

# Review and Outlook: A New Approach to Solving Old Problems

*by J. A. Cacy and Glenn H. Miller, Jr.*

In discharging its responsibility to help control inflation and promote a healthy economy, the Federal Reserve System in recent years has sought to control the growth of the nation's supply of money and credit. The System, however, has not always been successful in controlling monetary growth. In particular, during much of 1979, the money supply increased at a rapid pace. This rapid monetary growth was accompanied by accelerating inflation and recurring weakness in the international position of the dollar.

In response to these developments, and in an effort to slow monetary growth, the Federal Reserve took action at various times during 1979 to bring about increases in interest rates. As of the end of September, though, these efforts had not been effective in bringing monetary growth under control. For this reason, the Federal Reserve introduced additional measures in early October, one of which involved a change in the System's approach to monetary control. The Federal Reserve decided to focus on controlling the availability of money and credit directly, rather than controlling money indirectly through changes in interest rates.

This article describes the economic and monetary developments in 1979 that led up to the monetary policy measures instituted on October 6. An analysis of the Federal Reserve's new approach to monetary control is then presented. Following that analysis, the economic and financial outlook for 1980 is discussed.

## **ECONOMIC CONDITIONS IN 1979**

Following the recession of 1974-75, the United States embarked on an economic expansion that became, during 1978, the second longest in the nation's post-World War II history. The expansion was propelled primarily by vigorous growth in consumer spending and residential construction activity, with business spending for new plants and equipment contributing more strongly as the expansion matured. The balanced performance of the private domestic economy was rounded out by well-controlled growth in inventories, as businessmen kept their stocks of goods and materials in close check. As the expansion proceeded, however, accelerating inflation tended to overshadow the balanced nature of improving economic activity. In 1978, the increase in the general price level was—with the exception of 1974—the largest in 30 years.

During 1978, the influence of inflation and the dynamics of the business cycle led many

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observers to believe that the expansion period was drawing to a close and that a downturn was imminent. Yet, in the fourth quarter, total real output grew strongly, buoyed by robust spending on final purchases by both businesses and consumers. Thus, as 1979 opened, expectations for at least a general weakness in economic activity, if not an actual downturn, had not yet been realized.

## **Economic Activity**

Weakness in economic activity did, though, appear in the first quarter of 1979, when total real output grew at only a 1 per cent annual rate. All of that small increase was in final sales, as inventory investment remained unchanged from the fourth quarter. Personal consumption spending was weak, real residential construction spending declined substantially, and government purchases fell slightly, leaving only business fixed investment and net exports as contributors to total real output growth in the year's first quarter.

The second quarter of 1979 brought a temporary cessation of the expansion, as real GNP dropped at a **2.3** per cent annual rate. Only in retrospect will it be known whether that decline marked the beginning of a recession. Nevertheless, a general downturn in economic activity did occur, with real final sales falling in every major spending sector of the economy with the sole exception of purchases by state and local governments. As a result, total final sales fell by about 4 per cent. The difference between the declines in final sales and in real GNP was accounted for by a fairly substantial increase in business inventory investment, largely involuntary in nature because of the drop-off in sales.

If the nation was not yet in a recession at midyear, expectations of its imminent appearance were strengthened by the economy's performance in the first half of

1979. But the ambiguities of economic experience in the 1970s reasserted themselves in the third quarter of the year: total real output resumed its upward movement at an annual rate of 3.5 per cent. Real final sales rebounded sharply to grow nearly twice as rapidly as real GNP, an increase partly offset by a much reduced rate of inventory accumulation. In the third quarter, the earlier decline in real government purchases ceased, the decline in residential construction spending slowed, and business fixed investment spending increased substantially. Most important, however, was the comeback of the consumer after two quarters of nonspending behavior. In spite of a further drop in real disposable income, consumer purchases of both goods and services rose markedly. This performance was accomplished by means of a reduction of the personal saving rate to its lowest level in more than 25 years.

## **Labor Market Developments**

Labor market developments in 1979 generally paralleled the performance of economic activity, with employment growth slowing in the first half and strengthening in the third quarter. Total employment, which had grown steadily for 15 quarters through the first quarter of 1979, fell slightly in the second quarter, and the overall **employment-population** ratio also declined. Payroll employment growth, which maintained its post-recession average growth rate in the first quarter, slowed significantly in the second quarter. Labor force growth showed no change in the second quarter following rapid expansion in the year's first three months. Consequently, the growth rate of the labor force in the first half of 1979 was considerably below the growth attained earlier in the expansion period. These movements in employment and labor force growth resulted in virtual stability of the overall unemployment

rate in the first half of **1979**, following **14** quarters of steady decline.

