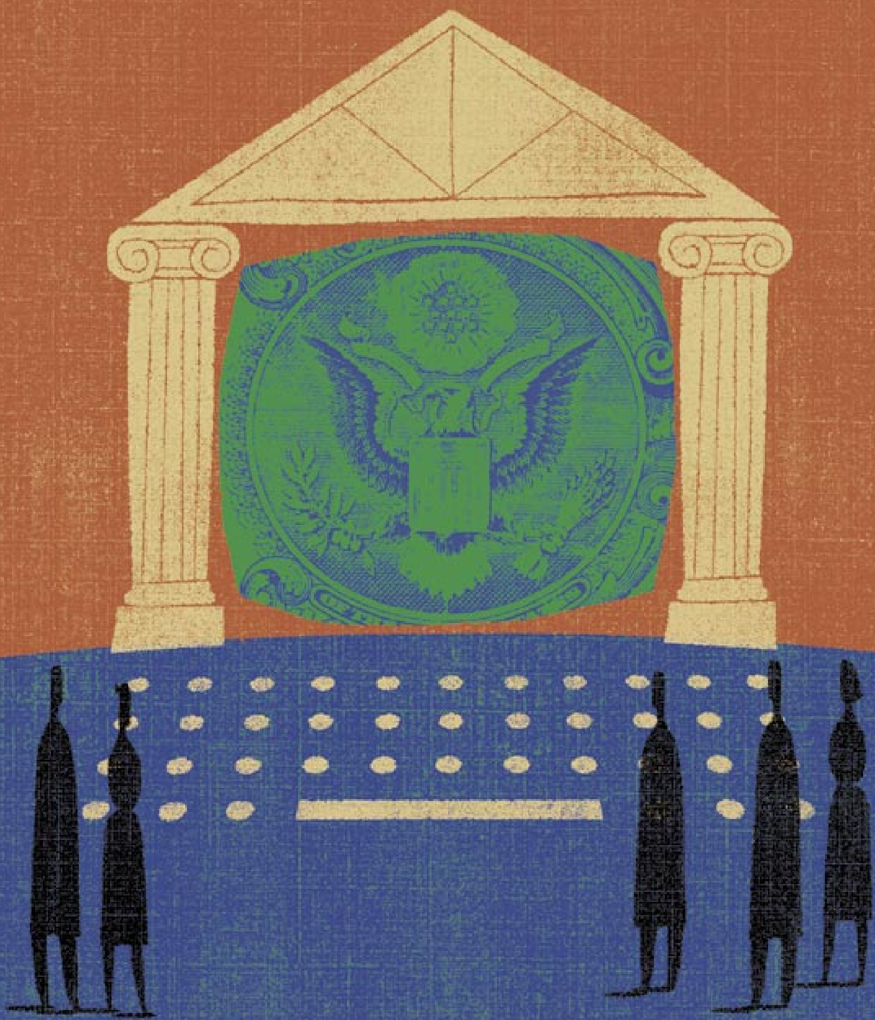
Evolving
Payment Standards and Public Policy



Federal Reserve Bank of Chicago 2003 Annual Report

CONTENTS

Message from the President 1
Shifting to New Payment System Standards 3
What Should the Fed's Role be? 11
Directors 12
Management Committee 14
Executive Officers 15
Advisory Councils 16
Executive Changes 17
Operations Volumes 18

Message from the President

The first and second halves of 2003 were about as different as night and day. In February, as the conflict with Iraq grew more pressing, the economy hit a wall. Businesses took a "wait and see" attitude toward many investment and hiring decisions, pending the progress of the war. Consumers became more reluctant to spend, and investors moved away from equities and into safe-haven assets like Treasury securities — pushing long-term interest rates to unusually low levels.

In the midst of all this downbeat news, the groundwork was laid for improvement in the second half of the year. Businesses took advantage of low interest rates to restructure their balance sheets, and consumers refinanced their mortgages at lower interest rates. In June, the Federal Open Market Committee (FOMC) lowered its target for the federal funds rate to 1 percent, the lowest rate in over 40 years, in order to give the economy additional support.

By the time summer arrived, the situation in Iraq had ceased to weigh heavily on decisionmakers' minds, and the economy was ready to take off. Output growth in the third quarter was the fastest rate in nearly 20 years and, for the year, economic output grew 4.3%.

By most indications, the expansion should continue in 2004. With inflation low and expected to stay low, the FOMC can be patient in removing its policy accommodation. Moreover, favorable trends in productivity — the result of extensive technological innovation during the past decade or so — should allow for solid growth and price stability in the year ahead.

Changes Ahead for Payments System

Just as technological innovation has benefits in the macroeconomy, innovation is also having a positive impact in the payment system. As payment technology continues to evolve, banks and their customers are moving away from paper-based payments — like checks — toward electronic payments.

The Fed has encouraged this change because of its huge potential to eliminate inefficiencies in the payments system. Last year, the Fed partnered with commercial financial institutions to push for legislation that would accelerate the move to electronic payments. In October, Congress passed the Check

Clearing for the 21st Century Act. The new law, more commonly known as Check 21, requires banks to accept electronic or paper images in place of original paper checks, but offers some flexibility for implementation.

With Check 21 as a backdrop, this year's annual report explores the incentives and obstacles that affect how the payments industry adopts new payment standards. The article also discusses the appropriate policy role of the Federal Reserve in facilitating the shift to new standards.

Review of 2003 Results

The move toward electronic payments has also had a significant impact on our day-to-day check-processing operations. In 2003, our check revenue fell short of its targets. In an effort to get our costs more in line with diminishing revenues, the Federal Reserve System began to implement plans to consolidate check-processing operations nationwide. At the same time though, the Financial Services group continued to serve our customers well through improved quality and efficiency.

In addition, the Economic Research department continued to make a significant contribution to policy debates through its conferences and academic research. And Supervision and Regulation strengthened its performance by improving its risk assessment processes.

I'd also like to highlight two specific initiatives we undertook last year. One is the effort to strengthen our internal controls. This effort will help us manage costs and deal with organizational risk in all of our business areas. The other is the construction of our new branch building in Detroit. We broke ground on February 9, 2004, and the project will be completed next year. The new facility will have the technology to provide secure cash handling and efficient check processing in a safer work environment.

Appreciation to Our Employees and Directors

As we increased our focus on cutting costs and improving efficiency, our employees approached their work with a spirit of innovation and dedication. They demonstrated all the qualities that make me proud to work with them, and I'd like to thank them all for their continued commitment to the bank's success.

Addtionally, I'd like to thank the members of our Boards of Directors. Their guidance and insights were invaluable as we moved through the year. I'd specifically like to acknowledge the Directors who retired at the end of 2003: Bob Darnall, Jack Evans, and Bob Yohanan from the Chicago Board, and Tim Leuliette and David Wagner from the Detroit Board. We owe a special note of gratitude to Bob Darnall, who served as chair of the Chicago Board for the past two years and led the Conference of Chairmen of the Federal Reserve System during 2003, as well as to Tim Leuliette, who served as chairman of the Detroit Board for the past four years.

In 2004, we welcomed five new members to our Boards. Joining the Chicago Board are John Canning, Jr., chairman and CEO of Madison Dearborn Partners, and Michael Kubacki, chairman, president and CEO of Lake City Bank and Lakeland Financial Corporation. Joining the Detroit Board are Ralph Babb, Jr., chairman, president and CEO of Comerica Incorporated; Roger Cregg, executive vice president and chief financial officer of Pulte Homes, Inc; and Linda Likely, executive director of the Kalamazoo Neighborhood Housing Service. In addition, Mark Gaffney, president of the Michigan AFL-CIO, left his seat on the Detroit Board to join the Chicago Board.

I learned early in my management career that the key to success is to surround yourself with the best people. With our talented staff at the Chicago Fed and the guidance of our Boards of Directors, we are well positioned for a successful year in 2004.

Michael H. Moskow
President and Chief Executive Officer
April 8, 2004

Shifting to New Payment System Standards

New payment technologies generate tremendous benefits for consumers and firms.

Incentives abound for payments markets to embrace new technological standards, as the prospects of reduced costs and higher profits drive innovation across the industry. But obstacles to coordination can stall migration toward new technologies. Amid all of this, the Fed can re-evaluate its policy role.

Financial institutions nationwide are considering the possibilities — and pitfalls — of a new law taking effect later this year requiring banks to begin accepting substitute paper images in place of original paper checks. Passage of the law, commonly known as Check 21, required cooperation from legislators, the Federal Reserve System, and industry participants throughout the payment system. A further benefit of the law, and one that may have been underemphasized, is the flexibility banks will have in choosing how they shift from paper-based to electronic payments (see related article below).

This flexibility calls attention to the Fed's preference to avoid overtly dictating technological change in payments markets. The view exemplified by Check 21 embraces the belief that it's beneficial to provide market participants with freedom in determining the future of payments technology. Such freedom fosters creativity and innovation in the development and marketing of new technologies. Ultimately, this flexibility should spur development of a more efficient payment system.

