



*Federal Reserve Bank of Cleveland*  
*Annual Report 1983*





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The year 1983 marked the 60th anniversary of the completion of the Federal Reserve Bank of Cleveland, a building long regarded as one of the architectural gems of Cleveland. In commemoration of the building's anniversary, we commissioned the architectural photographs featured in this annual report. The photographs show the meticulous attention to detail that characterizes the entire building, from the carved urn in the bank's main lobby (opposite) to the ornate bronze entrance on East Sixth Street (p. 24).

Designed by the architectural firm of Walker & Weeks, the bank resembles an Italian Renaissance fortress. The exterior is covered with Etowah Georgia marble, which takes on different hues in different levels of humidity. In damp weather, the marble has a yellowish-pink cast; in dry weather, the marble looks grayish-pink, as shown in the exterior detail (p. 16) and the carving above the Superior Avenue entrance (p. 20).

We at the Cleveland Fed take pleasure in showcasing some of the exquisite details of our building. We hope that you share in that pleasure.

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*Karen N. Horn*

## *The President's Foreword*

Economic recovery blossomed, both nationally and locally, in 1983. The Fourth Federal Reserve District's economy normally lags the nation in recovering from a recession because of its heavy concentration of manufacturing industries. Nevertheless, strong consumer spending in the early stages of this recovery contributed to stronger-than-usual gains in the District's automotive-related-goods industries. If our current expansion continues to support a strong investment rebound without reigniting inflation, the District's capital-goods industries should expand employment in 1984. Stability in prices and interest rates is essential to the vitality of the Fourth District's industries.

The first year of the current recovery was not accompanied by evidence of building inflationary pressures. Inflation seldom accelerates in the early stages of recovery, because strong productivity growth and substantial excess capacity subdue price and cost pressures. Nevertheless, prices rose as rapidly by year-end as during the previous year, suggesting a pause, at the least, in our progress toward further disinflation. This is a worrisome development, given the continued strength of the economy and the highly expansive fiscal course of our federal government.

The achievements that we've made in reducing inflation result from our slowing the growth of money and credit. In October 1979, this strategy became known informally as a policy to reduce the annual growth targets for the monetary aggregates gradually each year until inflation was eliminated. This technique was suspended in 1982 because of financial deregulation and a dramatic change in the link between the money supply and economic activity, namely velocity. Financial deregulation brought about massive shifting of funds among the various measures of money supply. Paradoxically, the subsidence of inflation, and the consequent improved expectations about future costs of holding money compared with other assets, also distorted the monetary aggregates. It thus became very difficult to define our money supply, let alone predict its growth. Now that these complications seem to be smoothing out, we expect that velocity will resume a more normal trend in the future and that our previous strategy of reducing the growth targets for the monetary aggregates will once again be consistent with disinflation.

While the Federal Reserve has made substantial progress toward its goal to end inflation, that progress is being complicated by record-level federal budget deficits. As the recovery proceeds, it should become increasingly clear that our economy cannot provide unlimited resources to meet both public and private credit demands. In light of the hardships caused by inflation in the last decade, we

would only be fooling ourselves if we thought that the stimulus provided by fiscal policy would be sufficient to produce the economic environment that we are seeking.

The Federal Reserve also made substantial progress in adjusting its operations to the provisions of the Depository Institutions Deregulation and Monetary Control Act of 1980, which mandated that the Federal Reserve price its services. In 1983, we at the Cleveland Fed achieved the goals that we set for ourselves. The hard work of the bank's staff was instrumental in our ability to match costs and revenues from the sale of our services.

This bank's many accomplishments in the past year reflect the determination and efforts of the talented individuals that are a part of our organization. We are especially indebted to J.L. Jackson, the Cleveland board chairman who resigned in December 1983 after being named president of Diamond Shamrock (headquartered in Dallas). Having served as chairman of the Cleveland board of directors since 1981, Jackson earlier served as a director of the Cincinnati Branch and then as director and deputy chairman of the Cleveland board. We shall miss him, and we extend to him our gratitude for his conscientious, dedicated leadership.

We are very pleased to have as the new chairman of the Cleveland board W.H. Knoell, who had served as deputy chairman of the Cleveland board since 1981. His skillful leadership has contributed immensely to the bank's direction thus far in 1984.

In addition to the change in chairmen, three other directors completed their terms of service in 1983. Clifford R. Meyer (President and Chief Operating Officer, Cincinnati Milacron Inc.) was first appointed a director of the Cincinnati Branch in 1981 and served as chairman of that board since 1982. O.T. Dorton (President, Citizens National Bank) served on the Cincinnati Branch board since 1981; and Ernest L. Lake (President, The National Bank of North East) served on our Pittsburgh Branch board since 1981. We are grateful to our retiring directors and, indeed, to all of our directors for their valuable service. The Fourth District has benefited tremendously from their dedication to the central banking system.

I have now served as president of this bank for two years, and I have found those two years to be most challenging and rewarding. I would like to take this opportunity to extend a personal thanks to the officers and to the rest of the staff of this bank. Their dedication and creativity made the difference in this bank's many accomplishments in 1983.

Sincerely,



Karen N. Horn  
President  
June 1, 1984



*Paul A. Volcker, Karen N. Horn,  
W.H. Knoell (seated).*

## *The Unfolding of the 1983 Recovery*

In 1983, the long-awaited and oft forecast economic recovery blossomed. This recovery has turned out to be substantially more vigorous than most analysts had anticipated. The expansion unfolded amid continued moderation in inflationary pressures. The price indexes rose at a more rapid pace at year-end, resulting more from special circumstances than from any worsening in the underlying trend of inflation.

The story of the 1983 recovery can be viewed in terms of serious problems that were defused before they developed. The objectives of monetary policy were fairly well achieved, with due allowances for substantial uncertainties resulting from financial deregulation. Early in the year, a surge in money growth attended the interest-rate deregulation, followed by a period of more subdued growth. Serious international debt problems loomed over the world recovery, but they did not prompt the financial crisis and instability that many analysts feared. Renegotiation of debt and recovery in world export markets averted the crisis.

Even with these successes, some of the economic events of 1983 were disappointing. Despite much discussion of the need for action, there was little progress toward resolving the federal budget deficit, the economic consequences that are its handmaidens, and the important longer-term policy objectives. Federal credit needs were met in 1983, with no dramatic collision in credit markets. While interest rates did not rise significantly, they did not decline apace with the reduction in inflation achieved in the past two years. More worrisome is that even higher interest rates in 1983 were averted only by factors that might not continue, such as lagging private demand for capital and high inflows of funds from abroad. Moreover, the need to attract foreign capital to clear domestic markets pushed the dollar exchange rate to record levels and helped precipitate a large, and still growing, trade deficit. Instead of reduced domestic borrowing because of interest-rate sensitivity, crowding out resulted from intensified foreign competition in domestic markets and from less competitive U.S. exports in world markets. As we contend in this annual report, it is difficult to take an optimistic view of these dual problems in 1984 and beyond—at least until measures to redress the budget deficit materialize. The growing demand for saving and capital in the private sector suggests that these problems

could worsen unless remedied. The likely casualties are productivity growth, structural change, and the badly needed transformation of U.S. industries into internationally competitive producers. Such considerations dull the sense of accomplishment produced by economic events in 1983.

### *The Blossoming of the Recovery*

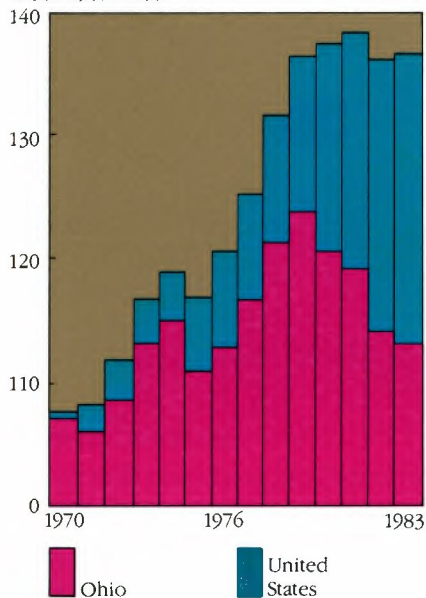
The 1983 recovery can be characterized as typical. Consumer durable goods, residential construction, and a substantial swing in inventory investment in the second and third quarters provided the momentum for the recovery. By midyear, the recovery's growing strength began to spread into the investment sector. Aside from past cyclical comparisons, business investment rose more rapidly than one would have expected from a strict reading of capacity utilization and other investment indicators. The direct public-sector contribution to the increase in spending fell short of past recovery standards. Total government purchases of goods and services (a measure that excludes government transfer payments) fell because of cutbacks in federal nondefense purchases and budget constraints at the state and local government levels.

