federal Deposit Insurance Corporation on identifying and resolving financial crises. The function also maintained an active presence in the region to expand public understanding of economic and financial market developments.

The Office of Policy Analysis coordinated the Bank's efforts to identify emerging trends and provide research-informed perspectives on public policy issues. Focusing on the root causes of the mortgage foreclosure crisis and the economic impact of housing vacancy and abandonment, the Bank shared information with community development groups and public officials.

As Ohio legislators considered a bill to revamp the state's existing laws on land banks, the Bank published an analysis of land banks as a tool to address the problem of vacant and abandoned properties. This analysis is intended to be of interest to policymakers nationwide. The Bank also focused on opportunities for regulatory reform and conducted numerous meetings with nationally renowned experts, with an eye toward developing a set of principles for regulatory reform.



December 10, 2008. Joint Board of Directors dinner with guest speaker William Dudley, current president of the Federal Reserve Bank of New York.



May 8, 2008. Ben Bernanke, chairman of the Board of Governors of the Federal Reserve System, speaks to Federal Reserve Bank of Cleveland employees at a special program hosted at the Bank.

The Bank's Learning Center and Money Museum offered additional opportunities to strengthen public awareness of the role of the Federal Reserve System and provided economic education and financial literacy resources for educators and students.

The Community Development function conducted extensive outreach during 2008, sharing the Bank's policy perspectives with community development practitioners and public officials. These efforts enabled the Bank to remain informed of emerging issues and opportunities to respond to them. The Bank contributed to the development of the System's "Recovery, Renewal, Rebuilding" events to address the housing market crisis, and hosted a research conference on vacant properties in weak-market cities.

The Bank also provided analytical support to public officials as they explored ways to optimize the use of funding made available by the Department of Housing and Urban Development through the Housing and Economic Recovery Act of 2008. In addition, the Bank also crafted two of the 16 case studies included in the System's landmark study, *The Enduring Challenge of Concentrated Poverty: Case Studies from Across the U.S.*, and provided guidance on the research direction of the project.



June 11-12, 2008. Sixth annual Community Development Policy Summit. (L-R): Jeff Gatica, senior Community Development advisor, Federal Reserve Bank of Cleveland; Paul Ginger, Central District Community Affairs officer, Office of the Comptroller of the Currency; Glenn Brewer, Community Affairs specialist, Federal Deposit Insurance Corporation; and Ruth Clevenger, vice president and Community Affairs officer, Federal Reserve Bank of Cleveland.

Core Business Operations

The Check function was selected as the Federal Reserve System's final paper check processing site and the final site for check adjustments, reflecting a long-term commitment to efficiency, effectiveness, and customer service. In support of the System's strategy to streamline operations in response to an increasingly electronic payments system, the Bank successfully consolidated Buffalo and Cincinnati check operations with minimal customer impact.

The Cash function maintained a superior ranking for all System efficiency standards and helped lead System efforts to standardize software requirements and operational practices.

The eGovernment function provides strategic, product development, project management, and operational support for two significant Treasury business lines: the processing of internet-originated collections and the settlement of check and ACH debit transactions. It also supports one emerging business line, the online banking channel. The function achieved the highest possible operational ratings from the U.S. Treasury and met or exceeded all cost targets. The Bank provided analysis and insights to the Treasury to support the future strategy for modernizing its collection and cash management operations.

The Treasury Retail Securities function received the highest possible rating from the U.S. Treasury and met all quantitative and qualitative Treasury measurements. The Bank continues to support the Bureau of the Public Debt initiatives, providing leadership to the business scanning project and expanding services to retail customers.

To support all of these outcomes, the Bank continued its culture change program through a focus on learning, leadership, and innovation. These efforts, combined with human capital plans to strengthen existing skills, are intended to help the Bank accommodate new opportunities to support Federal Reserve System strategies. To that end, the Bank hosted a talent management summit to provide expert insights on its approach and to share best practices with other Reserve Banks.



June 25, 2008. Lunchtime learning event presented to Federal Reserve Bank of Cleveland employees by Paul Kaboth, assistant vice president in Supervision and Regulation Administration.



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AUDITOR INDEPENDENCE

In 2008, the Board of Governors engaged Deloitte & Touche LLP (D&T) for the audits of the individual and combined financial statements of the Reserve Banks. Fees for D&T's services are estimated to be \$10.2 million. Approximately \$2.7 million of the estimated total fees were for the audits of the limited liability companies (LLCs) that are associated with recent Federal Reserve actions to address the financial crisis, and are consolidated in the financial statements of the Federal Reserve Bank of New York.¹ To ensure auditor independence, the Board of Governors requires that D&T be independent in all matters relating to the audit. 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 Reserve Banks, or in any other way impairing its audit independence. In 2008, the Bank did not engage D&T for any non-audit services.

1. Each LLC will reimburse the Board of Governors for the fees related to the audit of its financial statements from the entity's available net assets.

Management's Report on Internal Control Over Financial Reporting

To the Board of Directors of the Federal Reserve Bank of Cleveland:

The management of the Federal Reserve Bank of Cleveland ("FRB Cleveland") is responsible for the preparation and fair presentation of the Statement of Financial Condition, Statement of Income and Comprehensive Income, and Statement of Changes in Capital as of December 31, 2008 (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 FRB Cleveland 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 FRB Cleveland 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 FRB Cleveland maintained effective internal control over financial reporting as it relates to the Financial Statements.

Federal Reserve Bank of Cleveland April 2, 2009

Sandra Pianalto

Sandra Pianalto President & Chief Executive Officer

Gregung L. Stefani

Gregory L. Stefani Senior Vice President & Chief Financial Officer

Deloitte.

Deloitte & Touche LLP Suite 3300 127 Public Square Cleveland, OH 44114-1291 USA

Tel: +1 216 589 1300 Fax: +1 216 589 1369 www.deloitte.com

Report of Independent Auditors

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

We have audited the accompanying statements of condition of the Federal Reserve Bank of Cleveland ("FRB Cleveland") as of December 31, 2008 and 2007 and the related statements of income and comprehensive income and changes in capital for the years 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 the FRB Cleveland as of December 31, 2008, based on criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The FRB Cleveland'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. Our responsibility is to express an opinion on these financial statements and an opinion on the FRB Cleveland's internal control over financial Reporting. Our responsibility is to express an opinion on these financial statements and an opinion on the FRB Cleveland's internal control over financial Reporting. Our responsibility is to express an opinion on these financial statements and an opinion on the FRB Cleveland's internal control over financial control control control control control control contrel control cover financial control control control control cover f

We conducted our audits 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 audits 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 audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Member of **Deloitte Touche Tohmatsu**

