Flanking the main entrance of the Federal Reserve Bank of Cleveland are statues representing Security and Integrity, the essential characteristics of a central bank. Security, the powerful figure on the right, clutches a strongbox with one hand and an upraised sword with the other. To her left stands the gentler figure of Integrity, bearing her rolls of office and an uplifted rod, as if to swear to her worthiness of the trust invested in her.

The main lobby of the Bank reflects Italian Renaissance styling, with Sienna marble walls and a hand-decorated ceiling of ornamental plaster.
To Depository Institutions in the Fourth Federal Reserve District:

The past year has been exciting and challenging for this Bank—indeed, for all depository institutions. The passage of the Depository Institutions Deregulation and Monetary Control Act of 1980 has accelerated developments that in time may revolutionize our financial structure and the role of the central bank, as described in this Annual Report. The comprehensive nature of this legislation and the changes it has set in motion raise a number of other issues that have not been resolved. It seems appropriate to mention them here, if only to call attention to the need for further discussion and for public awareness.

The legislation has fundamentally altered the relationships between Federal Reserve Banks and depository institutions. The entire concept of membership has lost much of its traditional meaning. Our services will now be available to all depository institutions, on an equal basis, regardless of membership in the Federal Reserve System. The ownership of Federal Reserve stock is mandatory for national banks and optional for other banks. None of the new depository institutions that are now required to report data and hold reserves owns stock in this Bank, nor do they have any voice in the selection of our board of directors. Member banks elect six of the nine members of each Reserve Bank’s board of directors; the Federal Reserve Board of Governors selects the other three members. It may be desirable to broaden the composition of the Reserve Banks’ boards to include the new depository institutions. Whether this is best accomplished by enacting the boards of directors or increasing the number of institutions eligible to select directors or by enlarging membership are questions that deserve discussion.

The sweeping changes enabled by the Monetary Control Act will make depository institutions more and more alike. This homogenizing process will also have far-reaching ramifications for the regulatory structure, which at present is both complex and overlapping. Many issues must be reconsidered. How many different regulatory bodies or groups are necessary? How should they be reorganized or coordinated? What is the proper role of the Federal Reserve System if such reorganization occurs? Although opinions differ on these matters, it has been our experience that the effective performance of System monetary policy and operations functions requires accurate and timely information and important System participation in this process. As depository institutions become more alike, differences in competitive criteria and merger standards will become even more troublesome. Future changes in state and federal laws to permit wider branching—both intra- and interstate—will accelerate the process. The pressure to amend regulations can only increase, as all depository institutions move toward competition on more equal grounds. This in turn will force changes in the regulatory structure and procedures.

The Federal Reserve System originally was designed for a unit banking structure—a structure that has been slowly eroding, and the rate of this erosion has been accelerating. The payments mechanism responsibilities of the Federal Reserve have already felt the influence of this evolution, and additional pressure will arise from the new pricing environment. Pricing turns the spotlight on costs of each specific service, which in turn raises questions about service territories and district boundaries, as well as the appropriateness and location of physical facilities.

The Monetary Control Act was designed primarily to achieve a specific goal—the control of the money supply. The legislation has accelerated the changes that are occurring in that elusive concept “money.” Reserve requirements have been extended to savings banks, savings and loan associations, and credit unions, as well as to all banks. But financial initiative both in the creation and the use of “money” is not limited to these institutions, and already many gaps in our network are recognized. We must continue to modify and enlarge our definitions as needed, both for equitable competitive conditions as well as adequate control of money.

Given the new operating environment mandated by the Monetary Control Act, the need for uniform responses throughout the Federal Reserve System becomes more necessary. This Bank believes that such uniformity should not, however, be equated with increased centralization of Federal Reserve decision-making at the Board of Governors. We strongly believe that each of the Federal Reserve District Banks should continue to contribute to the total System, whether in designing monetary policy or in administering new regulations. Decentralized contributions truly result in the Federal Reserve System equaling more than the sum of its 13 parts.

The Federal Reserve Bank of Cleveland is a service organization, providing useful services in an efficient manner. Certainly this Bank strives to excel in the products and the services that it offers, and it shall continue to do so. This Bank shall continue to be flexible in its response to the needs of customers, while also seeking to assure the stable environment necessary for the operation
new services should this Bank be prepared to implement in view of changes in market structure and demands? At what level of service can (and should) this Bank announce the discontinuation of a service? Which customers would be disadvantaged, and how? What other Federal Reserve objectives might suffer, or what other service prices might come under related upward pressure?

These are but a few of the questions and issues that the evolution set in place by last year’s legislation will bring to the forefront in the future. Although we have ended the year 1980 with many questions still unresolved, we are excited by the new questions and the new operating environment. The Bank and its staff look to the future with enthusiasm and dedication to serve our new public, as well as the many institutions that we have served in the past.

The many changes that this Bank has met in the past year reflect the diligence and capabilities of the Bank’s employees. We are proud of their accomplishments and appreciate their diligence. We are also mindful of the continued support of our member banks and the interest of our new constituents, and to all we express our sincere thanks.

J.L. Jackson
Chairman of the Board

Willis J. Winn
President

February 12, 1981
The Monetary Control Act—Mandate for Change

The past year marked the beginning of sweeping changes for the Federal Reserve Bank of Cleveland and for depository institutions in general. The Depository Institutions Deregulation and Monetary Control Act of 1980, signed into law in March, mandates far-reaching changes in the regulatory framework governing financial markets and depository institutions. The Monetary Control Act (MCA) is also likely to be the impetus for further changes in the structure of financial markets. Already, the role of this Bank in providing services to depository institutions in the Fourth District has been permanently altered. The institutions that use these services will be noticeably different in terms of identity, size, and even location. Some of the changes wrought by the Monetary Control Act are discussed in this Annual Report—specifically the changes at this Bank and the challenges and opportunities posed for the Federal Reserve System and for depository institutions alike.

1. Pressures for Change

The ultimate impact of the reforms mandated by the Monetary Control Act cannot be known for some time. However, the basic congressional objectives underlying the legislation are clear— to promote a more effective monetary policy and to foster increased competition in financial markets.

Monetary policy concerns were prominent in the passage of the MCA, especially as worsening inflation brought monetary policy to the forefront of national attention. Reducing inflation requires an effective monetary control mechanism that can slow the growth of the money supply over a prolonged period of time. As this Bank’s 1979 Annual Report indicated, market forces and institutional changes had created a number of significant problems for the monetary control mechanism. Within the financial structure of the United States, noninflationary money growth requires the effective control of bank reserves. This fact was highlighted in October 1979, some six months prior to the enactment of the MCA, when the Federal Open Market Committee adopted a new set of techniques for controlling money. These techniques focus more directly on control of bank reserves than had the previous control measures.

Prior to passage of the MCA, the Federal Reserve was tightly enmeshed in a vicious circle. Inflation, together with efforts to restrict growth of bank reserves and, ultimately, growth of money and credit, resulted in high interest rates. High interest rates in turn worsened the inequities between member banks (whose reserve balances were the basis for monetary control) and nonmember depository institutions. Member banks understandably sought to avoid the burden of high required levels of non-interest-bearing reserve balances. Moreover, many adjustments that the Federal Reserve might have made to strengthen the link between reserves and money, such as restructured reserve requirements and stricter administration of discount lending, would have further increased the competitive disadvantages of member banks and thus the incentive to leave the Federal Reserve System.
Dwindling Federal Reserve membership clearly compromised the effectiveness of the monetary control mechanism. A narrowing reserve base made it progressively more difficult to predict the volume of member-bank reserves consistent with the targeted stock of money. The growing proportion of financial instruments outside Federal Reserve requirements and data-reporting systems also added to the difficulty of interpreting the various money supply measures (see chart 1).

