

The U.S. Economy and Monetary Policy in 1983

By Glenn H. Miller, Jr., Karlyn Mitchell, and Dan Hoxworth

In January 1983, most forecasters predicted that the U.S. economy would perform rather poorly during the year. Most expected that, despite generally lower interest rates, real GNP growth would be low, the unemployment rate would be high, and the pace of inflation would be moderate.

As 1983 unfolded, however, the economy performed considerably better than forecasters had predicted. The economic recovery was fairly typical of the first years of previous recoveries while financial developments were generally more conducive to economic growth than in the recent past.

This article reviews the economic and financial developments in 1983 and suggests that the better than expected performance of the economy was due mainly to the unexpectedly large response of the economy to the decline in interest rates. The article also comments on the outlook for economic activity and the issues confronting monetary policy in 1984.

Economic recovery in 1983

The U.S. economy began its recovery in 1983, following the end of the nation's most recent recession in the fourth quarter of 1982. Economic indica-

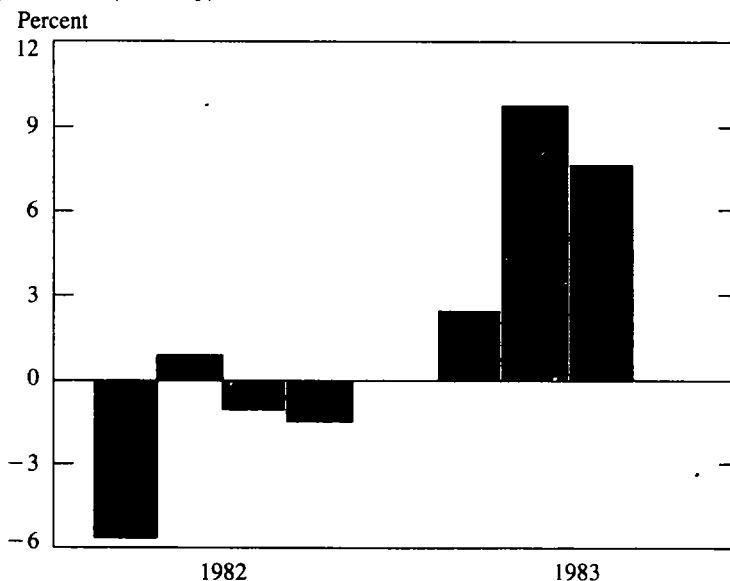
tors show the 1981-82 recession was worse than the average of post-World War II recessions. In terms of resource use and other indicators of slack in the economy, it was the worst recession in the post-World War II period. By the end of 1982, the overall civilian unemployment rate had reached a postwar high of 10.8 percent. Existing manufacturing capacity was being used only 68.8 percent, an operating rate lower than in any other postwar recession. Real GNP in the fourth quarter of 1982 was only about 92 percent of the level estimated if economic growth had followed its long-run trend — the lowest since 1949.

Cyclical recovery in 1983 brought improvement in all three of these measures of resource use. The civilian unemployment rate dropped steadily, reaching 8.4 percent in November. Vigorous increases in manufacturing output brought the October rate of capacity use up to 79 percent. And with real GNP growing at an annual rate of 6.6 percent over the first three quarters of the year, some of the GNP gap closed. Real GNP in the third quarter was about 94 percent of its estimated trend level.

The recovery got off to a slow start, with real GNP increasing at a 2.6 percent annual rate in the first quarter of 1983 (Chart 1). Total purchases of goods and services by final users increased hardly at all. A modest rise in consumer spending and a substantial increase in residential construction were

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CHART 1
Change in real GNP
 (seasonally adjusted annual rate
 compounded quarterly)



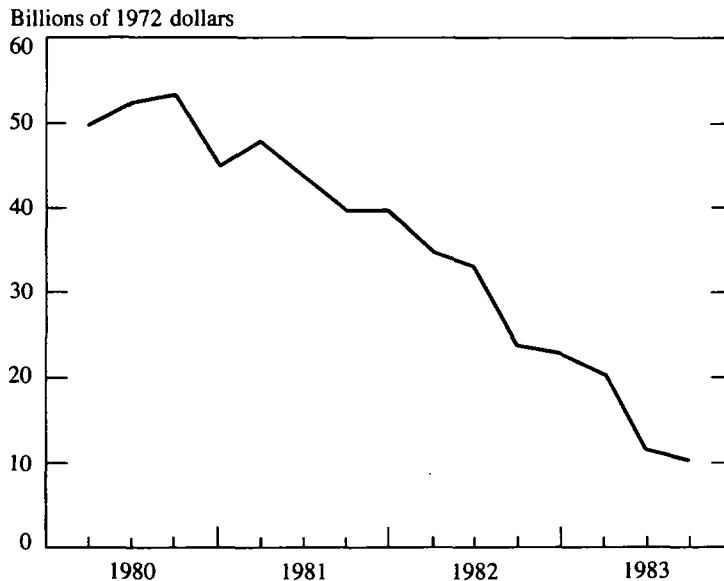
largely offset by declines in business fixed investment, net exports, and government purchases of goods and services. Nearly three-fourths of the total increase in real GNP was due to the business inventory liquidation being slower in the first quarter than in the fourth quarter of 1982.

