

Monetary Policy in 1981 and 1982

By J. A. Cacy

In conducting the nation's monetary policy in 1981, the Federal Reserve System focused on achieving its objectives for growth in the supply of money and credit. The Federal Reserve's long-run goal is to bring about a permanent reduction in the growth rate of the nation's money supply. A lower monetary growth rate, it is widely agreed, will help bring about a decline in the rate of price inflation experienced by the nation and contribute to a better performing national economy.

Inflation did decline in 1981, although it remained unacceptably high. At the same time, during the course of the year, the economic expansion that began in the summer of 1980 came to an early end. An upsurge in housing construction and automobile sales—fueled by a sharp drop in interest rates in the spring of 1980—had propelled the economy forward in the last half of 1980. The momentum of that upsurge carried over into early 1981, as economic activity rose sharply in the first quarter of the year.

The 1980-81 increase in production was accompanied by an upsurge in the demand for credit that was enlarged by the continued high inflation and by persistent heavy borrowing by the U.S. Treasury to finance large deficits in the

federal government's budget. With the Federal Reserve holding back the supply of money to achieve its monetary growth objectives, the increased demand for money led to a reversal of the earlier drop in interest rates. Interest rates rose sharply in late 1980 and remained high throughout most of 1981.

Due largely to these high interest rates, the economy's forward momentum was stopped, and a small decline in economic production occurred in the second quarter of 1981. Although production rose slightly in the third quarter, by the start of the final quarter the economy was experiencing distinct recessionary conditions. Production declined sharply in September and October, and unemployment increased. At the same time, toward yearend, inflation resumed a moderating trend that had been briefly interrupted in the third quarter. Moreover, the declining economy and moderating inflation were accompanied by a drop in the demand for credit and, consequently, by downward pressures on interest rates. By the end of December, interest rates were substantially lower than the record-high levels prevailing earlier in the year.

MONETARY GROWTH RATES AND MONETARY TARGETS

Against this background of an initially strong but progressively weakening economy, continued high although declining inflation, large

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Table 1
GROWTH RATES OF MONEY SUPPLY AND BANK CREDIT

	<u>M1-B*</u>	<u>M2</u>	<u>M3</u>	<u>Bank Credit</u>
1980: IV	10.8	8.1	11.3	14.6
1981: I	- 0.8	8.3	12.4	11.8
II	5.3	10.6	10.6	6.1
III	- 0.6	7.1	10.3	8.4
1981: First 11 months†	1.9	9.6	11.2	8.8
1981: Growth rate range	3.5 to 6	6 to 9	6.5 to 9.5	6 to 9
September	- 3.7	6.5	9.2	10.6
October	3.1	8.1	5.5	8.5
November	8.0	16.6	12.4	2.9

*Adjusted for shifts in NOW accounts.

†From fourth quarter 1980 through November 1981.

government budget deficits, and rapidly changing pressures in financial markets, the Federal Reserve in 1981 focused on achieving its monetary growth objectives. The System's Federal Open Market Committee (FOMC) has been establishing these monetary growth objectives for a number of years, stating them as yearly growth rate ranges for the various money supply definitions. These ranges indicate the Federal Reserve's view of the appropriate pace of monetary growth within particular years. In conducting monetary policy, therefore, the Federal Reserve takes actions intended to cause the money supply measures to grow at rates within their established ranges.

The 1981 growth rate range was 3.5 to 6 percent for M1-B—the narrowly defined money supply, which consists of currency plus traveler's checks plus transactions deposits at commercial banks and other depository institutions.¹ Transactions deposits include demand deposits plus other checkable deposits, mainly ATS and NOW accounts. The 1981 growth rate

ranges for M2 and M3—more broadly defined money supply measures that include M1-B plus other assets such as savings and time deposits—were 6 to 9 percent and 6.5 to 9.5 percent, respectively. Also, the FOMC established a growth rate range of 6 to 9 percent for bank credit, which consists of loans and investments at the nation's commercial banks.

