Rhetoric Aligned with Theory:
Talking Productively about Interest Rates
The Federal Reserve System is responsible for formulating and implementing U.S. monetary policy. It also supervises banks and bank holding companies, and provides financial services to depository institutions and the federal government.

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, D.C., comprise the Federal Reserve System.

The Federal Reserve Bank of Cleveland, including its branch offices in Cincinnati and Pittsburgh and its check processing center in Columbus, 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.
Last year, this Bank’s annual report began with a reflection on the century date change, observing the lack of problems associated with that much-publicized event. We began, “The prospect of serious, unforeseen events had spurred people in our Bank and the Federal Reserve System to work together in pursuit of a common objective. In the aftermath of that project, we found that we had forged some new relationships—and deepened some old ones—among our customers, the institutions we supervise, the public, and even our colleagues inside the Federal Reserve System.”

Little did we realize how true those words would ring today, in the aftermath of the September 11 terrorist attacks. Following the attacks, the Cleveland Bank and the Federal Reserve System were called upon to support this country’s financial system in unprecedented proportions.

Central banks are poorly understood institutions among the public, and the Federal Reserve is no exception. To the extent that people grasp our purpose, they may think of our influence on interest rates and the economy, our efforts to promote sound banking practices, and our stockpiles of currency and coin. Even our customers may see us only for those services we directly provide to them, without considering the full scope of our involvement in the broader economy. Yet the genius of the Federal Reserve System is its ability to pool diverse resources in order to rapidly accommodate sudden shifts in the demand for dollar liquidity and, in so doing, to cushion our nation’s banking, clearing, and settlement systems from severe shocks. The practical consequence of this capability is that financial transactions can continue even in the face of troubling national circumstances.
David H. Hoag, chairman; Robert W. Mahoney, deputy chairman; Sandra Pianalto, first vice president; and Jerry L. Jordan, president.
As the “Operational Highlights” section of this year’s report makes clear, the Bank’s ability to draw on the expertise of its financial services, credit risk, supervision, and research staff enabled it to quickly understand and respond to the many pressures that emerged in our financial system on September 11. In a very important sense, of course, it was not business as usual—but in many other ways, it was. The contingency planning we had done for the century date change proved invaluable during that crisis period. We understood clearly how our technical systems worked and how to resolve problems associated with them. But more important, we understood our customers’ needs, their systems, and how to communicate with them. The culture we had developed in the Bank during the 1990s—one of customer service and cross-functional team work—demonstrated its effectiveness.

As a nation, we are still adjusting to the effects of the war against terrorism and a new, more vigilant security posture. Clearly, our economy was affected by these factors during the last months of 2001, a time when economic activity had already slowed from the brisk pace of prior years. In January, the Federal Open Market Committee already had begun a sequence of reductions in the discount and federal funds rates, recognizing reduced demand for credit and increased demand for liquid financial assets. The events of September 11 intensified these trends, just when it seemed that economic weakness might have bottomed out. As of this writing, the FOMC has reduced the federal funds rate 475 basis points, and, once again, this period of economic decline appears to be over.

Rhetoric—that is, our choice of language—has become a common theme in this Bank’s annual reports. We continue this year with a discussion of the language used by economists, policymakers, market observers, and media analysts to describe changes in the federal funds rate over the business cycle. We suggest a different framework for thinking about and describing monetary policy actions than is commonly used. As we have argued in previous essays, we believe the goals of price stability and long-term economic growth are best served by replacing policy rhetoric that is built on a traditional activist framework with a rhetoric that better reflects what central banks truly can deliver.
We could not have accomplished all that we did in 2001 without the guidance provided by the directors of our Cincinnati, Cleveland, and Pittsburgh offices, and the members of our business and community bank advisory councils. We especially want to thank those directors who completed their terms of service on our boards in 2001. For their oversight and valuable contributions we are truly grateful. On our Cincinnati Office board of directors, Jean R. Hale (president and chief executive officer, Community Trust Bancorp, Inc.) and Thomas Revelly, Ill (president and chief executive officer, CBS Technologies, LLC) each completed a second term as a director. On our Pittsburgh Office board of directors, Gretchen R. Haggerty (senior vice president of accounting and finance, U.S. Steel Group) and Edward V. Randall, Jr. (management advisor and consultant, Babst, Calland, Clements & Zomnir, P.C.) also completed second terms as directors. The valuable contributions of all of our departing board members will be missed.

Finally, I would like to express my sincere appreciation to the officers and staff of the Federal Reserve Bank of Cleveland for their extraordinary efforts in responding to the tragic events of September 11, 2001. Because of your dedication, we were able to perform our role as the nation’s central bank during this national crisis. Although our country faced a number of uncertainties, the American public—indeed, the world—saw that the Federal Reserve continued to provide the necessary support to the financial system.

The Federal Reserve Bank of Cleveland did not close on September 11, nor did we restrict our hours in the days that followed. I want to extend my heartfelt thanks to the officers and staff and their families for the personal sacrifices they made for the benefit of the Bank, its customers, and the nation.

Jerry L. Jordan
President
RHETORIC ALIGNED WITH THEORY: TALKING PRODUCTIVELY ABOUT INTEREST RATES
“... the past decade is a telling reminder of how little economists know about managing the business cycle and, ironically, how much they know about promoting economic welfare...

Indeed, the most important theoretical developments of the past 20 years call into question the notion that substantial benefits are to be had from policies aimed at smoothing [short-run] economic fluctuations.”

—Federal Reserve Bank of Cleveland,
“Theory Ahead of Rhetoric: Economic Policy for a ‘New Economy,’”
1999 Annual Report

“The lessons of economic theory and hard experience have taught policymakers to mistrust arguments that realized economic growth rates are—

when they deviate from average experience—

imperfections to be hammered out by an industrious central bank.”

—Federal Reserve Bank of Cleveland,
“Theory Ahead of Rhetoric: Measurement and the ‘New Economy,’”
2000 Annual Report
According to the National Bureau of Economic Research, the official arbiter of business cycle dating, the record-setting economic expansion that began in 1991 came to an end in March of 2001. In the first week of 2001, the Federal Open Market Committee initiated what would become the most rapid federal funds rate descent since the early 1980s, a period when sharp rate declines accompanied a substantial disinflation.

As we write in early 2002, opinion is weighted toward the belief that the recession is over, or nearly so. If this forecast proves true, it will be hard to argue against the sentiment that the U.S. economy has drifted through some fairly treacherous waters with minimal damage. Indeed, with GDP already having registered a gain in the fourth quarter of 2001, it seems likely we’ve witnessed the most moderate recession in the postwar era. To many, no doubt, the 475 basis point reduction in the federal funds rate engineered by the FOMC will be one of the heroes of the recovery–expansion story.

Should we not, then, re-evaluate the position this Bank has taken in the past—that policymakers should keep their eyes on their long-term objectives rather than reacting to perceived, short-term gaps between output and its “potential.” Don’t the economic developments of the past year suggest there are indeed “substantial benefits to be had from policies aimed at smoothing economic fluctuations”? Didn’t aggressive “easing” in the form of federal funds rate cuts help to stimulate the economy last year, speeding recovery and making the downturn more shallow and less protracted that it might have been otherwise?

As we have argued, we do not believe the rhetorical framework behind these questions is a useful description of monetary policy. In particular, we do not agree that the FOMC’s actions over the past year are best described as “easy money” policy, required to pull the economy out of recession by stimulating aggregate spending. At the same time, we believe the 475 basis point reduction in the funds rate was justified under the circumstances.

How can these seemingly contradictory positions be reconciled? How can we claim that aggressive lowering of the federal funds rate in 2001 was appropriate and necessary, while maintaining that monetary ease is not the panacea for short-term economic ills? Our answer is that it is incorrect to characterize persistent reductions in the federal funds rate as, everywhere and always, evidence of “aggressive monetary ease.” Likewise, it is a mistake to believe such actions can contribute to economic recovery if and only if they directly prompt an acceleration of private spending.
“That monetary policy can wreak havoc on financial markets and can be a disruptive influence on the economy is unquestioned...

In the short run, it is important to strike a balance between the quantity of money demanded and the amount the central bank supplies.”

Which brings us to our central question: If we hesitate to endorse a policy that is expressly designed to stimulate the economy, by what rationale do we support the federal funds rate cuts of the past year?

We believe that changes in the federal funds rate should be considered on the basis of where economic forces are taking market interest rates, a perspective stemming from several presumptions about the way our economy works. First, “a balance between the quantity of money demanded and the amount the central bank supplies” requires the federal funds rate to adjust roughly in alignment with changes in real—that is, inflation-adjusted—returns to capital. Second, episodes of economic weakness typically are characterized by declining capital returns and greater demand for liquid financial assets. Third, when the funds rate fails to adjust to these realities, monetary policy can slip into a disinflationary, or even deflationary, stance. There is little question that the resulting contractionary policy impulse would be a misguided course in the face of weakening economic conditions.

From this perspective, there is no contradiction between supporting aggressive federal funds rate reductions and deep suspicion of policies designed to force growth to conform to some predetermined path. In an economy in which weak demand and falling productivity are reducing capital yields and market interest rates, fed funds rate cuts are not equivalent to policy ease as it is traditionally understood. Stable monetary policy—a stance that induces neither inflationary nor deflationary pressures, that seeks to avoid both artificial stimulation and inadvertent retardation of real economic growth—requires, paradoxically, active management of the federal funds rate. It is hard to imagine a coherent view of monetary policy without first disentangling defensive rate adjustments that maintain policy neutrality from rate changes that are, in fact, designed to go beyond neutral and stimulate the economy.

“...the language of monetary policy is replete with concepts and empirical constructs inherited from an era when damping business-cycle fluctuations was the \textit{sine qua non} of successful economic policy. The deep theoretical weaknesses of these ideas—embodied in such notions as ‘potential’ output, ‘the’ noninflationary rate of unemployment, growth ‘speed limits,’ and the like—have manifested themselves with a vengeance over the past decade, prompting casual observers to hail the so-called ‘New Economy.’

In fact, it’s not that the economy is new, but that the policy lexicon is old.

That is, the puzzling evolution of the current expansion is not a failure of economic theory, but of economic \textit{rhetoric}.”

—Federal Reserve Bank of Cleveland,
“Theory Ahead of Rhetoric: Economic Policy for a ‘New Economy,’”
1999 Annual Report
We have argued in the past that central bankers’ ability to articulate a cogent vision of noninflationary economic growth has been hampered by a rhetorical framework that is almost necessarily constrained to an activist view of monetary policy. The same rhetoric makes it virtually impossible to conceive of the FOMC’s actions in 2001 as anything but an attempt to create economic growth. But there is another interpretation—in our view, a more appropriate one—in which funds rate changes represent the central bank’s contribution to a stable monetary and financial environment, neither inflationary nor deflationary, in which the economy’s natural allocative forces can operate.

In an activist world, monetary policy will either get credit for judicious stimulation when the economy expands or take the heat for its lack of responsiveness if recovery lags. Neither judgment will be entirely deserved. Monetary policy is either part of the solution or part of the problem, but that determination will depend on its capacity to maintain the integrity of the currency and to sustain a healthy financial system in which workers and entrepreneurs can flourish.

**Monetary Policy without Money**

Striking just the right stance in monetary policy is no simple matter in practice, not least because policymakers may disagree about what that stance should be at any given moment. But even absent divergent opinion about short-run policy objectives, operationalizing monetary policy is a complicated task.