Tremendous deterioration occurred in the foreign trade sector in 1983. The merchandise trade deficit rose to \$60.6 billion in 1983, from \$36.4 billion in 1982; the deficit mounted at a \$74.0 billion annual rate in the second half of 1983. The deterioration in trade was a serious drag on the recovery. The net export component of the GNP accounts measured in real terms declined \$20.2 billion (fourth-quarter to fourth-quarter) last year, while the other components of GNP rose \$80.6 billion.

A decline in net exports in 1983 would not have been surprising. Net exports usually fall in the first year of recovery, as strengthening business activity boosts the demand for imports. The U.S. recovery in 1983 was much stronger than the recoveries experienced abroad. The magnitude of the deterioration in trade was nonetheless surprising. It reflects most directly the steep rise in the U.S. dollar exchange rate that began early in 1981 and continued throughout last year. On a trade-weighted basis, the dollar exchange rate in December rose 52.0 percent from its level in 1980. The impact on the competitive position of U.S. producers in both domestic and foreign markets has been substantial.

Output and employment soared in 1983, accompanied by the lowest rate of inflation since 1972. While recovery in output from previous recession lows can be characterized as about average, output was substantially stronger by the spring of 1983 than expected by most forecasters. Industrial production rose 15.5 percent in 1983, and the strength in output growth was evident across the board in consumer goods, materials, and business equipment. Pre-

Chart 1  
Total Employment: U.S. and Ohio  
Yearly averages  
Index 1967 = 100

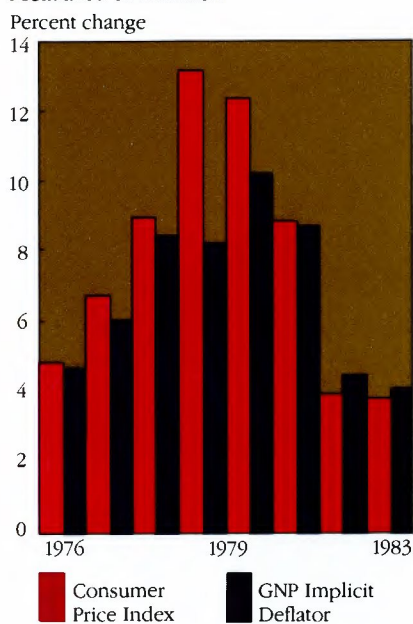


SOURCES: Bureau of Labor Statistics and Ohio Bureau of Employment Services.



dictably, the vigorous snapback in production prompted strong growth in employment. Nonfarm employment rose 3.3 percent (December-to-December), or 2.9 million people (see chart 1). The unemployment rate declined sharply, by 2.5 percentage points. The surge in employment did not, however, prevent a substantial recovery in productivity performance. Productivity growth in the non-farm sector of the economy expanded at about a 4.3 percent annual rate through the first three quarters of the 1983 recovery, with an even larger expansion in manufacturing. In the final quarter of the year, productivity growth slowed to a 1.2 percent pace. The productivity gain for the year matched the first years of past recoveries. However, many analysts fear that the secular slowdown in productivity growth that has characterized economic performance for the past decade may not have been altered by widespread efforts to cut costs and improve efficiency.

**Chart 2**  
**Measures of Inflation<sup>a</sup>**



SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; U.S. Department of Commerce, Bureau of Economic Analysis.

a. Percent changes in the CPI are December to December; percent changes in the GNP implicit deflator are fourth quarter to fourth quarter.

**Price Performance.** A review of inflation in 1983 is reassuring but also worrisome. It is reassuring to state that the dramatic progress made in reducing inflation in 1981 and 1982 was largely maintained throughout 1983. The consumer price index rose 3.7 percent in 1983, while producer prices rose 0.6 percent (see chart 2). The more comprehensive GNP price deflator increased 4.1 percent, not notably different from its performance in 1982.

Improved productivity and a further deceleration in labor compensation held the increase in unit labor cost to 0.8 percent in 1983, the smallest increase in a decade. Growth in labor compensation per man-hour slowed to about a 5 percent annual rate in 1983. Some of the slowing resulted from smaller first-year contract settlements and elimination of or reduction in cost-of-living-adjustment benefits. The renegotiation of existing contracts, which scaled down previously agreed-on increases in wages and benefits, also contributed to the moderation in labor compensation growth.

While the strong foreign exchange value of the dollar weakened U.S. net exports in 1983, it helped alleviate price pressures in this country. A strong dollar makes import prices more attractive to U.S. consumers. The resulting competition in the U.S. market from foreign producers forces domestic manufacturers to hold down costs and prices. A strong dollar also makes U.S. goods less attractive to foreigners, reducing associated price pressures.

Several elements of last year's price performance were less reassuring. The sharp declines in the inflation rates of 1981 and 1982 ended abruptly. Even a casual reading of the statistics indicates that prices were rising more rapidly by year-end 1983. Rather ordinary and not surprising cyclical factors have brought at least a pause to the reduction in inflation. Indeed, past experience suggests that further increase in the pace of inflation in the balance of the



1. *The Fourth Federal Reserve District includes all of the state of Ohio, northern and eastern Kentucky, western Pennsylvania, and the northern panhandle of West Virginia.*

current business expansion would result from the growing strength in product and labor markets. Such a tendency is already apparent in the quickening of price increases in the past several months. In the first quarter of 1984, the consumer price index rose 5 percent, up from a 3.8 percent rate for the preceding 12 months; the pace of finished producer prices increased from 0.6 percent to 6.1 percent in the same period.

Some analysts would dismiss this price acceleration as resulting from transitory factors, such as drought and Payment-in-Kind-induced price increases, which have nothing to do with the underlying inflation rate. Whether resulting from special or more fundamental factors, these price pressures could prove to be a precursor to the onset of even stronger price and cost pressures during the balance of the recovery. On the other hand, the pause in disinflation could be a prelude to further progress following the current business recovery. The outcome eventually will depend not only on the strength of the recovery in 1984 but also on the policies followed this year and their suitability to achieve longer-term disinflation objectives.

***The Recovery in the Fourth District.***<sup>1</sup> The economy of the Fourth District lagged the national recovery in 1983, a fact that is not surprising given the interaction between the District's long-run structural decline and its performance over the business cycle. Employment for the state of Ohio bottomed out in the first quarter of 1983, rose very slowly in the second and third quarters, and accelerated in the final quarter. The unemployment rate for the state, while still 2.3 percentage points above the nation's, declined from 14.2 percent at the end of 1982 to 10.5 percent in December 1983. Virtually all of the increase in local employment in 1983 can be attributed to the strong national comeback in production and sales of transportation equipment and the effects on suppliers to that industry. The thrust of the recovery in the automobile sector was strong enough to generate faster-than-normal recovery in Ohio's employment for the entire manufacturing sector. Output and employment growth in other manufacturing sectors and in construction, trade, and other service sectors have been disappointing. Employment performance in the first half of last year was slightly stronger than expected when measured against past cyclical performances. Yet, by the second half of the year, employment growth in Ohio again began to converge with its typical recovery path. As a result, the local recovery at the end of its first year was average in strength and exhibited a normal lag with the national employment recovery.

While it is difficult to sort the underlying structural problems of local industries from other influences associated with the District's lagging performance, one particular structural change is significant to the District's economic

recovery in 1984. Over the past decade, there has been a large nationwide shift in the composition of investment spending. More money is being invested in sophisticated electronic equipment rather than in the basic capital-goods industries, such as trucks and machinery tools. The national share of basic capital-goods spending for equipment has fallen from about 60 percent in the early 1970s to less than 40 percent in 1982 and 1983. This trend has not favored the basic capital-goods industries that dominate the Fourth District.