Real output increased sharply in the second quarter, with inflation-adjusted GNP expanding at an annual rate of 9.7 percent. While a further slowing in inventory liquidation provided some of the impetus, more than two-thirds of the gain in output came from final purchases. Private domestic sectors accounted for the increases in final purchases, as both net exports and government purchases declined further in the second quarter. Somewhat atypically for early in a recovery, business fixed investment also contributed to growth in economic activity. The real punch, however, came from the usual front-runners in early recoveries — consump-

tion and housing. Benefiting from earlier declines in mortgage rates, residential construction increased sharply in the second quarter. And consumer spending, led by a surge in purchases of durable goods, rose at an annual rate of 10 percent — the largest quarterly increase in nearly 18 years.

The pace of the recovery slowed only slightly in the third quarter, when real GNP rose at an annual rate of 7.7 percent. The contribution of inventory investment to output growth was about the same in constant dollar terms as in the second quarter. The form was different, however, as business returned to accumulating stocks after six quarters of inventory liquidation. Final sales, the major source of expansion in the third quarter, accounted for nearly two-thirds of the rise in total output. Neither consumer spending nor housing showed as much strength as in the second quarter, though both remained important contributors to the continuing

CHART 2
Real net exports of goods
and services



recovery. But business fixed investment was stronger in the third quarter than in the second, and government purchases changed from a drag on growth to a positive contributor to the expansion. Thus, with the public sector joining the private domestic economy as positive growth factors, only the foreign sector remained as a drag on growth as real net exports again declined.

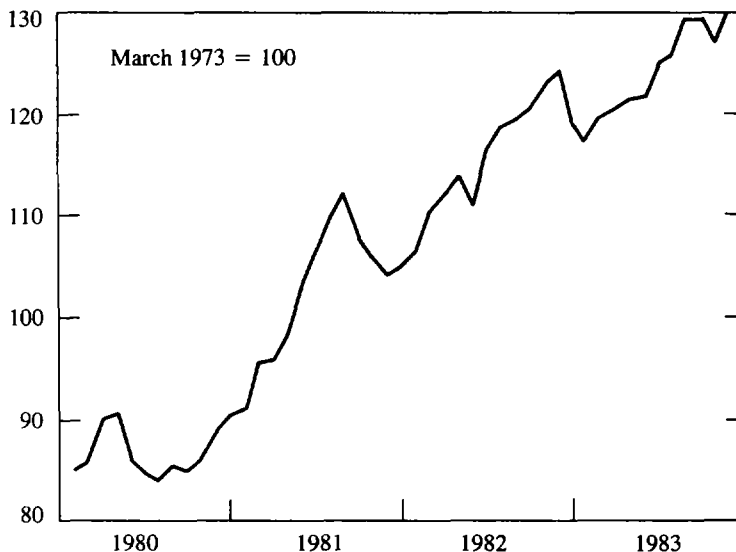
The foreign sector has become increasingly important to U.S. economic activity. From a low point in the fourth quarter of 1977 through a peak in the third quarter of 1980, real net exports tripled, increasing from \$18 billion to \$54 billion in 1972 dollars. That increase accounted for nearly 40 percent of the real gain in final sales over that period. From their peak in the third quarter of 1980, real net exports fell steadily to \$10 billion in the third quarter of 1983 (Chart 2). This \$44 billion decline in net exports was a significant drag on U.S. final sales,

which increased only \$75 billion over the period.

Much of the drop in real net exports, though not all, was associated with the substantial increase in the value of the dollar beginning in mid-1980 (Chart 3). The rising value of the dollar can be traced to such factors as lower inflation in the United States than in other countries, higher real interest rates in the United States, and the perception abroad that the United States is a safe haven for investment funds. The weighted average exchange value of the dollar rose more than 50 percent from the third quarter of 1980 to the third quarter of 1983 — the period when real net exports fell about 80 percent.