In simple textbook models of the aggregate economy, monetary policy is either expansionary, contractionary, or neutral with respect to the real economy, and either inflationary, disinflationary, or neutral with respect to the price level, depending on the pace at which the money supply expands relative to demand. Making use of this framework, however, requires that supply and demand for money have a stable relationship to economic activity and prices. Unfortunately, experience demonstrates that these relationships do not have the stability needed to transform the textbook model into a dependable, real-time policy tool.

In the 1970s, the Federal Open Market Committee relied on the “M1” measure of the money supply—essentially, the sum of cash in circulation and the quantity of checkable deposits. But the predictability of the relationship among M1 growth, prices, and GDP began to fade as the FOMC embarked on efforts to halt the acceleration of U.S. inflation in the latter part of that decade. During the mid-1980s, the “M2” measure, which added money market mutual funds, time deposits, small certificates of deposit, and the like to M1, moved center stage.

From the mid-1980s through 1993, the FOMC established annual growth rate objectives for the M2 monetary aggregate as the primary indicator of financial conditions in the economy. Although the Committee was not legally bound to achieve the monetary targets, deviations of M2 growth from its annual objective alerted policymakers to potential imbalances in the stance of policy. By the early 1990s, however, it had become evident that M2—like M1 before it—was unpredictable, and that these monetary targets could not provide adequate guideposts toward the central bank’s longer-term objectives.

In retrospect, we should not have been surprised. Stability in the relationship among money, prices, and output fundamentally depends on the financial relationships and institutions that define the processes by which central bank actions are translated into broad macroeconomic outcomes. In 2000, we emphasized the extraordinary challenges to meaningful economic measurement that fast-paced technological change creates. The rapid evolution of physical, human, and organizational capital wrought by the information revolution—the New Economy, if you will—touched the financial sector as much as, if not more than, other parts of our economy. If we add regulation, deregulation, and re-regulation—from the Monetary Control Act of 1980, to the Federal Deposit Insurance Corporation Improvement Act of 1991, to the recent Gramm-Leach-Bliley Act—to the ever-changing mix, the likelihood that static definitions of money will be very useful for very long seems very remote.
The formal practice of targeting money, or even monitoring it in a serious way, was abandoned in 1993. In its stead, the FOMC adopted a procedure of directly setting the federal funds rate—the overnight rate on loans between banks—without any reference to an intermediate objective.

This change has had an immense impact on the way monetary policy actions are conceived, communicated, and understood. To begin with, the demotion of monetary aggregates from the constellation of variables that drive short-run policy actions has made it difficult to remember that monetary policy can, in the end, only determine the price level, which it does by influencing the pace of money creation. Furthermore, directly targeting the precise average value of the federal funds rate has reinforced the unfortunate notion that monetary policy’s only role is to control economic fluctuations by controlling market interest rates.

These perceptions make it easy to forget, or to fail to appreciate, two essential facts. First, market interest rates—especially real (inflation-adjusted) rates—have a life of their own, independent of monetary policy. Second, when events conspire to move inflation-adjusted market rates, maintaining a given funds rate requires the Federal Reserve to alter the pace at which it injects liquidity into the economy. The latter observation means that when circumstances in the rest of the economy change, failing to move the funds rate is likely to alter the stance of monetary policy by default.

The New Economy, Interest Rates, and Policy

Economic theory instructs us that technological growth is a fundamental determinant of the equilibrium real interest rate. Periods characterized by rapid growth in technology—such as the late 1990s—generally produce brisk economic growth, high returns on new business investment, and high real interest rates. Conversely, during periods of economic weakness, returns to capital tend to fall, lending prospects dim, and market interest rates soften. Thus, the equilibrium real interest rate fluctuates as economic activity rises and falls in response to economic fundamentals.

The central problem faced by the policymaker, then, is first to recognize interest rate movements for what they are—that is, distinct from changes caused by shifts in inflation expectations, for instance—and then to formulate an appropriate response in the federal funds rate target.

There is no better example than the past year. The list of reasons why capital returns declined is not difficult to assemble. Excess capacity, in part a response to Y2K as businesses shifted capital acquisition to the period just prior to the date change and away from the following period. Diminished profit expectations in the wake of the “dot.com bust.” Rising costs following September 11, as traveling became more time consuming, security expenses rose dramatically, and so on. All of these developments fostered an environment in which real interest rates would be expected to fall.

As economic fundamentals put downward pressure on market interest rates, the only way the Federal Reserve can maintain the federal funds rate target is to restrict liquidity. In other words, by not adjusting the funds rate target downward—in concert with pressures driving market returns to capital down and the demand for liquid financial assets up—monetary policy will become more and more restrictive. Reducing the federal funds rate target is the only way to preserve neutrality in the stance of policy. This is nothing more than striking a balance between the quantity of money demanded and the quantity supplied.
That calibrating the federal funds rate to external market forces is complicated goes without saying. For one thing, declining income and production are likely to be associated with falling interest rates, which, in turn, increase the quantity of money demanded. Accommodating a more rapid pace of money creation—with federal funds rate cuts—can be fully consistent with our definition of monetary stability (or neutrality) as a condition in which policy is not biased in a stimulative or contractionary direction. Moreover, it is certainly true that, at some point, reducing the funds rate will yield what is commonly called “easy money” policy. Our point, however, is that over some set of circumstances and range of adjustment, appropriate changes in the funds rate are best thought of as purely defensive—that is, striving for monetary neutrality.

These distinctions go beyond the academic or the purely semantic. It is our view that the vast majority of changes in the federal funds rate over the past decade should be legitimately interpreted as defensive adjustments in the service of maintaining monetary neutrality. It is, of course, always treacherous, if not entirely inappropriate, to ascribe specific motivations to committee decisions that represent the consensus of individuals with varied perspectives and opinions. It is not our intention to ascribe such motivations here, but to suggest an alternative to the traditional rhetoric of “tight” and “easy” that accompanies most commentary on FOMC decisions.

A Rhetorically Revisionist History

The recovery of 1991 was characterized by highly unusual circumstances. The financial sector was undergoing pervasive structural change. Tax law changes in the early 1980s had favored investment in commercial real estate, leading to a glut in office space across the country. The tax incentives ultimately were eliminated in the Tax Reform Act of 1986, but not before contributing to a bust in commercial real estate by the end of the decade.

In the face of this glut, return on investment in structures fell dramatically, pulling down the whole constellation of returns and interest rates. Long-term interest rates continued to fall into the third year of the recovery. The situation was compounded by the fact that the boom had been financed by depositories that were poorly supervised, and hence especially vulnerable. Many depositories, particularly thrifts, could not survive. Those that did survive had to build back capital, and that required time. In effect, the adjustments inhibited credit supply.

Recognizing the restraining effects on credit conditions, the FOMC engineered 11 rate cuts between February 1991 and September 1992. The federal funds rate fell to a level that approximated inflation expectations and remained there for 15 months. Although the yield curve steepened, long rates maintained their downward trend, largely reflecting diminished expected returns to investment and swollen demand for liquidity.

Supplying bank reserves at a zero real interest rate transmits an inflationary impulse under normal circumstances, but the interval from 1991 through 1993 was unusual. In light of the fundamental forces yielding prolonged weakness in capital returns (and nominal GDP growth), it is questionable whether the low funds rate during this period should be characterized as an “easy” money policy.
“Short-term interest rates are currently abnormally low in real terms. At some point, absent an unexpected and prolonged weakening of economic activity, we will need to move them to a more neutral stance.

Such an action would not be taken in order to cut off or limit the economic expansion, but rather to sustain and enhance it.

The foremost contribution monetary policy can make to achieving higher standards of living in the United States is to provide the stable financial foundation for continued economic growth.”

— Chairman Alan Greenspan, January 31, 1994
Just as aggressive rate cuts are sometimes necessary to achieve monetary neutrality, so too are aggressive rate increases. Beginning in February 1994, the FOMC responded to rising market rates and signs of incipient inflation by increasing the federal funds rate 300 basis points in little more than a year. Surely, at least some of the increase was necessary to align the funds rate with changes in the equilibrium real market interest rate. Conditions had improved immensely in 1994, especially in the banking and commercial real estate sectors, lifting the rate of return on capital and necessitating a realignment of the funds rate. To characterize the full 300 basis points as evidence of “policy tightening” is clearly misleading.

In August of 1998, the FOMC faced a crisis situation: The Russian government had defaulted on its debt, sending shock waves through world financial markets and even threatening the integrity of the U.S. financial system. The Russian default immediately precipitated the failure of Long Term Capital Management, the large and prominent hedge fund, further roiling already troubled markets. Problems in international capital markets persisted throughout the balance of the year, culminating in the devaluation of the Brazilian real in January 1999.

As it had after the 1987 stock market crash, the FOMC responded to the string of crises by providing the liquidity that nervous investors demanded, engineering three federal funds rate decreases of 25 basis points each during the fall of 1999. Long-term market rates, however, actually began to rise at about the time the first cut was implemented. The movement in market rates might have been expected in the face of market participants’ heightened perceptions of risk, but the upward trend continued throughout 1999, well after the turmoil had passed. As the insightful observation below conveys, inaction on the funds rate in the increasing interest rate environment of 1999 would have led to a more expansionary creation of money than would have been consistent with containing inflationary pressures.

“As I think I indicated to you previously, I don’t think we did ‘pop the bubble,’ as you may put it.

We did raise interest rates in 1999, and the reason we did is, real, long-term rates were beginning to rise because the economy was beginning to accelerate.

Had we not raised the federal funds rate during that particular period, we could have held it in check only by expanding the money supply at an inordinately rapid rate...

— Chairman Alan Greenspan, March 7, 2002\(^2\)

Once again, we have a ready explanation for actions on the federal funds rate target that appears to be fully consistent with what we call “monetary neutrality” or “stability.” To be sure, each element of our narrative might be cast by others in more traditional terms, in which higher funds rates are designed to actively restrain the economy, lower funds rates to stimulate. This merely reflects the reality that, sometimes, a specific course of action is congruent with several different models of how the economy functions. If policymakers are not sensitive to their own rhetoric, and to that of their colleagues, they may not recognize when their agreements about a particular action stem from coincidence or consistent economic frameworks. Our concern applies most seriously to situations in which policymakers reach the wrong conclusion about the stance of policy because “activist” rhetoric clouds their judgment.

---

2 Chairman Alan Greenspan, Testimony before the U.S. Senate Committee on Banking, Housing, and Urban Affairs, response to Sen. Bunning, March 7, 2002.
The Road Ahead

“In a world where expectations matter,
the language of policymakers can have real consequences.”

—Federal Reserve Bank of Cleveland,
“Theory Ahead of Rhetoric: Economic Policy for a ‘New Economy,’”
1999 Annual Report

Simply put, maintaining a neutral policy stance—and conditions in which the economy’s natural resiliency can emerge—requires the federal funds rate to fall in light of the market interest rate pressures typifying economic downturn. The requirement is, of course, symmetrical: The softness of capital returns that accompanies recessions generally reverses in recovery. Consequently, the funds rate typically must rise in an expansion, lest the failure to adjust induce an inflationary policy.