The Monetary Control Act addresses these problems in several ways. First, it requires reserves on transaction accounts and nonpersonal time deposits for depository institutions. These institutions are required to provide data to the Federal Reserve. The structure of reserve requirements has been simplified and the average level reduced significantly. Reserve requirements for member banks will be gradually reduced to the new levels over a 3½-year period, while requirements for nonmember depository institutions will be increased to the same new levels over an eight-year phase-in period.

Other regulations also impinged on the effectiveness of the monetary control mechanism. Depository institutions were precluded from explicitly paying interest on transaction accounts, and inflation had pushed interest rates far above Regulation Q time deposit rate ceilings. The availability of computer and telecommunications technology at declining real costs made it possible to avoid deposit rate limits. Imaginative new accounts and transfer arrangements offered by depository institutions and, more disquietingly, by nondeposit financial institutions and even nonfinancial business firms, became increasingly attractive to consumers and businessmen. Sharp periodic shifts in flows of funds occurred whenever interest rates rose significantly above the regulatory ceilings. Some comprehensive relaxation of deposit rate regulation was a requisite both for an effective monetary-policy control mechanism and for more meaningful measurement of the money supply.

Second, the Monetary Control Act authorizes all depository institutions to offer interest-bearing payment accounts to individuals effective December 31, 1980. In addition, the removal of the Regulation Q ceilings on time and savings deposit rates was mandated as soon as feasible but no later than March 31, 1986. The task of overseeing the phase-out of the Regulation Q ceilings was assigned to the Depository Institutions Deregulation Committee (DIDC).

The extension of reserve requirements to all depository institutions...
made it possible to deal with another concern. Lack of open access to Federal Reserve services and a lack of competition in the provision of these services had led to inefficiencies in their delivery to consumers and businesses. To correct these inefficiencies, the third major feature of the Monetary Control Act provides for direct access to Federal Reserve services for all depository institutions subject to reserve requirements and requires that Federal Reserve services be explicitly priced. The result should be expanded opportunities for competition between Federal Reserve and private-sector suppliers of services to depository institutions, particularly in the area of the payments mechanism. Eventually, enhanced competition should lead to lower costs, more innovation in both services and equipment, and thus greater efficiency and more benefits for the public.

The exact impact of these competitive adjustments is impossible to predict at this time. Greater competition will force efficient and inefficient market participants alike to adjust their operations and to redefine their role in the marketplace. Given the large number of depository institutions, more competition may mean fewer and perhaps different institutions. Nevertheless, the underlying presumption is that increased competition is worth the price.

Efforts to reform the U.S. financial industry are not new. Recognizing the widening functions and growing competitiveness of financial institutions with different charters, the 1961 report of the Commission on Money and Credit recommended greater flexibility in the powers of depository institutions and fewer restrictions on the “free flow of funds.”

Public concern accompanying the Penn Central collapse in 1970 was reflected in the presidential appointment of the Hunt Commission in June 1970 to study the nation’s financial structure. Some of the Hunt Commission’s recommendations presaged the Monetary Control Act. For example, there were recommendations to abolish Regulation Q restrictions on deposit interest rates and to widen the availability of checking account services and credit cards. The report also recommended changes that would have broadened reserve requirements. On the other hand, the Hunt Commission report recommended that the payment of interest on demand deposits continue to be prohibited.

Throughout this period, rising interest rates and interest rate ceilings produced disintermediation and threatened...
Title II: Depository Institutions Deregulation Act of 1980 (new law)

Provides for the orderly phaseout and ultimate elimination of ceilings on interest rates on accounts and deposits at depository institutions. Sets up the Depository Institutions Deregulation Committee and defines its membership as the heads of the Treasury and the five federal financial regulatory agencies, and directs that they work toward providing all depositors with a market rate of return on their savings. Sets a maximum of six years for the phaseout of ceilings and the subsequent expiration of the committee itself.

Title III: Consumer Checking Account Equity Act of 1980 (new law)

Permits the nationwide offering of NOW accounts as of December 31, 1980. Allows all commercial banks to offer ATS accounts and all federally chartered savings and loan associations to operate remote service units as of March 31, 1980. Permits the Federal Home Loan Banks to process and settle check-like instruments provided that the banks charge for these services. Permits federally insured credit unions to offer share draft accounts. Permits the Central Liquidity Facility to clear transactions on such accounts and to charge fees for clearing. Raises deposit and account insurance to $100,000 with associated increases in insurance rates. Awards additional lending authority to credit unions, and raises their maximum loan rate ceiling to 15 percent per annum.

Title IV: Powers of Thrift Institutions and Miscellaneous Provisions

Increases lending and investing powers of federal savings and loan associations; removes geographic restrictions on their lending; and allows a higher loan-to-value ratio, second mortgages, the exercise of trust powers, and credit card services. Establishes a federal interagency task force to study the impact of high interest rates on thrift institutions. Expands the lending powers of mutual savings banks and their authority to accept demand deposits.

Title V: State Usury Laws

Overrides state laws or constitutional provisions that limit the rate or amount of interest on residential mortgage loans or on any accounts or deposits at depository institutions. Removes similar restrictions on large business and agricultural loans. Amends or repeals various existing laws to enable the new provisions.

Title VI: Truth in Lending Simplification and Reform Act (new law)

Incorporates modifications, clarifications, and redefinations into the Truth in Lending Act (15 U.S.C. 1602). Requires model disclosure forms and clauses in readily understandable language. Covers accuracy of annual percentage rates, liability of credit cardholders, and advertising of open-end credit plans.

Title VII: Amendments to the National Banking Laws

Amends national bank powers to hold real property. Authorizes Comptroller of the Currency to revoke the trust powers of a national bank and to proclaim a legal holiday for national banks for emergency reasons. Defines a bankers' bank. Terminates the national bank closed-receivership fund.

Title VIII: Financial Regulation Simplification Act of 1980 (new law)

Requires for the next five years that federal financial regulatory agencies review all existing regulations and plan all new regulations to be clearly written, necessary, efficient, and effective, avoiding costly burdens on the public.

Title IX: Foreign Control of U.S. Financial Institutions

Sets a three-month moratorium (until July 1, 1980) on the takeover of any domestic financial institution by a foreigner unless necessary to prevent insolvency or in the nature of an intrafirm reorganization or an ordered divestiture.

NOTE: This summary is by no means complete and should not be used for legal reference.
the ability of financial institutions to meet the demands for funds. Some financial intermediaries, trapped between relatively low interest rate ceilings and high market interest rates, found themselves unable to compete with other financial institutions and with new investment instruments, such as large negotiable CDs, Eurodollars, real estate investment trusts, money market mutual funds, and direct purchase of new U.S. Treasury issues by the public. The dramatic expansion in the volume of assets held in short-term, interest-paying arrangements with nondepository institutions continued.

Pressures for legislative reform were mounting in many quarters. By 1975, the House Banking Committee, in its Financial Institutions and the Nation's Economy (FINE) study, again turned attention to the potential benefits of reform. It soon became clear, however, that comprehensive legislative action was unlikely. Competing interests led to stalemate rather than compromise on most issues, as groups became entrenched in defense of perceived vital interests. Voluntary membership in the Federal Reserve System was one of these issues.