As this migration unfolds, the Fed can position itself in a new light: as a facilitator in fostering coordination, as a clearinghouse for valuable information about costs and benefits of new technologies, and as a careful observer alert to the danger that anti-competitive abuses might either accompany technological innovation or else hinder the pace of innovation.

Critical Juncture for Payments Systems

Payment systems find themselves at a critical juncture. While the "information revolution" brings a dizzying array of new technologies to payment markets, consumers and businesses must decide whether to commit resources to new payment technologies. They do so in volatile and uncertain markets with no assurance as to which technology will ultimately "win." And those in declining payment markets, most notably the market for check clearing, face a difficult question as well: What is the most efficient way of phasing out operations where uncertainty exists about how quickly the decline will occur?

Shifting to New Payment System Standards

For the Federal Reserve System, the questions are equally difficult:

- Are markets "getting it right" when they choose new technologies? Can they "stall" on older, inefficient technologies?
- What are the tradeoffs between market-based and more tightly managed policy approaches to achieving technological change in the payment system?
- How can the Fed best articulate policy that advances its goal – the smooth transition to the next-generation payment system?

These are some of the fundamental questions for the Federal Reserve and the payments industry today.

New Technologies: Innovation and Adoption

Before discussing what drives innovation and adoption of standards in payments systems, it's helpful to consider lessons learned from other cases where markets face the possibility of movement to new technological standards.

Consider the QWERTY computer keyboard system (so named for the first six letters on the top left of a computer keyboard). The QWERTY keyboard became the standard in the days of manual typewriters because its configuration minimized the risk that manual keys would get stuck when two letters were struck in succession. While this unusual key arrangement might have decreased typing speed, more importantly it reduced down time from sticking keys.

Computer keyboards today still use the QWERTY configuration. But why? There is no risk of key sticking on a PC keyboard. And other designs might be more intuitive to learn or lead to higher maximum typing speeds. There are two possible answers: One is that the market has "locked in" to an inferior technology. From a policy perspective, this raises the possibility that government intervention to move the market toward a superior standard might be beneficial. On the other hand, perhaps there has simply been no clearly superior new technology.

Networks and Coordination

The QWERTY system exemplifies the key issues surrounding technological change because the QWERTY keyboard, along with many other technological standards, is a network good. Its production and consumption occur in an environment where many individuals must make adoption decisions – and where each one's decision impacts the others. In such an environment, the transition to a new technological standard can require an exceptional degree of coordination.

Flexible Check 21 Law Sets Stage for Innovation

Commonly known as Check 21, the Check Clearing for the 21st Century Act becomes law on October 28, 2004. Check 21 requires banks and other financial institutions to accept substitute checks in place of original checks if these substitutes are presented to them by another bank. These substitute checks are paper copies of the original checks.

Check 21 establishes the legal validity of these substitute checks, mandates that paying banks honor substitute checks in the same way as original checks, and specifies technical standards to which substitute checks must adhere.

Despite its fairly modest scope and goals, the law's crafting and passage is the result of impressive cooperation from lawmakers, Fed officials, representatives of industry standards bodies, and industry participants throughout the payment system.

Speeding Toward Electronic Exchange of Check Information

The law is an effort to speed the move toward electronic exchange of check information rather than physical exchange of paper checks. In the long run, such arrangements will reduce costs and risks associated with handling, sorting, processing and returning checks, because electronic methods of accomplishing these tasks are easier and cheaper than current methods using paper checks. Additionally, banks adopting electronic exchange will gain more control over the location of their branches and ATMs, since they will no longer need to be geographically confined to check collection areas.

Because many banks will face transition costs associated with supporting dual infrastructures if they choose to process substitute checks, these banks may find it more attractive to enter into arrangements with other banks for electronic exchange. This will further accelerate movement toward electronics.

Technical Specifications

The new law requires the substitute check to contain an accurate and legible front-and-back image of the original. It must display the text, "This is a legal copy of your check. You can use it the same way you would use the original check." The MICR (magnetic-ink) coding on the substitute check must match that on the original, be machine-readable, and meet industry standards.

Flexibility for Financial Institutions

The scope of the act is revealing in the flexibility it affords banks. Banks currently present and return original checks unless they have entered into an agreement with another bank to process the checks electronically. Check 21 does not mandate that banks present checks electronically. It simply allows banks to send a substitute check instead of the original. This affords banks greater flexibility even if they do not enter into an arrangement for electronic exchange. For example, a bank can send an electronic image to its branch closest to the destination bank, then print the image and locally deliver it. In other words, the legislation does not mandate the electronic exchange of checks, but facilitates check processing by creating a standard format that allows banks to choose between paper, paperless, or some combination of the two when exchanging check information.

Why choose a policy option that values flexibility over specificity? Why risk a slower transition to electronics? These are difficult questions, but they relate to the same underlying theme: a faith in the ability of markets to foster transitions from one technology to another, through innovation and "creative destruction" – the process through which successful new technologies supplant older, more costly ones.

Payment networks face similar issues. Payment technologies are generally network goods, often involving diffuse and heterogeneous participants. Consider the coordination involved in setting up a debit card network. Consumers must adopt cards. Merchants must purchase card readers and subscribe to electronic networks. The networks themselves must develop and adopt technical standards allowing interoperability. And, banks must subscribe to common networks. Each of these groups has multiple decision-makers with diverse and possibly conflicting interests. How can the market overcome these barriers? Or suppose we start in an environment where checks are the dominant payment standard. Can a superior standard take over? And what about competition from other new technologies, such as credit cards?

One answer is that markets have proven to succeed even in the face of strong network effects. Of course this simplifies the issue a bit, but it is unambiguously true that there has been tremendous change in the payment system over the last two decades, even where new payment technologies have strong network effects. Debit cards, indeed, penetrated the market, and quite rapidly (see related article on page 8). It seems clear that markets can provide incentives for innovation and successful transitions between technological standards.

New Standards Often Result in Dramatic Reductions in Operating Costs

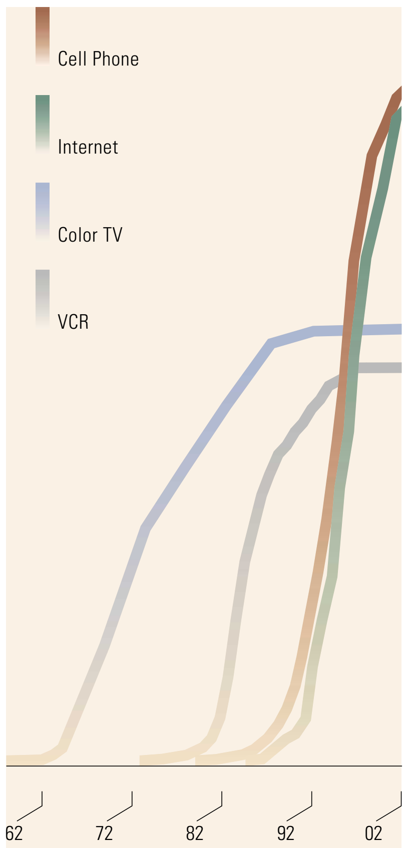
One reason we've observed shifts to new standards is that they often result in dramatic operating cost reductions, which create a tremendous incentive for firms interested in cutting expenses. Firms then pass on lower costs to consumers, spurring them to adopt the new standard. The rapid adoption of the World Wide Web is an excellent example. Development of the Web offered firms lower-cost ways of transmitting information and selling goods. Although its adoption seemingly required cooperation from a diverse host of users and developers because of network effects, the Web achieved market penetration within just a few years because it was such a large technological leap.

In other instances, early adoption by a small set of users can create a "bandwagon" effect that leads other adopters to get on board. The early adopters create a critical mass large enough to encourage those sitting on the fence to move to the new standard. This has even greater impact when large market players are the earliest adopters, which is often the case. Large players find adoption more attractive because they receive network benefits internally, giving them the proper incentives to adopt new technologies. This leads many new technologies to display an "S-shaped" pattern of adoption (see chart below). The "S" shape comes from a relatively slow period of initial adoption, followed by a rapid period of diffusion throughout the market. Adoption then flattens out as the market approaches saturation. Interestingly, it appears that in recent years the speed of adoption for new technologies has quickened – the Internet and cell phones are achieving much faster market penetration than earlier innovations such as color TVs or VCRs. This highlights modern markets' ability to drive technological change.

Fax machines offer a good illustration of these processes. Fax machines exhibit strong network effects. No one firm would want to be the first adopter without anyone else in the network to send or receive fax transmissions. This would seem to suggest that coordinating adoption would be difficult. Nonetheless, fax machines did achieve market adoption because large companies found them valuable for internal transmission of information across different offices. This "internalization" led large companies to embrace fax machine technology. That in turn created a bandwagon, attracting smaller users who found connection to the existing network valuable.