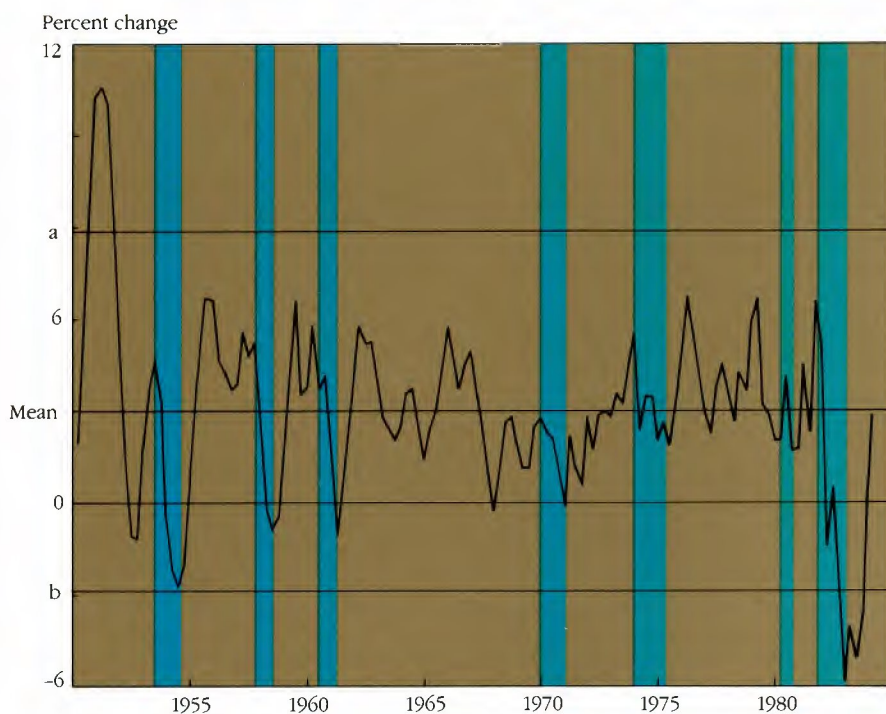
**Chart 3**  
Velocity of Money Supply

NOTE: Shaded areas represent periods of recession as defined by the National Bureau of Economic Research.

SOURCES: Board of Governors of the Federal Reserve System and U.S. Department of Commerce.

a. Mean plus two standard deviations. If velocity growth were stable, we would expect it to fall within two standard deviations of the mean 95 percent of the time.

b. Mean minus two standard deviations.



2. For further discussion of the declining performance of the region's economy, see Roger H. Hinderliter, "Sources of Regional Growth Disparity: The Case of Ohio's Industries," Economic Commentary, Federal Reserve Bank of Cleveland, December 19, 1983.

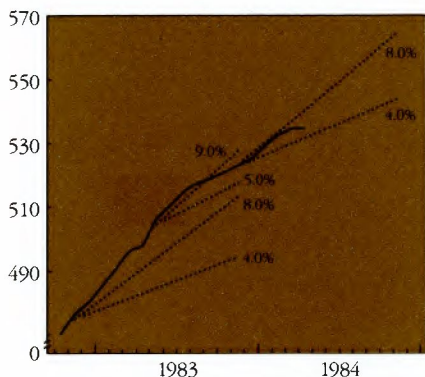
Import competition is another increasingly important element in the slippage of the Fourth District economy. Since 1972, imports of basic capital goods have risen more rapidly than sales of domestic capital goods; consequently, domestic producers are losing market share to foreign competitors.

The economic research conducted by this bank strongly suggests that structural elements are primarily responsible for the declining performance of the region's economy.<sup>2</sup> Employment trends by industries since 1950 show that the employment lag results more from a decline in the competitive advantage of Ohio's industries than from the state's peculiar mix of industries. The effects of these structural changes are likely to continue to be felt in 1984, despite a more favorable cyclical performance in the investment phase of the recovery.

**Monetary Policy in 1983.** In recent years, monetary policy focused on targeting the growth of monetary and credit aggregates. At the beginning of 1983, there was much uncertainty about the reliability of the linkage between money and the ultimate monetary-policy objectives. Normally, values of income and wealth, and of major categories of assets, tend to move in rough parallel over suitably

**Chart 4**  
**The M-1 Aggregate**

Billions of dollars, seasonally adjusted



NOTE: Dotted lines represent long-run target ranges.

SOURCE: Board of Governors of the Federal Reserve System.

defined periods of time. The *velocity* of a major category of assets (the ratio of income to assets) thus tends to move in a reasonably narrow range or, as in the case of the M-1 aggregate, has a predictable trend (see chart 3). Short-run variations in velocity around this trend are to be expected and, again as in the case of M-1, for cyclical and other unpredictable reasons.

In recent years, the relationship between economic activity and the M-1 aggregate departed significantly from past trends (see chart 4). By the middle of 1982, the velocity of M-1 was beginning to diverge markedly from past patterns. So substantial was the deviation that achieving the 1982 M-1 target might have encouraged a continuation of the deep and stubborn recession. The FOMC acknowledged the velocity disturbance in the latter half of 1982 by diminishing the emphasis placed on that aggregate in implementing monetary targeting and accommodating M-1 growth above its 1982 range.

As the year 1983 began, there was no compelling evidence to suggest an early return to a predictable relationship between M-1 and economic activity. In fact, further distortions in the relationship between economic activity and the various money-supply measures were imminent. Newly authorized money market deposit accounts (MMDAs) provided limited transactions capabilities but paid market rates of interest above previous ceiling rates on time and saving deposits. These new deposit instruments attracted large volumes of funds from market instruments that had not been included in the usual money measures. To the extent that such shifts of balances were simple reorganizations of previously existing portfolios, they were not of primary concern in the development of the monetary-policy objectives. During this period of transition, the Federal Reserve found it difficult to specify target growth rates consistent with a noninflationary economic expansion.

Initially, the Federal Reserve was in a position to accommodate the deposit shifts into the new accounts without much risk of jeopardizing longer-term objectives. After the lesser emphasis on the M-1 target, financial conditions were relaxed (short-term interest rates had declined by about 600 basis points in the second half of 1982). The long-expected economic recovery was apparently beginning to unfold. For a time at least, open-market operations could supply the reserves required to support the new configuration of deposit holdings without endangering recovery or fueling future inflation.

The monetary targets for 1983 explicitly recognized these problems. The M-1 aggregate seemed to be especially vulnerable to deposit shifts and thus was assigned lesser weight in policy implementation. The broader M-2 and M-3 aggregates were given somewhat greater weight. A new base period was established for the M-2 aggregate,





with its target range extending from February–March to the fourth quarter of 1983. The new point of departure was less affected by the huge volume of funds shifted into M-2. In effect, rebasing M-2 between the fourth quarter of 1982 and the new base period accommodated an increase of \$114.1 billion from huge unprecedented shifts in portfolio composition. These deposit shifts made it necessary for the monetary policymakers to look beyond the aggregates. These huge shifts of funds were accompanied by a relatively constant volume of discount-window borrowing and level of the federal funds rate—a pattern that was reflected in most other money market rates. Rapid growth of the new accounts began to slow after the early months of 1983. In the first quarter, for example, the growth rates for the M-2 and M-3 aggregates were 20.5 percent and 10.8 percent, respectively; in the second quarter, the growth rates for M-2 and M-3 were 10.6 percent and 9.3 percent, respectively. It became feasible to place more emphasis on the aggregates. The M-3 growth targets based on their fourth-quarter 1982 level were retained.

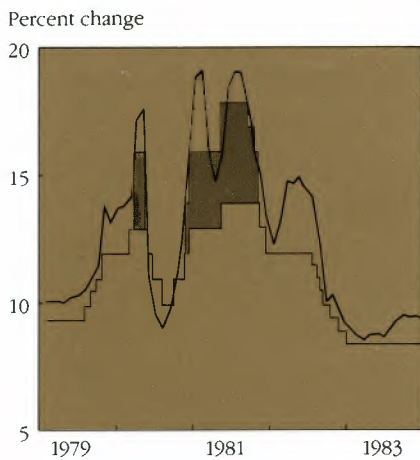
Dealing with the M-1 aggregate proved to be more difficult. The widened 4 percent to 8 percent range for M-1 made some allowance, both for the uncertainties of financial deregulation and the unusual velocity behavior in 1982. In the July reconsideration of the 1983 targets, the base for the M-1 monitoring range was shifted from the fourth quarter to the second quarter, and the range was lifted to 5 percent to 9 percent. These decisions, as in the earlier rebasing of the M-2 aggregate, largely accepted the rapid growth in early 1983 as being caused by the transitory effects of portfolio readjustments.