As was the case with economic activity, however, total employment rebounded in the third quarter and the employment-population ratio moved upward again. Labor force growth continued and the overall unemployment rate remained virtually unchanged from its second quarter level. It may be noteworthy, however, that disaggregation of the overall unemployment rate shows increases in the third quarter in the unemployment rates of adult men; married men, spouse present; and full-time workers.

### Prices and Costs

The rate of increase in the cost of living, as shown by changes in the Consumer Price Index for All Urban Consumers (CPI-U), was considerably greater in the first nine months of **1979** than in the high inflation year of **1978**. The total CPI-U rose at an annual rate of **13.2** per cent during the first three quarters of **1979**. Large boosts in the prices of energy items, particularly gasoline and fuel oil, contributed to the overall rise, as did the accelerating cost of shelter, especially the sharp rise in the cost of financing, taxes, and insurance. Food prices, on the other hand, rose at substantially decreasing rates from the first quarter to the third quarter of the year.

Other measures of price change show patterns of movement for **1979** somewhat different from the fairly steady rate of increase in the CPI-U. Prices of finished goods at wholesale (including capital equipment as well as consumer goods) rose more rapidly in the third quarter (+**15** per cent) than in the first half of the year (+**11** per cent). Consumer foods and energy prices both contributed to this pattern, while the rate of increase in producer prices of capital goods declined over the three quarters. Finally, the broadest measure of price

change—the implicit deflator for gross national product (**GNP**)—rose at an annual rate of about **8.9** per cent from the close of **1978** through the third quarter of **1979**. This measure not only shows a somewhat lower inflation rate than either the CPI-U or the Producer Price Index (PPI), it also shows some deceleration of the inflation rate from **9.3** per cent in the first quarter to **8.0** per cent in the third quarter of **1979**.

Changes in unit labor costs, which are composed of changes in compensation per hour and in output per hour, are perhaps the most important influence on changes in prices, reflecting as they do changes in fundamental real economic forces. The annual rate of increase in unit labor costs in the economy's nonfarm business sector through three quarters of **1979** (**11.8** per cent) was considerably greater than in **1978** (**7.9** per cent). The return to real output growth in the third quarter of **1979** slowed the first half declines in productivity, and slowed the rise in unit labor costs and in prices as measured by the deflator. Labor compensation payments, as measured by compensation per hour in the nonfarm business sector or by average hourly earnings in private nonfarm industries, have remained relatively stable through the first three quarters of **1979** and as compared with **1978**.

A three-quarter pattern of slow growth, decline, and rebound in business activity thus added up to nine months of general weakness for the economy through September **1979**. At the same time, however, the general price level—however measured—rose at an exceptionally rapid rate.

### FINANCIAL DEVELOPMENTS AND MONETARY POLICY IN 1979

During most of **1979**, the financial scene was dominated by rising interest rates, weakness of the dollar in foreign exchange markets, and

rapid growth in money and credit that exceeded the monetary growth objectives of the Federal Reserve.

### Monetary Growth Objectives and Experience

In developing its objectives for 1979, the Federal Reserve wanted to establish growth rate ranges for the monetary and credit aggregates that would be consistent with moderate growth in economic activity during the year and a reduction in inflationary pressures that had begun to intensify in 1978. Early in the year, at its February meeting, the Federal Open Market Committee (FOMC) established a growth rate range of 3 to 6 per cent for M1, the narrowly defined money supply, for the period from the fourth quarter of 1978 through the fourth quarter of 1979.<sup>1</sup> Growth ranges were also established for M2 and M3, broader money supply concepts, and for bank credit. M2's range was 5 to 8 per cent, and M3's range was 6 to 9 per cent. The range for bank credit was 7.5 to 10.5 per cent. This set of growth rate ranges was reconfirmed in July at the FOMC's mid-year review of monetary growth objectives.

During the first part of 1979, the monetary aggregates were very sluggish. For example, M1 actually declined in the first quarter of the year at an annual rate of 2.1 per cent. (See Table 1.) During the spring, however, monetary growth accelerated and M1 grew at an annual rate of 7.6 per cent in the second quarter. Even greater growth developed in the third quarter, with M1 increasing at a rate of 9.7 per cent in the three months ending in September.

<sup>1</sup> The range actually established at the February meeting for M1 was 1% to 4½ per cent. This range reflected an allowance for the impact of automatic transfer payments (ATS) introduced in November of 1978, which were expected to reduce M1's growth rate. However, it subsequently became evident that ATS were having a smaller downward impact on the growth of M1 than originally expected. Due to this smaller impact, M1's range has been adjusted to 3 to 6 per cent.