S-shaped Technology Adoption Patterns

Addoption of new technology often starts slowly and then accelerates quickly until critical mass is reached.



Source: World Bank

Of course, in many cases potential adopters of a new technology are smaller, and no one player has incentives strong enough to unilaterally adopt the new technology. Competition among multiple new technologies makes this problem more severe, because potential adopters find delay attractive in order to wait for the market to sort things out. And most problematic, if everyone delays, this sorting out never occurs.

How can markets solve this problem? One way is through the organization of standards bodies that foster communication and coordination. These bodies range from large-scale entities such as the International Organization for Standardization (ISO) and the American National Standards Institute (ANSI) to smaller bodies with narrower focuses on particular industries or types of technology. The World Wide Web Consortium (W3C), for example, is a standards body facilitating the development of common interoperability standards for the Web. Of course, achieving technological change through a standards body can be difficult, and fraught with delay or deception by industry participants. But in many ways, it's surprising to see how often these institutions actually work.

Profit Motive Spurs Adoption and Innovation

The profit motive also spurs diffusion of superior technologies. A new technological standard is often proprietary, yielding rewards to its inventor in the form of profits from licensing and sales. This allows the owner of a new technology to rally an uncoordinated and diffuse set of industry participants by sharing these profits, effectively paying other participants to adopt the new standard and thus solving the coordination problem.

Philips, for example, developed a proprietary technology for music: the compact disc (CD). Adoption of CD technology required the participation of a large and diverse set of network participants: musicians, recording studios, record labels, CD and CD player manufacturers, retail consumers, record stores, and numerous others. CDs also faced initial competition from other new formats such as Digital Audio Tape (DAT).

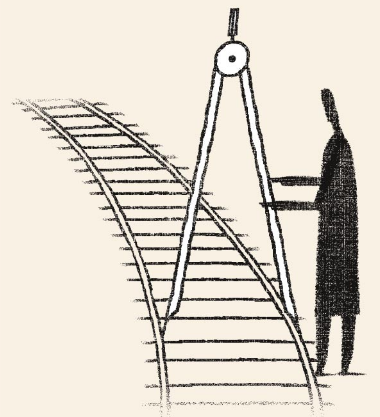
Philips solved this coordination problem by targeting points in the network where barriers to adoption were highest and then writing licensing agreements with major players in those market segments. It also developed cooperative relationships with DAT developers, effectively compensating them for their agreement to switch to CD technology.

Standards Are All Around Us

Put a CD into your computer, and it loads. Make a cell phone call, and it travels through airways to its destination. In the modern age, technological progress means "network goods" work with each other. That's because of standards: common technologies and modes of operation that create interoperability. The payments industry also has standards. These allow debit cards to function with readers, ATM cards to work with machines, and online bill payments to travel from your bank account to your biller. Other well-known standards:

Railroad Tracks

Imagine the wasted time if a train starting out in New York had to be unloaded in St. Louis because the railroad tracks did not line up with the train's wheels. That used to happen, and it prompted development of the standard railroad track 4 feet 8 inches wide. This gauge was mandated for use in the Transcontinental Railroad in 1864, and by 1886 had become the U.S. standard.



Fire Hydrants

Fire hose couplings always match fire hydrants, right? Not always. In 1904, reinforcements from New York, Philadelphia and Washington, D.C. turned out to help battle a blaze in Baltimore that engulfed 80 city blocks. But their fire hoses didn't fit the Baltimore hydrants. Shortly afterward, a national standard was created.

Source: American National Standards Institute

In payment systems that are still developing, PayPal provides an example of using market incentives to solve coordination problems associated with network effects. PayPal's person-to-person payment service is valuable only if many consumers sign up for it. PayPal handles this by subsidizing adoption, giving new consumers free purchasing power in exchange for signing up. This compensates each new consumer for the network benefit generated for other users.

Ownership of new technologies also sparks innovation. Since developing and bringing a successful innovation to market carries such large rewards, there are enormous incentives to bring new technological standards to market. And this isn't unique to payments markets. In other industries, such as pharmaceuticals, where research and innovation drive improvements in consumer welfare, there is a consensus that markets provide the strongest incentives for technological advance. This is the justification for our patent system, which guarantees innovators a return on their creations.

Of course, markets do not always guarantee the best outcome. In any setting, firms may exercise monopoly power or attempt to exclude viable competitors from bringing their products to market. Because the rewards to "winning" a standards battle are so large, these harmful motives can be particularly strong in markets where new technologies continually arise and supplant old standards.

Cautionary Tales: Standards and Market Failure

One danger associated with market mechanisms for choosing new standards is that multiple new standards often are developed simultaneously by competing firms, each with ownership. From the perspective of the standards' owners, it might be worthwhile to engage in a costly "standards war" because of the winner-take-all nature of competition. Such standards wars can be genuinely damaging to consumers as well as the firms. Additionally, standards wars can confuse customers and delay their commitment to new standards, stalling the market.

For example, in the early 1990s, two competing firms (British Satellite Broadcasting and Sky Television) offered incompatible satellite technology standards in the United Kingdom. While the technologies themselves presented minor differences to consumers, each company had committed huge sums to their development and marketing. Because both companies had made costly bets aimed at winning the standards war, they ended up engaging in a bloody "war of attrition" to control the market. This not only caused huge losses for each company, but paradoxically may have slowed satellite TV adoption. Consumers became confused about which technology would win – so confused that many deferred adopting satellite TV altogether. The market did ultimately resolve the problem: the two companies merged, consumer confusion lessened, and the rate of adoption accelerated. Nonetheless, the losses to consumers and firms up to that point could very well have been avoided.

In some of these cases, it isn't clear that standards bodies can help much. Standards bodies often require owners of proprietary technologies to give up their ownership in exchange for ratification by the standards body. Firms with a lot to gain from owning a winning standard will be reluctant to do this, and be unwilling to participate in the standards process.

Another complication is that in practice any one market may be governed by a set of standards bodies almost as numerous as the number of competing standards. Owners of standards can try to co-opt these standards bodies in order to promote their own standard. In this case, the different standards bodies just engage in a standards war of their own, causing delay and unnecessary expense.

A final critical risk is that the owner of a technological standard may come to dominate the market, allowing it to act anti-competitively. Because there are such strong network effects and large economies of scale in tech-related markets, the viability of competition is a concern. The operating system market is a good example. Such markets are vulnerable to the exercise of monopoly power. This can take the form of higher prices that harm consumers, or actions that exclude other competitors from the market, hindering innovation. The government's anti-trust case against Microsoft raised many of these issues, as have similar recent cases in payments markets against VISA and Mastercard.

In short, while markets can effectively manage transitions to new technological standards, the unique features of markets with network effects make them vulnerable to anti-competitive abuses. This highlights the importance of vigilant monitoring of the competitive environment. It also suggests that under certain circumstances, policy intervention may resolve uncertainty and speed the market toward a new technology with well-accepted superiority.

Electronic Payment Volume Hits 'Tipping Point'

More and more, Americans are embracing electronic payments. While paper checks remain quite popular, their use is sliding as other payment methods take hold.

In 2000, checks comprised nearly 60 percent of retail non-cash payments. Check use peaked in the United States in the mid-1990s, jumping from 32.8 billion checks in 1979 to 49.5 billion checks paid in 1995, before falling to approximately 40 billion checks paid in 2002. (The chart at right illustrates this trend.)

Growth of Debit and Credit Cards

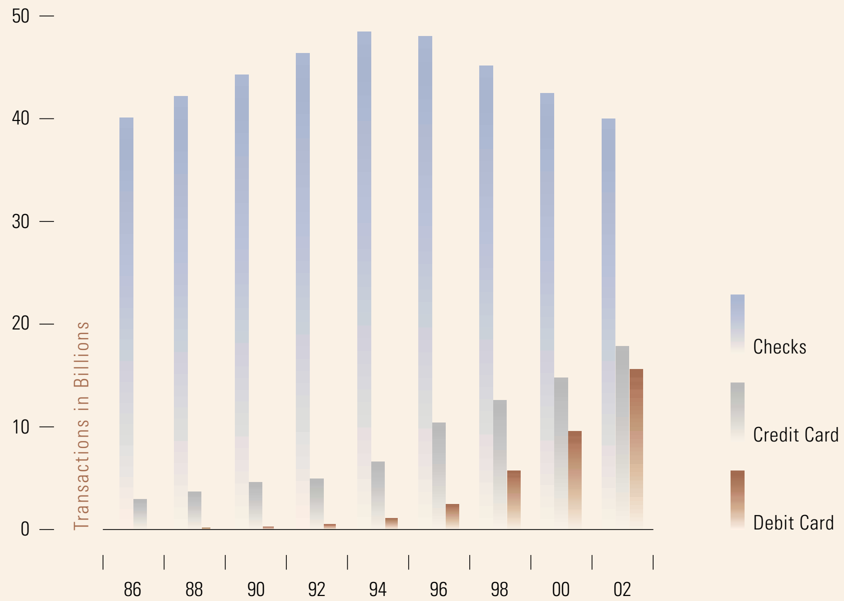
Technological competition to checks comes primarily from debit and credit cards. Volume for these transactions has accelerated dramatically since 1980, from roughly 5 billion to nearly 25 billion transactions in 2000. There is a consensus that the industry has reached a "tipping point," after which the volume of electronic payments will accelerate even faster. This appears to be true for debit cards in particular, where transactions increased from 9.6 billion in 2000 to 15.6 billion in 2002.