The FRB Cleveland's internal control over financial reporting is a process designed by, or under the supervision of, the FRB Cleveland's principal executive and principal financial officers, or persons performing similar functions, and effected by the FRB Cleveland'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. The FRB Cleveland's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the FRB Cleveland; (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 the FRB Cleveland are being made only in accordance with authorizations of management and directors of the FRB Cleveland; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the FRB Cleveland'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 4 to the financial statements, the FRB Cleveland 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 in the United States of America are also described in Note 4.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the FRB Cleveland as of December 31, 2008 and 2007, and the results of its operations for the years then ended, on the basis of accounting described in Note 4. Also, in our opinion, the FRB Cleveland maintained, in all material respects, effective internal control over financial reporting as of December 31, 2008, based on the criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Delorthe + Touche HAP

April 2, 2009

Comparative Financial Statements

Statements of Condition

(in millions)

| (| | December 31, 2008 | | December 31, 2007 | | |
|---|----|-------------------|----|-------------------|--|--|
| ASSETS | | | | | | |
| Gold certificates | \$ | 423 | \$ | 428 | | |
| Special drawing rights certificates | | 104 | | 104 | | |
| Coin | | 136 | | 113 | | |
| tems in process of collection | | 164 | | 268 | | |
| _oans to depository institutions | | 15,622 | | 853 | | |
| System Open Market Account: | | | | | | |
| Securities purchased under agreements to resell | | 3,034 | | 1,903 | | |
| U.S. government, Federal agency, and government- sponsored enterprise securities, net | | 19,043 | | 30,514 | | |
| Investments denominated in foreign currencies | | 1,736 | | 1,625 | | |
| Central bank liquidity swaps | | 38,749 | | 1,727 | | |
| nterdistrict settlement account | | 16,708 | | _ | | |
| Bank premises and equipment, net | | 168 | | 176 | | |
| Prepaid interest on Federal Reserve notes due from U.S. Treasury | | 19 | | 69 | | |
| Accrued interest receivable | | 312 | | 262 | | |
| Other assets | | 34 | | 59 | | |
| Total assets | \$ | 96,252 | \$ | 38,101 | | |
| IABILITIES AND CAPITAL | | | | | | |
| Federal Reserve notes outstanding, net | \$ | 39,263 | \$ | 32,223 | | |
| System Open Market Account: | | | | | | |
| Securities sold under agreements to repurchase | | 3,350 | | 1,800 | | |
| Deposits: | | | | | | |
| Depository institutions | | 49,963 | | 446 | | |
| Other deposits | | 4 | | 3 | | |
| Deferred credit items | | 456 | | 200 | | |
| nterdistrict settlement account | | _ | | 741 | | |
| Accrued benefit costs | | 96 | | 90 | | |
| Other liabilities | | 16 | | 16 | | |
| Total liabilities | | 93,148 | | 35,519 | | |
| Capital paid-in | | 1,552 | | 1,291 | | |
| Surplus (including accumulated other comprehensive loss of \$16 million and \$17 million at December 31, 2008 and 2007, respectively) | | 1,552 | | 1,291 | | |
| Total capital | | 3,104 | | 2,582 | | |
| • | | ., | \$ | 38,101 | | |

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

Statements of Income and Comprehensive Income

(in millions)

| (in millions) | | year ended r 31, 2008 | For the year ended December 31, 2007 | | |
|---|----|--------------------------|--------------------------------------|-------|--|
| Interest income: | | | | | |
| Loans to depository institutions | \$ | 132 | \$ | 1 | |
| System Open Market Account: | | | | | |
| Securities purchased under agreements to resell | | 73 | | 59 | |
| U.S. government, Federal agency, and government-sponsored | | 1 000 | | 1 000 | |
| enterprise securities | | 1,000 | | 1,609 | |
| Investments denominated in foreign currencies | | 44 | | 39 | |
| Central bank liquidity swaps Total interest income | | 252 | | 1 710 | |
| iotal interest income | | 1,501 | | 1,710 | |
| Interest expense: | | | | | |
| System Open Market Account: | | | | | |
| Securities sold under agreements to repurchase | | 29 | | 70 | |
| Depository institution deposits | | 28 | | - | |
| Total interest expense | | 57 | | 70 | |
| Net interest income | | 1,444 | | 1,640 | |
| Non-interest income: | | | | | |
| System Open Market Account: | | | | | |
| U.S. government, Federal agency, and government-sponsored enterprise securities gains, net | | 151 | | - | |
| Foreign currency gains, net | | 89 | | 132 | |
| Compensation received for services provided | | 68 | | 80 | |
| Reimbursable services to government agencies | | 63 | | 62 | |
| Other income | | 33 | | 6 | |
| Total non-interest income | | 404 | | 280 | |
| Operating expenses: | | | | | |
| Salaries and other benefits | | 129 | | 128 | |
| Occupancy expense | | 20 | | 17 | |
| Equipment expense | | 11 | | 13 | |
| Assessments by the Board of Governors | | 49 | | 47 | |
| Other expenses | | 62 | | 79 | |
| Total operating expenses | | 271 | | 284 | |
| Net income prior to distribution | | 1,577 | | 1,636 | |
| Change in funded status of benefit plans | | 1 | | Ę | |
| Comprehensive income prior to distribution | \$ | 1,578 | \$ | 1,641 | |
| Distribution of comprehensive income: | | | | | |
| Dividends paid to member banks | \$ | 85 | \$ | 66 | |
| Transferred to surplus and change in accumulated other comprehensive loss | Ŧ | 261 | | 204 | |
| Payments to U.S. Treasury as interest on Federal Reserve notes | | 1,232 | | 1,371 | |
| Total distribution | \$ | 1,578 | \$ | 1,641 | |

Federal Reserve Bank of Cleveland

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

Statements of Changes in Capital

| (in millions, except share data) | For the years ended December 31, 2008 and December 31, 2007 | | | | | | | | | |
|--|---|-------------|------------------------|-------|--|------|---------------|-------|----|-------------|
| | | | Surplus | | | | | | | |
| | Capi | tal Paid-In | Net Income Retained | | Accumulated Other Comprehensive Loss | | Total Surplus | | To | tal Capital |
| Balance at January 1, 2007 (21.7 million shares) | \$ | 1,087 | \$ | 1,109 | \$ | (22) | \$ | 1,087 | \$ | 2,174 |
| Net change in capital stock issued (4.1 million shares) | | 204 | | _ | | _ | | _ | | 204 |
| Transferred to surplus and change in accumulated other comprehensive loss | | _ | | 199 | | 5 | | 204 | | 204 |
| Balance at December 31, 2007 (25.8 million shares) | \$ | 1,291 | \$ | 1,308 | \$ | (17) | \$ | 1,291 | \$ | 2,582 |
| Net change in capital stock issued (5.2 million shares) | | 261 | | _ | | _ | | _ | | 261 |
| Transferred to surplus and change in accumulated other comprehensive loss | | _ | | 260 | | 1 | | 261 | | 261 |
| Balance at December 31, 2008 (31.0 million shares) | \$ | 1,552 | \$ | 1,568 | \$ | (16) | \$ | 1,552 | \$ | 3,104 |

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

Notes to Financial Statements

1. STRUCTURE

The Federal Reserve Bank of Cleveland ("Bank") is part of the Federal Reserve System ("System") and is 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 serves the Fourth Federal Reserve District, which includes Ohio and portions of Kentucky, Pennsylvania, and West Virginia.