As Federal Reserve membership continued to erode, the System became increasingly concerned about the effectiveness of monetary policy actions (see chart 2). With the change in policy emphasis in October 1979, the focus of monetary policy shifted further toward the direct control of bank reserves. At the same time, the proportion of bank deposits against which Federal Reserve reserve requirements did not apply was increasing. During the fourth quarter of 1979 and the first few weeks of 1980, for example, 69 banks gave notice of withdrawal from membership—during a period when the acceleration of prices seemed to indicate that inflation was out of control. Membership simply had become too expensive for a growing number of banks.

Although pressures for legislation to deal with these problems were strong, progress was slow. Constrained by an out-dated, unchanged regulatory framework, a complex structure of financial markets had evolved, bringing with it many conflicting objectives and interests.

Early in 1980, acceleration of inflation and continued loss of Federal Reserve membership added impetus to several pieces of legislation that had been slowly moving through Congress. One was the perennial bill to solve the membership problem. Others were bills to remove Regulation Q, relax lending restrictions on thrift institutions, and permit negotiable order of withdrawal (NOW) accounts. Interest rates had reached unprecedented levels, and the implicit cost of membership increased. Two banks in Pennsylvania, with combined deposits totaling over $3 billion, announced their withdrawal from membership. In testimony before the Senate Banking, Housing, and Urban Affairs Committee in February, Federal Reserve Chairman Paul A. Volcker revealed that a Federal Reserve survey suggested an additional 670 banks were considering withdrawal. Finally, longstanding differences were cast aside, consensus emerged, and legislative changes long advocated but just as long delayed occurred with breathtaking
The Data Services Department of the main office receives reports from institutions in the Fourth District. speed. By March 23, a congressional joint conference had agreed on a final version of a bill, which was passed by Congress and signed by President Carter on March 31, 1980. A new era had dawned for the financial industry.

II. Impact on the Federal Reserve Bank of Cleveland in 1980

The Monetary Control Act had a marked impact on this Bank in 1980. Many of our services, formerly provided to member banks only, will be made available to all depository institutions that hold reserves. The MCA contained new definitions of deposits subject to reserve requirements, applied them to all depository institutions, and stipulated access to Federal Reserve services in a pricing environment for all depository institutions. The legislation enacted in March would begin to take effect in six months.

Data Reporting and Reserve Maintenance

Depository institutions with transaction accounts or nonpersonal time deposits are required to report deposit data for the calculation of required reserves. The data are also used in the construction and interpretation of the monetary aggregates. At the Federal Reserve Bank of Cleveland, deposit reports stream into the Data Services Department at the main office and the Accounting Departments at the Cincinnati and Pittsburgh offices. Many of the Bank's accounting and data reporting systems have been automated for several years. Virtually all of the computer programs for reserve accounting and deposit data reporting were modified in the second half of 1980 to meet the requirements of the new legislation.

The data services function maintains the computerized "central file"—originally a list of commercial banks (member and nonmember) and branches in the Fourth District. At the end of July 1980, the central file contained 664 banks. Under the Monetary Control Act, the number of institutions to be contacted (if not serviced) in the Fourth
In November a total of 990 depository institutions, with $15 million or more in deposits, reported data weekly under the new requirements (see table 1). Over 600 institutions, with $2 million to $15 million in deposits, began to report data on a quarterly basis in January 1981.

Nearly 1750 District depository institutions have not yet begun to report data to the Federal Reserve. These are certain nonmember institutions with less than $2 million in total deposits—largely credit unions and savings and loan associations. The entire question of their reporting and maintaining reserves has been deferred at least until May 1981.

The immediate impact on reserve balances held on deposit at this Bank was modest in 1980 because of the phase-in provisions of the legislation. Reserve requirements of nonmember banks and nonbank depository institutions will be increased to the new levels over an eight-year period. The first step was instituted in November for institutions with more than $15 million in total deposits. Because the vault cash levels of most nonmember institutions exceeded the first phase of their reserve requirements, only a few new reserve deposit accounts were established. Most member-bank reserve requirements will be reduced over a 3½-year period. The first installment of those reductions occurred in November 1980.

The Discount Window

The MCA provides all depository institutions subject to reserve requirements with access to the discount window. Following passage of the legislation, the Federal Reserve revised its regulations governing the discount window to accommodate newly eligible institutions. A booklet containing information on credit services and the administration of the discount window was prepared and distributed to all depository institutions in the Fourth District.

Two basic types of credit programs are available to depository institutions. The first—adjustment credit—is available on a short-term basis, either to assist depository institutions in meeting unforeseen temporary requirements for funds or to cushion adjustment to more persistent outflows. The second basic program is extended credit, one form of which is seasonal credit. Seasonal credit can be provided to smaller institutions that lack ready access to national money markets or to special industry lenders. Adjustment credit and advances made under the seasonal credit program are at the basic discount rate, although the Federal Reserve retains the option to apply a surcharge to the basic rate.

Extended credit is also available to help meet difficulties arising from exceptional circumstances or problems at a specific depository institution, where the provision of such temporary assistance is in the public interest. Extended credit for these purposes would normally be at a rate in excess of the basic rate.

Member banks have found the adjustment credit useful. A sizable share of bank liabilities is in transaction accounts, which tend to be more volatile than thrift accounts. As the provisions of the Monetary Control Act become effective, nonmember depository institutions may also develop similar needs for adjustment credit. Adjustment credit is an important buffer for individual depository institutions against financial disruption.

Institutions eligible to borrow from the Federal Reserve are expected to rely
### Table 1 Deposit Reporting of Fourth District Depository Institutions

<table>
<thead>
<tr>
<th>Type of institution</th>
<th>Weekly&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Quarterly&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Deferred&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member banks</td>
<td>382</td>
<td>39&lt;sup&gt;d&lt;/sup&gt;</td>
<td>0</td>
</tr>
<tr>
<td>Nonmember banks</td>
<td>172</td>
<td>103</td>
<td>0</td>
</tr>
<tr>
<td>Mutual savings banks</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Savings and loan associations</td>
<td>398</td>
<td>168</td>
<td>26</td>
</tr>
<tr>
<td>Credit unions</td>
<td>28</td>
<td>297</td>
<td>1,717</td>
</tr>
<tr>
<td>Branches of foreign banks</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Edge Act corporations</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>990</strong></td>
<td><strong>607</strong></td>
<td><strong>1,743</strong></td>
</tr>
</tbody>
</table>

---

<sup>a</sup> As of November 12, 1980.

<sup>b</sup> As of January 1981.

<sup>c</sup> Deferred at least until May 1981.

<sup>d</sup> Prior to the Monetary Control Act, all member banks reported weekly and continued to do so throughout 1980. In 1981, 79 member banks with less than $15 million in deposits became eligible for quarterly reporting, yet 40 of these banks chose to continue weekly reporting.

---

III. Preparing for the Future

Pricing and wider access may lead to sweeping changes in demand for the entire range of services currently offered by the Federal Reserve. Open access will greatly increase the number of institutions that can use Federal Reserve services. On the other hand, the introduction of explicit prices for those services may reduce the number of institutions that actually use them. Although these changes will not take place overnight, the MCA has set in motion a process that could lead to a new market structure whose ultimate form is now uncertain. As the Federal Reserve prices its services directly, banks—correspondent and respondent alike—will compare costs and change their own services and prices in response. Each change is likely to prompt further adjustments. At present the Reserve Banks have little solid indication about what the ultimate service demand will be.