Many believe that these new technologies are cheaper than checks as payment technologies, and will therefore completely replace checks. Estimates vary as to when this will happen, and it is not clear which payment technologies will eventually "win" the battle.

It's possible debit or credit cards might eventually dominate payments markets as checks and cash once did. It's also possible that some as-yet-unknown-but-superior payment technology will sweep through the market and replace these technologies.

Electronic Payments Continue to Increase

As the number of checks declines, electronic payment volume grows.



Source: Card Industry Directory (various years) and Federal Reserve System data

What Should the Fed's Role be?

Striking a Balance in Public Policy

Given the advantages and disadvantages of markets as the engine of technological progress, what should policymakers do? Suppose there are multiple competing standards for a new payment technology. What should the Fed do? Should it step in and choose a winner? What best achieves a smooth transition to the next-generation payment system?

The answer might seem a bit paradoxical, but in some cases generating the swiftest transition requires granting freedom to market participants rather than mandating behavior. This preserves firms' incentives for innovation and sponsorship of coordination. It can bring superior new technologies to market faster and ultimately leaves consumers and producers better off.

The approach certainly carries risks, but allowing such freedom avoids some dangers associated with intervention. One is that policymakers may be less conversant with technology alternatives than participants in the market, making it difficult to pick the right standard. Another danger is that by choosing any technology at all and forcing the innovator to give up property rights to it, the policymaker may deprive innovators of the fruits of their labor. Such deprivation in turn reduces incentives to innovate.

Such an approach has already found its way into the thinking of other policymakers. The importance of preserving incentives to innovate was acknowledged by both sides in the Microsoft antitrust case. One proposed remedy in that case involved making the operating system "open," essentially forcing Microsoft to cede ownership. But what would this do to the incentives to successfully bring an operating system to market in the first place? If the engine of innovation is the profit motive, cutting off the stream of profits would surely slow down the engine's performance. The Department of Justice recognized this in its approach to the case, noting that the focus of effective policy in the Information Age should be developing balanced policy that leaves incentives for innovation intact, while preventing abuses that hinder the pace of innovation.

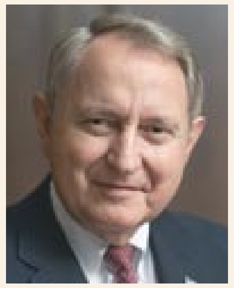
It is interesting to return to the scope and provisions of Check 21 (see page 4) in light of these points. Check 21 attempts to nudge the market away from what is perceived as a clearly inferior technology, without specifying what technology should replace it. This strategy leaves creators of new technology with strong incentives to bring new payment technologies to market. While it seems inevitable that markets will experience disruptions that harm some participants in the short run, this is an essential feature of the "creative destruction" that ultimately drives economic growth.

In this regard, as mentioned at the start of this article, the Fed can position itself in a new light as a policy entity in the 21st century, by striking a balance between its traditional role as regulator and its complementary role as facilitator of discussions among industry participants. The Fed should also continue to serve as a careful and objective observer alert to the danger that anti-competitive abuses might hinder the pace of innovation.

While it would be difficult for anyone, including the Fed, to predict how payments markets will evolve over the next century, its unique role can help ensure that these markets take full advantage of the remarkable creativity and ingenuity that has transformed our economy in the Information Age.

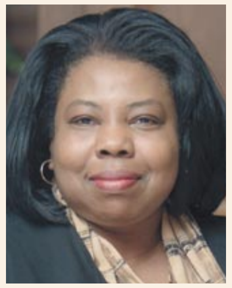
Board of Directors

Federal Reserve Bank of Chicago

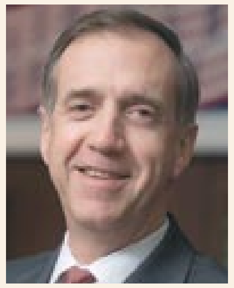


Chairman
Robert J. Darnall
Retired President and
Chief Executive Officer
Inland Steel Industries
Chicago, Illinois

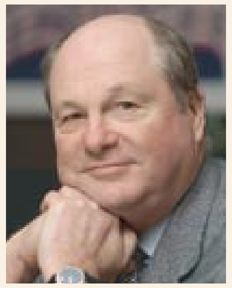
Deputy Chairman
W. James Farrell
Chairman and
Chief Executive Officer
Illinois Tool Works, Inc.
Glenview, Illinois



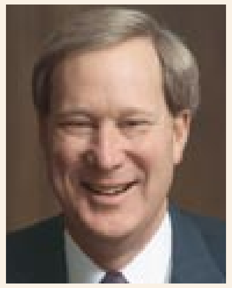
Connie E. Evans
President and
Chief Executive Officer
WSEP Ventures
Chicago, Illinois



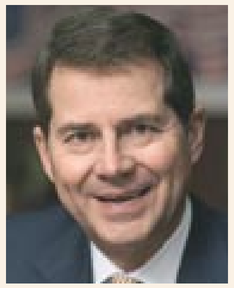
Jack B. Evans
President
The Hall-Perrine
Foundation
Cedar Rapids, Iowa



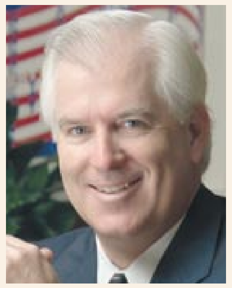
James H. Keyes
Chairman of the Board
Johnson Controls, Inc.
Milwaukee, Wisconsin



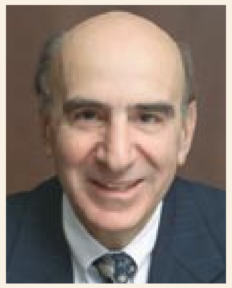
William A. Osborn
Chairman and
Chief Executive Officer
Northern Trust Corp.
and Northern Trust Co.
Chicago, Illinois



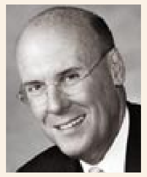
Alan R. Tubbs
President
Maquoketa State Bank
and Ohnward Bancshares
Maquoketa, Iowa



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



Robert R. Yohanan
Managing Director and
Chief Executive Officer
First Bank & Trust
Evanston, Illinois

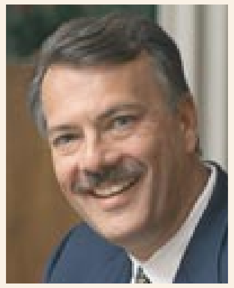


Three directors joined the Chicago Board in 2004:

The new directors are John A. Canning, Jr. (left to right), Chairman and Chief Executive Officer, Madison Dearborn Partners, Inc., Chicago, Illinois; Mark T. Gaffney, President, Michigan State AFL-CIO, Lansing, Michigan, who previously served on the Detroit Board; and Michael L. Kubacki, Chairman, President and Chief Executive Officer, Lake City Bank and Lakeland Financial Corporation, Warsaw, Indiana. Respectively, they replaced Robert J. Darnall, Jack B. Evans and Robert R. Yohanan.

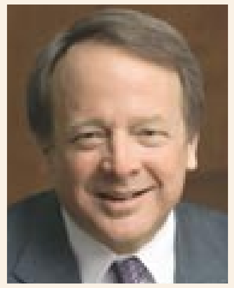
Board of Directors

Detroit Branch



Chairman
Timothy D. Leuliette
Chairman, President and
Chief Executive Officer
Metaldyne
Plymouth, Michigan

Robert E. Churchill
Chairman and
Chief Executive Officer
Citizens National Bank
Cheboygan, Michigan



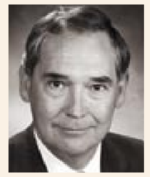
Edsel B. Ford, II
Director
Ford Motor Company
Dearborn, Michigan

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

Irvin D. Reid
President
Wayne State
University
Detroit, Michigan

David J. Wagner
Chairman
Fifth Third Bank
Grand Rapids,
Michigan

Tommi A. White
Chief Operating Officer
Compuware Corporation
Detroit, Michigan



Three directors joined the Detroit Branch Board in 2004:

The new directors are (left to right) Linda S. Likely, Executive Director, Kalamazoo Neighborhood Housing Services, Kalamazoo, Michigan; Ralph W. Babb, Jr., Chairman, President and Chief Executive Officer, Comerica Incorporated, Detroit, Michigan; and Roger A. Cregg, Executive Vice President and Chief Financial Officer, Pulte Homes, Inc., Bloomfield Hills, Michigan. Respectively, they replaced directors Mark Gaffney, David Wagner and Timothy Leuliette.