One consequence of a strong dollar is a higher price abroad for U.S. exports. The resulting reduction in foreign demand for U.S. production has been a source of weakness in the U.S. economy for the last three years. Another consequence of a strong dollar is a lower price for imports into the United

CHART 3
Weighted average exchange value
of the U.S. dollar
(monthly averages)



States. As lower import prices also help hold down prices of import-competing U.S. goods, an increasing value of the dollar tends to hold back inflation in the United States.

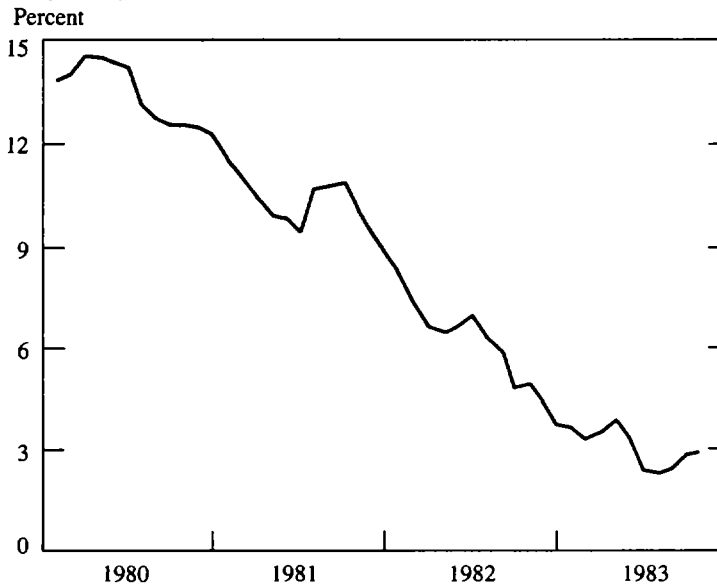
Substantial disinflation has been underway in the United States since 1980. While due partly to the strength of the dollar, the disinflation is related more to the weakness of the economy and to the slack in resource use. All major price indexes reflect the disinflation. As shown in Chart 4, the percentage change in the consumer price index (CPI) measured over one-year spans has declined strikingly from more than 14 percent in early 1980 to less than 3 percent in October 1983. As the chart shows, disinflation has continued in the first three quarters of cyclical recovery in 1983.

Another feature of recent years has been wage disinflation. Chart 5 shows percentage changes in the index of average hourly earnings measured over

one-year spans. The increase in hourly earnings, which was running at nearly 10 percent in early 1981, slowed to just under 4 percent in late summer of 1983. Unit labor costs — compensation per hour divided by output per hour, or productivity — also slowed substantially in their rate of increase after 1980. From a 12 percent increase over the year ending in the second quarter of 1980, the rate of increase in unit labor costs slowed to 1.6 percent for the year ended in the third quarter of 1983. Thus, wage disinflation, like price disinflation, has continued as the economy moved through the first three quarters of recovery.

The continuation of price and wage disinflation through the early recovery period is typical of recent U.S. business cycles. An upturn in the inflation rate as measured by the CPI typically occurs later than an upturn in business activity. The same holds for unit labor costs. Inflation as measured by the CPI

CHART 4
Change in consumer price index
(seasonally adjusted percentage change
over one-year span)



did not begin to increase in the 1950s, 1960s, or 1970s until an average of about five quarters after business cycle recoveries began. Similarly, the rate of increase in unit labor costs continued to fall on average for nearly four quarters after recessions ended. If these patterns are repeated, prices and labor costs might be expected to begin rising faster again in early 1984.

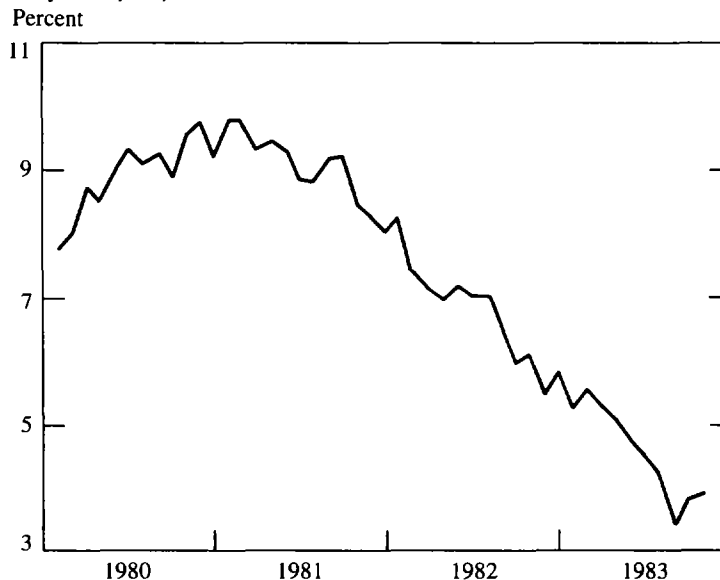
The economy's surprisingly good performance in 1983 is due mainly to the lower level of nominal and real interest rates. Lower rates, in turn, were due mainly to the Federal Reserve's anti-inflation monetary policy. Under this policy, the Federal Reserve has sought to lower the long-run inflation rate by reducing gradually the growth rate of the money supply. While this policy initially put upward pressure on interest rates, it has allowed a gradual reduction in nominal rates by reducing inflation expectations and the inflation premiums lenders require.