Once the economy gets rolling, we should expect returns to new business investment to rise, perhaps rather quickly. Under such circumstances, market-determined interest rates will increase as scarce savings are allocated to the best opportunities. If FOMC actions persistently lag behind rising equilibrium real rates by failing to adjust the federal funds rate, eventually they will tempt the inflation fates. Appropriate rate increases would not, in our view, cut off or limit economic expansion; rather, they would sustain and enhance it by ensuring that monetary policy stays a course that is neither restrictive nor unnecessarily stimulative.

The problem is that many observers (even sophisticated ones) will interpret ascending funds rates in the early phase of expansion as an attempt (misguided, they will say) to restrain inflation by restraining the recovery. It can scarcely be otherwise, as the “activist” language of monetary policy has tied itself inappropriately to the federal funds rate without reference to the monetary and real phenomena that give a particular target meaning. The ability to distinguish lower funds rates from “easy money” and higher funds rate from “tight money” has become almost wholly absent in public discourse. Moreover, it leads to vacuous characterizations of policymakers as “hawks” and “doves.”

As we have argued in the past, we believe that central banks ultimately can deliver more economic growth by abandoning preoccupations with output gaps (and the like) in favor of a price-stability rhetoric and a policy orientation that meets this objective with the least interference to the natural, dynamic forces of the economy. Board of Governors economist Athanasios Orphanides provides new and intriguing evidence that, despite the rhetorical legacy of activist demand-management policy, the reality of policymaking over the past several decades has, in fact, been very much in this spirit.3

Credibility is the currency of central banks. Indeed, the rapid decline in the funds rate implemented by the Federal Open Market Committee in 2001 was a luxury bought with public confidence in monetary policy gained over the course of the past expansion. But such confidence is a precious and tenuous commodity, too much so to be squandered by frustration with a policy that is misperceived as anti-growth after a period of protracted economic weakness. In some business cycle episodes, the appropriate funds rate movements may be the same regardless of the chosen lexicon. But we contend that changing the rhetoric will improve policy because it will be better aligned with both the practice of monetary policy and the results it is truly capable of achieving.

3 See Athanasios Orphanides, “Monetary Policy Rules, Macroeconomic Stability and Inflation: A View from the Trenches,” Board of Governors of the Federal Reserve System, Finance and Economics Discussion Series, no. 2001-62. Orphanides estimates the FOMC’s response to internal Board staff forecasts of inflation and available estimates of the output gaps, both before and after 1979. He finds that in the earlier period, the FOMC systematically altered the funds rate in response to changes in the output gap measure. However, he finds no evidence that the Committee’s response to inflation changed across the two periods. Because the latter period was associated with lower inflation and lower output variability, Orphanides concludes that policy improved as a consequence of suppressing temptations to manage the output gap.
FINANCIAL CONTENTS

19
MANAGEMENT’S REPORT ON RESPONSIBILITY FOR FINANCIAL REPORTING

20
REPORT OF INDEPENDENT ACCOUNTANTS ON FINANCIAL REPORTING

21
REPORT OF INDEPENDENT ACCOUNTANTS ON FINANCIAL STATEMENTS

22
COMPARATIVE FINANCIAL STATEMENTS

24
NOTES TO FINANCIAL STATEMENTS
March 12, 2002

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 Statement of Changes in Capital as of December 31, 2001 (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, and as such, include amounts, some of which are based on judgments and estimates of management.

The management of the FRB Cleveland is responsible for maintaining an effective process of internal controls over financial reporting including the safeguarding of assets as they relate to the Financial Statements. Such internal controls are designed to provide reasonable assurance to management and to the Board of Directors regarding the preparation of reliable Financial Statements. This process of internal controls contains self-monitoring mechanisms, including, but not limited to, divisions of responsibility and a code of conduct. Once identified, any material deficiencies in the process of internal controls are reported to management, and appropriate corrective measures are implemented.

Even an effective process of internal controls, 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.

The management of the FRB Cleveland assessed its process of internal controls over financial reporting including the safeguarding of assets 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 (COSO). Based on this assessment, the management of the FRB Cleveland believes that the FRB Cleveland maintained an effective process of internal controls over financial reporting including the safeguarding of assets as they relate to the Financial Statements.

President & Chief Executive Officer
Federal Reserve Bank of Cleveland

First Vice President & Chief Operating Officer
Federal Reserve Bank of Cleveland
To the Board of Directors of the Federal Reserve Bank of Cleveland:

We have examined management’s assertion that the Federal Reserve Bank of Cleveland (“FRB Cleveland”) maintained effective internal control over financial reporting and the safeguarding of assets as they relate to the Financial Statements as of December 31, 2001, included in the accompanying Management’s Assertion.

Our examination was made in accordance with standards established by the American Institute of Certified Public Accountants, and accordingly, included obtaining an understanding of the internal control over financial reporting, testing, and evaluating the design and operating effectiveness of the internal control, and such other procedures as we considered necessary in the circumstances. We believe that our examination provides a reasonable basis for our opinion.

Because of inherent limitations in any internal control, misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal control over financial reporting to future periods are subject to the risk that the internal control may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, management’s assertion that the FRB Cleveland maintained effective internal control over financial reporting and over the safeguarding of assets as they relate to the Financial Statements as of December 31, 2001, is fairly stated, in all material respects, based upon criteria described in “Internal Control – Integrated Framework” issued by the Committee of Sponsoring Organizations of the Treadway Commission.

March 4, 2002
Cleveland, Ohio
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 (the “Bank”) as of December 31, 2001 and 2000, and the related statements of income and changes in capital for the years then ended. These financial statements are the responsibility of the Bank’s management. Our responsibility is to express an opinion on the financial statements based on our audits.

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

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Bank as of December 31, 2001 and 2000, and results of its operations for the years then ended, on the basis of accounting described in Note 3.

March 4, 2002
Cleveland, Ohio
# Comparative Financial Statements

## Statements of Condition

*(in millions)*

<table>
<thead>
<tr>
<th></th>
<th>As of December 31, 2001</th>
<th>As of December 31, 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gold certificates</td>
<td>$ 538</td>
<td>$ 520</td>
</tr>
<tr>
<td>Special drawing rights certificates</td>
<td>104</td>
<td>104</td>
</tr>
<tr>
<td>Coin</td>
<td>61</td>
<td>67</td>
</tr>
<tr>
<td>Items in process of collection</td>
<td>219</td>
<td>282</td>
</tr>
<tr>
<td>U.S. government and federal agency securities, net</td>
<td>32,885</td>
<td>29,016</td>
</tr>
<tr>
<td>Investments denominated in foreign currencies</td>
<td>996</td>
<td>1,083</td>
</tr>
<tr>
<td>Accrued interest receivable</td>
<td>334</td>
<td>338</td>
</tr>
<tr>
<td>Interdistrict settlement account</td>
<td>—</td>
<td>2,260</td>
</tr>
<tr>
<td>Bank premises and equipment, net</td>
<td>181</td>
<td>186</td>
</tr>
<tr>
<td>Other assets</td>
<td>62</td>
<td>50</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>$ 35,380</strong></td>
<td><strong>$ 33,906</strong></td>
</tr>
<tr>
<td><strong>Liabilities and Capital</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Liabilities:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal Reserve notes outstanding, net</td>
<td>$ 30,620</td>
<td>$ 31,183</td>
</tr>
<tr>
<td>Deposits:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depository institutions</td>
<td>1,103</td>
<td>1,249</td>
</tr>
<tr>
<td>Other deposits</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Deferred credit items</td>
<td>224</td>
<td>349</td>
</tr>
<tr>
<td>Interest on Federal Reserve notes due U.S. Treasury</td>
<td>28</td>
<td>110</td>
</tr>
<tr>
<td>Interdistrict settlement account</td>
<td>2,008</td>
<td>—</td>
</tr>
<tr>
<td>Accrued benefit costs</td>
<td>56</td>
<td>54</td>
</tr>
<tr>
<td>Other liabilities</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td><strong>$ 34,050</strong></td>
<td><strong>$ 32,962</strong></td>
</tr>
<tr>
<td><strong>Capital:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital paid-in</td>
<td>$ 665</td>
<td>$ 472</td>
</tr>
<tr>
<td>Surplus</td>
<td>665</td>
<td>472</td>
</tr>
<tr>
<td><strong>Total capital</strong></td>
<td><strong>1,330</strong></td>
<td><strong>944</strong></td>
</tr>
<tr>
<td><strong>Total liabilities and capital</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>$ 35,380</strong></td>
<td><strong>$ 33,906</strong></td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of these financial statements.
**Statements of Income**  
*(in millions)*

<table>
<thead>
<tr>
<th>For the year ended</th>
<th>December 31, 2001</th>
<th>For the year ended</th>
<th>December 31, 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interest income:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest on U.S. government and federal agency securities</td>
<td>$1,708</td>
<td>$1,774</td>
<td></td>
</tr>
<tr>
<td>Interest on investments denominated in foreign currencies</td>
<td>22</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Interest on loans to depository institutions</td>
<td>1</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td><strong>Total interest income</strong></td>
<td>$1,731</td>
<td>$1,793</td>
<td></td>
</tr>
<tr>
<td><strong>Other operating income (loss):</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income from services</td>
<td>$65</td>
<td>$59</td>
<td></td>
</tr>
<tr>
<td>Reimbursable services to government agencies</td>
<td>23</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Foreign currency losses, net</td>
<td>(98)</td>
<td>(97)</td>
<td></td>
</tr>
<tr>
<td>U.S. government securities gains (losses), net</td>
<td>18</td>
<td>(5)</td>
<td></td>
</tr>
<tr>
<td>Other income</td>
<td>5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Total other operating income (loss)</strong></td>
<td>$13</td>
<td>$(13)</td>
<td></td>
</tr>
<tr>
<td><strong>Operating expenses:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries and other benefits</td>
<td>$81</td>
<td>$75</td>
<td></td>
</tr>
<tr>
<td>Occupancy expense</td>
<td>13</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Equipment expense</td>
<td>12</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Cost of unreimbursed Treasury services</td>
<td>—</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Assessments by Board of Governors</td>
<td>39</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Other expenses</td>
<td>55</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td><strong>Total operating expenses</strong></td>
<td>$200</td>
<td>$209</td>
<td></td>
</tr>
<tr>
<td><strong>Net income prior to distribution</strong></td>
<td>$1,544</td>
<td>$1,571</td>
<td></td>
</tr>
<tr>
<td><strong>Distribution of net income:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividends paid to member banks</td>
<td>$30</td>
<td>$27</td>
<td></td>
</tr>
<tr>
<td>Transferred to surplus</td>
<td>193</td>
<td>287</td>
<td></td>
</tr>
<tr>
<td>Payments to U.S. Treasury as interest on Federal Reserve notes</td>
<td>1,321</td>
<td>1,257</td>
<td></td>
</tr>
<tr>
<td><strong>Total distribution</strong></td>
<td>$1,544</td>
<td>$1,571</td>
<td></td>
</tr>
</tbody>
</table>

**Statements of Changes in Capital**  
*(in millions)*

| For the years ended December 31, 2001 and December 31, 2000 |
|------------------|------------------|------------------|
| **Capital Paid-in** | **Surplus** | **Total Capital** |
| Balance at January 1, 2000 (8.9 million shares) | $444 | $444 | $888 |
| Net income transferred to surplus | — | 287 | 287 |
| Surplus transfer to the U.S. Treasury | — | (259) | (259) |
| Net change in capital stock issued (0.5 million shares) | 28 | — | 28 |
| **Balance at December 31, 2000 (9.4 million shares)** | $472 | $472 | $944 |
| Net income transferred to surplus | — | 193 | 193 |
| Net change in capital stock issued (3.9 million shares) | 193 | — | 193 |
| **Balance at December 31, 2001 (13.3 million shares)** | $665 | $665 | $1,330 |

The accompanying notes are an integral part of these financial statements.
Notes to Financial Statements

1. ORGANIZATION
The Federal Reserve Bank of Cleveland ("Bank") is part of the Federal Reserve System ("System") created by Congress under the Federal Reserve Act of 1913 ("Federal Reserve Act") which established the central bank of the United States. The System consists of the Board of Governors of the Federal Reserve System ("Board of Governors") and twelve Federal Reserve Banks ("Reserve Banks"). The Reserve Banks are chartered by the federal government and possess a unique set of governmental, corporate, and central bank characteristics. Other major elements of the System are the Federal Open Market Committee ("FOMC") and the Federal Advisory Council. The FOMC is composed of members of the Board of Governors, the president of the Federal Reserve Bank of New York ("FRBNY") and, on a rotating basis, four other Reserve Bank presidents.