The Federal Reserve was only partly successful in achieving its longer run monetary growth objectives in 1981. For example, over the first 11 months of the year, from the fourth quarter of 1980 through November 1981, M1-B increased at an annual rate of about 1.9 percent, well below its range of 3.5 to 6 percent (Table 1). M2's growth rate during the same period was slightly above the upper limit of its

¹ Unless otherwise indicated, the term M1-B in this article will refer to the so-called "shift-adjusted" M1-B, which adjusts M1-B to account for the introduction on December 31, 1980, of nationwide NOW accounts. Shift-adjusted M1-B is discussed in greater detail in the following section of the article.

range, as this broader aggregate rose at an annual rate of 9.6 percent, compared with its target of 6 to 9 percent. M3's growth rate also exceeded the upper limits of its range in 1981, with this broadly defined aggregate rising at a rate of 11.2 percent, against a range of 6.5 to 9.5 percent. Bank credit grew in 1981 at a rate of 8.8 percent, slightly less than the 9 percent upper limit of its target range.

NOW ACCOUNTS AND M1-B

The implementation of monetary policy was complicated in 1981 by the introduction of nationwide negotiable orders of withdrawal (NOW accounts). Under the Monetary Control Act of 1980, commercial banks and other depository institutions across the nation were granted authority to offer NOW accounts beginning on December 31, 1980. These interest-bearing checkable savings deposits were in use in a limited number of states for several years. Since the beginning of 1980, they have been included in the narrowly defined money supply, M1-B, which is meant to measure the nation's transactions balances, that is, those balances the public uses to facilitate the day-to-day discharging of financial obligations and the buying and selling of goods, services, and assets.

Historically, currency and demand deposits at commercial banks have been the assets used for making transactions. Hence, for many years the narrow money concept—designated before 1980 as M1—was defined as the public's holdings of these two assets. In recent years, however, other items such as ATS and NOW accounts have come to be used for transactions purposes. For this reason, beginning in January 1980, when the Federal Reserve introduced a new set of money supply definitions, these other items—under the heading of "other checkable deposits at depository institutions"—were included in the definition of transactions balances. The total of transac-

tions balances—currency plus demand deposits plus other checkable deposits—was labeled M1-B to distinguish it during a transition period from the older definition.² The old M1, with minor adjustments, was relabeled M1-A. Although the Federal Reserve established growth rate ranges for M1-A for 1980 and 1981, beginning in 1982 M1-A will be discontinued and M1-B will be relabeled M1.

While M1-B is meant to measure the nation's transactions balances, it probably has not been an accurate measure of these balances in 1981. The introduction of nationwide NOW accounts at the beginning of the year, by creating an unusual shift of funds into these accounts, distorted M1-B's behavior. Some of the funds flowing into NOW accounts during the year came from nontransactions sources not included in M1-B, such as regular savings accounts. The inflow of nontransactions funds caused M1-B to grow more rapidly than transactions balances would have under normal conditions. Thus, due to the introduction of nationwide NOW accounts, M1-B has not reflected the true behavior of the nation's transactions balances in 1981.

The Federal Reserve has taken account of the introduction of NOW accounts by developing a "shift-adjusted" M1-B that is meant to reflect the true behavior of transactions balances. In making this correction, the Federal Reserve estimates the amount of funds flowing into NOW accounts from nontransactions sources. This estimated amount is subtracted from M1-B to arrive at an adjusted figure. Shift-adjusted M1-B has been used by the Federal Reserve in gauging the behavior of transactions balances and in conducting monetary policy in 1981.

² Beginning in May 1981, traveler's checks have been included in M1-B.

THE BEHAVIOR OF SHIFT-ADJUSTED M1-B

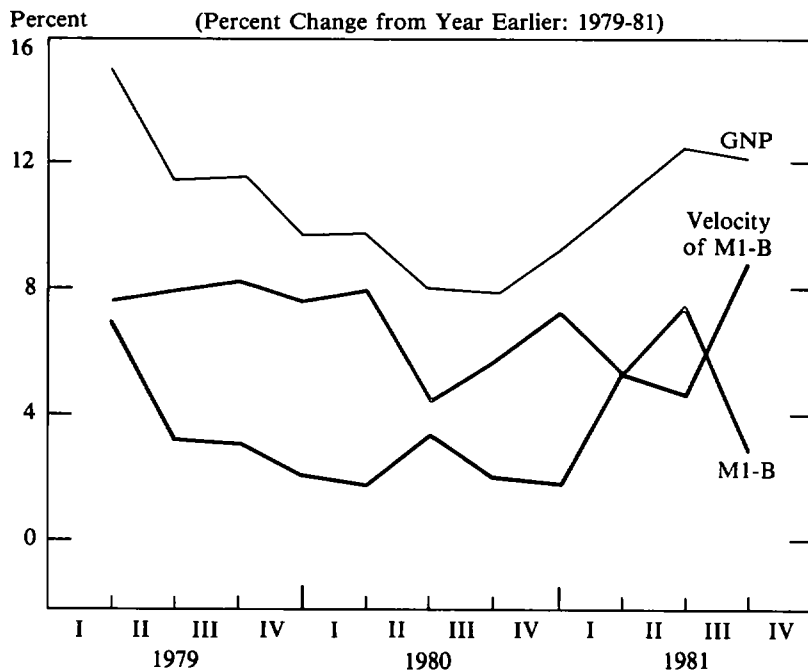
The implementation of monetary policy in 1981 was further complicated by the fact that the nation's transactions balances, as measured by shift-adjusted M1-B, grew slowly in 1981 relative both to other money supply measures and to the nation's Gross National Product. Thus, during the first 11 months of the year, M2's growth rate of 9.6 percent exceeded shift-adjusted M1-B's growth rate of 1.9 percent by 7.7 percentage points. This differential was substantially greater than the average differential of 1.8 percentage points between the growth rates of M2 and M1-B during 1979 and 1980.