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 NewYork ("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 clearinghouse ("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 entities; serving as the federal government's bank; provision of short-term loans to depository institutions; provision of loans to individuals, partnerships, and corporations in unusual and exigent circumstances; 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.

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 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 and securities contracts for, fourteen foreign currencies and to invest such foreign currency holdings, ensuring adequate liquidity is maintained. The FRBNY is also authorized and directed by the FOMC to maintain reciprocal currency arrangements with fourteen central banks and to "warehouse" foreign currencies for the U.S. Treasury and Exchange Stabilization Fund ("ESF") through the Reserve Banks.

Although the Reserve Banks are separate legal entities, they collaborate in the delivery of certain services to achieve greater efficiency and effectiveness. This collaboration takes the form of centralized operations and product or function offices that have responsibility for the delivery of certain services on behalf of the Reserve Banks. Various operational and management models are used and are supported by service agreements between the Reserve Banks providing the service and the other 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 reimburse the other Reserve Banks for services provided to them.

Major services provided by the Bank on behalf of the System and for which the costs were not reimbursed by the other Reserve Banks include National Check Adjustments, National Check Automation Services, Treasury Retail Services Technology, Check 21 Technology, Check Restructuring Projects, Retail Payments Office, Cash Technology, National Billing Operations, and Audit Application Competency Center Services.

3. RECENT FINANCIAL STABILITY ACTIVITIES

The Federal Reserve has implemented a number of programs designed to support the liquidity of financial institutions and to foster improved conditions in financial markets. These new programs, which are set forth below, have resulted in significant changes to the Bank's financial statements.

Expanded Open Market Operations and Support for Mortgage Related Securities

The Single-Tranche Open Market Operation Program, created on March 7, 2008, allows primary dealers to initiate a series of term repurchase transactions that are expected to accumulate up to \$100 billion in total. Under the provisions of the program, these transactions are conducted as 28-day term repurchase agreements for which primary dealers pledge U.S. Treasury and agency securities and agency Mortgage-Backed Securities ("MBS") as collateral. The FRBNY can elect to increase the size of the term repurchase program if conditions warrant. The repurchase transactions are reported as "System Open Market Account: Securities purchased under agreements to resell" in the Statements of Condition.

The GSE and Agency Securities and MBS Purchase Program was announced on November 25, 2008. The primary goal of the program is to provide support to the mortgage and housing markets and to foster improved conditions in financial markets. Under this program, the FRBNY will purchase the direct obligations of housing-related GSEs and MBS backed by the Federal National Mortgage Association ("Fannie Mae"), the Federal Home Loan Mortgage Corporation ("Freddie Mae"), and the Government National Mortgage Association ("Ginnie Mae"). Purchases of the direct obligations of housing-related GSEs began in November 2008 and purchases of GSE and agency MBS began in January 2009. There were no purchases of GSE and agency MBS during the period ended December 31, 2008. The program was initially authorized to purchase up to \$100 billion in GSE direct obligations and up to \$500 billion in GSE and agency MBS. In March 2009, the FOMC authorized FRBNY to purchase up to an additional \$750 billion of GSE and agency MBS and up to an additional \$100 billion of GSE direct obligations.

The FRBNY holds the resulting securities and agreements in the SOMA portfolio and the activities of both programs are allocated to the other Reserve Banks.

Central Bank Liquidity Swaps

The FOMC authorized the FRBNY to establish temporary reciprocal currency swap arrangements (central bank liquidity swaps) with the European Central Bank and the Swiss National Bank on December 12, 2007, to help provide liquidity in U.S. dollars to overseas markets. Subsequently, the FOMC authorized reciprocal currency swap arrangements with additional foreign central banks. Such arrangements are now authorized with the following central banks: the Reserve Bank of Australia, the Banco Central do Brasil, the Bank of Canada, Danmarks Nationalbank, the Bank of England, the European Central Bank, the Bank of Japan, the Bank of Korea, the Banco de Mexico, the Reserve Bank of New Zealand, Norges Bank, the Monetary Authority of Singapore, Sveriges Riksbank, and the Swiss National Bank. The activity related to the program is allocated to the other Reserve Banks. The maximum amount of borrowing permissible under the swap arrangements varies by central bank. The central bank liquidity swap arrangements are authorized through October 30, 2009.

Lending to Depository Institutions

The temporary Term Auction Facility ("TAF") program was created on December 12, 2007. The goal of the TAF is to help promote the efficient dissemination of liquidity, which is achieved by the Reserve Banks injecting term funds through a broader range of counterparties and against a broader range of collateral than open market operations. Under the TAF program, Reserve Banks auction term funds to depository institutions against a wide variety of collateral. All depository institutions that are judged to be in generally sound financial condition by their Reserve Bank and that are eligible to borrow under the primary credit program are eligible to participate in TAF auctions. All advances must be fully collateralized. The loans are reported as "Loans to depository institutions" in the Statements of Condition.

Lending to Primary Dealers

The Term Securities Lending Facility ("TSLF") was created on March 11, 2008, to promote the liquidity in the financing markets for U.S. Treasuries and other collateral. Under the TSLF, the FRBNY will lend up to an aggregate amount of \$200 billion of U.S. Treasury securities to primary dealers secured for a term of 28 days. Securities loans are collateralized by a pledge of other securities, including federal agency debt, federal agency residential mortgage-backed securities, and non-agency AAA/Aaa-rated private-label residential mortgage-backed securities, and are awarded to primary dealers through a competitive single-price auction. The TSLF is authorized through October 30, 2009. The fees related to these securities lending transactions are reported as a component of "Non-interest income: Other income" in the Statements of Income and Comprehensive Income.

The Term Securities Lending Facility Options Program ("TOP"), created on July 30, 2008, offers primary dealers the option to draw upon short-term, fixed-rate TSLF loans in exchange for eligible collateral. The options are awarded through a competitive auction. The program is intended to enhance the effectiveness of the TSLF by ensuring additional securities liquidity during periods of heightened collateral market pressures, such as around quarter-end dates. TOP auction dates are determined by the FRBNY, and the program authorization ends concurrently with the TSLF.

Other Lending Facilitie

The Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility ("AMLF"), created on September 19, 2008, is a lending facility that provides funding to U.S. depository institutions and bank holding companies to finance the purchase of high-quality asset-backed commercial paper ("ABCP") from money market mutual funds under certain conditions. The program is intended to assist money market mutual funds that hold such paper to meet the demands for investor redemptions and to foster liquidity in the ABCP market and money markets more generally. The Federal Reserve Bank of Boston ("FRBB") administers the AMLF and is authorized to extend these loans to eligible borrowers on behalf of the other Reserve Banks. All loans extended under the AMLF are recorded as assets by the FRBB and, if the borrowing institution settles to a depository account in the Fourth Reserve District, the funds are credited to the institution's depository account and settled between the Banks through the interdistrict settlement account. The credit risk related to the AMLF is assumed by the FRBB. The FRBB is authorized to finance the purchase of commercial paper through October 30, 2009.