Structure
The Bank and its branches in Cincinnati and Pittsburgh serve the Fourth Federal Reserve District, which includes Ohio and a portion of Kentucky, Pennsylvania, and West Virginia. In accordance with the Federal Reserve Act, supervision and control of the Bank are exercised by a Board of Directors. Banks that are members of the System include all national banks and any state chartered bank that applies and is approved for membership in the System.

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, and six directors are elected by member banks. Of the six elected by member banks, three represent the public and three represent member banks. 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.

2. OPERATIONS AND SERVICES
The System performs a variety of services and operations. Functions include: formulating and conducting monetary policy; participating actively in the payments mechanism, including large-dollar transfers of funds, automated clearinghouse ("ACH") operations and check processing; distributing coin and currency; performing fiscal agency functions for the U.S. Treasury and certain federal agencies; serving as the federal government’s bank, providing short-term loans to depository institutions; serving the consumer and the community by providing educational materials and information regarding consumer laws; supervising bank holding companies and state member banks; and administering other regulations of the Board of Governors. The Board of Governors’ operating costs are funded through assessments on the Reserve Banks.

The FOMC establishes policy regarding open market operations, oversees these operations, and issues authorizations and directives to the FRBNY for its execution of transactions. Authorized transaction types include direct purchase and sale of securities, matched sale-purchase transactions, the purchase of securities under agreements to resell, and the lending of U.S. government securities. The FRBNY is also authorized by the FOMC to hold balances of and to execute spot and forward foreign exchange and securities contracts in nine foreign currencies, maintain reciprocal currency arrangements ("F/X swaps") with various central banks, and "warehouse" foreign currencies for the U.S. Treasury and Exchange Stabilization Fund ("ESF") through the Reserve Banks.

3. SIGNIFICANT ACCOUNTING POLICIES
Accounting principles for entities with the unique powers and responsibilities of the nation’s central bank have not been formulated by the Financial Accounting Standards Board. The Board of Governors has developed specialized accounting principles and practices that it believes are appropriate for the significantly different nature and function of a central bank as compared to the private sector. These accounting principles and practices are documented in the Financial Accounting Manual for Federal Reserve Banks ("Financial Accounting Manual"), which is issued by the Board of Governors. All Reserve Banks are required to adopt and apply accounting policies and practices that are consistent with the Financial Accounting Manual.

The financial statements have been prepared in accordance with the Financial Accounting Manual. Differences exist between the accounting principles and practices of the System and accounting principles generally accepted in the United States of America ("GAAP"). The primary differences are the presentation of all security holdings at amortized cost, rather than at the fair value presentation requirements of GAAP, and the accounting for matched sale-purchase transactions as separate sales and purchases, rather than secured borrowings with pledged collateral, as is generally required by GAAP. In addition, the Bank has elected not to present a Statement of Cash Flows. The Statement of Cash Flows has not been included as the liquidity and cash position of the Bank are not of primary concern to the users of these financial statements. Other information regarding the Bank’s activities is provided in, or may be derived from, the Statements of Condition, Income, and Changes in Capital. Therefore, a Statement of Cash Flows would not provide any additional useful information. There are no other significant differences between the policies outlined in the Financial Accounting Manual and GAAP.

Effective January 2001, the System implemented procedures to eliminate the sharing of costs by Reserve Banks for certain services a Reserve Bank may provide on behalf of the System. Data for 2001 reflects the adoption of this policy. Major services provided for the System by this bank, for which the costs will not be redistributed to the other Reserve Banks, include Retail Payment Office, Savings Bonds Software, Check Standardization Project, Cash Materials Handling Software, National Account Program, and Electronic Access Products.

The preparation of the financial statements in conformity with the Financial Accounting Manual requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and 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 Certificates**

The Secretary of the Treasury is authorized to issue gold certificates to the Reserve Banks to monetize gold held by the U.S. Treasury. 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. These 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 lowered. The value of gold for purposes of backing the gold certificates is set by law at $42.2/9 a fine troy ounce. The Board of Governors allocates the gold certificates among Reserve Banks once a year based upon average Federal Reserve notes outstanding in each District.

b. **Special Drawing Rights Certificates**

Special drawing rights ("SDRs") are issued by the International Monetary Fund ("Fund") to its members in proportion to each member’s quota in the Fund at the time of issuance. SDRs serve as a supplement to international monetary reserves and may be transferred from one national monetary authority to another. Under the law providing for United States participation in the SDR system, the Secretary of the U.S. Treasury is authorized to issue SDR certificates, somewhat like gold certificates, to the Reserve Banks. At such time, 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 SDRs, at the direction of the U.S. Treasury, for the purpose of financing SDR certificate acquisitions or for financing exchange stabilization operations. At the time SDR transactions occur, the Board of Governors allocates amounts among Reserve Banks based upon Federal Reserve notes outstanding in each District at the end of the preceding year. There were no SDR transactions in 2001.

c. **Loans to Depository Institutions**

The Depository Institutions Deregulation and Monetary Control Act of 1980 provides that all depository institutions that maintain reservable transaction accounts or nonpersonal time deposits, as defined in Regulation D issued by the Board of Governors, have borrowing privileges at the discretion of the Reserve Banks. Borrowers execute collateral lending agreements and deposit sufficient collateral before credit is extended. Loans are currently all are considered collectible and fully collateralized. If any loans were deemed to be uncollectible, an appropriate reserve would be established. Interest is accrued using the applicable discount rate established at least every fourteen days by the Board of Directors of the Reserve Banks, subject to review by the Board of Governors. Reserve Banks retain the option to impose a surcharge above the basic rate in certain circumstances. There were no outstanding loans to depository institutions at December 31, 2001 and 2000.

d. **U.S. Government and Federal Agency Securities and Investments Denominated in Foreign Currencies**

The FOMC has designated the FRBNY to execute open market transactions on its behalf and to hold the resulting securities in the portfolio known as the System Open Market Account ("SOMA"). In addition to authorizing and directing operations in the domestic securities market, the FOMC authorizes and directs the FRBNY to execute operations in foreign markets for major currencies in order to counter disorderly conditions in exchange markets or to meet other needs specified by the FOMC in carrying out the System’s central bank responsibilities. Such authorizations are reviewed and approved annually by the FOMC.

Matched sale-purchase transactions are accounted for as separate sale and purchase transactions. Matched sale-purchase transactions are transactions in which the FRBNY sells a security and buys it back at the rate specified at the commencement of the transaction.

The FRBNY has sole authorization by the FOMC to lend U.S. government securities held in the SOMA to U.S. government securities dealers and to banks participating in U.S. government securities clearing arrangements on behalf of the System, in order to facilitate the effective functioning of the domestic securities market. These securities-lending transactions are fully collateralized by other U.S. government securities. FOMC policy requires FRBNY to take possession of collateral in excess of the market values of the securities loaned. The market values of the collateral and the securities loaned are monitored by FRBNY on a daily basis, with additional collateral obtained as necessary. The securities loaned continue to be accounted for in the SOMA.

Foreign exchange ("F/X") contracts are contractual agreements between two parties to exchange specified currencies, at a specified price, on a specified date. Spot foreign contracts normally settle two days after the trade date, whereas the settlement date on forward contracts is negotiated between the contracting parties, but will extend beyond two days from the trade date. The FRBNY generally enters into spot contracts, with any forward contracts generally limited to the second leg of a swap/warehousing transaction.

The FRBNY, on behalf of the Reserve Banks, maintains renewable, short-term F/X swap arrangements with two authorized foreign central banks. The parties agree to exchange their currencies up to a pre-arranged maximum amount and for an agreed upon period of time (up to twelve months), at an agreed upon interest rate. These arrangements give the FOMC temporary access to foreign currencies that it may need for intervention operations to support the dollar and give the partner foreign central bank temporary access to dollars it may need to support its own currency. Drawings under the F/X swap arrangements can be initiated by either the FRBNY or the partner foreign central bank, and must be agreed to by the drawer. The F/X swaps are structured so that the party initiating the transaction (the drawer) bears the exchange rate risk upon maturity. The FRBNY will generally invest the foreign currency received under an F/X swap in interest-bearing instruments.

Warehousing is an arrangement under which the FOMC agrees to exchange, at the request of the Treasury, U.S. dollars for foreign currencies held by the 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 Treasury and ESF for financing purchases of foreign currencies and related international operations.

In connection with its foreign currency activities, the FRBNY, on behalf of the Reserve Banks, may enter into contracts which contain varying degrees of off-balance sheet market risk, because they represent contractual commitments involving future settlement and counter-party credit risk. The FRBNY controls credit risk by obtaining credit approvals, establishing transaction limits, and performing daily monitoring procedures.

While the application of current market prices to the securities currently held in the SOMA portfolio and investments denominated in foreign currencies 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 Reserve Bank earnings or capital. Both the domestic and foreign components of the SOMA portfolio from time to time involve transactions that can result in gains or losses when holdings are sold prior to maturity. However, decisions regarding the securities and foreign currencies transactions, including their purchase and sale, are motivated by monetary policy objectives rather than profit. Accordingly, earnings and any gains or losses resulting from the sale of such currencies and securities are incidental to the open market operations and do not motivate its activities or policy decisions.
U.S. government and federal agency securities and investments denominated in foreign currencies comprising the SOMA are recorded at cost, on a settlement-date basis, and adjusted for amortization of premiums or accretion of discounts on a straight-line basis. Interest income is accrued on a straight-line basis and is reported as "Interest on U.S. government and federal agency securities" or "Interest on investments denominated in foreign currencies," as appropriate. Income earned on securities lending transactions is reported as a component of "Other income." Gains and losses resulting from sales of securities are determined by specific issues based on average cost. Gains and losses on the sales of U.S. government and federal agency securities are reported as "U.S. government securities gains (losses), net." Foreign-currency-denominated assets are revalued daily at current 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 losses, net." Foreign currencies held through F/X swaps, when initiated by the counter-party, and warehousing arrangements are revalued daily, with the unrealized gain or loss reported by the FRBNY as a component of "Other assets" or "Other liabilities," as appropriate.