Management Committee

Federal Reserve Bank of Chicago

Michael H. Moskow
President
and Chief Executive
Officer

Gordon Werkema
First Vice President
and Chief Operating
Officer

Richard P. Anstee
Senior Vice President
Technology, Finance
and Support Services

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

Barbara D. Benson
Senior Vice President
Leadership Development
and CRSO

Charles L. Evans
Senior Vice President
and Director of
Research

Charles W. Furbee
Senior Vice President
Financial Services
Group

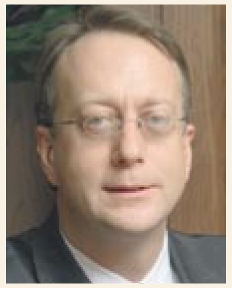
Edward J. Green
Senior Vice President
Financial Systems and
Risk Management

Glenn C. Hansen
Senior Vice President
Detroit Branch
and Cash Operations

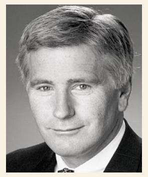
Karen Kane
Senior Vice President
Corporate
Communications

Elizabeth A. Knospe
Senior Vice President
and General Counsel
Legal Relations

Margaret K. Koenigs
Vice President
and General Auditor



James W. Nelson
Senior Vice President
Supervision
and Regulation



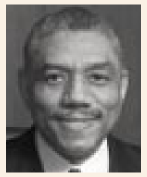
Robert G. Wiley joined the Bank in December 2003 as Senior Vice President of the Financial Services Group. He replaces Charles W. Furbee, who retired on March 31, 2004.

Angela D. Robinson
Senior Vice President
People Practices,
EEO Officer

Catherine M. Cummings
Special Assistant
to First Vice President

Althea Lee
Special Assistant
to President





General Auditor Jerome F. John (left) and Chief Financial Officer Carl E. Vander Wilt (center) retired in April 2003 after more than 29 and 35 years of service, respectively. Research Director William C. Hunter (right) left the Bank in August 2003 to become Dean of the School of Business at the University of Connecticut.

Executive Officers

Federal Reserve Bank of Chicago

Michael H. Moskow
President
and Chief Executive Officer

Gordon Werkema
First Vice President
and Chief Operating Officer

Central Bank Activities

Economic Research and Programs

Charles L. Evans
Senior Vice President and
Director of Research

Regional Economic Programs

William A. Testa
Vice President
and Economic Advisor

Financial Markets Regulation and Payments Issues

Douglas D. Evanoff
Vice President
and Economic Advisor

Macroeconomic Policy Research

David Marshall
Vice President
and Economic Advisor

Spencer D. Krane
Vice President
and Economic Advisor

Microeconomic Policy Research

Daniel G. Sullivan
Vice President
and Economic Advisor

Statistics

Valerie J. Van Meter
Vice President

Consumer and Community Affairs

Alicia Williams
Vice President

Financial Systems and Risk Management

Edward J. Green
Senior Vice President

Thomas G. Ciesielski
Vice President

Supervision and Regulation

James W. Nelson
Senior Vice President

Operations

James A. Bluemle
Vice President
and Division Leader

Large Bank Supervision

Richard C. Cahill
Vice President
and Division Leader

Community/Compliance and CRA

Douglas J. Kasl
Vice President
and Division Leader

Risk Analysis

Catharine M. Lemieux
Vice President
and Division Leader

Services to Depository Institutions

Customer Relations and Support Office

William A. Barouski
Senior Vice President

Barbara D. Benson
Senior Vice President

Marketing and Communications

Laura Hughes
Vice President

Michael J. Hoppe
Vice President
and National Accounts
Manager

Sales

Sean Rodriguez
Vice President

Dick Kuxhausen
Vice President

Electronic Access and Fedline

Ira R. Zilist
Vice President

Customer Support

Frank S. McKenna
Vice President

Detroit Branch and Cash Operations

Glenn C. Hansen
Senior Vice President

Cash Operations

Jerome D. Nicolas
Vice President

Financial Services Group

Charles W. Furbee
Senior Vice President

Brian D. Egan
Vice President

Check Processing

Deborah A. Schneider
Vice President

Check Adjustment and Check Modernization

Mary H. Sherburne
Vice President

Business Development, Strategy and Support

Barbara J. Peryer
Vice President

Support Functions

Audit

Margaret K. Koenigs
Vice President
and General Auditor

Corporate Communications

Karen Kane
Senior Vice President
and Board Secretary

G. Douglas Tillett
Vice President

Legal Relations

Elizabeth A. Knospe
Senior Vice President
and General Counsel

Yurii Skorin
Vice President
and Associate General
Counsel

Anna M. Voytovich
Vice President
and Associate General
Counsel

People Practices

Angela D. Robinson
Senior Vice President and
EEO Officer

Leadership Development and Strategic Planning/Projects

Barbara D. Benson
Senior Vice President

Technology, Finance and Support Services

Richard P. Anstee
Senior Vice President

Technology Group

David E. Ritter
Vice President

Budget

Jeffery Anderson
Vice President

Finance

Gerard J. Nick
Vice President

Support Services

Kristi L. Zimmermann
Vice President

Advisory Councils

Federal Advisory Council Seventh District Representative

Alan G. McNally
Harris Bankcorp. Inc.
Chicago, Illinois

Seventh District Advisory Council

Thomas Kendall Brown
Ford Motor Company
Dearborn, Michigan

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

Richard L. Clarke
Healthcare Financial Management Association
Westchester, Illinois

Erroll B. Davis, Jr.
Alliant Energy
Madison, Wisconsin

Darcy L. Evon
I-Street, Inc.
Chicago, Illinois

Katherine M. Hudson
Brady Corporation
Milwaukee, Wisconsin

Christopher P. LaMothe
Oxford Financial Group, Ltd.
Indianapolis, Indiana

Pamela Forbes Lieberman
TruServ Corporation
Chicago, Illinois

Bret R. Maxwell
MK Capital
Chicago, Illinois

Leslie Smith Miller
Iowa State Savings Bank
Knoxville, Iowa

David Newby
Wisconsin State AFL-CIO
Milwaukee, Wisconsin

Matthew Paull
McDonald's Corporation
Oak Brook, Illinois

Robert G. Potter
United Food and Commercial Workers Local 951
Grand Rapids, Michigan

Quintin E. Primo III
Capri Capital
Chicago, Illinois

James R. Reilly
Chicago Convention & Tourism Bureau
Chicago, Illinois

Donald J. Schneider
Schneider National, Inc.
Green Bay, Wisconsin

Leland Strom
Strom Farm
Elgin, Illinois

Jim Theisen
Theisen Home Farm Auto
Dubuque, Iowa

Jean Wojtowicz
Cambridge Capital Management Corp.
Indianapolis, Indiana

Community Bank Council

Illinois

Roger Devries
Milledgeville State Bank
Milledgeville, Illinois

Barbara J. Kuhl
First Busey Corporation
Urbana, Illinois

Richard K. McCord
Illinois National Bancorp
Springfield, Illinois

Indiana

Brent Clifton
Grabill Bank
Grabill, Indiana

Michael L. Cox
First Merchants Corporation
Muncie, Indiana

Charles L. Crow
Community Bank
Noblesville, Indiana

Allan B. Hubbard
E&A Industries, Inc.
Indianapolis, Indiana

Michael L. Kubacki
Lake City Bank
Warsaw, Indiana

Iowa

David M. Bradley
First Federal Savings Bank of Iowa
Fort Dodge, Iowa

Michael Bauer
Quad City Bank & Trust Company
Davenport, Iowa

Elizabeth Garst
Raccoon Valley State Bank
Coon Rapids, Iowa

Richard A. Waller
Security National Bank
Sioux City, Iowa

Michigan

Gary M. Burkhardt
Century Bank & Trust
Coldwater, Michigan

Richard M. Carncross
Signature Bank
Bad Axe, Michigan

David S. Hickman
United Bank & Trust
Tecumseh, Michigan

John R. Kluck
First National Bank of Gaylord
Gaylord, Michigan

Joseph F. Salas
CSB Bank
Capac, Michigan

Wisconsin

Paul C. Adamski
The Pineries Bank
Stevens Point, Wisconsin

Michael Falbo
State Financial Services Corporation
Hales Corners, Wisconsin

Richard Hansen
Johnson Bank
Racine, Wisconsin

Philip G. Holland
Ixonia State Bank
Ixonia, Wisconsin

David Kopperud
Peoples State Bank
Wausau, Wisconsin

Executive Changes

Directors

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

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

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

Director appointments and elections at the Chicago Reserve Bank and its Detroit Branch effective in 2003 were:

Robert J. Darnall re-designated chairman

W. James Farrell re-designated deputy chairman

William A. Osborn re-elected to a three-year term

Connie E. Evans re-elected to a three-year term

Timothy D. Leuliette re-designated Branch chairman

Tommi A. White appointed to a three-year term as Branch director

Edsel B. Ford II re-appointed to a three-year term as Branch director

Mark T. Gaffney re-appointed to a three-year term as Branch director

At year-end 2003 the following appointments and elections to terms beginning in 2004 were announced:

W. James Farrell re-appointed to a three-year term and designated chairman

Miles D. White designated deputy chairman

John A. Canning, Jr. appointed to complete two years of an unexpired term

Mark T. Gaffney elected to a three-year term

Michael L. Kubacki elected to a three-year term

Edsel B. Ford II designated Branch chairman

Linda S. Likely appointed as Branch director to complete two years of an unexpired term

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

Roger A. Cregg appointed to a three-year term as Branch director

Advisory Councils

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

Each year the Chicago Reserve Bank's board of directors selects a representative to this group. Dennis J. Kuester, president and chief executive officer, Marshall & Ilsley Corporation, was selected to be the 2004 representative.