These rapid monetary growth rates of the spring and summer greatly exceeded the Federal Reserve's monetary growth rate ranges. Monetary policymakers became increasingly concerned, feeling that the excessive growth in the money supply, if allowed to continue, would add to inflationary pressures. The rapid monetary growth, moreover, was contributing to weakness in the dollar in foreign exchange markets. The dollar had strengthened in late 1978 in response to a new support program introduced in November of that year. However, its foreign exchange value dropped sharply in January 1979, and, after recovering somewhat, began declining again in June. By the end of September, the dollar's value had declined to the level prevailing in October 1978, prior to the introduction of the November support package.

### Policy Actions

The decline in the dollar's value and the rapid monetary growth, along with the

	<u>M1</u>	<u>M2</u>	<u>M3</u>	<u>Bank Credit</u>
1977	7.9	9.8	11.7	11.1
1978	7.2	8.4	9.3	13.5
1979*	5.1	7.6	7.9	13.3
1978: Q4	4.1	7.6	9.3	13.9
1979: Q1	-2.1	1.8	4.7	13.7
Q2	7.6	8.6	7.9	11.3
Q3	9.7	12.0	10.5	13.4
Sept.	11.2	12.2	10.9	21.7
Oct.	2.5	8.6	7.5	7.6
*First three quarters.				

acceleration of inflation, led the Federal Reserve to adopt an increasingly restrictive monetary policy during the year. In July the discount rate was raised, and further increases occurred in August and September. Also, the Federal Reserve took actions to bring about increases in market interest rates. Due in part to these actions, the interest rate on Federal funds had increased from around 10 per cent in January to around 11½ per cent by the end of September. Other short-term interest rates rose in line with the Federal funds rate. Long-term rates also increased during the July-September period. (See Chart 1.)

Despite the restrictive monetary policy actions taken in the spring and summer, the monetary and credit aggregates continued to grow rapidly, inflation continued to accelerate, and the dollar continued to weaken. Moreover, by the end of September, the economy was showing unexpected signs of strength. Under these circumstances, the Federal Reserve felt that additional strong policy actions were needed. On October 6, the Federal Reserve increased the discount rate one full percentage point to 12 per cent, placed a marginal reserve requirement of 8 per cent on managed liabilities, and decided to adopt a different approach to conducting monetary policy. Under the new approach, which may be referred to as the reserve aggregate approach, greater emphasis is placed on controlling the availability of money and credit.

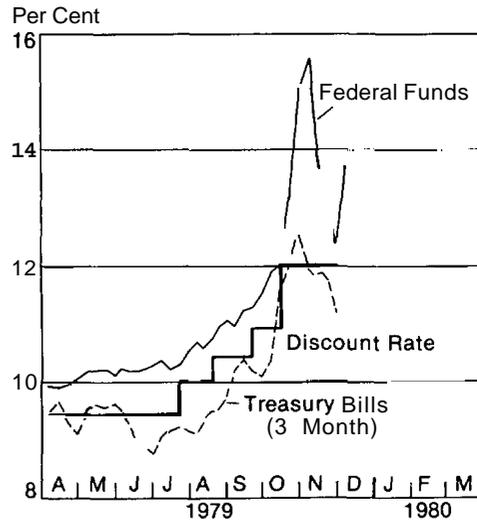
When the demand for money and credit is expanding rapidly, as it was in early October, the new approach of controlling the availability of money and credit will place strong upward pressure on interest rates. Thus, interest rates rose sharply following the October 6 monetary policy actions. (See Chart 1.)

### THE NEW APPROACH

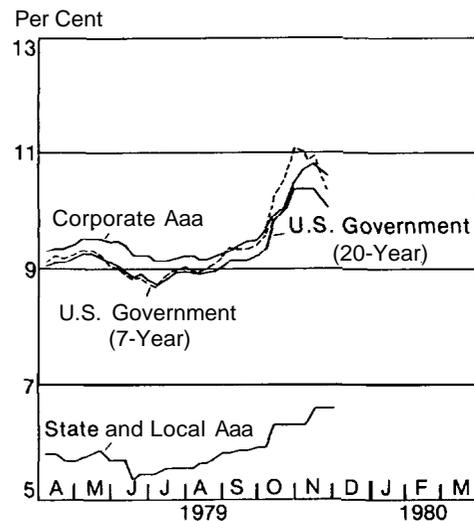
The new approach to conducting monetary policy consists essentially of three steps. The

**Chart 1  
SELECTED INTEREST RATES**

#### MONEY MARKET RATES



#### CAPITAL MARKET YIELDS



first step is to establish objectives for the behavior of money and credit. The second step is to estimate the behavior of "reserve aggregates"<sup>w</sup>—such as member bank reserves and the monetary base—that will be consistent with achieving the monetary objectives. The third step is to undertake those monetary policy actions that will bring about the required behavior of the reserve aggregates.