Balances of U.S. government and federal agency securities bought outright, securities loaned, investments denominated in foreign currency, interest income, securities lending fee income, amortization of premiums and discounts on securities bought outright, gains and losses on sales of securities, and realized and unrealized gains and losses on investments denominated in foreign currencies, excluding those held under an F/X swap arrangement, are allocated to each Reserve Bank. Income from securities lending transactions undertaken by the FRBNY are also allocated to each Reserve Bank. Securities purchased under agreements to resell and unrealized gains and losses on the revaluation of foreign currency holdings under F/X swaps and warehousing arrangements are allocated to the FRBNY and not to other Reserve Banks.

Statement of Financial Accounting Standards No. 133, as amended and interpreted, became effective on January 1, 2001. For the periods presented, the Reserve Banks had no derivative instruments required to be accounted for under the standard.

e. Bank Premises and Equipment
Bank premises and equipment are stated at cost less accumulated depreciation. Depreciation is calculated on a straight-line basis over estimated useful lives of assets ranging from 2 to 50 years. New assets, major alterations, renovations and improvements are capitalized at cost as additions to the asset accounts. Maintenance, repairs and minor replacements are charged to operations in the year incurred. Internally-developed software is capitalized based on the cost of direct materials and services and those indirect costs associated with developing, implementing, or testing software.

f. Interdistrict Settlement Account
At the close of business each day, all Reserve Banks and branches assemble the payments due to or from other Reserve Banks and branches as a result of transactions involving accounts residing in other Districts that occurred during the day’s operations. Such transactions may include funds settlement, check clearing and ACH operations, and allocations of shared expenses. The cumulative net amount due to or from other Reserve Banks is reported as the "Interdistrict settlement account."

g. Federal Reserve Notes
The Federal Reserve notes are the circulating currency of the United States. These notes are issued through the various Federal Reserve agents to the Reserve Banks upon deposit with such Agents of certain 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 equal to the sum of the notes applied for by such Reserve Bank. In accordance with the Federal Reserve Act, gold certificates, special drawing rights certificates, U.S. government and federal agency securities, triparty agreements, loans to depository institutions, and investments denominated in foreign currencies are pledged as collateral for net Federal Reserve notes outstanding. The collateral value is equal to the book value of the collateral tendered, with the exception of securities, whose collateral value is equal to the par value of the securities tendered. The Board of Governors may, at any time, call upon a Reserve Bank for additional security to adequately collateralize the Federal Reserve notes. The Reserve Banks have entered into an agreement which provides for certain assets of the Reserve Banks to be jointly pledged as collateral for the Federal Reserve notes of all Reserve Banks in order to satisfy their obligation of providing sufficient collateral for outstanding Federal Reserve notes. 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, as obligations of the United States, Federal Reserve notes are backed by the full faith and credit of the United States government.

The "Federal Reserve notes outstanding, net" account represents Federal Reserve notes reduced by currency held in the vaults of the Bank of $4,316 million, and $5,089 million at December 31, 2001 and 2000, respectively.

h. 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. As a member bank’s capital and surplus changes, its holdings of the Reserve Bank’s stock must be adjusted. Member banks are those state-chartered banks that apply and are approved for membership in the System and all national banks. Currently, only one-half of the subscription is paid-in and the remainder is subject to call. These shares are nonvoting with a par value of $100. They may not be transferred or hypothecated. By law, each member bank is entitled to receive an annual dividend of 6 percent on the paid-in capital stock. This cumulative dividend is paid semi-annually. A member bank is liable for Reserve Bank liabilities up to twice the par value of stock subscribed by it.

i. Surplus
The Board of Governors requires Reserve Banks to maintain a surplus equal to the amount of capital paid-in as of December 31. This amount is intended to provide additional capital and reduce the possibility that the Reserve Banks would be required to call on member banks for additional capital. Reserve Banks are required by the Board of Governors to transfer to the U.S. Treasury excess earnings, after providing for the costs of operations, payment of dividends, and reservation of an amount necessary to equate surplus with capital paid-in.

The Consolidated Appropriations Act of 2000 (Public Law 106-113, Section 302) directed the Reserve Banks to transfer to the U.S. Treasury additional surplus funds of $3,752 million during the Federal Government’s 2000 fiscal year. Federal Reserve Bank of Cleveland transferred $259 million to the U.S. Treasury. Reserve Banks were not permitted to replenish surplus for these amounts during fiscal year 2000, which ended September 30, 2000; however, the surplus was replenished by December 31, 2000.

In the event of losses or a substantial increase in capital, payments to the U.S. Treasury are suspended until such losses are recovered through subsequent earnings. Weekly payments to the U.S. Treasury may vary significantly.
j. Income and Costs related to Treasury Services

The Bank is required by the Federal Reserve Act to serve as fiscal agent and depository of the United States. By statute, the Department of the Treasury is permitted, but not required, to pay for these services. The costs of providing fiscal agency and depository services to the Treasury Department that have been billed but not paid are immaterial and included in “Other expenses.”

k. Taxes

The Reserve Banks are exempt from federal, state, and local taxes, except for taxes on real property, which are reported as a component of “Occupancy expense.”

4. U.S. GOVERNMENT AND FEDERAL AGENCY SECURITIES

Securities bought outright are held in the SOMA at the FRBNY. An undivided interest in SOMA activity, with the exception of securities held under agreements to resell and the related premiums, discounts and income, is allocated to each Reserve Bank on a percentage basis derived from an annual settlement of interdistrict clearings. The settlement, performed in April of each year, equalizes Reserve Bank gold certificate holdings to Federal Reserve notes outstanding. The Bank’s allocated share of SOMA balances was 5.854% and 5.996% at December 31, 2001 and 2000, respectively.

The Bank’s allocated share of securities held in the SOMA at December 31, that were bought outright, were as follows (in millions):

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Par value:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal agency</td>
<td>$ 1</td>
<td>$ 7</td>
</tr>
<tr>
<td>U.S. government:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bills</td>
<td>10,659</td>
<td>10,003</td>
</tr>
<tr>
<td>Notes</td>
<td>15,569</td>
<td>13,441</td>
</tr>
<tr>
<td>Bonds</td>
<td>6,069</td>
<td>5,192</td>
</tr>
<tr>
<td>Total par value</td>
<td>32,298</td>
<td>28,643</td>
</tr>
<tr>
<td>Unamortized premiums</td>
<td>662</td>
<td>545</td>
</tr>
<tr>
<td>Unaccreted discounts</td>
<td>(75)</td>
<td>(172)</td>
</tr>
<tr>
<td>Total allocated to Bank</td>
<td>$32,885</td>
<td>$29,016</td>
</tr>
</tbody>
</table>

Total SOMA securities bought outright were $561,701 million and $518,501 million at December 31, 2001 and 2000, respectively.

The maturity distribution of U.S. government and federal agency securities bought outright, which were allocated to the Bank at December 31, 2001, were as follows (in millions):

<table>
<thead>
<tr>
<th>Maturities of Securities Held</th>
<th>Par value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within 15 days</td>
<td>$ 625</td>
</tr>
<tr>
<td>16 days to 90 days</td>
<td>7,292</td>
</tr>
<tr>
<td>91 days to 1 year</td>
<td>7,647</td>
</tr>
<tr>
<td>Over 1 year to 5 years</td>
<td>8,966</td>
</tr>
<tr>
<td>Over 5 years to 10 years</td>
<td>3,123</td>
</tr>
<tr>
<td>Over 10 years</td>
<td>4,644</td>
</tr>
<tr>
<td>Total</td>
<td>$32,297</td>
</tr>
</tbody>
</table>

At December 31, 2001 and 2000, matched sale-purchase transactions involving U.S. government securities with par values of $23,188 million and $21,112 million, respectively, were outstanding, of which $1,238 million and $1,181 million were allocated to the Bank. Matched sale-purchase transactions are generally overnight arrangements.

At December 31, 2001 and 2000, U.S. government securities with par values of $7,345 million and $2,086 million, respectively, were loaned from the SOMA, of which $400 million and $116 million were allocated to the Bank.

5. INVESTMENTS DENOMINATED IN FOREIGN CURRENCIES

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

Each Reserve Bank is allocated a share of foreign-currency-denominated assets, the related interest income, and realized and unrealized foreign currency gains and losses, with the exception of unrealized gains and losses on F/X swaps and warehousing transactions. This allocation is based on the ratio of each Reserve Bank’s capital and surplus to aggregate capital and surplus at the preceding December 31. The Bank’s allocated share of investments denominated in foreign currencies was approximately 6.844% and 6.911% at December 31, 2001 and 2000, respectively.
The Bank’s allocated share of investments denominated in foreign currencies, valued at current exchange rates at December 31, was as follows (in millions):

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>European Union Euro:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign currency deposits</td>
<td>$314</td>
<td>$320</td>
</tr>
<tr>
<td>Government debt instruments</td>
<td>185</td>
<td>188</td>
</tr>
<tr>
<td>including agreements to resell</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Japanese Yen:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign currency deposits</td>
<td>129</td>
<td>190</td>
</tr>
<tr>
<td>Government debt instruments</td>
<td>364</td>
<td>380</td>
</tr>
<tr>
<td>including agreements to resell</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accrued interest</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$996</td>
<td>$1,083</td>
</tr>
</tbody>
</table>

Total investments denominated in foreign currencies were $14,559 million and $15,670 million at December 31, 2001 and 2000, respectively.

The maturity distribution of investments denominated in foreign currencies which were allocated to the Bank at December 31, 2001, was as follows (in millions):

<table>
<thead>
<tr>
<th>Maturities of Investments Denominated in Foreign Currencies</th>
<th>2001</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within 1 year</td>
<td>$938</td>
<td></td>
</tr>
<tr>
<td>Over 1 year to 5 years</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Over 5 years to 10 years</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Over 10 years</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$996</td>
<td></td>
</tr>
</tbody>
</table>

At December 31, 2001 and 2000, there were no open foreign exchange contracts or outstanding F/X swaps.

At December 31, 2001 and 2000, the warehousing facility was $5 billion, with no balance outstanding.

### 6. BANK PREMISES AND EQUIPMENT

A summary of bank premises and equipment at December 31 is as follows (in millions):

<table>
<thead>
<tr>
<th>Bank premises and equipment:</th>
<th>2001</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>$7</td>
<td>$7</td>
</tr>
<tr>
<td>Buildings</td>
<td>149</td>
<td>149</td>
</tr>
<tr>
<td>Building machinery and equipment</td>
<td>43</td>
<td>42</td>
</tr>
<tr>
<td>Construction in progress</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Furniture and equipment</td>
<td>73</td>
<td>73</td>
</tr>
<tr>
<td><strong>Accumulated depreciation</strong></td>
<td>273</td>
<td>272</td>
</tr>
<tr>
<td><strong>Bank premises and equipment, net</strong></td>
<td>$181</td>
<td>$186</td>
</tr>
</tbody>
</table>

Depreciation expense was $12 million for each of the years ended December 31, 2001 and 2000.

The Bank leases unused space to outside tenants. Those leases have terms ranging from 1 to 14 years. Rental income from such leases was $1.3 million for each of the years ended December 31, 2001 and 2000. Future minimum lease payments under noncancelable agreements in existence at December 31, 2001, were (in millions):

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>1</td>
</tr>
<tr>
<td>2003</td>
<td>1</td>
</tr>
<tr>
<td>2004</td>
<td>1</td>
</tr>
<tr>
<td>2005</td>
<td>1</td>
</tr>
<tr>
<td>2006</td>
<td>1</td>
</tr>
<tr>
<td>Thereafter</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$11</td>
</tr>
</tbody>
</table>

### 7. COMMITMENTS AND CONTINGENCIES

At December 31, 2001, the Bank was obligated under noncancelable leases for premises and equipment with terms ranging from 1 to approximately 5 years. These leases provide for increased rentals based upon increases in real estate taxes, operating costs or selected price indices.