Regardless of the level of demand, the Federal Reserve System has every intention of carrying out its basic service responsibility—to maintain an efficient and effective payments mechanism for the nation. Over the years the Federal Reserve has played a major role in modernizing the payments mechanism. A long series of innovations have enhanced service, reduced costs, and handled volume increases in the payments mechanism. In recent years planning and implementation have centered on newer, more productive equipment and systems designed to accommodate increased demands. Significant increases in productivity have been achieved at this Reserve Bank. The continuation of these efforts will help the Federal Reserve to remain competitive and retain a prominent place in the payments mechanism.
The Federal Reserve Bank of Cleveland introduced a number of changes in 1980 that illustrate our ability to respond successfully to the challenges of a competitive environment.

Currency Processing

The Reserve Banks act as agents for the federal government in distributing new and reusable currency, accepting surplus cash, and replacing currency no longer fit for circulation. Historically, cash handling was a relatively high-cost operation, because each note was inspected manually to determine currency fitness and authenticity. There has been a longstanding effort on the part of the Reserve Banks to control currency-handling costs. Increases in currency volume in the 1960s precipitated the use of sampling and weighing techniques and increased dependence on machines such as tickometer counting equipment and medium-speed processors with counterfeit detection capabilities.

After extensive study, the Federal Reserve System contracted for the competitive design and construction of a prototype automated currency-processing system, known as CVCS (currency verification, counting, and sorting system). The equipment embodying this new technology was installed in 1979 at the Cleveland, Cincinnati, and Pittsburgh offices, and additional equipment was installed in 1980. Approximately 80 percent of the currency deposited in the Fourth District is now processed on high-speed equipment.

The CVCS system efficiently performs all of the basic currency-processing functions. Each of the six machines handles up to 67,000 notes per hour, verifying each piece of currency for denomination and identifying and rejecting improper notes. The machines evaluate the physical condition of each note against a quality level established for notes fit for recirculation. Currency that is determined to be fit is assembled in packages (“straps”) of 100. Currency detected by the machine’s sensors as unfit for reissue due to tears, repairs, soiling, and/or a high degree of wear is shredded and destroyed as part of the processing operation.

The new technology has several benefits. Foremost is an improvement in the general quality of recirculated currency. Second, the number of fit notes previously destroyed prematurely has been reduced. In the past, packages of unfit currency deposited by banks invariably contained some fit notes, yet the entire bundle was destroyed because it was not cost-effective to inspect each note. With the rising cost of printing Federal Reserve notes, significant savings are realized in recovering fit notes.

A third benefit of CVCS processing is an improvement in counterfeit detection. Formerly, counterfeit notes were discovered by “feel” or by simple magnetic devices. Because the CVCS equipment contains a sophisticated counterfeit detector, most counterfeits are now spotted.

Each of the Bank’s high-speed currency-processing machines can handle up to 67,000 notes per hour.
High-speed check sorters read the coding on each check, transmit the dollar amount and routing number to a central computer, and sort checks for delivery to appropriate depository institutions.

Another benefit of the CVCS system is the elimination of former labor-intensive and costly currency destruction procedures. Before 1980, the destruction of unfit notes required extensive verification and cancellation procedures involving as many as six employees. Today the CVCS equipment shreds unfit notes on their first trip through the machine.

Although this first generation of high-speed equipment has significantly improved the currency-processing capabilities of this Bank, additional improvements can be made. Planning for a second generation of machines has already begun, to improve further the quality of currency in circulation and reduce currency-processing costs.

Check Clearing

In terms of dollar value, paper checks are the primary means of payment for ordinary transactions in the United States today. The number of paper checks written each year has been growing rapidly. In 1973, the 12 Federal Reserve Banks together cleared 10 billion checks; by 1980, the number had grown to 16.5 billion, an average 7.4 percent annual rate of increase (see chart 3). Now the huge volume of checks drawn on banks is being supplemented by orders for third-party payments drawn on thrift institutions and credit unions, especially since the MCA extended NOW account powers to depository institutions nationwide.

The Fourth District Federal Reserve offices receive, sort, and dispatch 4.2 million checks daily. To process such an enormous number of checks within a
few hours of receipt, accurate high-speed equipment is essential. High-speed reader/sorters are used to read the MICR (magnetic ink character recognition) coding printed on each check, transmit the amount and routing numbers on each check to a central computer, and sort each check for delivery to the appropriate depository institution. At the same time, the computer processor compiles the information necessary to credit the depositing institutions that honored checks for their customers and to charge the paying institutions that in turn will charge their customers who wrote the checks.

During 1980, the Federal Reserve Bank of Cleveland began planning to replace its current high-speed check reader/sorters with faster, more reliable equipment. The new check-sorting equipment will significantly reduce preparation time, increase throughput to more than 90,000 checks per hour, and reduce the number of mis-sorted items. Another major improvement will be a reduction in the number of items rejected, due to an improved double-reading feature for all documents on the new equipment. Fewer rejects will significantly reduce the costly man-hours required to process non-readable items.

The new check-processing equipment can accommodate future operations improvements and new services for depository institutions. The equipment may make it possible to exchange magnetic tapes containing the images of items, thus enabling depository institutions to "image-match" items for easier reconciling and processing. Various geographic sort patterns, commingling of endpoints during sorting, deposit analysis, and larger cash letters are some additional features and services that will be possible.

Another productivity improvement in check processing during 1980 was the introduction of new sorters for less labor-intensive processing of rejected checks. The new machines automatically feed each document and read as many of the MICR characters as possible; a display screen informs the operator of the characters that are not readable (amount or routing number) for each check. The operator uses a keyboard to enter the correct amount or routing number, and the check is then sorted automatically to the correct pocket. Currently, over one-half of all reject items are being fully read and sorted without operator assistance.

Transportation Services

In an ongoing effort to improve services, the Bank is attempting to reduce costs in its check-delivery and armored-transportation networks. Significant operations savings have been achieved at all of the Fourth District offices. Transportation represents about one-third of the Federal Reserve costs of check processing. Many of the Fourth District's interdistrict check-transportation networks have been competitively bid in the last year or two, resulting often in lower costs and sometimes in a change in carrier.

The Bank also has elected to employ "rate protests" before public utilities commissions when no competitive alternative source of supply was available. These initiatives have required extensive legal and consultative support because of the "expert" testimony required by public utilities commissions in rate-making decisions. Recent decisions handed down by the Public Utilities Commission of Ohio, for example, have resulted in substantial rate reductions for intra-state check shipments.

Selected intra- and interdistrict armored-transportation networks were also bid competitively among contract carriers in 1980. Major rate reductions have enhanced service and offset rapid
cost increases in these areas. Additional armored networks will be selected for bidding in 1981.

Over the past two years, transportation services in the Fourth District have become much more competitive as new carriers have entered the marketplace. If this trend continues, there will be less need for rate protests before regulatory bodies.

Because of the MCA, new depository institutions are entering the payment-service marketplace, adding new endpoints to the Fourth District's check-delivery network. The cost of transportation services is expected to increase as labor, energy, and capital costs accelerate. Faced with increasing demand and costs, depository institutions may welcome the check-and-balance environment provided by multiple transportation vendors. As the cost differential between over-the-road and electronic-delivery networks narrows, electronic rather than paper payment alternatives also may become more attractive to depository institutions and the public.

Federal Reserve Communications System

While checks are currently a more common form of payment in the United States, massive transfers of funds are made electronically. On an average business day, approximately $256 billion is transferred by Fedwire (Federal Reserve communications system). Fedwire has been used for years to transfer funds between participating institutions in virtually every part of the country.