The introduction of Super-NOW accounts was expected to inflate M-1 growth with funds attracted from non-M-1 assets. The introduction of MMDAs (included in the non-M-1 component of M-2) was expected to deflate M-1 growth by a flow of funds out of M-1 (NOW accounts in particular). On balance, these substitutions were thought to offset each other, so that measured M-1 growth should have been little affected by these two regulatory changes. Nevertheless, in 1983 the uncertainties involved in predicting M-1 velocity were substantial. While some analysts expected a return to more normal M-1 velocity behavior, there was little confirming evidence of this until the end of the year.

While M-2 growth was slowing, moving that aggregate into its rebased target range, rapid M-1 growth was continuing. The M-1 aggregate rose at an 11.6 percent rate in the second quarter, compared with 12.8 percent in the first. The behavior of M-1 could not be linked with confidence to policy objectives. Targets for M-2 and M-3 could be set, but the radical transformation of these broader aggregates had also diminished confidence in their relationship to economic policy objectives. Moreover, their controllability also became more problematic.

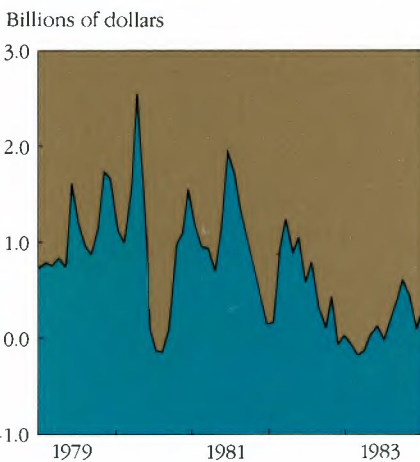
In the absence of a reliable M-1 target, it fell to the FOMC to use M-1 and all other available financial and economic information in reaching decisions about the appropriate degree of reserve restraint to be maintained between meetings. The discount rate remained at 8.5 percent throughout the year, and the federal funds rate generally varied within a 100-basis-point range above the discount rate (see chart 5). This was in remarkable contrast to the preceding three years in which, under the reserve targeting procedure, the funds rate had changed by as many as 900 basis points during a year, and at times had exceeded the discount rate by as many as 600 basis points. Similarly, average borrowed reserves net of excess reserves ranged from \$377 million of free reserves to \$1.2 billion of net borrowed reserves (see chart 6). Again, this was a narrower range than in the preceding three years, when this measure varied as much as \$3.8 billion within a year.

**Chart 5**  
**Federal Funds and Discount Rates**



NOTE: Shaded areas indicate period when surcharge was in effect.

**Chart 6**  
**Net Borrowed Reserves**



SOURCE: Board of Governors of the Federal Reserve System.

By a small 7 to 5 margin, at its May meeting the FOMC agreed to an increase in reserve restraint. Over the next few months, measures of reserve restraint reflected this decision as the borrowed and free reserve positions of the banking system tightened by about \$500 million and the average level of the federal funds rate rose by about 75 basis points to the 9.5 percent range. Interest rates across the spectrum of instruments and maturities moved up by comparable amounts. The FOMC's decision in May had double significance. One was the direct impact of even a marginal adjustment of reserve restraint on growth of money and credit and the pace of economic recovery. The other was the demonstration that, despite substantial uncertainty about the reliability of monetary aggregates, the FOMC was willing to adjust the degree of reserve restraint when decisions based on the array of economic indicators suggested the prudence of such an adjustment in seeking long-run objectives. The suspension of strict nonborrowed reserve targeting in 1982 had cut the automatic link between reserve restraint and short-run money growth. It did *not* mean that the FOMC would indefinitely accommodate whatever contour of monetary and economic growth happened to develop.

The phenomenal growth rates of other checkable deposits ceased in August, suggesting that the portfolio adjustments associated with deposit deregulation and new accounts were nearing completion. M-1 growth finished the year near the midpoint of the 5 percent to 9 percent range for the second half of 1983, and M-1 velocity growth appeared to be approaching rates more nearly consistent with historical experience.

**Interest Rates and Capital Markets.** The level of interest rates was a matter of controversy during the year, despite their relative stability. A common perception early in 1983 was that the level of interest rates was *too high* to allow



anything but a mild recovery. A mild recovery would bring only a slight reduction in idle capacity and the unemployment rate by year-end. The perception that interest rates were too high relative to past standards, to the rate of inflation, or to economic recovery goals was common. In the first place, the level of nominal interest rates can be high or low, depending on the rates of inflation expected to prevail over the term of the instrument. Expectations of inflation cannot be observed directly or measured well. Whatever the level of interest rates, they were not so high in 1983 as to preclude the growing demands for output in traditionally rate-sensitive sectors of the economy that provided the driving force for recovery.

### ***And Then the Thorns***

Although optimistic about the vigor of the 1983 recovery, economists are worried about other aspects of the economy. Perhaps the greatest concern is the financing of our huge federal budget deficit. Many budget analysts now expect the deficit to grow through the current decade and remain in a range of 5 percent to 6 percent of GNP. During the 1970s, the deficit averaged 2.2 percent of GNP; during the 1960s, a decade of rapid capital accumulation, the deficit averaged less than 1.0 percent of GNP. The financing needs of the federal sector will keep upward pressure on interest rates. This upward pressure could hamper the growth of the economy's interest-sensitive sectors, including housing, consumer purchases of durable goods, business fixed investment, and capital expenditures of state and local governments.

The central issue is the adequacy of saving to finance both public and private credit demands as the current recovery proceeds. Although many alternative measures of saving exist, most measures suggest that saving is not increasing at a pace consistent with the substantial credit needs that loom ahead. Since 1979, net saving from the household, nonfinancial business, and state and local government sectors has grown more slowly than the federal sector's borrowing needs. Moreover, foreign capital inflows, which helped finance the deficit in 1983, will become less freely available as the worldwide recovery proceeds. As a result of these trends, the United States might only be able to satisfy growing federal credit demands at the expense of its capital-stock growth. Future generations would then bear the burden of today's deficits.

***The Saving Concept.*** Saving is defined as the part of current income that is not consumed. Added over sectors, saving is equal to household income less consumption plus business retained earnings and depreciation allowances, plus foreign capital inflows, plus any federal, state, and local government surpluses. Saving represents resources withheld from current consumption to build capital and ensure



greater future consumption.<sup>3</sup> Aggregate saving over any quarter or year equals aggregate investment. Changes in economic variables such as interest rates, employment, and income correct any tendency of the two to diverge. If, for example, planned investment exceeds planned saving, interest rates will rise to constrain investment demand, reduce consumption, and encourage additional saving. In this way interest rates force planned investment to equal planned saving.

3. *Borrowing represents dissaving; that is, borrowing reduces future consumption to increase current consumption.*

4. *See Flow of Funds Accounts, Fourth Quarter 1983, Board of Governors of the Federal Reserve System.*

Although the broad concept of saving is fairly straightforward, measurement of the concept is fraught with difficulties. Some of these difficulties reflect measurement problems, and some result from definitional problems. Conceptually, economists can measure saving from current account transactions, as income minus current expenditures. Saving also can be measured from capital account transactions, as net investment in tangibles and financial assets minus net increases in debt. These two approaches will yield equal results in the absence of measurement errors and definitional problems.

Whether measured on a current account basis or a capital account basis, saving falls out as a residual. As such, any error in the measurement of income or consumption (current account basis) or in the measurement of the changes in assets or liabilities (capital account basis) appears in the saving figure. The substantial discrepancies that appear between saving estimated on a current account basis and saving estimated on a capital account basis evidence this measurement problem. Gross nonfinancial business saving in 1982, for example, equaled \$321 billion on a current account basis, but equaled \$263 billion on a capital account basis.<sup>4</sup> The \$57-billion discrepancy between these two measures is attributable largely to incomplete and preliminary information on business taxes. Similarly, foreign capital flows measured as the negative of U.S. current account balances equaled an inflow of \$8 billion in 1982; foreign capital flows measured on the capital account basis in the flow-of-funds accounts amounted to an outflow of \$30 billion. The \$38-billion statistical discrepancy reflects errors in measurement. Statistical discrepancies exist in the other sectors.

When considering a saving aggregate, we must decide whether these discrepancies largely reflect saving or whether they result primarily from errors in the measurement of income and consumption (current account basis) or errors in the measurement of changes in assets and liabilities (capital account basis). We measure saving from flow-of-funds data on a current account basis. Statistical discrepancies are not allocated to saving.