Rental expense under operating leases for certain operating facilities, warehouses, and data processing and office equipment (including taxes, insurance and maintenance when included in rent), net of sublease rentals, was $617 thousand and $552 thousand for the years ended December 31, 2001 and 2000, respectively. Certain of the Bank’s leases have options to renew.

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, 2001, were not material.
At December 31, 2001, the Bank, acting on behalf of the Reserve Banks, had contractual commitments through the year 2005 totaling $63.4 million. These contracts represent equipment, maintenance, software, and other miscellaneous costs for Check operations and the Check Modernization project that will be allocated annually to other Reserve Banks. It is estimated that the Bank’s allocated share will be $12.7 million.

Under the Insurance Agreement of the Federal Reserve Banks dated as of March 2, 1999, each of the Reserve Banks has agreed to bear, on a per incident basis, a pro rata share of losses in excess of 1 percent of the capital paid-in of the claiming Reserve Bank, up to 50 percent of the total capital paid-in of all Reserve Banks. Losses are borne in the ratio that a Reserve Bank’s capital paid-in bears 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 such agreement at December 31, 2001 or 2000.

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

8. RETIREMENT AND THRIFT PLANS

Retirement Plans
The Bank currently offers two 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”) and the Benefit Equalization Retirement Plan (“BEP”). The System Plan is a multi-employer plan with contributions fully funded by participating employers. No separate accounting is maintained of assets contributed by the participating employers. The Bank’s projected benefit obligation and net pension costs for the BEP at December 31, 2001 and 2000, and for the years then ended, are not material.

Thrift Plan
Employees of the Bank may also participate in the defined contribution Thrift Plan for Employees of the Federal Reserve System (“Thrift Plan”). The Bank’s Thrift Plan contributions totaled $3 million and $2 million for the years ended December 31, 2001 and 2000, respectively, and are reported as a component of “Salaries and other benefits.”

9. POSTRETIREMENT BENEFITS OTHER THAN PENSIONS AND POSTEMPLOYMENT BENEFITS

Postretirement benefits other than pensions
In addition to the Bank’s retirement plans, employees who have met certain age and length of service requirements are eligible for both medical benefits and life insurance coverage during retirement.

The Bank funds benefits payable under the medical and life insurance plans as due and, accordingly, has no plan assets. Net postretirement benefit costs are actuarially determined using a January 1 measurement date.

Following is a reconciliation of beginning and ending balances of the benefit obligation (in millions):

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulated postretirement benefit obligation at January 1</td>
<td>$39.4</td>
<td>$37.2</td>
</tr>
<tr>
<td>Service cost-benefits earned during the period</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Interest cost of accumulated benefit obligation</td>
<td>2.7</td>
<td>2.6</td>
</tr>
<tr>
<td>Actuarial loss (gain)</td>
<td>0.4</td>
<td>(0.1)</td>
</tr>
<tr>
<td>Contributions by plan participants</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Benefits paid</td>
<td>(1.9)</td>
<td>(1.5)</td>
</tr>
<tr>
<td>Plan amendments, acquisitions, foreign currency exchange rate changes, business combinations, divestitures, curtailments, settlements, special termination benefits</td>
<td>(1.0)</td>
<td>—</td>
</tr>
<tr>
<td>Accumulated postretirement benefit obligation at December 31</td>
<td>$40.8</td>
<td>$39.4</td>
</tr>
</tbody>
</table>

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):

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair value of plan assets at January 1</td>
<td>$—</td>
<td>$—</td>
</tr>
<tr>
<td>Actual return on plan assets</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Contributions by the employer</td>
<td>1.7</td>
<td>1.3</td>
</tr>
<tr>
<td>Contributions by plan participants</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Benefits paid</td>
<td>(1.9)</td>
<td>(1.5)</td>
</tr>
<tr>
<td>Fair value of plan assets at December 31</td>
<td>$—</td>
<td>$—</td>
</tr>
<tr>
<td>Unfunded postretirement benefit obligation</td>
<td>$40.8</td>
<td>$39.4</td>
</tr>
<tr>
<td>Unrecognized initial net transition asset (obligation)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Unrecognized prior service cost</td>
<td>1.0</td>
<td>—</td>
</tr>
<tr>
<td>Unrecognized net actuarial gain</td>
<td>8.2</td>
<td>9.1</td>
</tr>
<tr>
<td>Accrued postretirement benefit cost</td>
<td>$50.0</td>
<td>$48.5</td>
</tr>
</tbody>
</table>

Accrued postretirement benefit costs are reported as a component of “Accrued benefit costs.”

At December 31, 2001 and 2000, the weighted average discount rate assumptions used in developing the benefit obligation were 7.0 percent and 7.5 percent, respectively.

For measurement purposes, a 10.00 percent annual rate of increase in the cost of covered health care benefits was assumed for 2002. Ultimately, the health care cost trend rate is expected to decrease gradually to 5.00 percent by 2008, and remain at that level thereafter.
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, 2001 (in millions):

<table>
<thead>
<tr>
<th>Effect on aggregate of service and interest cost components of net periodic postretirement benefit costs</th>
<th>1 Percentage Point Increase</th>
<th>1 Percentage Point Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect on accumulated postretirement benefit obligation</td>
<td>7.2</td>
<td>(5.7)</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service cost-benefits earned during the period</td>
<td>$1.0</td>
<td>$1.0</td>
</tr>
<tr>
<td>Interest cost of accumulated benefit obligation</td>
<td>2.7</td>
<td>2.6</td>
</tr>
<tr>
<td>Amortization of prior service cost</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Recognized net actuarial loss</td>
<td>(0.6)</td>
<td>(0.4)</td>
</tr>
<tr>
<td>Net periodic postretirement benefit costs</td>
<td>$3.1</td>
<td>$3.2</td>
</tr>
</tbody>
</table>

Net periodic postretirement benefit costs are reported as a component of “Salaries and other benefits.”

Postemployment benefits
The Bank offers benefits to former or inactive employees. Postemployment benefit costs are actuarially determined and include the cost of medical and dental insurance, survivor income, and disability benefits. Costs were projected using the same discount rate and health care trend rates as were used for projecting postretirement costs. The accrued postemployment benefit costs recognized by the Bank for each of the years ended December 31, 2001 and 2000, were $6 million. This cost is included as a component of “Accrued benefit costs.” Net periodic postemployment benefit costs included in 2001 and 2000 operating expenses were $1 million for each of the years ended December 31, 2001 and 2000.
Consultants are highly skilled employees who contribute to attaining the Bank’s goals through their specialized professional or technical skills.

Officers and Consultants
As of December 31, 2001

Jerry L. Jordan  
President & Chief Executive Officer

Sandra Pianalto  
First Vice President & Chief Operating Officer

Lawrence Cuy  
Senior Vice President  
Financial Management Services, Strategic Planning, Information Technology, COSO

R. Chris Moore  
Senior Vice President  
Supervision and Regulation, Credit Risk Management, Data Services

Robert W. Price  
Senior Vice President  
Retail Product Office, Check Automation and Operations

Susan G. Schueller  
Senior Vice President & General Auditor  
Audit

Samuel D. Smith  
Senior Vice President  

Mark S. Sniderman  
Senior Vice President & Director of Research  
Research, Corporate Communications, Community Affairs

Peggy A. Yelimesis  
Senior Vice President  
Human Resources, Payroll, Internal Communications, Quality, EEO Officer

Robert F. Ware  
Senior Vice President  
Check, Marketing, Electronic Payments, Customer Satisfaction

Andrew W. Watts  
Senior Vice President and General Counsel  
Legal, Ethics

David E. Altig  
Vice President & Associate Director of Research  
Research

Terry N. Bennett  
Vice President  
Information Technology

Raymond L. Brinkman  
Vice President  
Savings Bonds, EZ Clear

Michael F. Bryan  
Vice President & Economist  
Research

Andrew C. Burkle, Jr.  
Vice President  
Supervision and Regulation

William D. Fosnight  
Vice President & Associate General Counsel  
Legal

Barbara B. Henshaw  
Vice President  
Cincinnati Location Officer, Protection, Business Continuity

Suzanne M. Howe  
Vice President  
Electronic Payments

David P. Jager  
Vice President  
Cash, Treasury Services, Electronic Payments

Stephen H. Jenkins  
Vice President  
Supervision and Regulation

Rayford P. Kalich  
Vice President  
Accounting, Budget, Purchasing, Strategic Planning, COSO

Stephen J. Ong  
Vice President  
Supervision and Regulation

David E. Rich  
Senior Consultant  
Information Technology

Edward E. Richardson  
Vice President  
Sales, National Account Program

Terence J. Roth  
Vice President  
Retail Product Office, Product Development

Robert B. Schaub  
Vice President  
Pittsburgh Location Officer, Protection, Business Continuity

Gregory L. Stefani  
Vice President  
Credit Risk Management, Data Services

Edward J. Stevens  
Senior Consultant & Economist  
Research

James B. Thomson  
Vice President & Economist  
Research

Joseph C. Thorp  
Vice President  
Facilities, Business Continuity

Charles F. Williams  
Vice President  
Cincinnati and Columbus Check Operations

Darel R. Wittrup  
Vice President  
Accounting, Billing

Douglas A. Banks  
Assistant Vice President & Consumer Affairs Officer  
Supervision and Regulation

Kelly A. Banks  
Assistant Vice President & Public Information Officer  
Corporate Communications

James A. Blake  
Consultant  
Retail Product Office

Ruth M. Clevenger  
Assistant Vice President & Community Affairs Officer  
Community Affairs

Stacey L. Conner  
Assistant Vice President & Corporate Secretary  
Office of the Corporate Secretary

Stephen J. Geers  
Assistant Vice President  
Marketing, National Account Program

Patrick Geyer  
Assistant Vice President  
Electronic Payments

Kenneth J. Good  
Assistant Vice President  
Pittsburgh Check Operations

Felix Harshman  
Assistant Vice President  
Accounting, Budget

Joseph G. Haubrich  
Consultant & Economist  
Research

Keith W. Hribal  
Assistant Vice President  
Cash Systems Support

Jon C. Jeswald  
Assistant Vice President  
Retail Product Office

Paul E. Kabeth  
Assistant Vice President  
Supervision and Regulation

Dean A. Longo  
Consultant  
Information Technology

William J. Major  
Assistant Vice President  
District Transition Manager, Check Modernization

James W. Rakowsky  
Assistant Vice President  
Facilities, Business Continuity

John P. Robins  
Consultant  
Supervision and Regulation

Elizabeth J. Robinson  
Assistant Vice President  
Human Resources

Jerome J. Schwing  
Assistant Vice President  
Cincinnati Check Operations

Henry P. Trollo  
Assistant Vice President  
Information Technology

Anthony Turcinov  
Assistant Vice President  
Cleveland Check Operations

Michael Vangelos  
Assistant Vice President  
Information Security

Consultants are highly skilled employees who contribute to attaining the Bank’s goals through their specialized professional or technical skills.
Directors
As of December 31, 2001

Cleveland

David H. Hoag
Chairman
Retired Chairman
The LTV Corporation
Cleveland, Ohio

Robert W. Mahoney
Deputy Chairman
Retired Chairman & CEO
Diebold, Incorporated
Uniontown, Ohio