The Seventh District Advisory Council and the Community Bank Council members meet twice a year to provide their views on current business conditions to Chicago Fed President Michael Moskow and other senior officials of the Bank. Input from Council members on regional economic conditions helps contribute to the Federal Reserve System's formulation of national monetary policy.

Effective in 2003, the councils' appointments are staggered to ensure stability and continuity within the group from year to year.

Executive Officers

A number of executive changes were made among the Bank's executive officers during 2003.

The Bank's board of directors acted on the following senior vice president promotions during 2003:

Charlie L. Evans to Senior Vice President and Director of Research

New vice presidents or senior vice presidents appointed by the board in 2003 were:

Laura Hughes, Vice President, CRSO Marketing and Communications

Robert Wiley, Senior Vice President, Financial Services Group

The following executive officers retired during 2003:

Kathleen H. Williams, Vice President, retired after 28 years of service

Carl E. Vander Wilt, Senior Vice President and Chief Financial Officer, retired after 35 years of service

Jerome F. John, Senior Vice President and General Auditor, retired after 29 years of service

William C. Hunter, Senior Vice President and Director of Research, retired after 15 years of service

Operations Volumes

	Dollar Amount		Number of Items	
	2003	2002	2003	2002
Check Operations				
Checks, NOWs and Share Drafts Processed	1.7 Trillion	1.8 Trillion	2.3 Billion	2.3 Billion
Fine Sort and Packaged Checks Handled	10.5 Billion	10.7 Billion	16.2 Million	21.8 Million
U.S. Government Checks Processed	0.0 Billion	16.9 Billion	0.0 Million	13.4 Million
Cash Operations				
Currency Processed	52.5 Billion	53.5 Billion	3.4 Billion	3.3 Billion
Unfit Currency Destroyed	7.1 Billion	7.6 Billion	615.4 Million	712.3 Million
Coin Bags Received and Processed	1.6 Billion	1.5 Billion	3.8 Million	2.9 Million
Loans to Depository Institutions				
Total Loans Made During Year	4.8 Billion	3.6 Billion	0.6 Thousand	1.0 Thousand

CONTENTS

Auditor Independence 19
Financial Reports 20
Financial Statements 23
Notes to Financial Statements 26

Auditor Independence

The firm engaged by the Board of Governors for the audits of the individual and combined financial statements of the Reserve Banks for 2003 was PricewaterhouseCoopers LLP (PwC). Fees for these services totaled $1.4 million. To ensure auditor independence, the Board of Governors requires that PwC be independent in all matters relating to the audit. Specifically, PwC may not perform services for the Reserve Banks or others that would place it in a position of auditing its own work, making management decisions on behalf of the Reserve Banks, or in any other way impairing its audit independence. In 2003, the Bank did not engage PwC for advisory services.

2003 Financial Reports

Management Assertion
February 2004
To the Board of Directors of the Federal Reserve Bank of Chicago

The management of the Federal Reserve Bank of Chicago ("FRBC") is responsible for the preparation and fair presentation of the Statement of Financial Condition, Statement of Income, and Statement of Changes in Capital as of December 31, 2003 (the "Financial Statements"). The Financial Statements have been prepared in conformity with the accounting principles, policies, and practices established by the Board of Governors of the Federal Reserve System and as set forth in the Financial Accounting Manual for the Federal Reserve Banks ("Manual"), and as such, include amounts, some of which are based on judgments and estimates of management. To our knowledge, the Financial Statements are, in all material respects, fairly presented in conformity with the accounting principles, policies and practices documented in the Manual and include all disclosures necessary for such fair presentation.

The management of the FRBC is responsible for 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 FRBC 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, we believe that the FRBC maintained an effective process of internal controls over financial reporting including the safeguarding of assets as they relate to the Financial Statements.

Federal Reserve Bank of Chicago

Michael H. Moskow
President
and Chief Executive Officer

Gordon Werkema
First Vice President
and Chief Operating Officer

Richard Anstee
Senior Vice President
and Chief Financial Officer

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

Report of Independent Accountants
to the Board of Directors of the Federal Reserve Bank of Chicago

We have examined management's assertion, included in the accompanying Management Assertion, that the Federal Reserve Bank of Chicago ("FRB Chicago") maintained effective internal control over financial reporting and the safeguarding of assets as they relate to the financial statements as of December 31, 2003, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. FRB Chicago's management is responsible for maintaining effective internal control over financial reporting and safeguarding of assets as they relate to the financial statements. Our responsibility is to express an opinion on management's assertion based on our examination.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants and, accordingly, included obtaining an understanding of internal control over financial reporting, testing and evaluating the design and operating effectiveness of internal control, and performing 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 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 FRB Chicago maintained effective internal control over financial reporting and over the safeguarding of assets as they relate to the financial statements as of December 31, 2003 is fairly stated, in all material respects, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

This report is intended solely for the information and use of management and the Board of Directors and Audit Committee of FRB Chicago, and any organization with legally defined oversight responsibilities and is not intended to be and should not be used by anyone other than these specified parties.

PricewaterhouseCoopers LLP

March 1, 2004

PRICEWATERHOUSECOOPERS

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

Report of Independent Auditors
to the Board of Governors of the Federal Reserve System and
the Board of Directors of the Federal Reserve Bank of Chicago

We have audited the accompanying statements of condition of The Federal Reserve Bank of Chicago (the "Bank") as of December 31, 2003 and 2002, and the related statements of income and changes in capital for the years then ended, which have been prepared in conformity with the accounting principles, policies, and practices established by the Board of Governors of The Federal Reserve System. These financial statements are the responsibility of the Bank's management. Our responsibility is to express an opinion on 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, 2003 and 2002, and results of its operations for the years then ended, in conformity with the basis of accounting described in Note 3.

PricewaterhouseCoopers LLP

March 1, 2004

2003 Financial Statements

Statements of Condition, in Millions

As of December 31,	2003	2002
Assets		
Gold certificates	$ 982	$ 1,080
Special drawing rights certificates	212	212
Coin	90	126
Items in process of collection	942	1,170
Loans to depository institutions	17	7
U.S. government and federal agency securities, net	68,267	75,212
Investments denominated in foreign currencies	2,033	1,827
Accrued interest receivable	510	642
Bank premises and equipment, net	157	149
Other assets	40	38
Total Assets	**$ 73,250**	**$ 80,463**
Liabilities and Capital		
Liabilities:		
Federal Reserve notes outstanding, net	$ 58,694	$ 56,508
Securities sold under agreements to repurchase	2,592	2,482
Deposits:		
Depository institutions	2,350	3,943
Other deposits	4	4
Deferred credit items	781	997
Interest on Federal Reserve notes due U.S. Treasury	29	123
Interdistrict settlement account	6,831	14,583
Accrued benefit costs	93	92
Other liabilities	28	17
Total Liabilities	**71,402**	**78,749**
Capital:		
Capital paid-in	924	857
Surplus	924	857
Total Capital	**1,848**	**1,714**
Total Liabilities and Capital	**$ 73,250**	**$ 80,463**

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

Statements of Income, in Millions

For the years ended December 31,	2003	2002
Interest Income		
Interest on U.S. government and federal agency securities	$ 2,358	$ 2,926
Interest on investments denominated in foreign currencies	27	29
Interest on loans to depository institutions	-	1
Total Interest Income	**2,385**	**2,956**
Interest Expense		
Interest expense on securities sold under agreements to repurchase	23	2
Net Interest Income	**2,362**	**2,954**
Other Operating Income		
Income from services	108	107
Reimbursable services to government agencies	6	11
Foreign currency gains, net	276	229
U.S. government securities gains, net	-	9
Other income	8	9
Total Other Operating Income	**398**	**365**
Operating Expenses		
Salaries and other benefits	169	158
Occupancy expense	22	20
Equipment expense	19	21
Assessments by Board of Governors	75	70
Other expenses	65	73
Total Operating Expenses	**350**	**342**
Net Income Prior to Distribution	**$ 2,410**	**$ 2,977**
Distribution of Net Income		
Dividends paid to member banks	$ 53	$ 49
Transferred to surplus	67	64
Payments to U.S. Treasury as interest on Federal Reserve notes	2,290	2,864
Total Distribution	**$ 2,410**	**$ 2,977**