A second aspect of the measurement problems involves defining the relevant components of the saving aggregate. There are a myriad of definitional questions. A major





uncertainty, for example, involves the choice between *net* saving, which is available to finance additions to the capital stock, and *gross* saving, which equals net saving plus depreciation allowances available to maintain the existing capital stock. Although we focus on a net saving concept, we also consider a gross saving measure. Depreciation allowances based on tax laws could overstate capital consumption needs based on the physical characteristics of plant and equipment, especially in the short run. These funds could temporarily finance credit demands unrelated to the replacement of capital.



Another definitional question involves the treatment of household tangible assets. When a household purchases durable goods, such as a new car or refrigerator, the household does not consume, or use up, the product immediately. Durable goods are assets with a store of value that yields a return of services over a long time. Many economists argue that the flow of services from the unconsumed portion of such durable goods represents a form of saving. We include household tangibles in our measure of saving. In the long term, this stock of tangible assets is an important determinant of household consumption (and saving) patterns. In the short term, we might exclude household tangibles from a saving measure, arguing that they do not represent a flow of liquid funds available in credit markets to satisfy borrowers' needs.

***Saving by Sector.*** Ultimately, we are interested in the total amount of saving available to finance private and public credit demands. The aggregate data, however, mask trends and developments in the various sectors of the economy important to our understanding of saving. A brief discussion of saving by sector follows.

Household saving includes net financial investment plus allowances for tangible assets, capital-gains dividends, and government insurance funds. In the United States, the household sector is the largest saving sector. Total household saving has grown at a fairly steady average annual rate of 9.3 percent since 1970. Over the years, the composition of household saving has changed. Between 1970 and 1975, households accumulated financial assets more quickly than tangible assets. Between 1975 and 1979, households slowed their acquisition of financial assets and accelerated their holdings of tangible assets. During the earlier period, inflation remained relatively moderate, and the public generally believed that economic policies would bring inflation under control. In the later period, inflation accelerated, inflationary expectations heightened, and the credibility of policymakers became strained. Returns on financial assets often fell below the inflation rate, increasing the attractiveness of tangible assets. Since 1979, households' accumulation of tangible assets again has become relatively less important than that of financial assets, suggest-

ing more optimistic expectations about inflation and the wisdom of policymakers.

In contrast to the fairly steady growth of household saving, nonfinancial business saving has slowed markedly since the late 1970s. Between 1970 and 1979, for example, gross business saving grew on average approximately 13.0 percent per year. Since 1979, gross business saving has grown on average 10.4 percent per year. Much of the growth in gross nonfinancial saving can be traced to an expansion of depreciation allowances. Tax laws pertaining to depreciation charges generally have been liberalized over the years. Substantial liberalization of depreciation write-offs pertaining to new capital were instituted under the Economic Recovery Tax Act of 1981. This law should substantially increase depreciation charges in the future as existing capital stock is replaced with new capital.

Net of depreciation allowances, nonfinancial business saving has fallen at a 12.8 percent annual rate since 1979, after increasing at a 24.9 percent annual rate between 1970 and 1979. The weakness in net business saving since 1979 in large measure could reflect the general weakness in economic activity, and renewed growth in business net saving could be forthcoming as economic activity strengthens.

One possible measure of state and local governments' saving equals total receipts less total expenditures. The flow-of-funds accounts allocate pension funds to the household saving sector. These funds have grown sharply since the early 1970s. In the absence of these pension funds, state and local governments' saving is fairly small and fluctuates around zero. In 1983, state and local governments' saving equaled \$12 billion, but there is no reason to expect this unusually large level of saving to persist.

Like the state and local government sector, the foreign sector is sometimes a net saver and sometimes a net borrower. Inflows of foreign capital, measured as the negative of the current account balance, rose sharply in 1983 to \$32 billion. Foreign capital inflows were attracted to the United States because of the faster pace of recovery here than in most other developed countries, higher relative interest rates here than abroad, and fears of political upheavals and capital controls in many foreign countries. The inflow of foreign funds helped keep U.S. interest rates below levels they otherwise would have attained, but the capital flows also promoted a strong dollar exchange rate and weakened U.S. net exports. Most economists project a widening in the current account deficit in 1984 and 1985, implying even greater inflows of foreign capital. At the same time, recovery abroad will quicken, and foreign credit demands will begin to firm. By late 1984 or early 1985, substantial increases in U.S. interest rates compared with those elsewhere in the world, and/or a sharp depreciation in the spot-dollar exchange rate compared with its



5. Federally sponsored agencies and mortgage pools are not included in the federal borrowing figures, because these agencies function as intermediaries: they borrow funds and relend them. Federally sponsored agencies and mortgage pools alter the flow of credit from what would occur in a free market. In 1983, federally sponsored agencies and mortgage pools borrowed and relent \$68.1 billion.

longer-term expected value, could be necessary to attract additional foreign funds into the United States. The foreign source of saving consequently could prove to be expensive and unreliable in the future.

In contrast to the other sectors that contribute to saving at least periodically, the federal sector has been a net borrower of growing magnitude since 1969. This can be directly traced to Treasury borrowing to finance ballooning federal budget deficits and net federal off-budget spending. The concept of *net* federal borrowing is not strictly equal to Treasury borrowing to finance the deficit and off-budget spending, because the federal government holds some financial assets.<sup>5</sup> These offsets are small, however. Net federal borrowing equaled \$189 billion in 1983, up sharply from \$67 billion as recently as 1981 and \$15 billion in 1970. Although much of the increase in Treasury borrowing is associated with the economic malaise of the recent recession years, budget analysts currently do not expect Treasury borrowing to moderate significantly as the economic recovery proceeds.

*The Adequacy of Saving.* Saving from the household, nonfinancial business, state and local government, and foreign sectors equals nonfederal saving and represents funds available to finance private investment or federal credit demands (see chart 7). *Net* nonfederal saving is available to finance new additions to the capital stock or federal deficit spending. Gross nonfederal saving equals net saving plus depreciation allowances available to maintain the existing capital stock. Because federal borrowing is insensitive to interest rates and involves virtually no credit risk to lenders, the federal sector generally stands first in the queue for credit-market funds. Consequently, over time the amount of planned private investment financed depends on the growth of nonfederal saving and the growth of federal credit demands.

Between 1960 and 1978, net nonfederal saving grew at an 11.5 percent average annual rate and gradually rose from 7 percent to 12 percent of GNP. Since 1978, net nonfederal saving has leveled off, falling to 9 percent of GNP. In contrast, gross saving continued to grow by a widening margin because of more generous depreciation allowances. For much of the period since 1960, the federal sector's appetite for saving remained fairly subdued. Between 1960 and 1969, net federal borrowing rarely exceeded 1 percent of GNP; over the next five years, it averaged only slightly above 1 percent of GNP. Since 1979, as nonfederal net saving slowed, the federal appetite for net saving rose dramatically to almost 6 percent of GNP in 1983.

Especially during economic downturns, deficit spending in conjunction with accommodating money growth can benefit the economy by generating income with little pres-

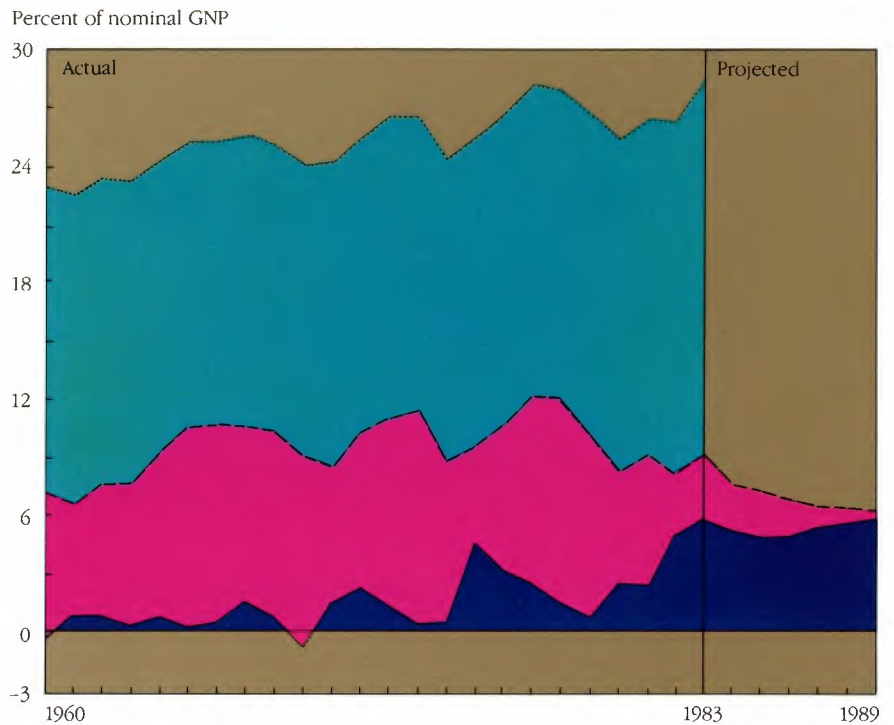


sure on interest rates. Continuous and expanding deficits, especially when the economy is growing and approaching full capacity utilization, place federal borrowing in conflict with private credit needs. If planned private investment and federal credit demands exceed planned non-federal saving, interest rates will rise to balance the amount of credit demanded with that supplied; the federal sector will crowd private borrowers out of the credit market. Since 1979, the moderate growth in net nonfederal saving, together with the sharp rise in net federal borrowing, has