The growth rate of M1-B (shift-adjusted in 1981) relative to that of nominal GNP is shown in Chart 1. The chart shows that, on a year-over-year basis, the growth rate of transactions balances generally paralleled that of GNP in

1979 and 1980. Thus, during most of the period, the growth rate of the velocity of M1-B, which is equal to the growth rate of GNP minus the growth rate of M1-B, moved within a narrow range around an average of 3.1 percent for the two-year period. In 1981, however, the growth rate of GNP has trended upward, while the growth rate of the nation's transactions balances has trended downward. Thus, the growth rate of the velocity of transactions balances accelerated sharply, averaging 6.4 percent on a year-over-year basis during the first three quarters of the year.

The acceleration in the growth rate of M1-B velocity has been due in part to the sharp rise in interest rates. An increase in interest rates encourages the public to economize on transactions balances in order to take advantage of higher returns on other assets. This economizing tends to cause transactions balances to grow slowly relative to GNP and results in upward

Chart 1
GROSS NATIONAL PRODUCT



movements in M1-B's velocity.

Based on historical patterns, however, not all of the 1981 rise in shift-adjusted M1-B's velocity can be attributed to the increase in interest rates. Another factor is that a downward shift developed during the year in the public's demand for transactions balances. In other words, due to continued financial innovation and increased public awareness of available investment opportunities, funds that formerly would have been placed in transactions balances have been placed in other instruments, such as money market mutual funds and retail repurchase agreements. This process led to a slowing in the growth rate of M1-B relative to GNP and contributed to the increase in M1-B's velocity.³

The problem encountered by the Federal Reserve in measuring the nation's transactions balances in 1981 has led to suggestions that greater emphasis be placed on other money supply concepts, such as M2. To some extent this view is supported by the fact that the velocity of M2 in 1981 has behaved more in line with past experience than the velocity of shift-adjusted M1-B. M2's velocity rose at a rate of 3.0 percent during the year ended in the third quarter

³ Another factor that might possibly account for part of the rise in the velocity of shift-adjusted M1-B is that the adjustment to allow for the introduction of NOW accounts may not be accurate. The estimates the Federal Reserve uses to adjust M1-B are based mainly on survey data and may be subject to some error. Thus, it is possible that shift-adjusted M1-B either overstates or understates the true growth of the nation's transactions balances. If shift-adjusted M1-B understates the true growth rate of transactions balances, this accounts for some of the rapid velocity growth in 1981. However, there appears to be no reason for assuming that the growth rate of shift-adjusted M1-B understates rather than overstates the growth rate of transactions balances.

For a more complete analysis of the behavior of M1-B's velocity, see Bryon Higgins and Jon Faust, "Velocity Behavior of the New Monetary Aggregates," *Economic Review*, Federal Reserve Bank of Kansas City, September-October 1981.

of 1981. While this was considerably more than the 1.4 percent average growth rate of M2's velocity in 1979 and 1980, the difference between M2's 1981 and 1979-80 velocity growth is considerably less than the difference between M1-B's velocity growth in the two periods.