4. SIGNIFICANT ACCOUNTING POLICIES

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

Differences exist between the accounting principles and practices in the FAM 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 SOMA securities holdings at amortized cost rather than using the fair value presentation required by GAAP. U.S. government, Federal agency, and GSE securities, and investments denominated in foreign currencies comprising the SOMA are recorded at cost, on a settlement-date basis, and are 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. Although 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, fair 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. 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 FAM and GAAP.

Preparing the financial statements in conformity with the FAM requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of income and expenses during the reporting period. Actual results could differ from those estimates. Certain amounts relating to the prior year have been reclassified to conform to the current-year presentation. 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 the 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 (the "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 U.S. 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 the 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 2008 or 2007.

b. Loans to Depository Institutions

Loans are reported at their outstanding principal balances net of commitment fees. Interest income is recognized on an accrual basis. Loan commitment fees are generally deferred and amortized on a straight-line basis over the commitment period, which is not materially different from the interest method.

Outstanding loans are evaluated to determine whether an allowance for loan losses is required. The Bank has developed procedures for assessing the adequacy of the allowance for loan losses that reflect the assessment of credit risk considering all available information. This assessment includes monitoring information obtained from banking supervisors, borrowers, and other sources to assess the credit condition of the borrowers.

Loans are considered to be impaired when it is probable that the Bank will not receive principal and interest due in accordance with the contractual terms of the loan agreement. The amount of the impairment is the difference between the recorded amount of the loan and the amount expected to be collected after consideration of the fair value of the collateral. Recognition of interest income is discontinued for any loans that are considered to be impaired. Cash payments made by borrowers on impaired loans are applied to principal until the balance is reduced to zero; subsequent payments are recorded as recoveries of amounts previously charged off and then to interest income.

c. 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 Fannie Mae, Freddie Mac, and Ginnie Mae; STRIP securities of the U.S. government; and "stripped" securities of other government agencies. The tri-party agreements are accounted for as financing transactions and the associated interest income is 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 at their contractual amounts in the Statements of Condition 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 to facilitate the effective functioning of the domestic securities market. Overnight securities lending transactions are fully collateralized by other U.S. government securities. Term securities lending transactions are fully collateralized with investment-grade debt securities, collateral eligible for tri-party repurchase agreements arranged by the Open Market Trading Desk, or both. The collateral taken in both overnight and term securities lending transactions is in excess of the fair value of the securities loaned. The FRBNY charges the primary dealer a fee for borrowing securities, and these fees are reported as a component of "Other income."

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

d. U.S. Government, Federal Agency, and Government-Sponsored Enterprise Securities; Investments Denominated in Foreign Currencies; and Warehousing Agreements

Interest income on U.S. government, Federal agency, and GSE 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 issue 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, net" in the Statements of Income and Comprehensive Income.

Activity related to U.S. government, Federal agency, and GSE securities, including the premiums, discounts, and realized gains and losses, is allocated to each Reserve Bank on a percentage basis derived from an annual settlement of the interdistrict settlement account that occurs in 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, including the premiums, discounts, and realized gains and losses, 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.

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.

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

e. Central Bank Liquidity Swaps

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

The foreign central bank pays interest to the FRBNY based on the foreign currency amounts held by the FRBNY. The FRBNY recognizes interest income during the term of the swap agreement and reports the interest income as a component of "Interest income: Central bank liquidity swaps" in the Statements of Income and Comprehensive Income.

Activity related to these swap transactions, including the related interest income, 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. Similar to other investments denominated in foreign currencies, the foreign currency holdings associated with these central bank liquidity swaps are revalued at current foreign currency market exchange rates. Because the swap arrangement will be unwound at the same exchange rate that was used in the initial transaction, the obligation to return the foreign currency is also revalued at current foreign currency market exchange valuation account by the FRBNY. The revaluation method eliminates the effects of the changes in the market exchange rate. As of December 31, 2008, the FRBNY began allocating this currency exchange valuation account to the Bank and, as a result, the reported amount of central bank liquidity swaps reflects the Bank's allocated portion at the contract exchange rate.

f. Interdistrict Settlement Account

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

g. 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, whether developed internally or acquired for internal use, are capitalized based on the cost of direct services and materials associated with designing, coding, installing, and testing the software. Capitalized software costs are amortized on a straight-line basis over the estimated useful lives of the software applications, which 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 and an adjustment is recorded when events or changes in circumstances indicate that the carrying amount of assets or asset groups is not recoverable and significantly exceeds the assets' fair value.

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 outstanding Federal Reserve notes. To satisfy the obligation to provide sufficient collateral for outstanding Federal Reserve notes, the Reserve Banks have entered into an agreement that provides for certain assets of the Reserve Banks to be jointly pledged as collateral for the Federal Reserve notes issued to all Reserve Banks. In the event that this collateral is insufficient, the Federal Reserve Act provides that Federal Reserve notes become a first and paramount lien on all the assets of the Reserve Banks. Finally, Federal Reserve notes are obligations of the United States government. At December 31, 2008 and 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 \$7,240 million and \$7,130 million at December 31, 2008 and 2007, 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 be deducted from net earnings, dividends are presented 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 will 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 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 12 and 13.

I. 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. Interest on Depository Institution Deposits

Beginning October 9, 2008, the Reserve Banks began paying interest to depository institutions on qualifying balances held at the Banks. Authorization for payment of interest on these balances was granted by Title II of the Financial Services Regulatory Relief Act of 2006, which had an effective date of 2011. Section 128 of the Emergency Economic Stabilization Act of 2008, enacted on October 3, 2008, made that authority immediately effective. The interest rates paid on required reserve balances and excess balances are based on an FOMC-established target range for the effective federal funds rate.

n. Income and Costs Related to U.S. Treasury Service.

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 has appropriations to pay for these services. During the years ended December 31, 2008 and 2007, the Bank was reimbursed for all services provided to the Department of the Treasury as its fiscal agent.

o. Compensation Received for Services Provided

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.

p. 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.

q. Taxes

The Reserve Banks are exempt from federal, state, and local taxes, except for taxes on real property and, in some states, sales taxes on construction-related materials. The Bank's real property taxes were \$2 million for each of the years ended December 31, 2008 and 2007, and are reported as a component of "Occupancy expense."

r. 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 14 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 9. 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.

s. Recently Issued Accounting Standards

In September 2006, FASB issued SFAS No. 157, "Fair Value Measurements" ("SFAS 157"), which established a single authoritative definition of fair value and a framework for measuring fair value, and expands the required disclosures for assets and liabilities measured at fair value. SFAS 157 was effective for fiscal years beginning after November 15, 2007, with early adoption permitted. The Bank adopted SFAS 157 effective January 1, 2008. The provisions of this standard have no material effect on the Bank's financial statements.