**Chart 7**  
Saving and the Federal Sector

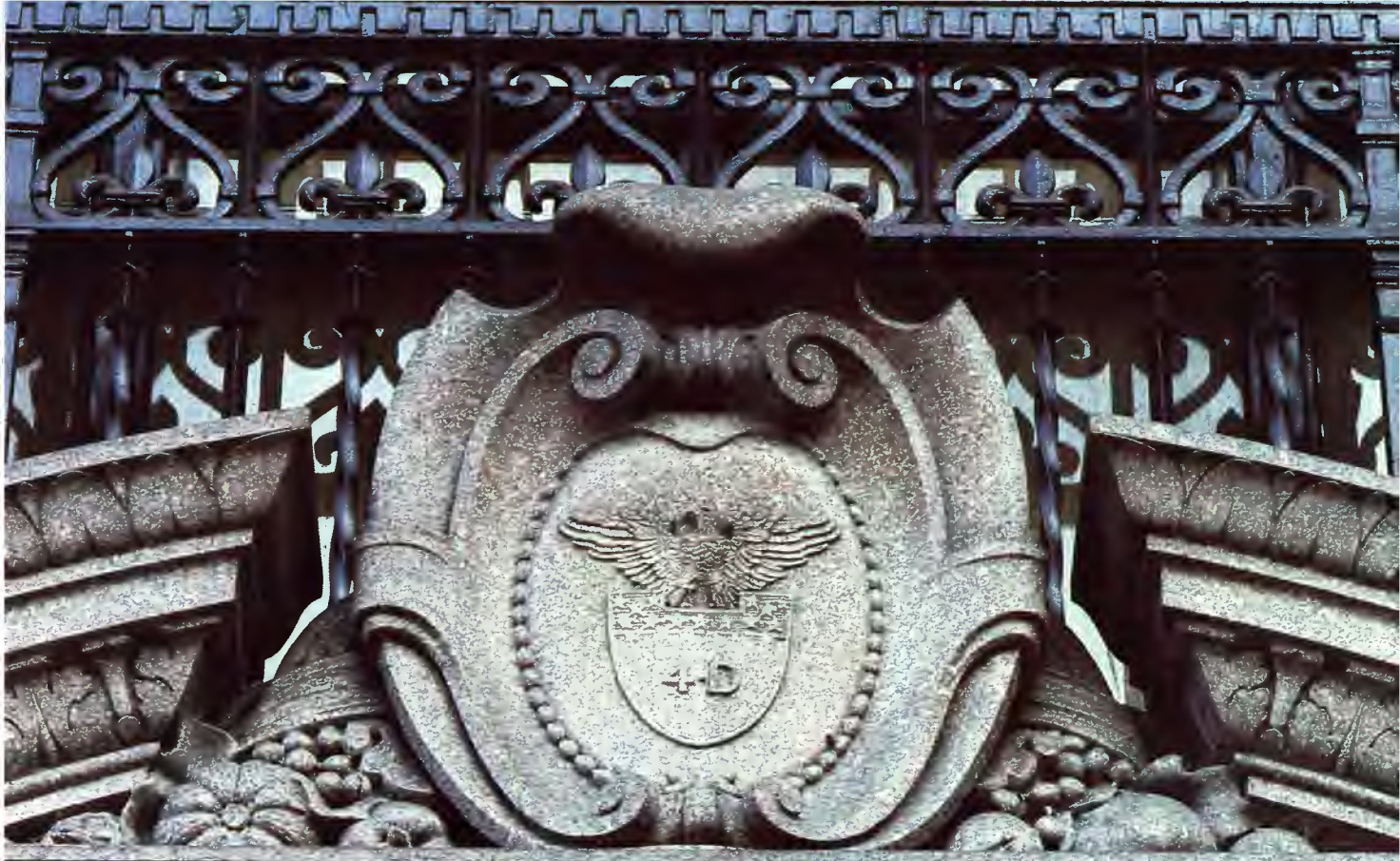
- Capital consumption funds
- Net federal borrowing
- Net private investment funds
- Gross nonfederal saving
- Net nonfederal saving
- Net federal borrowing

SOURCES: Actual data—Federal Reserve Board flow of funds accounts. Projections incorporate a Congressional Budget Office forecast of GNP and the baseline budget deficit.



reduced the funds available for private investment. In 1983, net federal borrowing consumed nearly all of net nonfederal saving. According to our measures of saving, since 1979 the United States has financed its budget deficit at the expense of net private investment.

A slowing in the growth of a nation's capital stock relative to the growth of its labor force eventually produces a decline in that country's productivity growth and its full-employment (or potential) level of output. Since the mid-1970s, U.S. labor-productivity growth has slowed; since 1977, U.S. productivity has shown virtually no growth. Although economists have not fully explained the poor U.S. productivity performance, the most reasonable explanations relate to demographic trends in the United States and to a failure to accumulate productive capital. An economy with a slowing productivity growth rate will become more vulnerable to inflationary pressures. Over an extended period of time, such an economy will suffer a drop in its standard of living measured as the total amount of real goods and services consumed per capita. The resulting smaller capital stocks and reduced standard of living



represent the true burden, which is passed to future generations, of financing the federal deficit. Continuous federal deficit spending augments current consumption per capita at the expense of future consumption per capita.<sup>6</sup>

The United States could avoid the consequences of heavy federal borrowing if the gap between net nonfederal saving and net federal borrowing were to widen again. To examine the prospects of such a development, we projected net nonfederal saving through 1989 according to its historic growth pattern. We estimated net federal borrowing over the same period, using the Congressional Budget Office's (CBO) estimates of the baseline budget deficit.<sup>7</sup> We also used the CBO's estimates of GNP as the denominator of the ratios. The projections indicate that the difference between net nonfederal saving and net federal borrowing narrows throughout the remainder of the decade. In the absence of effective policies to reduce the federal budget deficit, the United States could experience a ten-year period (1980 through 1989) characterized by a continuous and generally tightening squeeze on the funds available to finance net private investment. In the absence of deficit-reducing policies, real interest rates in the 1980s could easily remain above their pre-1979 historic norm. The long-term adverse consequences of these projections could manifest themselves in the near term as rising interest rates, sluggish growth of residential construction and business fixed investment relative to public and private consumption, and possibly an early end to the current economic recovery.

***Implications for Monetary Policy.*** Given the formidable difficulties of measuring saving, we must allow for sizable margins of imprecision around our estimates. Yet, the general conclusion holds. Federal borrowing to finance budget deficits has consumed an increasing share of the saving available to finance private investment since 1979 and could easily continue to crowd private borrowers out of credit markets as recovery proceeds, unless actions are taken to reduce the deficit. Hefty federal credit demands have contributed to the unusually high level of interest rates in recent years, and these interest-rate pressures could become more pronounced in 1984 and 1985 as private credit demands rise. At this point, federal deficit spending could conflict with a monetary policy directed at preventing a resurgence of inflation.