M2, which is meant to measure the nation's store of readily available purchasing power, was also subject to problems in 1981. For example, the rapid growth rate of M2 in 1981 was due almost entirely to the growth of money market mutual funds. While some of the funds flowing into money market mutual funds have come from other components of M2, a considerable portion undoubtedly comes from investment instruments not included in M2, such as Treasury bills. To some extent, then, M2 overstated the growth of the nation's store of readily available purchasing power in 1981. Nevertheless, due to the problems in measuring the nation's transactions balances, M2 assumed added importance in 1981. In conducting monetary policy during the year, the Federal Reserve placed relatively greater emphasis than in previous years on the behavior of this broadly defined money supply concept.

The problems with the money supply measures in 1981 do not imply that they are not useful in monetary policymaking. The problems do indicate, though, that in focusing on the money supply the Federal Reserve must apply its procedures in a flexible way. In making policy, the behavior of the money supply must be interpreted in light of current developments in the financial industry. Moreover, the Federal Reserve must take into account a wide range of developments in both the financial and economic sectors of the economy.

INTEREST RATES IN 1981

Both short- and long-term interest rates remained at or near historically high levels throughout most of 1981. For example, the prime rate charged by commercial banks

averaged 19.2 percent during the first 11 months of the year, compared with an average of 15.3 percent in 1980 and 12.7 percent in 1979 (Table 2). Long-term interest rates also remained high. For example, the yields on 20-year U.S. government bonds averaged 13.7 percent in the first 11 months of 1981, compared with 11.4 percent in 1980 and 9.3 percent in 1979.

The persistence of historically high interest rates over the past year can be attributed to a number of factors. An important one is the persistence of high inflation, which adds to the demand for money and places upward pressure on interest rates. More importantly, persistent high inflation leads borrowers and lenders to expect high inflation to continue. When borrowers expect high inflation to continue, they become willing to pay high interest rates for borrowed funds because the borrowing will be repaid in cheaper dollars. When lenders expect the price level to continue sharply upward, they require high interest rates to compensate for the cheaper dollars they will receive upon repayment. These inflationary expectations, by increasing the demand for credit and reducing the supply, build an inflationary premium into interest rates that, over time and other things equal, elevates the level of rates by an amount related to the expected rate of inflation.

To analyze the impact of inflationary expect-

tations, economists have developed the concept of the "real" interest rate, which is defined as the nominal or observed interest rate minus the expected rate of inflation. This calculation of the real interest rate is meant to remove the inflationary premium from the nominal interest rate and provide an indication of the gross (before-tax) inflation-adjusted cost of borrowed funds. Even after adjusting for inflation, however, interest rates were high in 1981. The real prime rate is estimated to have averaged 10.9 percent in the first 11 months of the year, 5.1 percentage points higher than the 5.8 percent average in 1980 (Table 3).

Another factor that has contributed to high interest rates is the high marginal rate of taxation, which has increased in recent years as taxpayers have been pushed by inflation into higher tax brackets. By reducing the after-tax cost of borrowed funds, high marginal tax rates make borrowing more attractive, increasing the demand for credit and contributing to high interest rates.

The joint impact on interest rates of inflationary expectations and high marginal rates is sometimes illustrated with the concept of the real tax-adjusted interest rate. The tax-adjusted interest rate is the net (after-tax) cost of borrowed funds. For example, for a borrower in the 40 percent tax bracket, a 20 percent nominal interest rate translates into a 12 per-

Table 2
SELECTED INTEREST RATES
(Yearly Averages: 1978-81)

Date	Bank Prime Loan	3-Month Treasury Bills	Federal Funds	U.S. Govt. 20-Year Bonds	Recently Offered Aaa Utility Bonds
1978	9.1	7.2	7.9	8.5	9.0
1979	12.7	10.1	11.2	9.3	10.0
1980	15.3	11.4	13.4	11.4	12.7
1981*	19.2	14.3	16.7	13.7	15.6

*Through November 1981.

Table 3
NOMINAL AND REAL PRIME RATE
(Yearly Averages: 1978-81)

Date	Nominal	Real*	
		Before-Tax	After-Tax
1978	9.1	0.9	-2.7
1979	12.7	4.8	-0.2
1980	15.3	5.8	-0.3
1981†	19.2	10.9	3.2

*The real prime rate is defined in this table as the nominal prime rate minus the rate of inflation as measured by the GNP implicit price deflator. The real after-tax rate assumes a 40 percent tax bracket.