The first step in the new approach is the same as in the previous approach. In both cases, the Federal Open Market Committee establishes target growth rate ranges for the monetary and credit aggregates. Thus, at the October 6 meeting, the FOMC reconfirmed the targeted ranges for 1979 that were first announced in February and confirmed in July.

### Estimating the Required Behavior of Reserve Aggregates

The second step of the new approach—estimating the behavior of reserve aggregates—differs from the earlier approach, although the two have common elements. Both agree that the money stock is affected by both demand and supply factors. The earlier approach—known as the interest rate approach—is demand oriented and relies heavily on the concept of the demand for money. This concept refers to a relationship between the amount of money demanded (that is, the amount of money that households and businesses want to hold) and the variables, such as income and interest rates, that affect the amount demanded. Specifically, the interest rate approach focuses on the relationship between interest rates and the demand for money. Estimating the behavior of interest rates that will be consistent with achieving monetary growth objectives is the second element in the interest rate approach.

The reserve aggregate approach is supply oriented and relies on the relationship between

the amount of money supplied by the Federal Reserve and the banking system and the variables that determine the amount supplied. The relationship between the money supply and its determinants may be summarized in the following way:

$$M = Rm,$$

where M represents the money stock, R represents a reserve aggregate, and m is a "money multiplier." The equation indicates that the money supply is affected by a reserve aggregate and a money multiplier. Specifically, the level of the money supply is equal to a reserve aggregate multiplied by the level of a money multiplier. In terms of growth rates, the growth rate of the money supply is equal (approximately) to the growth rate of a reserve aggregate plus the growth rate of a multiplier. That is:

$$\dot{M} = \dot{R} + \dot{m},$$

where the dots over the variables indicate growth rates.

The second step in the reserve aggregate approach—estimating the required level or growth rate of reserve aggregates—is equivalent to estimating the expected level or growth rate of the money multiplier. Thus, the required growth rate of a reserve aggregate is as follows:

$$\dot{R}^* = \dot{M}^* - \dot{m}^e,$$

where M\* is the targeted money supply growth rate, m<sup>e</sup> is the expected growth rate for the money multiplier, and R\* is the required growth rate for the reserve aggregate.

The reserve aggregate approach requires that multipliers be estimated—either explicitly or implicitly—for each money supply concept that is targeted and for each reserve aggregate that is controlled. For example, if M1 and M2 are targeted and member bank reserves and the monetary base are controlled, four multipliers would be estimated—the M1-reserves multi-

plier ( $m1R$ ), the M1-base multiplier ( $m1B$ ), the M2-reserves multiplier ( $m2R$ ), and the M2-base multiplier ( $m2B$ ). In theory, if the estimates of the money multipliers were accurate, only one reserve aggregate would be needed. Since the estimates may not be accurate, the monetary policy authorities may wish to focus as a precaution on more than one measure.

In estimating the expected growth rates of the money multipliers and the required growth rates of the reserve aggregates, the Federal Reserve will likely find it useful to observe the past behavior of these variables. A review of past behavior indicates that the two reserve aggregates—member bank reserves and the monetary base—have followed an upward trend over the past several years. Reserves have increased from \$36.9 billion in the fourth quarter of 1974 to \$41.4 billion in the third quarter of 1979. During the same 1975-79 period, the monetary base—which includes member bank

reserves plus currency in circulation outside member banks—rose from \$106.5 billion to \$148.8 billion (Chart 2). The reserve-money multipliers also increased during the 1975-79 period. By the third quarter of 1979,  $m1R$  had increased to 9.0 and  $m2R$  had increased to 22.3. The M2-base multiplier ( $m2B$ ) also increased, rising to 6.2 in the latest quarter, while  $m1B$  trended downward in the 1975-79 period, declining to 2.5 in the third quarter of 1979 (Chart 3).

In terms of growth rates, member bank reserves increased at an annual average rate of 2.3 per cent during the 1975-79 period, while the monetary base grew at an average rate of 7.3 per cent. (See Table 2.) The reserve multipliers grew at rates of 3.7 per cent for  $m1R$  and 6.6 per cent for  $m2R$ . The M2-base multiplier's growth rate was 1.7 per cent, while  $m1B$  declined at an average annual rate of 1.1 per cent.