In February 2007, FASB issued SFAS No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities," including an amendment of FASB Statement No. 115 ("SFAS 159"), which provides companies with an irrevocable option to elect fair value as the measurement for selected financial assets, financial liabilities, unrecognized firm commitments, and written loan commitments that are not subject to fair value under other accounting standards. There is a one-time election available to apply this standard to existing financial instruments as of January 1, 2008; otherwise, the fair value option will be available for financial instruments on their initial transaction date. SFAS 159 reduces the accounting complexity for financial instruments and the volatility in earnings caused by measuring related assets and liabilities differently, and it eliminates the operational complexities of applying hedge accounting. The Bank adopted SFAS 159 effective January 1, 2008. The provisions of this standard have no material effect on the Bank's financial statements.

In February 2008, FASB issued FASB Staff Position ("FSP") FAS 140-3, "Accounting for Transfers of Financial Assets and Repurchase Financing Transactions." FSP FAS 140-3 requires that an initial transfer of a financial asset and a repurchase financing that was entered into contemporaneously with, or in contemplation of, the initial transfer be evaluated together as a linked transaction under SFAS 140 "Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities," unless certain criteria are met. FSP FAS 140-3 is effective for the Bank's financial statements for the year beginning on January 1, 2009, and earlier adoption is not permitted. The provisions of this standard will not have a material effect on the Bank's financial statements.

5. LOANS

The loan amounts outstanding to depository institutions at December 31 were as follows (in millions):

| | 2008 | 2007 |
|---|--------------|-----------|
| Primary, secondary, and seasonal credit | \$ 47 | \$ 841 |
| TAF | 15,575 | 12 |
| Total loans to depository institutions | \$ 15,622 | \$ 853 |

Loans to Depository Institutions

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

Primary, secondary, and seasonal credit lending is collateralized to the satisfaction of the Bank to reduce credit risk. Assets eligible to collateralize these loans include consumer, business, and real estate loans, U.S. Treasury securities, Federal agency securities, GSE obligations, foreign sovereign debt obligations, municipal or corporate obligations, state and local government obligations, asset-backed securities, corporate bonds, commercial paper, and bank-issued assets, such as certificates of deposit, bank notes, and deposit notes. Collateral is assigned a lending value deemed appropriate by the Bank, which is typically fair value or face value reduced by a margin.

Depository institutions that are eligible to borrow under the Bank's primary credit program are also eligible to participate in the temporary 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. TAF loans are extended on a short-term basis, with terms of either 28 or 84 days. All advances under the TAF must be fully collateralized. Assets eligible to collateralize TAF loans include the complete list noted above for loans to depository institutions. Similar to the process used for primary, secondary, and seasonal credit, a lending value is assigned to each asset accepted as collateral for TAF loans.

Loans to depository institutions are monitored on a daily basis to ensure that borrowers continue to meet eligibility requirements for these programs. The financial condition of borrowers is monitored by the Bank and, if a borrower no longer qualifies for these programs, the Bank will generally request full repayment of the outstanding loan or may convert the loan to a secondary credit loan.

Collateral levels are reviewed daily against outstanding obligations and borrowers that no longer have sufficient collateral to support outstanding loans are required to provide additional collateral or to make partial or full repayment.

The maturity distribution of loans outstanding at December 31, 2008, was as follows (in millions):

| | Primary, seco and seasona | | TAF |
|--------------------|------------------------------|----|--------------|
| Within 15 days | \$ | 47 | \$ 8,825 |
| 16 days to 90 days | | - | 6,750 |
| Total loans | \$ | 47 | \$ 15,575 |

Allowance for Loan Losses

At December 31, 2008 and 2007, no loans were considered to be impaired and the Bank determined that no allowance for loan losses was required.

6. U.S. GOVERNMENT, FEDERAL AGENCY, AND GOVERNMENT-SPONSORED ENTERPRISE 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 3.792 percent and 4.092 percent at December 31, 2008 and 2007, respectively.

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

| | 2008 | 2007 |
|-----------------------------------|--------------|--------------|
| U.S. government securities: | | |
| Bills | \$ 699 | \$ 9,324 |
| Notes | 12,695 | 16,442 |
| Bonds | 4,653 | 4,542 |
| Federal agency and GSE securities | 747 | |
| Total par value | 18,794 | 30,308 |
| Unamortized premiums | 305 | 327 |
| Unaccreted discounts | (56) | (121) |
| Total allocated to the Bank | \$ 19,043 | \$ 30,514 |

At December 31, 2008 and 2007, the fair value of the U.S. government, Federal agency, and GSE securities allocated to the Bank, excluding accrued interest, was \$21,479 million and \$31,803 million, respectively, as determined by reference to quoted prices for identical securities.

The total of the U.S. government, Federal agency, and GSE securities, net held in the SOMA was \$502,189 million and \$745,629 million at December 31, 2008 and 2007, respectively. At December 31, 2008 and 2007, the fair value of the U.S. government, Federal agency, and GSE securities held in the SOMA, excluding accrued interest, was \$566,427 million and \$777,141 million, respectively, as determined by reference to quoted prices for identical securities.

Although the fair value of security holdings can be substantially greater than or less than the recorded value at any point in time, these unrealized gains or losses have no effect on the ability of the Reserve Banks, as central bank, to meet their financial obligations and responsibilities and do not represent 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 years ended December 31, 2008 and 2007, were as follows (in millions):

| | Securities purchased under agreements to resell | | Securities sold under agr to rep | | | reements purchase | |
|--|--|---------|-------------------------------------|----|--------|----------------------|--------|
| | | 2008 | 2007 | | 2008 | | 2007 |
| Allocated to the Bank: | | | | | | | |
| Contract amount outstanding, end of year | \$ | 3,034 | \$ 1,903 | \$ | 3,350 | \$ | 1,800 |
| Weighted average amount outstanding, during the year | | 3,680 | 1,435 | | 2,482 | | 1,426 |
| Maximum month-end balance outstanding, during the year | | 4,512 | 2,108 | | 3,737 | | 1,800 |
| Securities pledged, end of year | | | | | 2,992 | | 1,803 |
| System total: | | | | | | | |
| Contract amount outstanding, end of year | \$ | 80,000 | \$ 46,500 | \$ | 88,352 | \$ | 43,985 |
| Weighted average amount outstanding, during the year | | 97,037 | 35,073 | | 65,461 | | 34,846 |
| Maximum month-end balance outstanding, during the year | | 119,000 | 51,500 | | 98,559 | | 43,985 |
| Securities pledged, end of year | | | | | 78,896 | | 44,048 |