Transfers to and from the accounts of businesses and consumers result in immediate debits and credits to member-bank reserve or clearing accounts held at Federal Reserve Banks.

Over the years, the Federal Reserve communications system has been expanded to accommodate a huge increase in both funds and securities transfers. The volume of messages is currently increasing at a rate of more than 25 percent per year. Since the Federal Reserve and the U.S. Treasury instituted a computerized "book-entry" system for U.S. government securities, ownership of the securities is electronically transferred without the risk and cost of physically moving securities. This is especially advantageous when large denominations are transferred.

The Federal Reserve Bank of Cleveland has encouraged other applications of electronic funds transfer (EFT). These include the formation of local and regional automated clearinghouses (ACHs) for the exchange of government and commercial payments in computer format. Not only does EFT produce significant economies in paper handling, but the system also reduces risks of loss and theft in the transfer of funds. The direct deposit of Social Security payments is a well-known application of EFT.

This Bank is continuing its efforts to simplify and enhance the operations of depository institutions through electronic communications. An inexpensive, durable communications terminal for low volumes of wire transfers was developed, tested, and installed in several institutions in 1980. In 1981, the system's capacity will be expanded to numerous institutions by the installation of additional terminals throughout the District. The terminals will provide institutions with on-line capability to initiate and receive funds transfers and to confirm transactions immediately. In the future this Bank will
Approximately $256 billion is transferred by Fedwire on an average business day.

continue to evaluate expanded uses for these and other more advanced terminals. In addition to the installation of low-volume terminals, this Bank is reassessing the possibility of upgrading the equipment currently used for high volumes of wire transfers.

The basis for this EFT activity is a computerized communications network established in 1969. The network links over 500 direct-access endpoints and 12 separate Federal Reserve intra-District systems. Realizing that access to Federal Reserve services would broaden during the 1980s and that the volume of electronic payments would increase, the Federal Reserve System began to plan in 1975 for a new network with greater capacity, flexibility, and security than the one currently in use. Known as FRCS 80 (Federal Reserve communications system of the 1980s), the system will replace the current network with one standardized system that can accommodate present and future needs. Complex in design, the project may well serve as a model for advanced computer-based business communications.

The conceptual design of FRCS 80 is that of a distributed packet-switching network augmented by circuit-switching facilities. A packet is a small set of data, and packet switching is the relaying of data from one processing center to another. Instead of depending on a central switch, FRCS 80 consists of a series of inter-connected processors or "nodes." The network can expand to meet volume increases, and it can accommodate multiple connections with terminals and/or other communications systems. Most importantly, FRCS 80 will reduce restrictions on how and where data can be processed in the Federal Reserve System. Each node is in direct contact with at least two others in
the network, making it possible for another Federal Reserve Bank, for example, to receive and process communications for this Bank if our computers were inoperative.

FRCS 80 will be implemented in phases, starting with bulk data transmission within the Federal Reserve System. The information to be transferred will automatically be translated by “interface modules” to a form acceptable by the receiving computer both before and after conversion to FRCS 80. Thus, information will continue to flow without any apparent interruption due to conversion. The FRCS 80 equipment and communications lines will be phased in starting in late 1981 or early 1982. Some of the pilot testing for the new system will be carried out at this Bank. The conversion project team responsible for guiding implementation of FRCS 80 is located at the Federal Reserve Bank of Chicago.

IV. Challenges for the Federal Reserve in 1981

Efforts to reduce costs and improve productivity allow this Bank to begin 1981 with cost-effective processing and delivery capabilities. Nevertheless, further operations-area improvements will be needed to meet competition under pricing if this Bank is to fulfill its role in maintaining an efficient payments mechanism. The second challenge is monetary policy. The central bank must control money more effectively in 1981 and beyond.

Maintaining an Efficient Payments Mechanism

Pricing represents a major shift for an institution that has offered services to a specific clientele for almost 70 years. The MCA pricing mandate is quite clear, listing the services to be priced, as well as the basis for setting prices. The MCA also requires reductions in Federal Reserve Bank operating budgets “commensurate with any actual or projected decline in the volume of services to be provided....” One objective of the legislation is to assure that particular services are provided throughout the nation at the lowest aggregate cost “without constraining the adequacy of the level of the services.” Another objective is to use revenues from pricing to offset an expected decline in revenues due to reduced reserve requirements and thereby maintain Federal Reserve payments to the Treasury (see chart 4). The largest influence on Federal Reserve earnings is, of course, the current level of interest rates. An overwhelming proportion of Federal Reserve earning assets are held as short-term U.S. government securities. Changes in market interest rates carry through quickly to Federal Reserve earnings. Federal Reserve revenues have nearly quadrupled since 1969. Payments to the U.S. Treasury rose 20 percent in 1980 alone, totaling $11.7 billion.

The Federal Reserve System is designing price schedules in good faith, based on periodic re-evaluation and consultation with the financial industry. Indeed, the first proposals that were issued for public comment in August 1980 were significantly altered in response to such comments. The final schedule itself will be but the first step in an evolutionary process, with fee schedules and levels of service modified over time in response to changing market conditions.
conditions and user demand (see table 2). The pricing process must be both adaptive and ongoing in order to remain competitive. The challenge for 1981 and for the next few years will be to adapt both our operations and our prices to the unforeseeable market adjustments that will result from the MCA. The nation must be assured of a fair test of price competition, after an absence of nearly 70 years.

The MCA requires that services be priced competitively and explicitly, based over the long run on all direct and indirect costs actually incurred in providing the services. The fees must include “an allocation of imputed costs which takes into account the taxes that would have been paid and the return on capital that would have been provided had the services been furnished by a private business firm.” For a number of years, the Federal Reserve Banks have followed a uniform cost-accounting system that captures all direct and indirect expenses of each major service provided. The required allocation of imputed costs led to development of a “private sector adjustment factor.” This factor was derived from estimates of the value of Federal Reserve fixed assets used in producing the priced services. In addition, the estimates incorporated an assumed capital structure that would approximate a private business providing the full range of payment services, plus estimated average debt, equity, and tax costs in 1980 based on a sample of large commercial banks. The latest estimates resulted in a private sector adjustment factor of 16 percent.

Anticipating legislation that would mandate pricing, the Board of Governors appointed a Pricing Policy Committee in May 1978 to analyze the costs of Federal Reserve Bank services and to draw up a tentative price schedule. Some services vary from one Reserve Bank to another, while other services are uniform throughout the Federal Reserve System. Costs of some services vary widely from one Federal Reserve District to another, usually reflecting differences in geographic size and the degree of competition in each region’s transport industry, while costs of other services appear to be similar throughout the Federal Reserve System. Charges would be nationwide for services that are uniform throughout the Federal Reserve System, District-wide where the costs vary significantly from District to District and competition tends to be regional, and only office-wide where the market for services is local and significant office-to-office cost differences exist (see table 3).