The ability of the Federal Reserve System to promote low interest rates in the face of heavy public and private credit demands is severely limited. While changes in monetary policy often can lower interest rates in the short run, over time the monetary authority only can attempt to approximate such an objective through continuously accelerating money growth. The price of such a policy is accelerating

6. *To the extent that current budget deficits reflect federal investment spending, which benefits future generations, they should bear part of the burden. Much of the growth in federal spending over the past decade reflects consumption spending (e.g., transfer payments) instead of investment spending.*

7. See Congressional Budget Office, *An Analysis of the President's Budgetary Proposals for Fiscal Year 1985, February 1984.*

inflation. Ultimately, such a policy course is self-defeating; lenders eventually will raise interest rates to prevent an accelerating inflation rate from eroding the real value of their outstanding loans. In the long run, monetary policy is limited; if society devotes more of its resources to the federal sector, fewer resources are available to the private sector.

### ***More Brambles in the Garden***

The competition for saving between the public and private sectors will be the major factor influencing the contours of the current economic recovery and weighing on monetary policy decisions. This, of course, is not the only event that will define the monetary policy environment over the next year or so. Monetary policymakers also will confront increasing price pressures as recovery proceeds, along with a precarious international debt situation.

***A Pause in the Disinflation Process.*** Twenty years ago policymakers optimistically believed that monetary and fiscal policies could maintain both full employment and price stability. Monetary policy objectives alternated between fighting inflation and fighting unemployment. By switching objectives back and forth between inflation and unemployment, policymakers lost both battles. The unfortunate experience was that the Federal Reserve could not for very long trade off a little more inflation for a little less unemployment. Indeed, inflation rose to higher and higher levels in each expansion period, and unemployment rose to new heights in each recession. If any trade-off existed, it was only temporary.

The experience of the past 20 years prompts two observations. First, the Federal Reserve has limited ability to manipulate the economy in the short run to achieve full employment. Second, full employment cannot be achieved on an enduring basis in an inflationary environment. A growing realization of the difficulty of achieving short-term economic goals, coupled with the widening awareness of the overriding importance of any inflation-free environment, has led to a consensus that price stability over the long run should be the central bank's primary goal. What do we mean by price stability? In theory, it can be argued that it does not matter whether the inflation rate is 0 to 5 percent, as long as it is predictable. In practice, we have found that a little inflation soon becomes more, and that inflation becomes even less predictable at higher levels. Consequently, long-run price stability might only be consistent with a zero-inflation objective.

Adjusting to high levels of inflation in the real world is not costless, even when those levels are predictable. During the 1970s, repeated failure to deal with inflation on a long-term basis all but forced consumers, businessmen, savers, and borrowers to expect future inflation to be worse than current inflation. Eventually, the expectations

of higher future inflation became entrenched in financial markets, and investors built a substantial inflation premium into interest rates. Accelerating inflation led to more uncertainties and risks in financial markets, as well as to distortions in saving and investment. Some economists believe that these distortions may have eroded the stock of productive capital, lowered worker productivity, and contributed to even higher unemployment rates. Although there are certainly many who would disagree, economists increasingly have come to realize that the central bank can do little to maintain full employment except provide an economic environment that includes a sound financial system and a stable price level.

Since 1979, the Federal Reserve has clearly established and acknowledged that its primary responsibility is to end inflation, and we have made much progress toward that goal. Inflation as measured by the GNP implicit price deflator has fallen from about 9 percent in the early 1980s to about 4 percent in 1983. Inflationary expectations, so rampant in the mid- to late-1970s, also have cooled, and policymakers have earned renewed credibility with respect to their resolve to prevent inflation. Nevertheless, the battle against inflation is not over. Inflation hovers around 4 percent to 5 percent. Although this is a substantial improvement from recent experience, it is still unacceptably high in view of historical averages in the United States and long-term price stability.

A renewed challenge to the Federal Reserve's disinflation policy will come in 1984 and 1985 as the pace of economic activity quickens, reducing excess capacity in the economy and placing cyclical pressures on prices. The overall amount of excess capacity in the economy can be approximated by the gap between actual and potential GNP.<sup>8</sup> Potential GNP attempts to measure the total amount of goods and services that the economy could produce if it continuously operated at full employment. Because it is an imprecise measure, price pressures can exist while actual GNP remains far below potential. Given these caveats, the measure is useful in gauging the intensity of overall price pressures. At the trough of the last recession, i.e., the fourth quarter of 1982, the GNP gap equaled approximately 8 percent of potential GNP. During the first year of the current recovery, real GNP grew 6.2 percent, roughly equal to the average first-year recovery pace experienced throughout the post-World War II period. While the GNP gap narrowed to 5.4 percent of potential GNP, sufficient excess capacity existed to avoid cyclical pressures on prices. Few industries experienced capacity problems last year. Assuming that in 1984 the rate of real growth would be approximately equal to last year's growth rate, the GNP gap would close to about 2.7 percent of potential. In late 1984 and early 1985, the economy will approach the capacity limits implied by the potential GNP measure. To avoid a sharp acceleration

8. See K.J. Kowalewski and Michael F. Bryan, "The Outlook for Inflation," Economic Review, Federal Reserve Bank of Cleveland, Winter 1984, pp. 7-22.

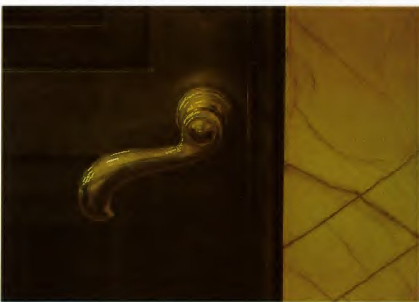


in inflation as actual GNP approaches potential GNP, the economy's growth rate must slow to a pace equal to the growth rate of potential GNP, i.e., 2.5 percent to 3.0 percent annually. Such a growth rate is compatible with the long-term growth in the labor force and capital stock. If real economic growth continued above this pace, prices would rise rapidly.

***The International Sector.*** A further depreciation of the U.S. dollar in foreign-exchange markets also could add to price pressures in 1984 and 1985. The dollar continues to exhibit strength in exchange markets, remaining well above levels that many economists regard as consistent with long-term equilibrium in the U.S. foreign trade balance. Consequently, many foreign-exchange analysts expect a depreciation of the dollar's exchange value this year and again next year. Depreciation of the dollar tends to raise the dollar prices of internationally traded goods. Almost immediately following a depreciation of the dollar, prices of U.S. imports rise. As import prices rise, consumers of these goods will shift to domestic substitutes, eventually exerting upward price pressures in these markets. Similarly, a dollar depreciation reduces the foreign-currency price of U.S. exports and increases the foreign demand for U.S. goods. The dollar prices of U.S. export goods then begin to rise. These price pressures also ripple through closely related markets. Although dollar depreciation exerts pressures on the prices of traded goods in the absence of an accommodative monetary policy, these price pressures would not translate into a more broadly based inflation.

Another major thorn in the economic outlook is the international debt situation. The world's developing countries, excluding members of the Organization of Petroleum Exporting Countries (OPEC), currently have debts outstanding totaling about \$600 billion. U.S. banks hold roughly 15 percent of this debt. The economic climate of the past few years has left many developing countries unable to meet the interest and principal payments on their original loan agreements. Consequently, many countries have entered into negotiations with their creditors to extend repayment schedules. Major disruptions or delays in meeting interest payments on debts could shake confidence in the U.S. banking system, producing contractions in both domestic and international lending. Such developments could reduce international trade and slow the pace of the economic recovery worldwide.

As of June 1983 (latest data available), the 190 U.S. banks reporting to a lending survey of the Federal Financial Institutions Examination Council had claims on non-oil developing countries of nearly \$104 billion, an amount equal to 139 percent of the capital of these banks. Although many regional and small banks entered the international lending market in the 1970s, international lending remained the



domain of large banks with expertise in the area. The nine largest U.S. reporting banks held 62 percent of the total reporting bank claims on developing countries as of June 1983. This amount equaled 212 percent of the large banks' capital. As recently as December 1977, the nine largest banks had loans outstanding to non-oil developing countries equaling only 163 percent of their capital.

U.S. banks have concentrated their international lending on a relatively small group of middle-income developing countries. In June 1983, Argentina, Brazil, Mexico, and Venezuela accounted for 63 percent of the total U.S. reporting bank claims, with Brazil and Mexico accounting for 20 percent and 24 percent, respectively. Consequently, U.S. banks are vulnerable to adverse developments in these countries.