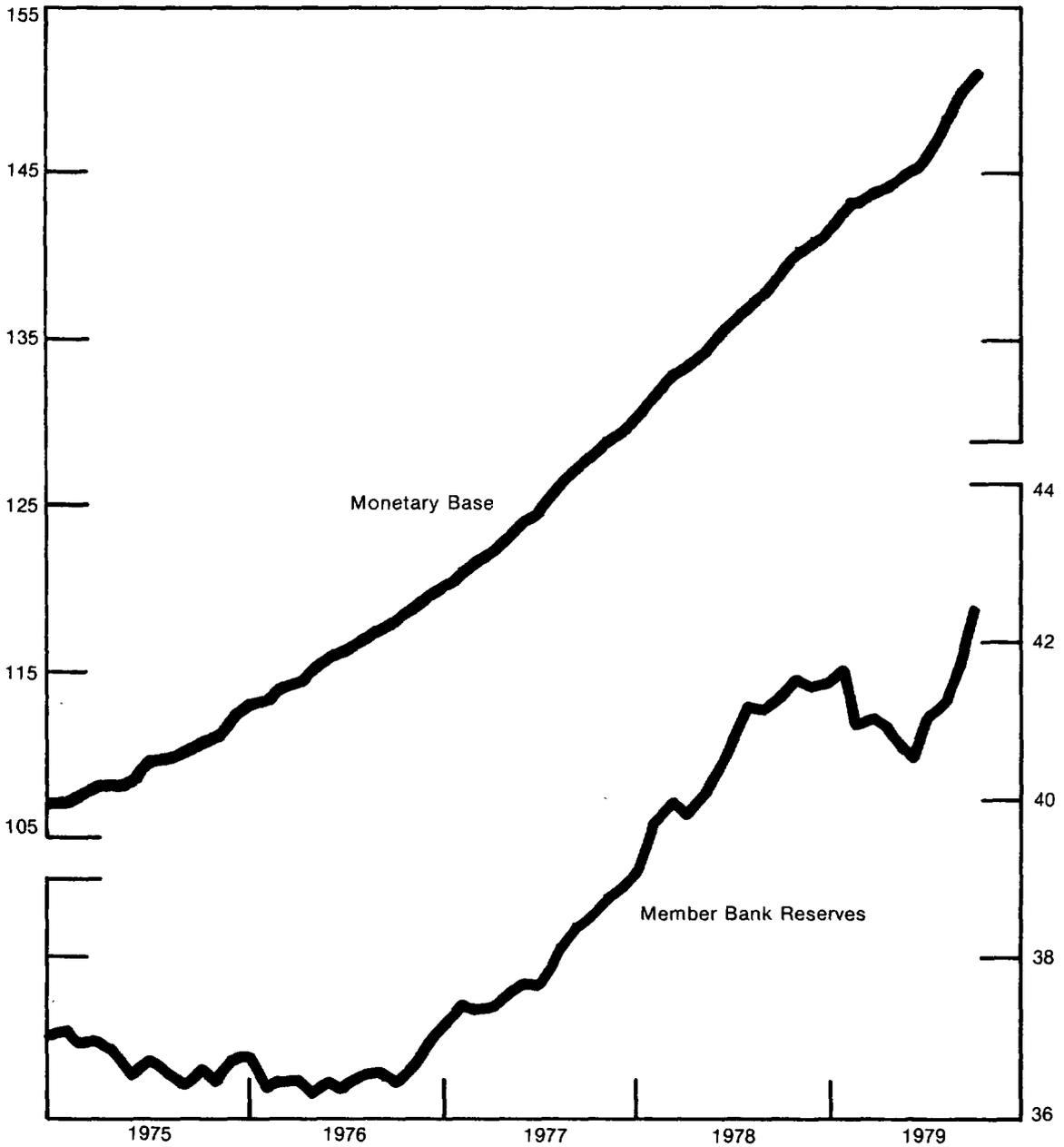
**Table 2**  
**GROWTH RATES OF RESERVE AGGREGATES AND MONEY MULTIPLIERS**  
(Per Cent Change at Seasonally Adjusted Annual Rate)

	Reserve Aggregates		Multipliers			
	Total Reserves	Monetary Base	M1		M2	
			Total Reserves	Monetary Base	Total Reserves	Monetary Base
1975	-0.5	5.7	5.1	-1.0	8.9	2.6
1976	0.7	6.7	5.0	-0.8	10.1	3.9
1977	5.3	8.3	2.4	-0.3	4.2	1.4
1978	6.7	9.1	0.4	-1.8	1.6	-0.6
1979*	-0.6	6.5	5.7	-1.4	8.2	1.0
1975-79 (average)	2.3	7.3	3.7	-1.1	6.6	1.7
1978: Q4	2.4	8.5	1.8	-4.2	5.2	-0.8
1979: Q1	-3.0	5.6	0.8	-7.5	4.7	-3.8
Q2	-5.0	4.0	12.7	3.5	13.8	4.7
Q3	6.3	9.8	3.3	-0.2	5.6	2.1

\*First three quarters.