Tri-level pricing, reflecting geographic differences in service design, demand, and cost, is a first step toward assuring that pricing is consistent with competition. Beyond that, however, some very difficult problems remain—problems whose solution will be of fundamental importance to the payments mechanism. As expressed in this Bank’s 1979 Annual Report, the Federal Reserve must operate as a public utility, guaranteeing service to all users, including those who would be abandoned by private suppliers because of the high cost of serving them. If the Federal Reserve were to face competition passively from the private sector, many lower-cost users of Federal Reserve services would gravitate to private suppliers offering similar services. Federal

<table>
<thead>
<tr>
<th>Service</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local check clearing at RCPCs</td>
<td>Full access, December 31, 1980</td>
</tr>
<tr>
<td></td>
<td>Access and pricing, January 29, 1981</td>
</tr>
<tr>
<td></td>
<td>Full pricing, March 26, 1981</td>
</tr>
<tr>
<td>Wire transfer</td>
<td>Access and pricing, January 29, 1981</td>
</tr>
<tr>
<td>Net settlement</td>
<td>Full pricing, March 26, 1981</td>
</tr>
<tr>
<td>Automated clearinghouse services</td>
<td>Full access and pricing, August 1, 1981</td>
</tr>
<tr>
<td>Check collection and clearing</td>
<td>Full access and pricing, August 1, 1981</td>
</tr>
<tr>
<td>Purchase, sale, safekeeping, and transfer of securities</td>
<td>Access and pricing, October 1981</td>
</tr>
<tr>
<td>Noncash collection</td>
<td>Access and pricing, October 1981</td>
</tr>
<tr>
<td>Coin and currency transportation services</td>
<td>Access and pricing, January 1, 1982</td>
</tr>
<tr>
<td>Float</td>
<td>Access and pricing, January 1, 1982</td>
</tr>
<tr>
<td></td>
<td>Three phases:</td>
</tr>
<tr>
<td></td>
<td>1. Operation improvement, under way</td>
</tr>
<tr>
<td></td>
<td>2. Change availability, September 1981</td>
</tr>
<tr>
<td></td>
<td>3. Explicit pricing, no date established</td>
</tr>
</tbody>
</table>

Table 2 Federal Reserve Services — Pricing and Access
Reserve costs and fees would rise as volume declined. Unless cost-based pricing is adapted to emerging competitive conditions in each identifiable market, competition could produce a payments mechanism that is not consistent with congressional intent or with the availability of a basic lowest-common-denominator level of services across the nation.

The pricing requirement of the Monetary Control Act is intended to improve performance of the payments mechanism. In particular, there is no intent in the MCA to precipitate the re-emergence of undesirable banking practices, such as non-par checking, remote disbursement of checks, or lack of acceptance of checks drawn on distant banks. The Federal Reserve Banks will have to respond to changing demands for services in different markets by different users. Only by actively meeting the challenge of competition can the Reserve Banks avoid becoming last-resort providers of service for high-cost locations and needs.

### Monetary Policy

The second major challenge for the Federal Reserve in 1981 is clear. The central bank must control money and credit more effectively than in 1980, the first full year under the new operating procedures. Monetary policy generally succeeded in 1980 in limiting the growth of money supply. By late in the year, the narrowly defined transactions aggregates, after adjustment for unanticipated shifts into automatic transfer savings (ATS) accounts, were within or close to the upper bounds of their target ranges. That is, of course, far from the whole story. The year was marked by turbulence in the economy and in the financial markets, and both the monetary aggregates and interest rates reflected this turbulence. During the first half of 1980, the aggregates fell short of the target ranges, and interest rates, following the peak in March, plummeted. In the second half of the year, a surprisingly resilient economy and strong demands for money and credit restored interest rates to the peak levels of the first quarter. Only the December decline in the money supply measures pulled the aggregates back to their target ranges. At least two difficult conclusions can be drawn from the rollercoaster pattern of 1980.

The brief but sharp decline in economic activity in 1980 did not even dent the upward march of the price indexes. The carryover effects of past price and cost increases, working their way through the price structure, simply overwhelmed the price dampening effects of the slack that developed in many product, labor, and capital markets. Inflation is deeply ingrained into our economic structure and widely expected to continue. A successful effort to lower inflation must be founded on a believable commitment to prolonged action. Such an effort will require painful adjustments and steady commitment to accept the costs of these adjustments.

For monetary policy to make a successful contribution to a sustained anti-inflation program, money supply growth must be lowered gradually, over a prolonged period of time. These are the objectives of the Federal Reserve. The MCA has broken the vicious circle that was sapping the strength of monetary policy and has provided greater assurance that an anti-inflation policy actually is feasible. As stated by Chairman Volcker in his recent testimony before Congress, the Federal Reserve seeks to reduce further the growth of the money supply in 1981. The target ranges announced for narrowly based M-1A and M-1B aggregates for the next four quarters have been

### Table 3 Basis for Pricing Federal Reserve Services

<table>
<thead>
<tr>
<th>Characteristics of services</th>
<th>Nationwide</th>
<th>District-wide</th>
<th>Office-wide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Similar long-run costs</td>
<td>Significant regional cost differences</td>
<td>Significant local cost differences</td>
<td>Local service market</td>
</tr>
<tr>
<td>Capital intensive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uniform in nature</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Services involved</th>
<th>Nationwide</th>
<th>District-wide</th>
<th>Office-wide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wire transfer</td>
<td>Coin wrapping</td>
<td>Currency and coin shipments</td>
<td></td>
</tr>
<tr>
<td>Net settlement</td>
<td>Securities services</td>
<td>Check collection</td>
<td></td>
</tr>
<tr>
<td>ACH&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Noncash collection</td>
<td>Check collection&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>On-line securities transfer</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Except for Second Federal Reserve District.

<sup>b</sup> At option of each Federal Reserve Bank.
Future inflation, and basic uncertainties reduced by a half percentage point from the 1980 target ranges. High rates of current inflation, continued expectations of future inflation, and basic uncertainties involving movements in economic activity this year will make these objectives difficult to accomplish. Monetary policy must focus more on the requirements of a non-inflationary environment for private decisions and less on the uncertain feedback effects of money growth on the economy over the next two or three quarters.

The effort to contain inflation is unlikely to succeed unless supported by fiscal policy changes. First, a less expansive federal budget is essential for the credibility of any anti-inflation program. Moreover, the growing volume of federal financing needs has meant stiff competition in the capital markets and higher interest rates for private borrowers. If the Federal Reserve is successful in its efforts to contain growth of money and credit, then federal borrowing at recent levels would continue to absorb capital resources that could better be used in the private sector. We are hopeful that the efforts now under way to curb growth of federal outlays will succeed. Otherwise, the tax reductions that have been proposed will be offset by future inflation, higher interest rates, and further diminution in rates of productivity growth.

Another lesson to be drawn from the events of 1980 is that it is very difficult to control money growth closely over short periods of time. Many factors outside the control of the central bank, including credit restraints and sharp shifts in business activity and in credit demands, can strongly influence money growth for short periods of time. Last year began with a surge of inflation and a much stronger level of business activity than most forecasters anticipated. Inflation and expectations of still more inflation had begun to affect consumer-buying patterns and credit use. Amid growing concern about inflation, on March 14 President Carter imposed a sweeping set of direct controls on the use of credit and assigned the responsibility for administering these to the Federal Reserve System.

In retrospect, economic activity and overall credit demands probably had peaked prior to the imposition of the controls. The immediate impact of the controls was dramatic. Installment credit use nearly ceased, economic activity fell, and interest rates declined sharply. Bankers and businessmen re-examined their projections for the year, and credit expansion quickly subsided to moderate levels. The sharpness of the decline in the second quarter owed much to the imposition of credit controls, which also added greatly to the always present difficulties of interpreting the basic trends of economic activity and of money and credit growth.