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

Statements of Changes in Capital, in Millions

For the years ended December 31, 2003 and December 31, 2002	Capital Paid-in	Surplus	Total Capital
Balance at January 1, 2002 (15.9 million shares)	**$ 793**	**$ 793**	**$ 1,586**
Net income transferred to surplus	–	64	64
Net change in capital stock issued (1.3 million shares)	64	–	64
Balance at December 31, 2002 (17.2 million shares)	**$ 857**	**$ 857**	**$ 1,714**
Net income transferred to surplus	–	67	67
Net change in capital stock issued (1.3 million shares)	67	–	67
Balance at December 31, 2003 (18.5 million shares)	**$ 924**	**$ 924**	**$ 1,848**

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

Notes to Financial Statements

1. Structure

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

In accordance with the Federal Reserve Act, supervision and control of the Bank is exercised by a Board of Directors. The Federal Reserve Act specifies the composition of the Board of Directors for each of the Reserve Banks. Each board is composed of nine members serving three-year terms: three directors, including those designated as Chairman and Deputy Chairman, are appointed by the Board of Governors, 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, the sale of securities under agreements to repurchase, 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 ("F/X") 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 with 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 because 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. A Statement of Cash Flows, therefore, would not provide any additional useful information. There are no other significant differences between the policies outlined in the Financial Accounting Manual and GAAP.

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

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, 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 on 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 SDR certificates, at the direction of the U.S. Treasury, for the purpose of financing SDR acquisitions or for financing exchange stabilization operations. At the time SDR transactions occur, the Board of Governors allocates SDR certificate transactions among Reserve Banks based upon Federal Reserve notes outstanding in each District at the end of the preceding year. There were no SDR transactions in 2003 or 2002.

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 certain lending agreements and deposit sufficient collateral before credit is extended. Loans are evaluated for collectibility, and 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.

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.

In December 2002, the FRBNY replaced matched sale-purchase ("MSP") transactions with securities sold under agreements to repurchase. MSP transactions, accounted for as separate sale and purchase transactions, are transactions in which the FRBNY sells a security and buys it back at a rate specified at the commencement of the transaction. Securities sold under agreements to repurchase are treated as secured borrowing transactions with the associated interest expense recognized over the life 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 the 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 the FRBNY on a daily basis, with additional collateral obtained as necessary. The securities loaned continue to be accounted for in the SOMA.

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 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 drawee. 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 that 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. Decisions regarding the securities and foreign currencies transactions, including their purchase and sale, are motivated by monetary policy objectives rather than profit. Accordingly, market values, earnings and any gains or losses resulting from the sale of such 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, net." Foreign-currency-denominated assets are revalued daily at current foreign currency market exchange rates in order to report these assets in U.S. dollars. Realized and unrealized gains and losses on investments denominated in foreign currencies are reported as "Foreign currency gains, net." 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 sold under agreements to repurchase, securities loaned, investments denominated in foreign currency, interest income and expense, 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. 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.

In 2003, additional interest income of $61 million, representing one day's interest on the SOMA portfolio, was accrued to reflect a change in interest accrual methods, of which $6.2 million was allocated to the Bank. Interest accruals and the amortization of premiums and discounts are now recognized beginning the day that a security is purchased and ending the day before the security matures or is sold. Previously, accruals and amortization began the day after the security was purchased and ended on the day that the security matured or was sold. The effect of this change was not material; therefore, it was included in the 2003 interest income.

E. Bank Premises, Equipment and Software

Bank premises and equipment are stated at cost less accumulated depreciation. Depreciation is calculated on a straight-line basis over estimated useful lives of assets ranging from two to fifty years. 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. Costs incurred for software, either developed internally or acquired for internal use, during the application development stage are capitalized based on the cost of direct services and materials associated with designing, coding, installing, or testing software. Capitalized software costs are amortized on a straight-line basis over the estimated useful lives of the software applications, which range from two to five years.

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

Federal Reserve notes are the circulating currency of the United States. These notes are issued through the various Federal Reserve agents (the Chairman of the Board of Directors of each Reserve Bank) 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 2003, the Federal Reserve Act was amended to expand the assets eligible to be pledged as collateral security to include all Federal Reserve Bank assets. Prior to the amendment, only gold certificates, special drawing rights certificates, U.S. government and federal agency securities, securities purchased under agreements to resell, loans to depository institutions, and investments denominated in foreign currencies could be pledged as collateral. 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 par value of securities pledged for securities sold under agreements to repurchase is similarly deducted. 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 that 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 the Bank's Federal Reserve notes outstanding, reduced by its currency holdings of $8,141 million and $7,397 million at December 31, 2003 and 2002, 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 semiannually. 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. Pursuant to Section 16 of the Federal Reserve Act, Reserve Banks are required by the Board of Governors to transfer to the U.S. Treasury as interest on Federal Reserve notes 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.

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.

K. Taxes

The Reserve Banks are exempt from federal, state, and local taxes, except for taxes on real property. The Bank's real property taxes were $4 million and $3 million for the years ended December 31, 2003 and 2002, respectively, and are reported as a component of "Occupancy expense."

L. Recent Accounting Developments

In May 2003, the Financial Accounting Standards Board issued SFAS No. 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity." SFAS No. 150, which will become applicable for the Bank in 2004, establishes standards for how an issuer classifies and measures certain financial instruments with characteristics of both liabilities and equity and imposes certain additional disclosure requirements. When adopted, there may be situations in which the Bank has not yet processed a member bank's application to redeem its Reserve Bank stock. In those situations, this standard requires that the portion of the capital paid-in that is mandatorily redeemable be reclassified as debt.

M. 2003 Restructuring Charges

In 2003, the System restructured several operations, primarily in the check and cash services. The restructuring included streamlining the management and support structures, reducing staff, decreasing the number of processing locations, and increasing processing capacity in the remaining locations.

Footnote 10 describes the restructuring and provides information about the Bank's costs and liabilities associated with employee separations and contract terminations. The costs associated with the write-down of certain Bank assets are discussed in footnote 6. Costs and liabilities associated with enhanced pension benefits for all Reserve Banks are recorded on the books of the FRBNY as discussed in footnote 8 and those associated with the Bank's enhanced postretirement benefits are disclosed in footnote 9.

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 and the related premiums, discounts and income, with the exception of securities purchased under agreements to resell, 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 approximately 10.105% and 11.768% at December 31, 2003 and 2002, respectively.

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

	2003	2002
Par value:		
Federal agency	$ -	$ 1
U.S. government:		
Bills	24,740	26,676
Notes	32,676	35,056
Bonds	9,951	12,337
Total par value	$ 67,367	$ 74,070
Unamortized premiums	990	1,266
Unaccreted discounts	(90)	(124)
Total allocated to Bank	**$ 68,267**	**$ 75,212**

The total of SOMA securities bought outright was $675,569 million and $639,125 million at December 31, 2003 and 2002, respectively.

As noted in footnote 3, the FRBNY replaced MSP transactions with securities sold under agreements to repurchase in December 2002. At December 31, 2003 and 2002, securities sold under agreements to repurchase with a contract amount of $25,652 million and $21,091 million, respectively, were outstanding, of which $2,592 million and $2,482 million were allocated to the Bank. At December 31, 2003 and 2002, securities sold under agreements to repurchase with a par value of $25,658 million and $21,098 million, respectively, were outstanding, of which $2,593 million and $2,483 million were allocated to the Bank.

The maturity distribution of U.S. government securities bought outright and securities sold under agreements to repurchase, that were allocated to the Bank at December 31, 2003, was as follows (in millions):

Maturities of Securities Held	U.S. Gov't Securities (Par value)	Securities Sold Under Agreements to Repurchase (Contract amount)
Within 15 days	$ 4,824	$ 2,592
16 to 90 days	14,081	–
91 days to 1 year	16,579	–
Over 1 year to 5 years	18,902	–
Over 5 years to 10 years	5,185	–
Over 10 years	7,796	–
Total	**$ 67,367**	**$ 2,592**

At December 31, 2003 and 2002, U.S. government securities with par values of $4,426 million and $1,841 million, respectively, were loaned from the SOMA, of which $447 million and $217 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 purchased 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 10.234 percent and 10.802 percent at December 31, 2003 and 2002, respectively.

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

	2003	2002
European Union Euro:		
Foreign currency deposits	$ 703	$ 603
Government debt instruments including agreements to resell	419	356
Japanese Yen:		
Foreign currency deposits	151	193
Government debt instruments including agreements to resell	751	666
Accrued interest	9	9
Total	**$ 2,033**	**$ 1,827**

Total investments denominated in foreign currencies were $19,868 million and $16,913 million at December 31, 2003 and 2002, respectively.