Chart 2  
RESERVE AGGREGATES  
1975-79

Billions of dollars



The task of estimating the required behavior of reserve aggregates would be greatly simplified if the money multipliers could reasonably be assumed to behave in the future as they have in the past. For example, suppose the growth rate of  $m1R$  is estimated to be the same in the fourth quarter of 1979 as it was on average during the 1975-79 period. Under this assumption, the required growth rate for reserves that would be consistent with achieving the targeted fourth quarter  $M1$  growth rate would be equal to the targeted rate minus 3.7 per cent, the average annual increase in  $m1R$  during the 1975-79 period.

Policymakers, of course, cannot reasonably assume that the money multipliers will behave in the future as they have in the past. The growth rates of the multipliers vary considerably. Thus, during the 1975-79 period, the annual growth rate of  $m1R$  varied from 0.4 per cent in 1978 to 5.7 per cent in 1979. (See

Table 2.) The quarterly variation is even more pronounced. Over the past four quarters, for example, the growth rate of  $m1R$  varied from 0.8 per cent in the first quarter of 1979 to 12.7 per cent in the second quarter of the year.

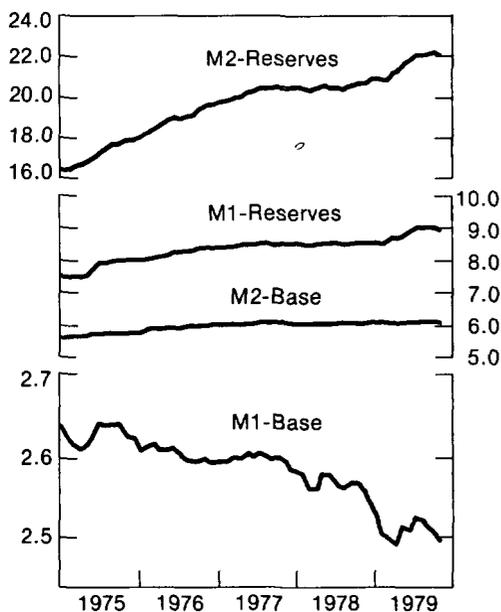
Due to the variability of the money multipliers, policymakers cannot reasonably estimate their expected future behavior by a simple reference to past behavior. The estimates must be based on an analysis of the economic and financial conditions that may be affecting the behavior of the multipliers. Nevertheless, a review of past behavior provides a useful starting point in the task of estimating the likely future course of the money multipliers.

### Controlling the Reserve Aggregates

The third step in the new reserve aggregate approach also differs from the interest rate approach. In the third step of the previous approach, monetary policy actions were directed toward bringing about predetermined levels of interest rates, particularly the Federal funds rate. The third part of the reserve aggregate approach is to undertake monetary policy actions that will bring about the required growth rates of the reserve aggregates. Interest rates are allowed to vary, within limits established by the FOMC, in accordance with the demand for the reserve aggregates.

Monetary policy actions that affect the reserve aggregates include establishing reserve requirements, making loans to member banks and setting the discount rate on these loans, and undertaking open market operations. On a continuous basis, the most important instrument for controlling the reserve aggregates is open market operations, which refers to the buying and selling of U.S. Government securities. Purchases of securities by the Federal Reserve increase bank reserves and the monetary base, while sales of securities

**Chart 3  
MONEY MULTIPLIERS  
1975-79**



reduce reserves and the base. Thus, the volume of securities held by the Federal Reserve is an important determinant of the reserve aggregates. Other things equal, a high or low level of securities results in a high or low level of reserves and the base.

The reserve aggregates are also affected by member bank borrowings from the Federal Reserve, as a high or low level of borrowing is reflected in a high or low level of reserves and the base. In addition, the level of the reserve aggregates depends on currency outside of member banks and on a number of technical factors such as Federal Reserve float.<sup>2</sup>

In controlling the level and growth rates of the reserve aggregates, the Federal Reserve adjusts its holdings of securities to take account of and, if necessary, to offset the impact of factors such as currency flows and float. For example, suppose the Federal Reserve wants reserves and the base to remain unchanged. Suppose further that float is expected to increase, which would, if not offset, cause reserves and the base to increase. In this case, the Federal Reserve would reduce its holdings of securities, thereby offsetting the impact of float and preventing the reserve aggregates from increasing.