†Through November 1981. The table assumes that the GNP deflator for the fourth quarter will be 8.3 percent, the average for the first three quarters.

cent tax-adjusted rate. The real tax-adjusted interest rate is equal to the tax-adjusted rate minus the expected rate of inflation. Thus, if the tax-adjusted rate is 12 percent and the expected rate of inflation is 8 percent, the real tax-adjusted rate of interest is 4 percent. Even after adjusting for both inflation and taxes, interest rates were relatively high in 1981. For a borrower in the 40 percent tax bracket, the after-tax real prime rate averaged 3.2 percent in the first 11 months of the year, 3.5 percentage points higher than in 1980 (Table 3).

The persistence of historically high tax-adjusted real interest rates in 1981 was due in part to the relatively strong economy that prevailed during much of the first three quarters of the year. Real GNP rose sharply in the first quarter, declined in the second, then rose slightly in the third quarter. On average, for the first three quarters of the year, real GNP rose at an annual rate of 2.4 percent, compared with a decline of 0.3 percent in 1980. Moreover, due to continued high inflation, nominal GNP increased at an annual rate of 11.0 percent in the first three quarters of 1981, compared with 9.4 percent in 1980.

The increase in real and nominal GNP in the first three quarters of 1981 was accompanied by heavy demands for credit in the nation's financial markets. Private nonfinancial borrowers—state and local governments, businesses, households, and foreigners—raised \$325 billion, at an annual rate, in the nation's financial markets during the first three quarters of 1981, 11 percent more than in 1980 (Table 4). Businesses were especially heavy borrowers in 1981, compared not only with 1980 but also with 1979 and 1978. Households borrowed more in 1981 than in 1980, although substantially less than in earlier years. Foreigners also borrowed more in 1981 than in 1980, while state and local governments borrowed less in 1981 than in the previous year.

Another important part of the explanation for high interest rates in 1981 was deficit spending on the part of the federal government. When the government's outlays exceed its income, the U.S. Treasury must raise the difference in the nation's credit markets. During the first three quarters of 1981, federal government borrowing amounted to \$79.2 billion at an annual rate and accounted for almost 20 percent of total credit demand (Table 4).

The Federal Reserve's policy of bringing about a reduction in the monetary growth rate played a role in the interest rate picture. When inflation is high, the economy is holding firm, and budget deficits are large, a reduction in the monetary growth inevitably will be accompanied by high interest rates. Of course, the Federal Reserve could bring interest rates down for a short period of time. But a low interest rate policy over the past year would have resulted in large increases in the money supply, which would have contributed to greater inflation and even higher interest rates in the long run.

INTEREST RATES AND MONETARY POLICY

The impact of monetary policy on interest

rates can be seen by analyzing the trend in the reserves that the Federal Reserve makes available to commercial banks and other depository institutions. These reserves consist of funds that institutions borrow through the discount window plus nonborrowed reserves made available through the Federal Reserve's open market operations.

Under the operating procedures used to achieve its monetary growth objectives, the Federal Reserve undertakes open market operations designed to maintain nonborrowed reserves at a predetermined level. That level of nonborrowed reserves along with the anticipated level of discount window borrowing is expected to provide the reserves needed to support the targeted growth in the money supply.

For example, suppose the Federal Reserve wants M1-B to average \$425 billion during a certain month. Suppose further that the System estimates that currency will average \$125 billion during the month, so that the deposit component of M1-B needs to average \$300 billion.

Now suppose that, if the deposit component of M1-B averages \$300 billion, depository institutions will need \$30 billion in reserves to meet their reserve requirements. Also assume that banks want to hold \$500 million in excess reserves beyond legal requirements. Under these assumptions, a total of \$30.5 billion in reserves will be needed to support the targeted \$425 billion M1-B level. Now assume that, given the interest rate consistent with the public holding the targeted \$425 billion M1-B level, depository institutions will borrow \$1.5 billion from the Federal Reserve. In this case, the Federal Reserve will then need to supply \$29 billion of nonborrowed reserves. In other words, the predetermined level of nonborrowed reserves to be maintained through open market operations is \$29 billion (\$30.5 billion minus \$1.5 billion).