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, Federal agency, and GSE 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, 2008, was as follows (in millions):

| | 0 | U.S. vernment securities | | al agency and GSE securities | gov Federa | ototal: U.S vernment, al agency, and GSE securities | purcha | Securities sed under greements to resell | so agree | ecurities Id under ments to purchase |
|-----------------------------|----|--------------------------------|----|------------------------------------|---------------|---|----------|---|-------------|---|
| | (F | Par value) | (P | ar value) | (F | Par value) | (Contrac | t amount) | (Contract | amount) |
| Within 15 days | \$ | 726 | \$ | 17 | \$ | 743 | \$ | 1,517 | \$ | 3,350 |
| 16 days to 90 days | | 795 | | 124 | | 919 | | 1,517 | | _ |
| 91 days to 1 year | | 2,401 | | 37 | | 2,438 | | _ | | _ |
| Over 1 year to 5 years | | 6,573 | | 431 | | 7,004 | | _ | | _ |
| Over 5 years to 10 years | | 3,690 | | 138 | | 3,828 | | _ | | _ |
| Over 10 years | | 3,862 | | - | | 3,862 | | _ | | |
| Total allocated to the Bank | \$ | 18,047 | \$ | 747 | \$ | 18,794 | \$ | 3,034 | \$ | 3,350 |

At December 31, 2008 and 2007, U.S. government securities with par values of \$180,765 million and \$16,649 million, respectively, were loaned from the SOMA, of which \$6,855 million and \$681 million, respectively, were allocated to the Bank.

7. 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. 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 6.998 percent and 7.091 percent at December 31, 2008 and 2007, 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):

| | 2008 | 2007 |
|---|-------------|-------------|
| Euro: | | |
| Foreign currency deposits | \$ 389 | \$ 509 |
| Securities purchased under agreements to resell | 285 | 181 |
| Government debt instruments | 323 | 331 |
| Japanese yen: | | |
| Foreign currency deposits | 244 | 199 |
| Government debt instruments | 495 | 405 |
| Total allocated to the Bank | \$ 1,736 | \$ 1,625 |

At December 31, 2008 and 2007, the fair value of investments denominated in foreign currencies, including accrued interest, allocated to the Bank was \$1,751 million and \$1,623 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, Federal agency, and GSE securities discussed in Note 6, 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 \$24,804 million and \$22,914 million at December 31, 2008 and 2007, respectively. At December 31, 2008 and 2007, the fair value of the total System investments denominated in foreign currencies, including accrued interest, was \$25,021 million and \$22,892 million, respectively.

The maturity distribution of investments denominated in foreign currencies that were allocated to the Bank at December 31, 2008, was as follows (in millions):

| | Euro | uro Japanese yen | | | Total | | |
|-----------------------------|-----------|------------------|-----|----|-------|--|--|
| Within 15 days | \$ 531 | \$ | 244 | \$ | 775 | | |
| 16 days to 90 days | 82 | | 44 | | 126 | | |
| 91 days to 1 year | 123 | | 139 | | 262 | | |
| Over 1 year to 5 years | 261 | | 312 | | 573 | | |
| Total allocated to the Bank | \$ 997 | \$ | 739 | \$ | 1,736 | | |

At December 31, 2008 and 2007, the authorized warehousing facility was \$5.0 billion, with no balance outstanding.

In connection with its foreign currency activities, the FRBNY may enter into transactions that contain varying degrees of offbalance-sheet market risk that result from their future settlement and counter-party credit risk. The FRBNY controls these risks by obtaining credit approvals, establishing transaction limits, and performing daily monitoring procedures.

8. CENTRAL BANK LIQUIDITY SWAPS

Central bank liquidity 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 agreedupon period of time. At the end of that period of time, the currencies are returned at the original contractual exchange rate and the foreign central bank pays interest to the Federal Reserve at an agreed-upon rate. These arrangements give the authorized foreign central bank temporary access to U.S. dollars. Drawings under the swap arrangements are initiated by the foreign central bank and must be agreed to by the Federal Reserve.

The Bank's allocated share of central bank liquidity swaps was approximately 6.998 percent and 7.091 percent at December 31, 2008 and 2007, respectively.

At December 31, 2008 and 2007, the total System amount of foreign currency held under central bank liquidity swaps was \$553,728 million and \$24,353 million, respectively, of which \$38,749 million and \$1,727 million, respectively, was allocated to the Bank.

The maturity distribution of central bank liquidity swaps that were allocated to the Bank at December 31 was as follows (in millions):

| | | | | 2008 | | | 2007 |
|-------------------|-------|-----------|----|-----------------------|--------------|----|----------------------|
| | Withi | n 15 days | t | 16 days to 90 days | Total | t | 16 days o 90 days |
| Australian dollar | \$ | 700 | \$ | 898 | \$ 1,598 | \$ | |
| Danish krone | | _ | | 1,050 | 1,050 | | _ |
| Euro | | 10,565 | | 9,824 | 20,389 | | 1,439 |
| Japanese yen | | 3,351 | | 5,236 | 8,587 | | _ |
| Korean won | | _ | | 724 | 724 | | _ |
| Norwegian krone | | 154 | | 422 | 576 | | _ |
| Swedish krona | | 700 | | 1,049 | 1,749 | | _ |
| Swiss franc | | 1,345 | | 417 | 1,762 | | 288 |
| UK pound | | 8 | | 2,306 | 2,314 | | _ |
| Total | \$ | 16,823 | \$ | 21,926 | \$ 38,749 | \$ | 1,727 |

9. BANK PREMISES, EQUIPMENT, AND SOFTWARE

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

| | 2008 | 2007 |
|---|-----------|-----------|
| Bank premises and equipment: | | |
| Land | \$ 9 | \$ 9 |
| Buildings | 173 | 172 |
| Building machinery and equipment | 60 | 57 |
| Furniture and equipment | 63 | 71 |
| Subtotal | 305 | 309 |
| Accumulated depreciation | (137) | (133) |
| Bank premises and equipment, net | \$ 168 | \$ 176 |
| Depreciation expense, for the years ended December 31 | \$ 16 | \$ 14 |

The Bank leases space to outside tenants with remaining lease terms ranging from one to fifteen years. Rental income from such leases was \$1 million for each of the years ended December 31, 2008 and 2007, 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, 2008, are as follows (in millions):

| Total | \$ 15 |
|------------|----------|
| Thereafter | 8 |
| 2013 | 2 |
| 2012 | 2 |
| 2011 | 1 |
| 2010 | 1 |
| 2009 | \$ 1 |

The Bank has capitalized software assets, net of amortization, of \$8 million and \$26 million at December 31, 2008 and 2007, respectively. Amortization expense was \$18 million and \$15 million for the years ended December 31, 2008 and 2007, respectively. 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 14, include assets associated with legacy check processing. Asset impairment losses of \$3 million for the period ended December 31, 2007, were determined using fair values based on quoted fair values or other valuation techniques and are reported as a component of "Other expenses." The Bank had no impairment losses in 2008.