While the Federal Reserve can, within reasonably precise limits, offset the impact of currency flows and technical factors, the System may not be able to offset member bank borrowing in the short run. For example, if the Federal Reserve, by reducing its holdings of securities, tries to reduce total reserves below the level that banks are required to hold, banks will borrow at the discount window to meet their requirements. The increased borrowing will tend to offset the impact on total reserves

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<sup>2</sup> Currency outside of member banks does not affect the monetary base because the base includes such currency, as well as member bank reserves.

and the base of the reduction in securities and may, therefore, prevent the Federal Reserve from bringing about a reduction in total reserves.<sup>3</sup>

Due to the tendency for borrowing to offset open market operations during any short period of time, such as a week, the Federal Reserve works with a somewhat longer time horizon, undertaking to control the level and growth rates of the reserve aggregates over a period of weeks or months. In adopting a longer time horizon for total reserves, the Federal Reserve focuses on a week-to-week basis on controlling nonborrowed reserves. Nonborrowed reserves equal total reserves minus borrowing and represent the portion of total reserves that is not borrowed through the discount window. By controlling nonborrowed reserves on a week-to-week basis, the impact of borrowing on the reserve aggregates can be taken into account and offset over a period of weeks, thereby allowing control over total reserves and the monetary base over a longer time period.

For example, suppose the Federal Reserve wants total reserves to remain at a given level during a certain period of time. Suppose further that during the first part of the period, required reserves are above the given level of reserves. The Federal Reserve may respond by holding nonborrowed reserves below the level of required reserves, thereby creating a potential shortage of reserves. The shortage places upward pressure on short-term interest rates, as banks seek to meet their requirements by buying Federal funds and selling assets from

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<sup>3</sup> The tendency for borrowing to offset open market operations is especially pronounced under the system of lagged reserve accounting, now in operation. Under this system, the amount of reserves that must be provided to the banking system to meet requirements is given for any week by past deposit levels. If the given amount is not provided through provisions of nonborrowed reserves, banks will borrow the remainder.

their investment portfolios. Also, some banks will borrow from the Federal Reserve. The borrowing provides the banking system with the total reserves needed to meet requirements and temporarily keeps total reserves above the level sought by the Federal Reserve. At the same time, though, the decline in bank assets and the increase in interest rates will begin to reduce the level of bank deposits. In turn, the reduction in bank deposits will reduce the level of required reserves, thereby allowing the Federal Reserve to maintain the given level of total reserves.

## ECONOMIC AND FINANCIAL OUTLOOK FOR 1980

### Economic Outlook

The third quarter rebound in real GNP seemed to call into question the pronouncement of many analysts that a recession began in the second quarter of **1979**, and perhaps earlier. A true recession may, however, be identified in retrospect even if it contains a quarter of real growth. Even with the third quarter rebound, the economy has shown very little real growth since the fourth quarter of **1978**. Real GNP grew during the first three quarters of **1979** at an annual rate of about seven-tenths of one per cent. A view that the economy is exceedingly weak and **recession-prone**, and perhaps actually in a recession, is still supported by the behavior of most business indicators.

The outlook for **1980** is quite similar: continued recessionary tendencies well into the year, with the odds on economic activity falling somewhere in a range from mild recession to very slow real growth. The absence of prospective strength in nearly all major spending sectors, and the moves of monetary policy toward restraint, seem to assure such an outcome.

The limited data on business activity in the fourth quarter of **1979** give signals of weakness. Weakening in the labor market is indicated by a decline in October in the number of persons employed, and a rise in the overall unemployment rate to 6 per cent. The rise in the unemployment rate from 5.6 per cent in June is primarily attributable to an increase in the number of job losers. Housing starts declined, and the increase in personal income in October again lagged behind the increase in prices. Retail sales also fell sharply in October, primarily but not wholly due to a large decline in new automobile sales following good car sales statistics related to company sales incentive programs. Reflecting the drop in sales, auto manufacturers have continued to reduce their output plans for the fourth quarter. Nor are the inflation data encouraging. The PPI rose a little more slowly in October than in the preceding two months, as food prices edged down slightly and energy price rises slowed down somewhat. But the approximately **12** per cent annual rate of increase in the index for October indicates that inflation continues to move ahead on a broad front, in spite of modest improvement in food and energy prices.

Actual and potential weakness appear to permeate nearly all the major spending sectors of the economy. Although the level of activity of the housing industry has been surprisingly well maintained over recent months, it remains true that the residential construction sector has been a drag on total real output growth for over a year. Demand, well maintained for some time by demographic factors and the view of home ownership as a hedge against inflation, now appears to be softening. More importantly, the supply of funds for construction and mortgage financing is being rapidly reduced as a result of the recent tightening of monetary policy. How much those recent changes will worsen the outlook for housing is not yet clear, but few observers believe that the total decline from

peak to trough in housing starts will reach the 60 per cent slide that occurred in the previous housing cycle.