If monetary growth falls below its targeted amount, in the short run the demand for reserves on the part of depository institutions tends to fall below the amount needed to sup-

Table 4
BORROWING IN CREDIT MARKETS BY NONFINANCIAL BORROWERS
(In Billions of Dollars: 1978-81)

Date	Total	Federal Government	Private				
			Total	Business	Households	State and Local Governments	Foreign
1978	395.6	53.7	342.0	123.5	164.3	20.9	33.2
1979	387.0	37.4	349.6	139.6	170.6	18.4	21.0
1980	371.9	79.2	292.8	136.5	101.7	25.3	29.3
1981*	403.7	79.2	324.5	142.4	126.0	21.1	35.1
1981: I†	433.5	127.0	306.5	121.3	123.6	29.4	32.3
II†	400.2	50.9	349.2	159.8	130.0	21.2	38.2
III†	377.4	59.7	317.7	146.0	124.3	12.7	34.7

*First three quarters of the year.
†Seasonally adjusted annual rates.

port targeted money growth. As the Federal Reserve maintains the predetermined supply of nonborrowed reserves, the decline in the demand for reserves tends to place downward pressure on short-term interest rates, especially the federal funds rate. As the federal funds rate declines relative to a fixed discount rate, banks tend to borrow less at the discount window, reducing the supply of reserves and bringing the supply in line with demand. Thus, a shortfall in monetary growth leads more or less automatically to a drop in discount window borrowings and in the federal funds rate and other short-term interest rates. The decline in interest rates tends to stimulate monetary growth and eventually to bring it in line with targeted growth.

In addition, if the Federal Reserve deems it desirable to speed up the adjustment of actual to targeted monetary growth, the System may increase the predetermined level of nonborrowed reserves. In the short run, this places additional downward pressure on the short-term interest rates and borrowings and provides additional stimulus to monetary growth.⁴ Thus, during periods in which there is a shortfall in monetary growth relative to target, nonborrowed reserves tend to grow relatively rapidly and borrowings and short-term interest rates tend to decline. Similarly, excessive monetary growth relative to target is typically associated with relatively slow growth in nonborrowed reserves along with an increase in discount window borrowings and short-term interest rates.

The general correspondence between discount window borrowing and the federal funds rate in 1981 is shown in the top panel of Chart 2. The middle panel of the chart shows the cumulative year-to-date growth rates of shift-adjusted M1-B and M2, while the lower panel

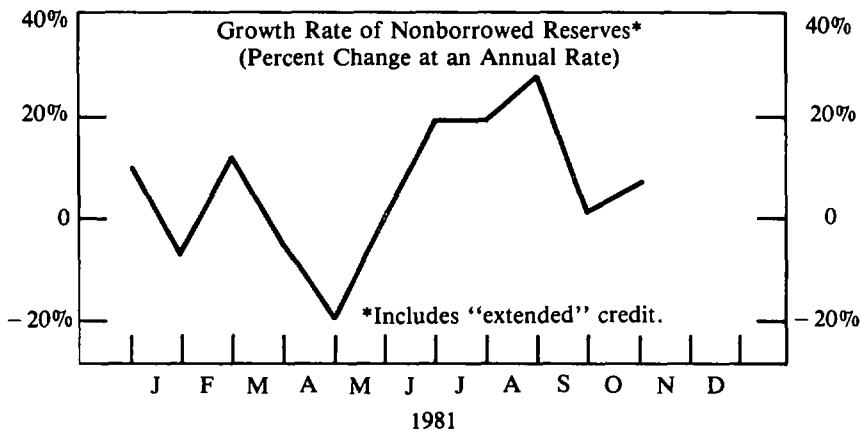
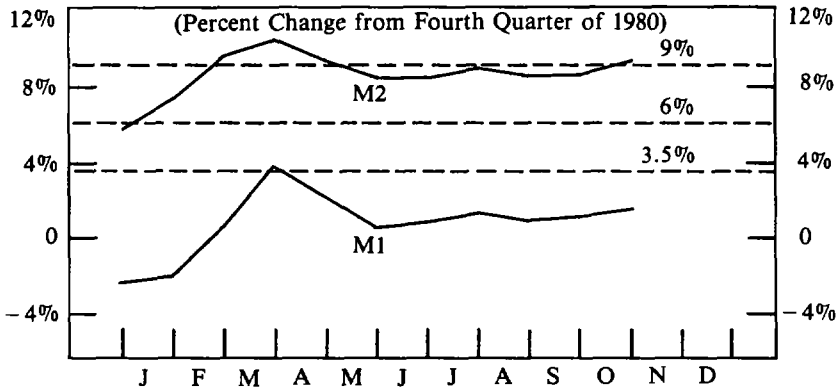
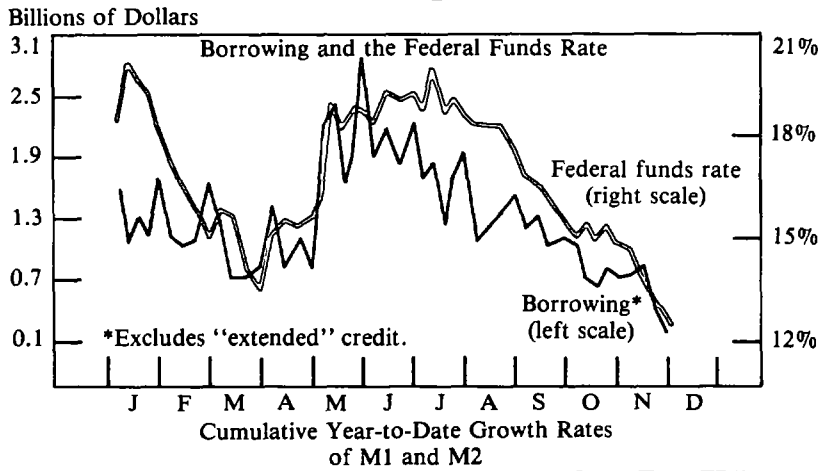
shows the monthly growth rates of nonborrowed reserves.