10. COMMITMENTS AND CONTINGENCIES

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

At December 31, 2008, the Bank was obligated under a noncancelable lease for premises with a remaining term of less than one year.

Rental expense under operating leases for certain operating facilities and data processing and office equipment (including taxes, insurance and maintenance when included in rent), net of sublease rentals, was \$219 thousand and \$349 thousand for the years ended December 31, 2008 and 2007, respectively.

Future minimum rental payments under noncancelable operating leases and capital leases, net of sublease rentals, with terms of one year or more, at December 31, 2008, were not material.

At December 31, 2008, 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, 2008 or 2007.

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.

Federal Reserve Bank of Cleveland

11. 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 or net liability and costs associated with the System Plan in its financial statements. Costs associated with the System Plan are not reimbursed by other participating employers.

The Bank's projected benefit obligation, funded status, and net pension expenses for the BEP and the SERP at December 31, 2008 and 2007, 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 matches employee contributions based on a specified formula. For the years ended December 31, 2008 and 2007, 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. The Bank's Thrift Plan contributions totaled \$4 million for each of the years ended December 31, 2008 and 2007, and are reported as a component of "Salaries and other benefits" in the Statements of Income and Comprehensive Income. Beginning in 2009, the Bank will match 100 percent of the first 6 percent of employee contributions from the date of hire and provide an automatic employer contribution of 1 percent of eligible pay.

12. 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):

| | 2008 | 2007 |
|--|------------|------------|
| Accumulated postretirement benefit obligation at January 1 | \$ 81.2 | \$ 79.2 |
| Service cost-benefits earned during the period | 3.5 | 3.9 |
| Interest cost on accumulated benefit obligation | 5.3 | 5.0 |
| Net actuarial gain | (0.8) | (4.0) |
| Curtailment gain | (0.2) | _ |
| Contributions by plan participants | 0.6 | 0.5 |
| Benefits paid | (3.8) | (3.6) |
| Medicare Part D subsidies | 0.2 | 0.2 |
| Accumulated postretirement benefit obligation at December 31 | \$ 86.0 | \$ 81.2 |

At December 31, 2008 and 2007, the weighted-average discount rate assumptions used in developing the postretirement benefit obligation were 6.00 percent and 6.25 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):

| | 2008 | 2007 |
|---|--------------|--------------|
| Fair value of plan assets at January 1 | \$ _ | \$ _ |
| Contributions by the employer | 3.0 | 2.9 |
| Contributions by plan participants | 0.6 | 0.5 |
| Benefits paid | (3.8) | (3.6) |
| Medicare Part D subsidies | 0.2 | 0.2 |
| Fair value of plan assets at December 31 | \$ _ | \$ _ |
| Unfunded obligation and accrued postretirement benefit cost | \$ 86.0 | \$ 81.2 |
| Amounts included in accumulated other comprehensive loss are shown below: | | |
| Prior service cost | \$ 3.8 | \$ 5.7 |
| Net actuarial loss | (19.8) | (22.6) |
| Total accumulated other comprehensive loss | \$ (16.0) | \$ (16.9) |

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:

| | 2008 | 2007 |
|---|-------|-------|
| Health care cost trend rate assumed for next year | 7.50% | 8.00% |
| 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 | 2014 | 2013 |

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, 2008 (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 | \$ | 1.5 | \$ | (1.2) |
| Effect on accumulated postretirement benefit obligation | | 11.6 | | (9.6) |

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

| | 2008 | 2007 |
|--|-------------|------------|
| Service cost-benefits earned during the period | \$ 3.5 | \$ 3.9 |
| Interest cost on accumulated benefit obligation | 5.3 | 5.0 |
| Amortization of prior service cost | (2.3) | (2.3) |
| Amortization of net actuarial loss | 2.1 | 3.6 |
| Net periodic postretirement benefit expense | \$ 8.6 | \$ 10.2 |
| Estimated amounts that will be amortized from accumulated other comprehensive loss into net periodic postretirement benefit expense in 2009 are shown below: | | |
| Prior service cost | \$ (2.3) | |
| Net actuarial loss | 1.5 | |
| Total | \$ (0.8) | |

Net postretirement benefit costs are actuarially determined using a January 1 measurement date. At January 1, 2008 and 2007, the weighted-average discount rate assumptions used to determine net periodic postretirement benefit costs were 6.25 percent and 5.75 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 Medicare Prescription Drug, Improvement and Modernization Act of 2003 established a prescription drug benefit under Medicare ("Medicare Part D") and a federal subsidy to sponsors of retiree health care benefit plans that provide benefits that are at least actuarially equivalent to Medicare Part D. The benefits provided under the Bank's plan to certain participants are at least actuarially equivalent to the Medicare Part D prescription drug benefit. The estimated effects of the subsidy are reflected in actuarial loss in the accumulated postretirement benefit obligation and net periodic postretirement benefit expense.

Federal Medicare Part D subsidy receipts were \$0.2 million and \$0.4 million in the years ended December 31, 2008 and 2007, respectively. Expected receipts in 2009, related to benefits paid in the years ended December 31, 2008 and 2007, are \$0.1 million.

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

| | Without subsidy | | With subsidy | |
|-----------|-----------------|------|--------------|------|
| 2009 | \$ | 4.2 | \$ | 3.9 |
| 2010 | | 4.6 | | 4.3 |
| 2011 | | 5.1 | | 4.7 |
| 2012 | | 5.4 | | 4.9 |
| 2013 | | 5.7 | | 5.3 |
| 2014–2018 | | 35.3 | | 32.2 |
| Total | \$ | 60.3 | \$ | 55.3 |

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, disability benefits, and self-insured workers' compensation expenses. The accrued postemployment benefit costs recognized by the Bank at December 31, 2008 and 2007, were \$8.0 million and \$7.7 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 2008 and 2007 operating expenses were \$1.5 million and \$1.0 million, respectively, and are recorded as a component of "Salaries and other benefits" in the Statements of Income and Comprehensive Income.

13. ACCUMULATED OTHER COMPREHENSIVE INCOME AND OTHER COMPREHENSIVE INCOME

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

| | benef | elated to tirement its other pensions |
|---|-------|--|
| Balance at January 1, 2007 | \$ | (22) |
| Change in funded status of benefit plans: | | |
| Net actuarial gain arising during the year | | 4 |
| Amortization of prior service cost | | (2) |
| Amortization of net actuarial loss | | 3 |
| Change in funded status of benefit plans- other comprehensive income | | 5 |
| Balance at December 31, 2007 | \$ | (17) |
| Change in funded status of benefit plans: | | |
| Net actuarial gain arising during the year | | 1 |
| Amortization of prior service cost | | (2) |
| Amortization of net actuarial loss | | 2 |
| Change in funded status of benefit plans- other comprehensive income | | 1 |
| Balance at December 31, 2008 | \$ | (16) |

Additional detail regarding the classification of accumulated other comprehensive loss is included in Note 12.