This litany of special events is not offered as an excuse, either for last year's uneven money growth or abrupt shifts in interest rates. Simply stated, these were the events with which monetary policy had to contend. The procedures adopted in October 1979 were extremely useful in this volatile situation. First, as money growth fell below the target ranges in the second quarter of the year, the procedures operated to force bank reserves into the system— to support the growth of the money supply. In retrospect, much of the weakness in the economy and in money and credit growth was due to the credit controls. In these circumstances, the Federal Reserve may well have over-reacted in trying to counteract the sag in money supply growth. In similar fashion, removal of controls in the third quarter of the year presented another discontinuity for the money control procedures to absorb. Few observers expected the rebound in activity to be as robust as eventually proved to be the case. Again, the procedures were extremely useful, as the Federal Reserve moved to limit the growth in bank reserves.

The importance of controlling money supply growth more closely over short periods of time is both an open and a hotly contested issue. Several points deserve note, even while recognizing that the conclusions are open to debate. Closer control of money over fairly short time periods can be achieved. There will be a cost involved, however, and that cost is likely to be sharper movements in short-term interest rates than otherwise would occur. It is also worth noting, however, that closer control of the money supply in the short run is not of critical importance to efforts to lower inflation. Virtually all of the evidence continues to suggest that short-term variations in the money supply around a longer-term trend are unlikely to feed back in any significant degree into future changes in total spending or prices. Variations that are corrected within a two-month to four-month period are tolerable, especially if businessmen, consumers, and investors believe that the variations will be corrected. The current procedures provide a useful mechanism for adapting reserve growth to changing events and circumstances in a manner that is consistent with the longer-term money supply objectives.
Shifts in deposit holdings resulting from the MCA have already complicated the interpretation of monetary aggregates in 1981. Any definition of money is by necessity somewhat arbitrary. In practice, a good definition must change to reflect changes in what people use as money. The introduction of NOW accounts and share drafts nationwide has caused large movements of funds into these new accounts from demand deposits, savings deposits, and other sources. The shifts can be factored into monetary targets and procedures. However, the sharp changes in the money measures add to the difficulty of assuring the public of the unchanged commitment of policymakers to steady reduction in money growth.

In seeking closer control of money over short periods of time, there are a number of refinements in the money control mechanism that are being considered. The refinements would serve to tighten the link between reserves and money supply growth, but each of the improvements would involve other costs.

At present, depository institutions hold reserves based on deposits two weeks previous. Essentially, the level of required reserves in any week is predetermined. The open market desk, by changing the level of nonborrowed reserves, forces depository institutions to alter the level of their borrowing at the discount window. The resulting alteration in money market conditions and rates then feeds into money demand and supply, eventually altering money growth rates. Depository institutions would adjust their deposit and asset totals more quickly if reserves were held against current deposit totals. Offsetting this gain would be increased volatility of money market rates and larger information systems costs to depository institutions and the System. More timely information flows will be necessary to estimate required reserves under a more contemporaneous reserve accounting system.

A second possible area of improvement would be in the discount mechanism. At the time the new procedures were adopted, the Federal Reserve announced its intention to make more frequent adjustments in the discount rate. Keeping the discount rate more closely aligned with market rates would make borrowing behavior more predictable. This has been achieved during 1980 to some extent, particularly with the imposition of the surcharge of large bank borrowings. However, there were still periods during the year when there was a large spread between the discount rate and other money market rates. Reducing that spread would influence bank use of the discount window and tend to smooth out borrowings and thereby tighten the link between bank reserves and money supply. Similarly, administration of lending may require refinements to improve consistency over time and among the many institutions eligible to use the discount window. Both of these measures would probably add to the volatility of money market rates.

The fundamental improvements in the monetary control mechanism contained in the MCA are welcome—indeed, they are long overdue. They will become fully effective only over a lengthy phase-in period. Yet, the legislation should not be viewed as final. Neither the procedures of October 6, 1979, nor the legislative mandate to control money, and ultimately inflation, can succeed without public support. Controlling inflation must have a high priority for everyone. Success in promoting competition in payment service markets and in controlling inflation will not come as an immediate result of the MCA. Only long and costly adjustments—by the public and by the Federal Reserve, to pricing and to slowing money growth—will secure the future benefits envisioned in the passage of the Monetary Control Act.
## Comparative Statement of Condition

<table>
<thead>
<tr>
<th>ASSETS</th>
<th>December 31, 1980</th>
<th>December 31, 1979</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold Certificate Account</td>
<td>$847,000,000</td>
<td>$646,050,000</td>
</tr>
<tr>
<td>Special Drawing Rights Certificate Account</td>
<td>201,000,000</td>
<td>149,000,000</td>
</tr>
<tr>
<td>Coin</td>
<td>48,558,688</td>
<td>42,406,758</td>
</tr>
<tr>
<td>Loans to Member Banks</td>
<td>202,420,000</td>
<td>54,700,000</td>
</tr>
<tr>
<td>Federal Agency Obligations — Bought Outright</td>
<td>660,240,170</td>
<td>660,000,825</td>
</tr>
<tr>
<td>U.S. Government Securities:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bills</td>
<td>3,300,547,733</td>
<td>3,634,652,454</td>
</tr>
<tr>
<td>Notes</td>
<td>4,436,095,439</td>
<td>4,538,501,435</td>
</tr>
<tr>
<td>Bonds</td>
<td>1,276,210,128</td>
<td>1,169,091,069</td>
</tr>
<tr>
<td>Total U.S. Government Securities</td>
<td>9,012,853,300</td>
<td>9,342,244,958</td>
</tr>
<tr>
<td>Total Loans and Securities</td>
<td>9,875,513,470</td>
<td>10,056,945,783</td>
</tr>
<tr>
<td>Cash Items in Process of Collection</td>
<td>478,639,333</td>
<td>662,390,056</td>
</tr>
<tr>
<td>Bank Premises</td>
<td>23,994,150</td>
<td>23,224,790</td>
</tr>
<tr>
<td>Other Assets</td>
<td>708,326,686</td>
<td>370,470,917</td>
</tr>
<tr>
<td>Interdistrict Settlement Account</td>
<td>(321,784,244)</td>
<td>(627,877,934)</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$11,861,248,083</td>
<td>$11,322,610,370</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LIABILITIES</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Reserve Notes</td>
<td>$9,462,594,235</td>
<td>$9,026,664,652</td>
</tr>
<tr>
<td>Deposits:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depository Institutions</td>
<td>1,528,685,121</td>
<td>1,101,192,467</td>
</tr>
<tr>
<td>U.S. Treasurer — General Account</td>
<td>0-</td>
<td>358,145,019</td>
</tr>
<tr>
<td>Foreign</td>
<td>29,548,000</td>
<td>25,415,000</td>
</tr>
<tr>
<td>Other Deposits</td>
<td>17,373,141</td>
<td>73,075,781</td>
</tr>
<tr>
<td>Total Deposits</td>
<td>1,575,606,262</td>
<td>1,557,828,267</td>
</tr>
<tr>
<td>Deferred Availability Cash Items</td>
<td>435,038,138</td>
<td>375,999,179</td>
</tr>
<tr>
<td>Other Liabilities</td>
<td>197,629,548</td>
<td>172,330,472</td>
</tr>
<tr>
<td>Total Liabilities</td>
<td>$11,670,868,183</td>
<td>$11,132,822,570</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAPITAL ACCOUNTS</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Paid in</td>
<td>$95,189,950</td>
<td>$94,893,900</td>
</tr>
<tr>
<td>Surplus</td>
<td>95,189,950</td>
<td>94,893,900</td>
</tr>
<tr>
<td>Total Liabilities and Capital Accounts</td>
<td>$11,861,248,083</td>
<td>$11,322,610,370</td>
</tr>
</tbody>
</table>
## Comparison of Earnings and Expenses