Chart 2 shows that, during the first three months of 1981, on a cumulative year-to-date basis, shift-adjusted M1-B's growth rate remained below the 3.5 percent lower limit of its target range. The cumulative growth rate of M2 remained below the 9 percent upper limit of its range in January and February before moving slightly above 9 percent in March. The Federal Reserve responded to the generally sluggish first-quarter growth of shift-adjusted M1-B by providing relatively large amounts of nonborrowed reserves, which rose at an average annual rate of 6.2 percent during the quarter. This relatively rapid growth in nonborrowed reserves, along with the shortfall in the demand for reserves caused by the sluggish growth in the money supply, led to downward pressure on the federal funds rate and a decline in discount window borrowing. The federal funds rate dropped from 19.5 percent in late December to 13.5 percent at the end of March, while borrowings fell from an average of \$1.7 billion in December to \$1 billion in March.

In April, the growth rates of shift-adjusted M1-B and M2 accelerated sharply. This acceleration placed shift-adjusted M1-B's cumulative year-to-date growth rate slightly above the lower limit of its yearly target range and pushed M2's year-to-date growth rate significantly above the upper limit of its long-run range. While monetary growth slowed in May, year-to-date growth remained relatively high. The April-May acceleration in monetary growth was accompanied by a decline in reserve availability, with nonborrowed reserves declining at an average annual rate of about 12 percent during the two-month period. Also, in early May the Federal Reserve increased the basic discount rate from 13 to 14 percent and increased the surcharge from 3 to 4 percent. The rise in the discount rate and the decline in nonborrowed reserves, along with an increase in the

⁴ The Federal Reserve can also reduce the discount rate to further speed the adjustment of actual to targeted monetary growth.

Chart 2



demand for reserves due to rapid monetary growth, led to a sharp rise in the federal funds rate and in borrowings. The federal funds rate rose from 13.5 percent in late March to 18.7 percent by the end of May, while borrowings rose from \$1.0 billion in March to \$2.2 billion in April.