14. BUSINESS RESTRUCTURING CHARGES

2008 Restructuring Plans

In 2008, the Reserve Banks announced the acceleration of their check restructuring initiatives to align the check processing infrastructure and operations with declining check processing volumes. The new infrastructure will involve consolidation of operations into two regional Reserve Bank processing sites in Cleveland and Atlanta.

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. Additional announcements in 2007 related to restructuring plans associated with Electronic Treasury Financial Services. This restructure was the result of the U.S. Treasury initiating a Collection and Cash Management Modernization (CCMM) program.

2006 and Prior Restructuring Costs

The Bank incurred restructuring charges prior to 2007 related to the restructuring of Check Operations.

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

| | and prior ructuring plans | Rest | 2007 ructuring plans | Total |
|---|---------------------------------|------|----------------------------|-----------|
| Information related to restructuring plans as of December 31, 2008: | | | | |
| Total expected costs related to restructuring activity | \$ _ | \$ | 2.1 | \$ 2.1 |
| Expected completion date | 2006 | | 2010 | |
| Reconciliation of liability balances: | | | | |
| Balance at January 1, 2007 | \$ 0.2 | \$ | _ | \$ 0.2 |
| Employee separation costs | _ | | 2.9 | 2.9 |
| Payments | (0.2) | | _ | (0.2) |
| Balance at December 31, 2007 | \$ _ | \$ | 2.9 | \$ 2.9 |
| Employee separation costs | _ | | 0.2 | 0.2 |
| Adjustments | _ | | (1.0) | (1.0) |
| Payments | _ | | (1.1) | (1.1) |
| Balance at December 31, 2008 | \$ _ | \$ | 1.0 | \$ 1.0 |

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 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 Comprehensive Income.

Restructuring costs associated with the impairment of certain Bank assets, including software, buildings, leasehold improvements, furniture, and equipment, are discussed in Note 9. Costs associated with enhanced pension benefits for all Reserve Banks are recorded on the books of the FRBNY as discussed in Note 11.

15. SUBSEQUENT EVENTS

In February 2009, the System announced the extension through October 30, 2009, of liquidity programs that were previously scheduled to expire on April 30, 2009. The extension pertains to the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility and the Term Securities Lending Facility. In addition, the temporary reciprocal currency arrangements (swap lines) between the Federal Reserve and other central banks were extended to October 30, 2009.



| Officers and Consultants |
|----------------------------|
| Boards of Directors: |
| Cleveland 51 |
| Cincinnati |
| Pittsburgh |
| Business Advisory Councils |
| Consumer Advisory Council |

FEDERAL RESERVE BANK of CLEVELAND

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Martha Maher Assistant Vice President Retail Payments Office

Jerrold L. Newlon Assistant Vice President Supervision and Regulation

Anthony V. Notaro Assistant Vice President Facilities

Timothy M. Rachek Assistant Vice President Check Adjustments

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John P. Robins Consultant Supervision and Regulation Elizabeth J. Robinson Assistant Vice President Human Resources

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Jerome J. Schwing Assistant Vice President Check Operations

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Diana C. Starks Assistant Vice President Executive/Corporate Information Management, Diversity

Janine M. Valvoda Assistant Vice President and Chief Culture Officer

Michael Vangelos Assistant Vice President Information Security, Business Continuity Federal Reserve Banks each have a main office board of nine directors. Directors supervise the Bank's budget and operations, make recommendations on the discount rate on primary credit and, with the Board of Governors' approval, appoint the Bank's president and first vice president.

In addition, directors provide the Federal Reserve System with a wealth of information on economic conditions. This information is used by the Federal Open Market Committee and the Board of Governors in reaching decisions about monetary policy.



Class A directors are elected by and represent Fourth District member banks. Class B directors are also elected by Fourth District member banks and represent diverse industries within the District. Class C directors are selected by the Board of Governors and also represent the wide range of businesses and industries in the Fourth District. Two Class C directors are designated as chairman and deputy chairman of the board.



The Cincinnati and Pittsburgh branch offices each have a board of seven directors who are appointed by the Board of Directors of the Federal Reserve Bank of Cleveland and the Board of Governors.

Terms for all directors are generally limited to two three-year terms to ensure that the individuals who serve the Federal Reserve System represent a diversity of backgrounds and experience.

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Business Advisory Councils As of December 31, 2008

Business Advisory Council members are a diverse group of Fourth District businesspeople who advise the president and senior officers on current business conditions.

Each council—in Cleveland, Cincinnati, and Pittsburgh—meets with senior Bank leaders at least twice yearly. These meetings provide anecdotal information that is useful in the consideration of monetary policy direction and economic research activities.

Cleveland

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Mark A. Snyder Corporate Secretary Snyder Associated Companies Inc. Kittanning, Pennsylvania Consumer Advisory Council As of December 31, 2008 The Federal Reserve System's Consumer Advisory Council advises the Federal Reserve's Board of Governors on the exercise of the Board's responsibilities under various consumer financial services laws and on other related matters.

The council membership represents interests of consumers, communities, and the financial services industry. Members are appointed by the Board of Governors and serve three-year terms. The council meetings, held three times a year in Washington DC, are open to the public.

The following members represent the Fourth Federal Reserve District on the Consumer Advisory Council:

Tony T. Brown *President and Chief Executive Officer* Uptown Consortium Inc. Cincinnati, Ohio

Kathleen Engel Associate Professor of Law Cleveland–Marshall College of Law Cleveland, Ohio Louise J. Gissendaner

Akron City President and Director of Community Development Fifth Third Bank Cleveland, Ohio

Edna Sawady Consultant Market Innovations, Inc. New York, New York (formerly Cleveland, Ohio)



Edna Sawady, Kathleen Engel, Louise J. Gissendaner, and Tony T. Brown.

Acknowledgments

Managing Editor Robin Ratliff, Assistant Vice President and Assistant Corporate Secretary

Editor Amy Koehnen, Communications and Design

Managing Designer Michael Galka, Manager, Communications and Design

Designer Natalie Bashkin, Communications and Design

Essay Writer Doug Campbell, Communications and Design

Special Contributors

Jean Burson, Policy Advisor, Office of Policy Analysis Yuliya Demyanyk, Economist, Research O. Emre Ergungor, Economist, Research Thomas Fitzpatrick, Economist, Office of Policy Analysis Mary Helen Petrus, Manager, Community Development Francisca Richter, Economist, Community Development Guhan Venkatu, Economist, Research

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We invite your comments and questions. Please email us at editor@clev.frb.org.



Cleveland:

1455 East Sixth Street Cleveland, OH 44114 216.579.2000

Cincinnati:

150 East Fourth Street Cincinnati, OH 45202 513.721.4787

Pittsburgh:

717 Grant Street Pittsburgh, PA 15129 412.261.7800



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