John R. Cochran
Chairman & CEO
FirstMerit Corporation
Akron, Ohio

Phillip R. Cox
President & CEO
Cox Financial Corporation
Cincinnati, Ohio

Wayne R. Embry
Former President & COO
Team Division
Cleveland Cavaliers
Cleveland, Ohio

Cheryl L. Krueger-Horn
President & CEO
Cheryl & Co.
Westerville, Ohio

Tiney M. McComb
Chairman & President
Heartland BancCorp
Gahanna, Ohio

David L. Nichols
President & COO
Rich’s/Lazarus/Goldsmith’s
Atlanta, Georgia

Stephen P. Wilson
President & CEO
Lebanon Citizens National Bank
Lebanon, Ohio

Cincinnati

George C. Julifs
Chairman
President & CEO
SENCORP
Newport, Kentucky

Jean R. Hale
President & CEO
Community Trust Bancorp, Inc.
Pikeville, Kentucky

V. Daniel Radford
Executive Secretary-Treasurer
Cincinnati AFL-CIO Labor Council
Cincinnati, Ohio

Thomas Revely, III
President & CEO
CBS Technologies, LLC
Cincinnati, Ohio

Mary Ellen Slone
Chairman & CEO
Meridian Communications
Lexington, Kentucky

Benedict Weissenrieder
Chairman, President, & CEO
Hocking Valley Bank
Athens, Ohio

Charles Whitehead
President
Ashland Inc. Foundation
Covington, Kentucky

Pittsburgh

Charles E. Bunch
Chairman
Executive Vice President
PPG Industries, Inc.
Pittsburgh, Pennsylvania

Georgia Berner
President
Berner International Corporation
New Castle, Pennsylvania

Gretchen R. Haggerty
Senior Vice President & Controller
Accounting and Finance
U. S. Steel Group
Pittsburgh, Pennsylvania

James Mitnick
Senior Vice President
Turner Construction Company
Pittsburgh, Pennsylvania

Kristine Molnar
President
WestBanco Bank, Inc.
Upper Ohio Valley Region
Wheeling, West Virginia

Edward V. Randall, Jr.
Management Advisor & Consultant
Babst, Calland, Clements & Zommii, P.C.
Pittsburgh, Pennsylvania

Peter N. Stephans
Chairman & CEO
Trigon, Incorporated
McMurray, Pennsylvania
David A. Daberko
Federal Advisory Council Representative
Chairman
National City Corporation
Cleveland, Ohio

(Standing) David L. Nichols, Robert W. Mahoney, Wayne R. Embry, and Stephen P. Wilson;
(seated) Phillip R. Cox, Tiney M. McComb, David H. Hoag, and Cheryl L. Krueger-Horn

Thomas Revelly, III, Benedict Weissentruder, V. Daniel Radford, George C. Julifs,
Jean R. Hale, Mary Ellen Stone, and Charles Whitehead

(Standing) Charles E. Bunch, James Mitnick, Kristine Molnar, and
Peter N. Stephans; (seated) Gretchen R. Haggerty and Georgia Berner

Edward V. Randall, Jr.
The Federal Reserve System is the central bank of the United States. It was founded...to provide the nation with a safer, more flexible, and more stable monetary and financial system...
Integrity. Efficiency. Accessibility. These are the three major objectives the Federal Reserve Banks strive to meet in the U.S. monetary and financial system. During the past year, perhaps nothing demonstrated the significance of that mission more clearly than the Federal Reserve’s response to the events of September 11. The System’s prompt and decisive actions to support the economy during the national crisis included the central bank’s three primary functions: monetary policy, banking supervision and regulation, and financial services.

September 11 also underscored the necessity—for both the Federal Reserve and depository institutions—of contingency planning, a lesson we learned well from our preparations for the century date change. When Y2K turned out to be far less troublesome than feared, some questioned whether all the diligent preparation had been worthwhile. In retrospect, we discovered this groundwork allowed us to respond immediately to an unthinkable disaster and to preserve the public’s confidence in our financial system.

By joining forces to keep cash, checks, and electronic payments moving—and by providing record-breaking levels of discount window lending—the Cleveland Reserve Bank ensured that Fourth District financial institutions had access to all the liquidity they needed during the week of September 11 and afterward. The Bank’s staff worked tirelessly with their counterparts in other Federal Reserve Districts, with the Board of Governors, and with other financial institution regulators to help avert a systemic financial crisis.
Our response to September 11:

**Integrity** of people and operations…

**efficiency** through innovative liquidity solutions…

**accessibility** through frequent customer communication on all levels.

We Are the Central Bank

The Federal Reserve System wears many hats: monetary policy practitioner, payments system participant, fiscal agent for the U.S. Treasury, and banking supervisor, to name just a few. Although the System has begun to consolidate some of its functions over the past several years to increase efficiency and to better serve the needs of the marketplace, our primary role remains unchanged: We are the nation’s central bank. Depository institutions depend on the Fed to do whatever is necessary to support the economy and to act as the nation’s lender of last resort.

Chris Moore, senior vice president and head of the Fourth District’s discount window and supervision and regulation functions, brings a unique perspective to the events of September 11. He was sitting in a joint meeting of the Fed’s discount window officers at the Federal Reserve Bank of New York—just three blocks away from the World Trade Center—when the Twin Towers were struck that morning. “Once we determined that our colleagues were safe, all of us shared an instinctive response,” he explains. “We are the central bank. We know we have work to do to support the financial system.”

With normal channels of borrowing and payments disrupted, the Fed’s monetary policy tools, including open market operations, discount window lending, and other credit facilities, took on historic importance. Federal Reserve Board Vice Chairman Roger Ferguson issued a simple but far-reaching directive early that day: “The Federal Reserve is open and the discount window is available for meeting liquidity needs.”

This one-line statement bolstered confidence in the banking and financial sectors that liquidity would be available to help them meet their customers’ needs.

Federal Reserve Bank of Cleveland President Jerry Jordan added further clarity for Fourth District staff: “In responding to this crisis, don’t think of yourself just as representatives of our Bank, but as central bankers for our nation.”

The Board of Governors’ *Monetary Policy Report* to Congress on February 27, 2002, noted that direct dislocations in U.S. financial markets had made it difficult for the reserve market to channel funds where they were needed most, creating a surge in the effective demand for reserves. The Fed accommodated this increased demand in a number of ways, beginning with discount window lending, extending to securities lending and bilateral loans of reserves among market participants, and ending with open market operations as the market for reserves began to normalize.

The upshot was the largest single week of lending activity in central bank history, including the three largest loans in Fourth District history. The Bank’s Credit Risk Management Department, which is responsible for responding to liquidity needs, provided support through District lending (daylight and overnight credit), expanded hours of operation, and continuous communication with Fourth District depository institutions.
A Real-World Example of Theory

The Fourth District also played a critical role in fulfilling the Fed’s vital payments services responsibilities. Electronic payments staff—handling Fedwire™ funds and securities transfers, automated clearinghouse, and electronic access—routinely contacted bank customers as the securities and funds areas extended closing times until late in the evening. Employees were in frequent communication with the Fed’s Wholesale Payments Product Office, which directs the System’s day-to-day electronic transfer activities, as it shifted operations from New York to its contingency site. “Our staff got a real-world example of the theory of central banking,” says Suzanne Howe, vice president in charge of electronic payments.

The extended hours devoted to funds and securities transfers led to nearly round-the-clock operations for accounting systems and staff. “We pushed the limits of our systems but were successful because we made critical decisions and implemented them quickly,” notes Darell Wittrup, vice president.

Finally, the Retail Payments Office (RPO) in Cleveland assumed a significant leadership role during the week of September 11 as it partnered with the Atlanta Reserve Bank to manage check operations for the Fed’s 45 processing offices nationwide. With airline traffic halted for three days, the RPO and Reserve Banks kept paper checks moving by devising an interim ground transport network to swap check processing work among nearby offices. During frequent communications with customers, marketing staff outlined our policy of providing credit for all checks deposited at the Reserve Banks, despite the need to incur billions of dollars in check float.

How did the financial community respond to all of these extraordinary efforts? Consider the words of one stakeholder, Kenneth A. Guenther, president and chief executive officer of Independent Community Bankers of America, who commented: “The Federal Reserve’s response on September 11 ensured a fully functioning payments system when the private sector could not.... The Fed’s dual roles [as provider of services and regulator of the payments system] are an essential element of the ongoing homeland security of the United States.”

### Liquidity Provision during the September 11 Crisis

<table>
<thead>
<tr>
<th>Activity</th>
<th>Fourth District</th>
<th>Federal Reserve System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discount window lending</td>
<td>$5.3 billion lent on September 12</td>
<td>$45.5 billion lent on September 12</td>
</tr>
<tr>
<td></td>
<td>Monthly lending information not available</td>
<td>$82 billion in total lending for the week ending September 12 (compared with $755 million for the month of August 2001)</td>
</tr>
<tr>
<td>Overnight overdrafts</td>
<td>Negligible overnight overdraft activity</td>
<td>$4 billion in overnight overdrafts on September 12 (compared with $9 million for the month of August 2001)</td>
</tr>
<tr>
<td>Daylight credit</td>
<td>Average daily daylight credit utilization peaked at $21.7 billion on September 12 (compared with $19.8 billion for the month of August 2001)</td>
<td>Average daily daylight credit utilization peaked at $150.1 billion on September 14 (compared with $92.9 billion for the month of August 2001)</td>
</tr>
</tbody>
</table>

The following section presents an overview of the Bank’s 2001 operational achievements in each of its major areas of responsibility: economic research and monetary policy; the supervision and regulation of banking organizations; and the provision of payments services to banking institutions and the U.S. Treasury.

Economic Research and Monetary Policy Economic policymakers understand the importance of anticipating and preparing for change in today’s global economy. As 2001 unfolded, first with deteriorating economic conditions and then with the shocks brought by September 11, the ability to add insight and value to public discourse on policy issues gained new importance.

The Research Department continued to pursue its goals of being a respected contributor to strategic thinking about System policy issues and promoting constructive discourse of those issues in the public domain. Research staff published articles and papers on monetary, economic, and banking topics in the Bank’s annual report and its Economic Commentary and Economic Review series, as well as other respected academic journals.

One of the Federal Reserve Bank of Cleveland’s key strategic initiatives has been the formation of the Central Bank Institute. The Institute was established to promote greater understanding of the monetary policy, supervisory, and payments aspects of central banking through research and communications among central bank practitioners and academic economists. Academics and representatives from central banks around the world participated in a major conference in Cleveland and several workshops sponsored by the Central Bank Institute.

Efforts to leverage the Bank’s reputation and expertise in economic research and monetary policy were intensified in 2001. The Bank is recognized as a leader in the area of inflation and inflation expectation measurement, Social Security policy, and the role of the central bank.

Public outreach remains a key objective of the Federal Reserve Bank of Cleveland, and the public tour program and speakers bureau continue to be the cornerstones of that program. Although the tour program was suspended after September 11, more than 4,300 visitors toured the Cleveland, Cincinnati, and Pittsburgh offices in 2001, and Fourth District staff delivered more than 40 speeches.