<table>
<thead>
<tr>
<th></th>
<th>1980</th>
<th>1979</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Current Earnings</strong></td>
<td>$974,469,886</td>
<td>$823,249,108</td>
</tr>
<tr>
<td><strong>Net Expenses</strong></td>
<td>48,768,768</td>
<td>44,108,648</td>
</tr>
<tr>
<td><strong>Current Net Earnings</strong></td>
<td>925,701,118</td>
<td>779,140,460</td>
</tr>
<tr>
<td><strong>Additions to Current Net Earnings:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit on Foreign Exchange Transactions (Net)</td>
<td>7,977,852</td>
<td>-0-</td>
</tr>
<tr>
<td>All Other</td>
<td>-0-</td>
<td>634,945</td>
</tr>
<tr>
<td><strong>Total Additions</strong></td>
<td>7,977,852</td>
<td>634,945</td>
</tr>
<tr>
<td><strong>Deductions from Current Net Earnings:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss on Sales of U.S. Government Securities (Net)</td>
<td>15,589,711</td>
<td>12,540,229</td>
</tr>
<tr>
<td>Loss on Foreign Exchange Transactions (Net)</td>
<td>-0-</td>
<td>310,439</td>
</tr>
<tr>
<td>All Other</td>
<td>1,506,064</td>
<td>29,006</td>
</tr>
<tr>
<td><strong>Total Deductions</strong></td>
<td>17,095,775</td>
<td>12,879,674</td>
</tr>
<tr>
<td><strong>Net Deductions</strong></td>
<td>9,117,923</td>
<td>12,244,729</td>
</tr>
<tr>
<td>Assessment for Expenses of Board of Governors</td>
<td>5,119,700</td>
<td>4,288,000</td>
</tr>
<tr>
<td><strong>Net Earnings before Payments to U.S. Treasury</strong></td>
<td>911,463,495</td>
<td>762,607,731</td>
</tr>
<tr>
<td>Dividends Paid</td>
<td>5,666,775</td>
<td>5,622,240</td>
</tr>
<tr>
<td>Payments to U.S. Treasury (Interest on F.R. Notes)</td>
<td>905,500,670</td>
<td>753,871,891</td>
</tr>
<tr>
<td>Transferred to Surplus</td>
<td>296,050</td>
<td>3,113,600</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$911,463,495</td>
<td>$762,607,731</td>
</tr>
</tbody>
</table>
Directors
As of February 12, 1981

FEDERAL RESERVE BANK OF CLEVELAND

Chairman
J.L. JACKSON
Executive Vice President and President-Coal Unit, Diamond Shamrock Corp., Lexington, Kentucky

Deputy Chairman
WILLIAM H. KNOELL
President and Chief Executive Officer, Cyclops Corporation, Pittsburgh, Pennsylvania

JOHN W. ALFORD
Chairman of the Board and Chief Executive Officer, The Park National Bank, Newark, Ohio

JOHN D. ANDERSON
Senior Partner, The Andersons, Maumee, Ohio

J. DAVID BARNES
President, Mellon Bank, N.A., Pittsburgh, Pennsylvania

E. MANDELL de WINDT
Chairman of the Board, Eaton Corporation, Cleveland, Ohio

JOHN W. KESSLER
President, John W. Kessler Company, Columbus, Ohio

EVERETT L. MAFFETT
President and Chief Executive Officer, Eaton National Bank and Trust Co., Eaton, Ohio

JEFFERY A. ROBB
Managing Partner-Audit Division, Proctor, Robb & Company, Granville, Ohio

MEMBER, FEDERAL ADVISORY COUNCIL, FOURTH DISTRICT
MERLE E. GILLIAND
Chairman of the Board and Chief Executive Officer, Pittsburgh National Bank, Pittsburgh, Pennsylvania
CINCINNATI BRANCH

Chairman
MARTIN B. FRIEDMAN
Director, Formica Corporation, Cincinnati, Ohio

OLIVER W. BIRCKHEAD
Chairman of the Board and Chief Executive Officer, The Central Trust Company, N.A., Cincinnati, Ohio

O.T. DORTON
President, Citizens National Bank, Paintsville, Kentucky

LAWRENCE C. HAWKINS
Senior Vice President, University of Cincinnati, Cincinnati, Ohio

SISTER GRACE MARIE HILTZ
President, Sisters of Charity Health Care Systems, Inc., Cincinnati, Ohio

ELDEN HOUTS
Chairman of the Board and President, The Citizens Commercial Bank and Trust Company, Celina, Ohio

PITTSBURGH BRANCH

Chairman
MILTON G. HULME, Jr.
President and Chief Executive Officer, Mine Safety Appliances Company, Pittsburgh, Pennsylvania

R. BURT GOOKIN
Director, H.J. Heinz Co., Pittsburgh, Pennsylvania

ROBERT S. KAPLAN
Dean, Graduate School of Industrial Administration, Carnegie-Mellon University, Pittsburgh, Pennsylvania

ERNEST L. LAKE
President, The National Bank of North East, North East, Pennsylvania

THOMAS V. MANSELL
President and Chief Executive Officer, The First National Bank of Western Pennsylvania, New Castle, Pennsylvania

WILLIAM D. McKAIN
President, Wheeling National Bank, Wheeling, West Virginia
OFFICERS
As of February 12, 1981

WILLIS J. WINN
President

WALTER H. MacDONALD
First Vice President

JOHN M. DAVIS
Senior Vice President and Economist

WILLIAM H. HENDRICKS
Senior Vice President

GEORGE E. BOOTH, Jr.
Vice President

RANDOLPH G. COLEMAN
Vice President

PATRICK V. COST
General Auditor

HARRY W. HUNING
Vice President

JAMES H. NASH, Jr.
Vice President and General Counsel

THOMAS E. ORMISTON, Jr.
Vice President

LESTER M. SELBY
Vice President and Secretary

DONALD G. VINCEL
Vice President

ANDREW J. BAZAR
Assistant Vice President

OSCAR H. BEACH, Jr.
Assistant Vice President

MARGRET A. BEEKEL
Assistant Vice President

THOMAS J. CALLAHAN
Assistant Vice President and Assistant Secretary

JOHN J. ERCEG
Assistant Vice President and Economist

CREIGHTON R. FRICEK
Assistant Vice President

ROBERT J. GORIUS
Assistant Vice President

NORMAN K. HAGEN
Assistant Vice President

JAMES W. KNAUF
Assistant Vice President

CATHY L. PETRYSHYN
Assistant Vice President

BURTON G. SHUTACK
Assistant Vice President

WILLIAM J. SMITH
Assistant General Auditor

ROBERT VAN VALKENBURG
Assistant Vice President

ROBERT F. WARE
Assistant Vice President and Economist

CINCINNATI BRANCH

ROBERT E. SHOWALTER
Senior Vice President

CHARLES A. CERINO
Vice President

JEAN H. DEAN
Assistant Vice President

ROSCOE E. HARRISON
Assistant Vice President

DAVID F. WEISBROD
Assistant Vice President

JERRY S. WILSON
Assistant Vice President

PITTSBURGH BRANCH

HAROLD J. SWART
Vice President in Charge

DONALD G. BENJAMIN
Vice President

PAUL E. ANDERSON
Assistant Vice President

JOSEPH P. DONNELLY
Assistant Vice President

COLUMBUS OFFICE

CHARLES F. WILLIAMS
Assistant Vice President
For additional copies of the 1980 Annual Report and other Federal Reserve publications, please contact:

Federal Reserve Bank of Cleveland
Public Information Center
P.O. Box 6387
Cleveland, OH 44101