We can only speculate on the effects of a major disruption in the servicing of international loans. Much depends on the extent of the disruption and the response of regulatory agencies, commercial banks, shareholders, and depositors. Extensive loan write-offs could adversely affect banks' profits, shareholders' earnings, and banks' capital. Banks must maintain capital against loans, although the required amount is only a small share of total loans. Consequently, any reduction in capital could restrict bank lending and raise interest rates. Higher interest rates and reduced lending could slow domestic economic activity, but the extent of this effect would depend on the monetary policy of the Federal Reserve System.

Major debt-servicing disruptions also could greatly restrict the ability of borrowing countries to conduct international trade. Disruptions could leave the debtor nation unable to obtain foreign credit to import vital commodities. This in turn could impinge on the debtor nation's ability to produce other goods for domestic consumption and for exportation. Without exports, these countries would find it difficult to acquire foreign exchange. Moreover, the developing countries are important markets for developed country exports. The contraction of these markets could further reduce economic growth and employment in the United States.

***Monetary Policy for the Longer Term.*** The Federal Reserve is in the middle of a long-term program to end inflation by gradually slowing the growth of money and credit. When this program began, it was informally defined as a policy to reduce the annual growth targets for the money supply gradually each year until inflation was eliminated. In 1982, our effort to lower the money targets gradually each year was set aside. A series of well-documented events led to a sharp shift in the linkages between the money supply and total spending in the economy. Massive shifts of funds among the various measures of the money supply—the monetary aggregates—distorted the growth of those aggregates, particularly of M-1. Other factors, such as the



sudden decline in inflation and improved expectations about the future cost of holding money relative to other financial assets, also played a role. The FOMC agreed to de-emphasize the M-1 policy target and to place more emphasis on the broader monetary aggregates. As events since have proven, that decision did not mean that the battle against inflation was over. It was merely an acknowledgment that events had occurred that made the preannounced targets inappropriate—indeed, inconsistent with our policy to end inflation gradually.



In retrospect, we believe that the surge of M-1 in the first half of 1983 and the subsequent slowdown resulted from the effects of the ongoing deregulation of the financial markets and lower inflation itself. These transition effects appear to be ending. Barring further substantial changes in depository regulations, we expect the linkage between money and spending to be restored. This does not mean that velocity would become perfectly predictable, or even that the relationship between the monetary aggregates and nominal GNP would become any more stable and predictable than it was in earlier times. While we have no guarantee of how M-1 will behave in the future, the last three years have shown that the Federal Reserve can achieve its disinflation goal using annual monetary targets, even in the presence of enormous distortions to the aggregates. This success is predicated on the Federal Reserve's freedom to deviate from its targets when appropriate. An analysis of the last four years shows that the Federal Reserve did not achieve its original monetary targets; yet, in each of those four years, the deviations from target can be most accurately interpreted as reflecting offsetting deviations in the velocity of money from trend.

# Comparative Financial Statements

For years ended December 31

## Statement of Condition

	1983	1982
<i>Assets</i>		
Gold certificate account . . . . .	\$ 659,000,000	\$ 744,000,000
Special drawing rights certificate account . . . . .	302,000,000	302,000,000
Coin . . . . .	36,861,081	48,352,029
Loans and securities:		
Loans to depository institutions . . . . .	28,550,000	18,640,000
Federal agency obligations bought outright . . . . .	512,195,486	589,824,645
U.S. government securities:		
Bills . . . . .	3,899,095,369	3,592,053,786
Notes . . . . .	3,787,905,782	4,133,263,304
Bonds . . . . .	1,233,156,486	1,224,664,884
Total U.S. government securities . . . . .	8,920,157,637	8,949,981,974
Total loans and securities . . . . .	9,460,903,123	9,558,446,619
Cash items in process of collection . . . . .	313,757,611	497,489,683
Bank premises . . . . .	27,423,020	26,959,141
Other assets . . . . .	471,760,022	622,823,041
Interdistrict settlement account . . . . .	(693,739,261)	(1,322,017,967)
TOTAL ASSETS . . . . .	\$10,577,965,596	\$10,478,052,546
<i>Liabilities</i>		
Federal Reserve notes . . . . .	\$ 8,831,155,014	\$ 8,822,691,792
Deposits:		
Depository institutions . . . . .	1,094,302,278	1,050,526,845
Due to other Federal Reserve banks (collected funds) . . . . .	0	326,044
Foreign . . . . .	10,950,000	15,750,000
Other deposits . . . . .	21,855,551	41,324,088
Total deposits . . . . .	1,127,107,829	1,107,926,977
Deferred availability cash items . . . . .	275,111,613	214,983,382
Other liabilities . . . . .	141,856,440	134,157,795
TOTAL LIABILITIES . . . . .	\$10,375,230,896	\$10,279,759,946
<i>Capital accounts</i>		
Capital paid in . . . . .	\$ 101,367,350	\$ 99,146,300
Surplus . . . . .	101,367,350	99,146,300
TOTAL CAPITAL ACCOUNTS . . . . .	\$ 202,734,700	\$ 198,292,600
TOTAL LIABILITIES AND CAPITAL ACCOUNTS . . . . .	\$10,577,965,596	\$10,478,052,546

<i>Earnings and Expenses</i>	1983	1982
<i>Current earnings</i>		
Interest on loans . . . . .	\$ 2,378,047	\$ 7,476,261
Interest on government securities . . . . .	924,706,072	1,047,056,094
Earnings on foreign currency . . . . .	19,987,049	32,333,016
Revenue from priced services . . . . .	30,342,356	23,999,246
All other earnings . . . . .	286,732	318,797
Total current earnings . . . . .	\$ 977,700,256	\$1,111,183,414
<i>Current expenses</i>		
Current operating expenses . . . . .	\$ 54,278,653	\$ 59,109,587
Cost of earnings credits . . . . .	6,514,992	1,996,859
Total current expenses . . . . .	\$ 60,793,645	\$ 61,106,446
CURRENT NET EARNINGS . . . . .	\$ 916,906,611	\$1,050,076,968
<i>Profit and loss</i>		
Additions to current net earnings:		
Profit on sales of government securities . . . . .	\$ 1,336,302	\$ 5,533,134
All other additions . . . . .	14,243	707
Total additions . . . . .	\$ 1,350,545	\$ 5,533,841
Deductions from current net earnings:		
Loss on foreign exchange transactions . . . . .	\$ 33,309,709	\$ 11,220,916
All other deductions . . . . .	45,472	43,094
Total deductions . . . . .	\$ 33,355,181	\$ 11,264,010
Net additions or deductions . . . . .	(\$ 32,004,636)	(\$ 5,730,169)
<i>Assessments by Board of Governors</i>		
Board of Governors expenditures . . . . .	\$ 5,187,600	\$ 4,639,900
Federal Reserve currency costs <sup>1</sup> . . . . .	8,472,971	
Total assessments by Board of Governors . . . . .	\$ 13,660,571	\$ 4,639,900
NET EARNINGS AVAILABLE FOR DISTRIBUTION . . . . .	\$ 871,241,404	\$1,039,706,899
<i>Distribution of net earnings</i>		
Dividends paid . . . . .	\$ 6,018,002	\$ 5,891,495
Payments to U.S. Treasury (interest on Federal Reserve notes) . . . . .	863,002,352	1,031,120,404
Transferred to surplus . . . . .	2,221,050	2,695,000
Total distributed . . . . .	\$ 871,241,404	\$1,039,706,899

1. Prior to 1983, Federal Reserve currency costs were reported in current operating expenses.

# *Federal Reserve Bank of Cleveland Directors*

*As of June 1, 1984*



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Deputy Chairman

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*Chairman of the Board  
Eaton Corporation, Cleveland, OH*

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*Cincinnati*

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Banc One Corporation, Columbus, OH*



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*Aluminum Company of America, Pittsburgh, PA*

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MILTON A. WASHINGTON

*President and Chief Executive Officer  
Allegheny Housing Rehabilitation Corporation  
Pittsburgh, PA*

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Bank of  
Cleveland  
Officers**

*As of June 1, 1984*

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*President*

WILLIAM H. HENDRICKS  
*First Vice President*

LEE S. ADAMS  
*Senior Vice President  
& General Counsel*

RANDOLPH G. COLEMAN  
*Senior Vice President*

JOHN M. DAVIS  
*Senior Vice President  
& Economist*

THOMAS E. ORMISTON, JR.  
*Senior Vice President*

DONALD G. VINCEL  
*Senior Vice President*

ANDREW J. BAZAR  
*Vice President*

DONALD G. BENJAMIN  
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