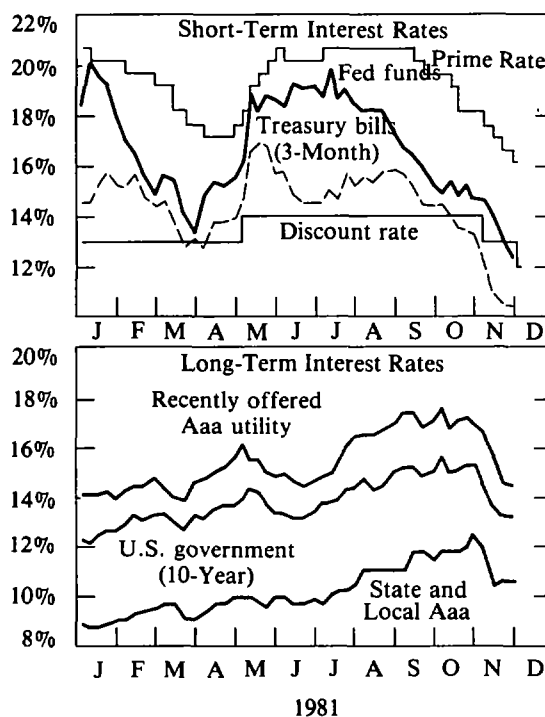
The weakness in the monetary growth rate that followed the sharp April increase in shift-adjusted M1-B continued in June and throughout the remainder of 1981, as the gap persisted between M1-B's year-to-date growth rate and the lower limit of its target range (Chart 2, middle panel). During most of this June through November period, M2's year-to-date growth rate fluctuated near the 9 percent upper limit of its yearly target growth range. As in the first quarter, the Federal Reserve responded to the relatively sluggish growth in the money supply after May by enlarging the availability of reserves. Nonborrowed reserves rose at an annual rate of 13.2 percent during the six months ending in November. Also, between the third week of September and early December, the basic discount rate was lowered 2 percentage points to 12 percent and the surcharge was eliminated. Beginning in July, the rapid growth in reserve availability was accompanied by a downward trend in the federal funds rate. By the end of November, the funds rate had declined to 12.4 percent from 18.7 percent at the end of May. Discount window borrowing dropped during the period from an average of \$2.2 billion in May to \$0.5 billion in November.

The general level of short-term interest rates in 1981 followed the pattern set by the federal funds rate (Chart 3). Short-term rates declined in the first quarter, rose in the spring, then followed a downward trend in the last half of the year. By the end of November, the bank prime rate had declined to below 16 percent, compared with 20.5 percent at midyear.

Long-term interest rates followed a somewhat different pattern in 1981 than did short-

term rates. In general, long-term rates trended upward during the first four months of the year, then declined in May and June. In July and August, during the period that the federal funds and other short-term interest rates were declining, long-term interest rates resumed an upward trend that extended through September. By the week of October 2, the yield on 20-year U.S. government securities averaged a record 15.6 percent, compared with 13.3 percent in late June and 12.0 percent at the end of December 1980. After September, long-term interest rates began a downward movement, with the yield on 20-year U.S. government securities dropping to 13.1 percent by the end of November.

Chart 3
SELECTED INTEREST RATES: 1981



MONETARY POLICY IN 1982

The Federal Reserve has established tentative growth rate ranges for the monetary aggregates for 1982. In line with the System's long-run goal of reducing inflation, the 1982 ranges for M1 (formerly M1-B) is somewhat more restrictive than the 1981 range. M1's tentative 1982 range is 2.5 to 5.5 percent, compared with 3.5 to 6 percent for 1981. The 1982 tentative range for M2 and M3 is 6 to 9 percent and 6.5 to 9.5 percent, respectively, the same as in 1981. Bank credit's tentative 1982 range is 6 to 9 percent. These 1982 growth rate ranges will be reviewed and definite ranges will be established at the February 1982 meeting of the FOMC.

With the economy in recession and with a continuation of the downward trend in inflation, the demand for money is likely to remain somewhat weak in the first part of 1982. As the Federal Reserve provides reserves sufficient to support moderate monetary growth, the sluggish demand for money may be expected to place further downward pressure on interest rates. Lower interest rates and reduced inflation, in turn, may be expected to cushion the economic decline, with the recession ending in the late spring or early summer. The scheduled reduction in federal income tax rates at midyear will provide further stimulus to economic activity. Thus, a moderate upturn in the economy may be expected to develop in the last half of

the year, supported by an extension of the downward trend in inflation. Inflation may be expected to continue declining even as the economy recovers, due both to the lagged impact of recession on the cost-price structure and to considerable economic slack remaining in the economy after midyear, with unemployment staying high and the rate of capacity utilization remaining low.

As the economy recovers in the last half of 1982, the demand for money and credit may be expected to strengthen. While the growing economy may be expected to place upward pressure on interest rates, continued lower inflation may offset the impact on the demand for money of rising economic activity, especially if the recovery is moderate rather than rapid. Thus, interest rates may not actually increase, at least not enough to quickly terminate the recovery, as occurred in 1981. For this reason, the economic upswing that may be expected to begin about mid-1982 may be longer lived than the 1980-81 upturn. The prospect of a longer recovery period will be greatly enhanced if appropriate monetary and fiscal policies are consistently applied, not only in 1982 but in succeeding years. An appropriate monetary policy would involve continued efforts to bring about a permanent decline in the monetary growth rate, while an appropriate fiscal policy would ensure timely and significant reductions in the federal government's budget deficit.