The maturity distribution of investments denominated in foreign currencies which were allocated to the Bank at December 31, 2003, was as follows (in millions):

Maturities of Investments Denominated in Foreign Currencies	
Within 1 year	$ 1,867
Over 1 year to 5 years	132
Over 5 years to 10 years	34
Over 10 years	–
Total	**$ 2,033**

At December 31, 2003 and 2002, there were no outstanding F/X swaps or material open foreign exchange contracts.

At December 31, 2003 and 2002, the warehousing facility was $5,000 million, with no balance outstanding.

6. Bank Premises, Equipment and Software

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

	2003	2002
Bank premises and equipment:		
Land	$ 10	$ 10
Buildings	140	137
Building machinery and equipment	22	21
Construction in progress	15	4
Furniture and equipment	94	101
Subtotal	$ 281	$ 273
Accumulated depreciation	(124)	(124)
Bank premises and equipment, net	**$ 157**	**$ 149**
Depreciation expense, for the years ended	**$ 15**	**$ 14**

In 2002, land was acquired to build a new building for the Detroit branch. Construction is expected to be completed in 2005.

Bank premises and equipment at December 31 include the following amounts for leases that have been capitalized (in millions):

	2003	2002
Bank premises and equipment	$ 0.6	$ –
Accumulated depreciation	(0.2)	–
Capitalized leases, net	**$ 0.4**	**$ –**

The Bank leases unused space to outside tenants. Those leases have terms ranging from one to nine years. Rental income from such leases was $3 million for each of the years ended December 31, 2003 and 2002. Future minimum lease payments under noncancelable agreements in existence at December 31, 2003, were (in millions):

2004	$ 3
2005	3
2006	3
2007	1
2008	1
Thereafter	1
	$ 12

The Bank has capitalized software assets, net of amortization, of $10 million for each of the years ended December 31, 2003 and 2002. Amortization expense was $2 million and $9 million for the years ended December 31, 2003 and 2002, respectively.

Assets impaired as a result of the Bank's restructuring plan as discussed in footnote 10 include software, furniture, and equipment. Asset impairment losses of $416 thousand for the period ending December 31, 2003 were determined using fair values based on quoted market values or other valuation techniques and are reported as a component of "Other expenses."

7. Commitments and Contigencies

At December 31, 2003, the Bank was obligated under noncancelable leases for premises and equipment with terms ranging from one to approximately eight 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 $4 million for each of the years ended December 31, 2003 and 2002. 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, 2003, were (in thousands):

	Operating	Capital
2004	$ 1,993	$ 132
2005	828	132
2006	687	132
2007	381	132
2008	274	22
Thereafter	741	–
	$ 4,904	**550**
Amount representing interest		90
Present value of net minimum lease payment		**$ 460**

In 2003, the Bank entered into a $76.5 million long-term contract for services relating to a new Detroit branch building, none of which was paid by December 31, 2003 or recognized as a liability in the financial statements.

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 one percent of the capital paid-in of the claiming Reserve Bank, up to 50 percent of the total capital paid-in of all Reserve Banks. Losses are borne in the ratio 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, 2003 or 2002.

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"). In addition, certain Bank officers participate in the Supplemental Employee Retirement Plan ("SERP").

The System Plan is a multi-employer plan with contributions fully funded by participating employers. Participating employers are the Federal Reserve Banks, the Board of Governors of the Federal Reserve System, and the Office of Employee Benefits of the Federal Reserve Employee Benefits System. No separate accounting is maintained of assets contributed by the participating employers. The

FRBNY acts as a sponsor of the Plan for the System and the costs associated with the Plan are not redistributed to the Bank. The Bank's projected benefit obligation and net pension costs for the BEP and the SERP at December 31, 2003 and 2002 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 $5.9 million and $5.8 million for the years ended December 31, 2003 and 2002, 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 cost is actuarially determined using a January 1 measurement date.

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

	2003	2002
Accumulated postretirement benefit obligation at January 1	$ 85.2	$ 75.2
Service cost-benefits earned during the period	1.9	1.7
Interest cost of accumulated benefit obligation	5.5	5.7
Actuarial loss	19.1	11.0
Contributions by plan participants	0.9	0.4
Benefits paid	(6.1)	(4.2)
Plan amendments	–	(4.6)
Accumulated postretirement benefit obligation at December 31	**$ 106.5**	**$ 85.2**

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

	2003	2002
Fair value of plan assets at January 1	$ –	$ –
Actual return on plan assets	–	–
Contributions by the employer	5.2	3.8
Contributions by plan participants	0.9	0.4
Benefits paid	(6.1)	(4.2)
Fair value of plan assets at December 31	**$ –**	**$ –**
Unfunded postretirement benefit obligation	$ 106.5	$ 85.2
Unrecognized prior service cost	18.5	21.1
Unrecognized net actuarial loss	(45.0)	(27.1)
Accrued postretirement benefit costs	**$ 80.0**	**$ 79.2**

Accrued postretirement benefit costs are reported as a component of "Accrued benefit costs."

At December 31, 2003 and 2002, the weighted average discount rate assumptions used in developing the benefit obligation were 6.25 percent and 6.75 percent, respectively.

For measurement purposes, a 10.00 percent annual rate of increase in the cost of covered health care benefits was assumed for 2004. Ultimately, the health care cost trend rate is expected to decrease gradually to 5.00 percent by 2011 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, 2003 (in millions):

	One Percentage Point Increase	One Percentage Point Decrease
Effect on aggregate of service and interest cost components of net periodic postretirement benefit costs	$ 1.3	$ (1.1)
Effect on accumulated postretirement benefit obligation	$ 16.0	$ (12.8)

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

	2003	2002
Service cost-benefits earned during the period	$ 1.9	$ 1.7
Interest cost of accumulated benefit obligation	5.5	5.7
Amortization of prior service cost	(2.5)	(2.1)
Recognized net actuarial loss	1.1	1.0
Net periodic postretirement benefit costs	**$ 6.0**	**$ 6.3**

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

The recognition of a special termination loss is the result of enhanced retirement benefits provided to employees during the restructuring described in footnote 10. Because the special termination loss is less than $50 thousand, the amount is not displayed in the tables above.

Following the guidance of the Financial Accounting Standards Board, the Bank elected to defer recognition of the financial effects of the Medicare Prescription Drug Improvement and Modernization Act of 2003 until further guidance is issued. Neither the accumulated postretirement benefit obligation at December 31, 2003 nor the net periodic postretirement benefit cost for the year then ended reflect the effect of the Act on the plan.

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 at December 31, 2003 and 2002, were $13 and $12 million, respectively. This cost is included as a component of “Accrued benefit costs.” Net periodic postemployment benefit costs included in 2003 and 2002 operating expenses were $2 million for each year.

10. Business Restructuring Charges and Asset Impairments

In 2003, the Bank announced plans for restructuring to streamline operations and reduce costs, including consolidation of check operations and staff reductions in various functions of the Bank. These actions resulted in the following business restructuring charges:

Major categories of expense (in millions):

	Total Est. Costs	Acc. Liab. 12/31/02	Total Charg.	Total Paid	Acc. Liab. 12/31/03
Employee separation	$ 6.7	$ –	$ 6.7	$ –	$ 6.7
Contract termination	0.6	–	0.6	–	0.6
Other	–	–	–	–	–
Total	**$ 7.3**	**$ –**	**$ 7.3**	**$ –**	**$ 7.3**

Employee separation costs are primarily severance costs related to reductions of approximately 262 staff and are reported as a component of “Salaries and other benefits.” Contract termination costs include the charges resulting from terminating existing lease contracts and are shown as a component of “Other expenses.”

Costs associated with the write-downs of certain Bank assets, including software, furniture and equipment are discussed in footnote 6. Costs associated with enhanced pension benefits for all Reserve Banks are recorded on the books of the FRBNY as discussed in footnote 8. Costs associated with enhanced postretirement benefits are disclosed in footnote 9.

Future costs associated with the restructuring that are not estimable and are not recognized as liabilities will be incurred in 2004.

The Bank anticipates substantially completing its announced plans by November 2004.

Our Mission

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

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

Our Vision

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

The main article of this annual report was written by Victor Stango, Senior Economist; Carrie Jankowski, Associate Economist; and Tom Ciesielski, Vice President, and is based on Stango's research.

FEDERAL RESERVE BANK
OF CHICAGO

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

Detroit Branch
160 West Fort Street
P.O. Box 1059
Detroit, Michigan 48231-1059
(313) 961-6880

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

Indianapolis Office
8311 North Perimeter Road
Indianapolis, Indiana 46241
(317) 244-7744

Milwaukee Office
304 East State Street
P.O. Box 361
Milwaukee, Wisconsin
53201-0361
(414) 276-2323

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

Peoria Facility
6100 West Dirksen Parkway
Peoria, Illinois 61607
(309) 633-5000