Further weakness in residential construction will have a negative influence on related industries, including furniture, appliances, and home goods of all kinds. But that is not the only reason for expecting weakness in the personal consumption expenditures sector. Most importantly, household income continues to be ravaged by inflation, leaving consumers' ability to buy in a weak state. Real disposable personal income fell in both the second and third quarters of 1979, bringing the third quarter level to below that of the fourth quarter of 1978. No rapid increase in disposable income is in sight. Moreover, there is small likelihood that the personal saving rate will be reduced further to support consumption increases. Indeed, the saving rate is more likely to rise and thus provide another weakening influence on the growth of consumer spending in the months ahead.

Nor is business fixed investment expected to be a driving force in total real output growth as the economy moves into 1980. The most recent survey of business intentions to purchase new plant and equipment in 1980 shows an increase of 9.5 per cent over such spending in 1979. Adjustment for expected inflation leaves real capital spending in 1980 virtually unchanged. The survey was taken before the October 6 actions of the Federal Reserve, and investment plans may be scaled back in the new financial environment. Other indicators suggest that cut-backs in capital spending programs were already under way before October. For example, manufacturers' new orders for nondefense capital goods industries peaked in March 1979, and construction contracts for commercial and industrial buildings peaked in February of this year. The combined series on contracts and orders for plant and equipment also peaked in March 1979. In spite of a surge

in September orders for nondefense capital goods, it seems unlikely that business fixed investment will grow very rapidly in the face of rates of utilization of existing capacity that have fallen significantly since spring and an expectation of sluggish demand.

Although business inventories were kept in a good relationship to sales during the expansion, the pattern of a substantial increase in inventories in the second quarter and a considerably smaller accumulation in the third quarter suggests that an adjustment of inventories is under way. Continued weakening of sales would further emphasize such a cyclical inventory correction, making inventory investment a source of weakness in real output growth.

The picture of general weakness in the private domestic economy is not likely to be much improved by the performance of net exports or government purchases of goods and services. Earlier optimism about relatively strong foreign demand for U.S. goods and services has succumbed to the impact of higher world energy prices, inflation, and an increasing priority given to inflation control by foreign governments. Thus, in spite of a reduced U.S. demand for imports accompanying slow growth in this country, net exports will probably not add much stimulus to U.S. economic activity. Neither are government purchases of goods and services likely to contribute much to total output growth.

If the various spending sectors behave as suggested above, the American economy is in for a period of significant weakness, which may well be identified in retrospect as a recession. In this period of slow growth or actual decline in real output, the economy's margin of unused resources will widen and unemployment rates will rise. As this occurs, there will be a reduction in the upward pressure of demand on prices. Experience and economic analysis both demonstrate that slow economic growth (and,

even more so, recession) tend, over some extended period of time, to reduce the rate of inflation. The beginnings of that amelioration of inflation should become apparent in 1980.

## **Financial Outlook**

Turning to the financial outlook, a number of factors will be affecting interest rates in the period ahead. One very important factor will be the condition of the economy, and the sluggish economy will be a factor tending to reduce upward interest rate pressures in the period ahead. In addition to the prospective strength of the economy, another factor in the interest rate picture is the outlook for inflation—an important factor because a continuation of inflation at the current high level would reinforce and strengthen the inflationary premium in interest rates and would work against any tendency for interest rates to decline. As mentioned, the weak economy may lead to some reduction in inflationary pressures during the first part of next year.

An additional factor affecting interest rates in the period ahead will be the behavior of the nation's money supply. If the money supply continues to grow rapidly, the Federal Reserve will likely reduce further the availability of reserves to the banking system, which will lead to further upward pressures on interest rates. The growth rate of the money supply may of course moderate in the months ahead. A

moderation would be expected to accompany the sluggish economy and any deceleration in the rate of inflation that may develop.

Finally, the trend in interest rates in the period ahead will be influenced by the performance of the dollar in the foreign exchange markets. Any marked and significant weakness in the dollar could result in some additional firming in interest rates.

Bringing together all these factors that will be affecting credit conditions in the period ahead—monetary policy, the behavior of the supply of money, inflation, the dollar, and the economy—what is the probable outlook? A reasonable assessment is that at some point during the period ahead, interest rates may stabilize and, perhaps, begin to decline. If the economy weakens further in the period ahead and if the rate of price inflation decelerates, the demand for money and credit may begin to grow less rapidly. In this event, the Federal Reserve's efforts to maintain moderate growth in the availability of money would be accompanied by a lowering of interest rates.

Regardless of whether interest rates increase further or decline in the months ahead, any permanent decline in interest rates depends on bringing inflation under control. Moreover, in the long run, the health of the economy depends on success in the fight against inflation. Thus, it is important that the Federal Reserve continue its efforts to gain effective control over the growth of money and credit.