In the area of economic education, the Bank again sponsored the Fed Challenge competition, in which teams of high school students participate in mock Federal Open Market Committee deliberations. Participation in the program, which entails extensive study of current economic conditions and monetary policymaking, increased 25 percent in 2001. The Bank also sponsored an exhibit on Alexander Hamilton at the Cleveland Office.
Supervision and Regulation  Changes in the operations and credit quality of the bank holding companies and community banks supervised by the Federal Reserve Bank of Cleveland continue to present challenges and opportunities for the Bank’s Supervision and Regulation Department. Prominent among these forces are emerging technologies, industry consolidation, and legal changes in the financial services arena. As the economy slowed in 2001, the quality of banks’ loan portfolios reflected weaknesses and resulting strains on earnings.

The concept of risk-based supervision has gained currency as a way to address these issues. In 2001, the Bank’s supervision and regulation function formed a Risk Committee to identify and monitor emerging trends in the financial services and legal environment and to direct resources to the areas of highest risk. The consumer affairs function has been recognized as a System leader in the development of comprehensive Community Reinvestment Act/compliance risk profiles for medium and large bank holding companies. The Bank also hosted a roundtable for community bankers to promote a better understanding of the issues and risks associated with liquidity and funding.

The Bank continued to refine its supervisory program for large, complex banking organizations. Dedicated teams that had been established to monitor and direct supervisory activities for these companies were improved by adding staff with key competencies matching the business profiles of the companies supervised.

Efforts to improve the effectiveness of knowledge management activities continue to be an important strategic goal for improving internal efficiency and facilitating communications. SuperLink (patent applied for), a cornerstone technology tool, was further enhanced to provide staff with easy, just-in-time access to the information they need. Other initiatives to explore emerging knowledge management technology tools and to promote a knowledge management culture will yield dividends in the future.

The Bank highly values communication, outreach programs, and training efforts for community bankers and the public. Therefore, the function sponsored workshops on proposed changes to the Home Mortgage Disclosure Act, the Home Owners Equity Protection Act, the Gramm-Leach-Bliley Act, and the Community Reinvestment Act.

The Federal Reserve Bank of Cleveland is a strong advocate of fair lending and community economic development. In support of these goals, the Bank’s community affairs staff participated on a number of boards and coalitions for which their public policy, regulatory, or facilitation expertise provided value. The Bank also helped to develop a statewide coalition of rural microenterprise organizations and organized several rural housing conferences.

Payments Services  The Federal Reserve Bank of Cleveland continued its tradition of strong financial performance combined with responsive and innovative solutions to marketplace and customer needs. Each functional area—retail payments, fiscal agency, cash, and electronic payments—met or exceeded all major Federal Reserve System quality measures, service objectives, and efficiency targets in 2001.
Retail Payments The Federal Reserve Bank of Cleveland offers two retail payments services: check processing and automated clearinghouse (ACH). Both areas performed exceedingly well in 2001 while undertaking major consolidation and standardization initiatives. The Bank maintained highly efficient operations, achieving the lowest unit cost in the System for retail payments. On the financial side, the check function exceeded its local net revenue target (the difference between revenue generated in the Fourth District and the Bank’s total operating and float costs). The function also met profitability targets while maintaining low unit costs.

In check processing, the Bank devoted significant energy to preparing for conversions to the System’s new nationwide standard software platform for check processing and FedImage Services in 2002. At the same time, two highly innovative and strategic products were developed: cash management perfect presentment and power encode. In ACH, the Bank consolidated its backroom operations to the Federal Reserve Bank of Atlanta, with no impact on customers.

Partnering with the Federal Reserve Bank of Atlanta, the Cleveland Fed’s Retail Payments Office (RPO) completed its second full year of managing the Check Modernization initiative. This massive four-year effort will standardize check processing at all 45 Reserve Bank offices, adopt common software for processing and researching check adjustment cases, create a national archive and retrieval system for check images, and deliver check services to customers online using the new FedLine® for the Web platform. In 2001, the RPO achieved several milestones as each of the four Check Modernization components (Check Standardization, Enterprise-Wide Adjustments, FedImage Services, and FedLine for the Web—Check Services) either moved into production or completed testing.

As part of the System’s Check Modernization Project, the Bank has entered into a Systemwide contract with PricewaterhouseCoopers LLP (PwC) for management advisory services. Expenditures for these services during the year 2001 totaled $0.7 million. The term of this contract extends to 2003 with total expected payments in future years of $1.8 million. PwC is also engaged by the Board of Governors of the Federal Reserve System to audit the individual and combined financial statements of the Reserve Banks for 2001. Fees for these services totaled $1.3 million. In order to ensure auditor independence, the Board requires that PwC be independent in all matters relating to the audit. Specifically, PwC may not perform services for the Reserve Bank or others that would place it in a position of auditing its own work, making management decisions on behalf of the Reserve Banks or in any other way impairing its audit independence. The Bank’s board of directors believes that the advisory services do not directly affect the preparation of the financial statements audited by PwC and are not incompatible with the services provided by PwC as an independent auditor.

Fiscal Agency Innovation was the hallmark of fiscal agency activities in 2001. The Cleveland Fed took a lead role in developing two new electronic payments initiatives for the U.S. Treasury, Pay.gov and Paper Check Conversion, both of which will be enhanced and implemented at new sites over the next few years. Pay.gov will use state-of-the-art payments technology to authorize and settle government payments over the Internet. Paper Check Conversion will allow the Treasury to move checks into the more efficient automated clearinghouse. The Bank’s fiscal agency function was designated as the System’s lead operating site for these two initiatives. The Bank’s savings bonds function is the largest of the five processing sites nationwide as well as the most efficient, evidenced by its lowest unit cost in the System.

FedImage Services is a service mark of the Federal Reserve Banks.
FedLine is a registered trademark of the Federal Reserve Banks.
Cash  The Fourth District’s cash function led the Federal Reserve System’s implementation of the Standard Cash Application, which automates cash accounting, control, and reporting functions nationwide. The Cleveland Bank served as a secondary installation site for the application and as the home of the Cash System Support function. The Bank’s cash function ranked first in the System in productivity (measured by bundles of currency processed per hour), performed under budget, and maintained low unit cost (fourth-highest rank in the System).

Electronic Payments  Data collected by the Federal Reserve System suggest that over the past 20 years, retail payments have been steadily migrating to electronic alternatives as consumers, businesses, and financial institutions seek greater efficiency and cost-effectiveness. American consumers and businesses make 80 billion retail payments each year, nearly 50 billion by check and 30 billion using electronic instruments such as credit cards, debit cards, and ACH. Since 1979, checks have declined from about 85 percent of noncash payments to approximately 60 percent today.

The Federal Reserve Bank of Cleveland is responding to this trend by interacting with customers to better understand financial institutions’ needs and by supporting those needs through initiatives such as the national consolidation of ACH operations and the addition of Ginnie Mae securities to the National Book-Entry System. The Bank continues to support the Direct Payment Program, which encourages consumers to pay their utility bills automatically through ACH. The Bank is also developing an electronic bill presentment and payment service that uses ACH as the delivery and payment method.

Quality Improvements  The Bank’s strategic vision—to become the best example of a private enterprise serving the public interest—has been the foundation for our strategic direction over the past several years. This vision, along with the four accompanying corporate goals—efficiency and effectiveness, customer culture, alignment, and leadership—has guided the Bank in meeting the needs of customers and stakeholders. The Bank continues to employ the balanced scorecard in all functional areas to track performance against objectives.

In 2001, significant time and effort were devoted to developing a multiyear strategic plan that will ensure the Bank’s continued effectiveness in monetary policy and economic research, banking supervision, and payments services in light of the rapidly changing environment in which we operate. The Bank’s updated vision, mission, strategic objectives, and corporate goals will be unveiled in 2002.

To further strengthen our service-oriented, customer-focused culture, the Bank formed a Customer Satisfaction Department, which is responsible for managing all of the elements associated with establishing the Bank as a preferred service provider to customers. In addition, the Bank implemented help desks at all offices and refocused the role of account executives to respond more effectively to customer needs. The Bank’s 2001 customer survey indicated dramatic improvement in customer service initiatives, with 84 percent of our customers classified as “truly loyal.”
Business Advisory Council
As of December 31, 2001

Barbara Bissett
President & CEO
The Bissett Steel Company
Valley View, Ohio

Douglas Cowan
Chairman & CEO
The Davey Tree Expert Company
Kent, Ohio

Tanny Crane
President & CEO
Crane Plastics Company, LP
Columbus, Ohio

Joseph A. Graviss
President & CEO
Graviss McDonalds Restaurants
Versailles, Kentucky

Robert A. Gray
President & CEO
The Gray Printing Company
Fostoria, Ohio

D. Michael Hartley
Chairman & CEO
Standard Bent Glass Corporation
Butler, Pennsylvania

Kevin Lamarr Jones
Managing Partner
Homestead Capital, LLC
Medina, Ohio

John Kahl
CEO
Manco, Inc.
Avon, Ohio

James R. Leake
Vice President & CEO
James R. Leake & Son, Inc.
Richmond, Kentucky

P. C. Miller
President & CEO
Duramax Marine, Inc.
Middlefield, Ohio

Cynthia Moore-Hardy
President & CEO
Lake Hospital System
Willoughby, Ohio

Donald L. Mottinger
President
Superior Products, Inc.
Cleveland, Ohio

C. David Snyder
Chairman & CEO
Snyder International Brewing Group
Cleveland, Ohio

Community Bank Advisory Council
As of December 31, 2001

Marlene K. Barkheimer
President & CEO
Farmers State Bank
West Salem, Ohio

Charles K. Graham
President & CEO
Progressive Bank, N.A.
Wheeling, West Virginia

Dorsey G. Hall, II
Chairman, President, & CEO
Somerset National Bank
Somerset, Kentucky

James Hay
President & CEO
The Peoples Bank of Fleming County
Flemingsburg, Kentucky

Dallas C. Hipple
President & CEO
The Mars National Bank
Mars, Pennsylvania

G. W. Holden
President & CEO
The Farmers Citizens Bank
Bucyrus, Ohio

Orval H. Homan
Chairman, President, & CEO
Minster Bank
Minster, Ohio

William P. Jilek
Retired Chairman
The Richland Trust Company
Mansfield, Ohio

Michael J. Lamping
President & CEO
Champaign National Bank and Trust
Urbana, Ohio

Edward J. McKeon
President & CEO
Western Reserve Bank
Medina, Ohio

Dennis W. Rich
President & CEO
Eagle Bank
Williamstown, Kentucky

J. Michael Romey
President & CEO
The Citizens National Bank of Bluffton
Bluffton, Ohio

Jeffrey E. Smith
President & CEO
The Ohio Valley Bank Company
Gallipolis, Ohio

Charles G. Urtin
President & CEO
Irwin Bank and Trust Company
Irwin, Pennsylvania
This annual report was prepared by the Corporate Communications and Community Affairs Department and the Research Department of the Federal Reserve Bank of Cleveland.

For additional copies, contact the Corporate Communications and Community Affairs Department, Federal Reserve Bank of Cleveland, P.O. Box 6387, Cleveland, OH 44101, or call 1-800-543-3489 (OH, PA, WV) or 216-579-2001.

The annual report is also available electronically through the Cleveland Fed's home page, www.clev.frb.org.

Acknowledgments
Manager, Communications Support: Patricia DeMaio
Editor: Deborah Zorska
Design: Michael Galka
Portrait Photography: The Reuben Group
Special thanks to Robin Ratliff and Martha Maher for their contributions.