Declining inflation also allowed real interest rates to decline beginning late in 1982. Hence in 1983, real GNP growth was led by interest-sensitive categories of spending, particularly consumer durables housing, inventory investment, and business fixed investment. In January 1983, most economic forecasters apparently underestimated the beneficial impact that lower interest rates would have on economic activity.

Interest rates in 1983

Compared with the previous three years, 1983 was a year of relatively low and stable nominal interest rates. Although low compared with the recent past, both short and long-term rates were still high by historical standards. Also high by historical standards were measured real interest rates, computed as nominal rates minus the annualized infla-

CHART 5
Change in average hourly earnings index
 (seasonally adjusted percentage change
 over one-year span)



tion rate. Short and long-term interest rates were not nearly as volatile as in recent years, however, a factor that probably increased investor confidence.

Interest rates remained fairly stable through the spring, rose over summer, and declined somewhat in the fall (Chart 6). Short-term rates were at their 1983 lows in January. Long-term rates hit their lows for the year in April and May. Both rates began rising sharply in June, to an August peak about 1.5 percentage points higher than their respective lows. Interest rates then declined somewhat but did not reach their previous 1983 lows.

Despite increases during the summer, nominal interest rates were generally lower in 1983 than in recent years (Table 1). In the first 11 months of 1983, short-term interest rates averaged 2 to 3 percentage points less than in all of 1982, the year with the lowest short-term rates in the 1980-82 period. In the first 11 months of 1983, long-term rates aver-

aged nearly the same as in all of 1980, approximately 1.5 to 2.5 percentage points lower than in all of 1981 and 1982.

In addition to being lower than in the previous three years, interest rates were more stable in 1983. Long-term interest rates, such as Moody's Aaa corporate bond rate, fluctuated in the first 11 months of 1983 within a 1 percentage point range, compared with an annual range of 3 percentage points in the 1980-82 period. The rate on U.S. government securities fluctuated in a range of 1.3 percentage points, compared with a 3 percentage point annual range in the 1980-82 period. Even more dramatic than the increased stability of long-term rates was the increased stability of short-term rates. In the first eleven months of 1983, the 3-month Treasury bill rate fluctuated in a range of 1.5 percentage points, down from ranges of 5.5 to 8.5 percentage points in the 1980-82 period. The reduced variability of short

CHART 6
Interest Rates

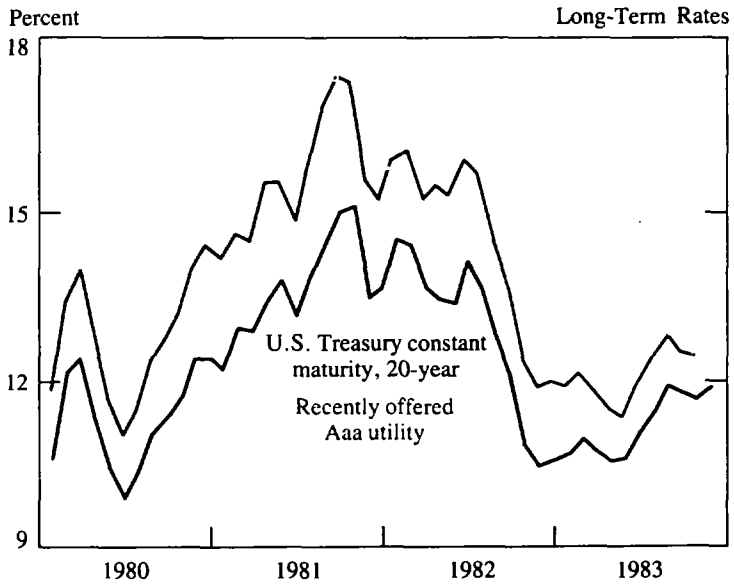
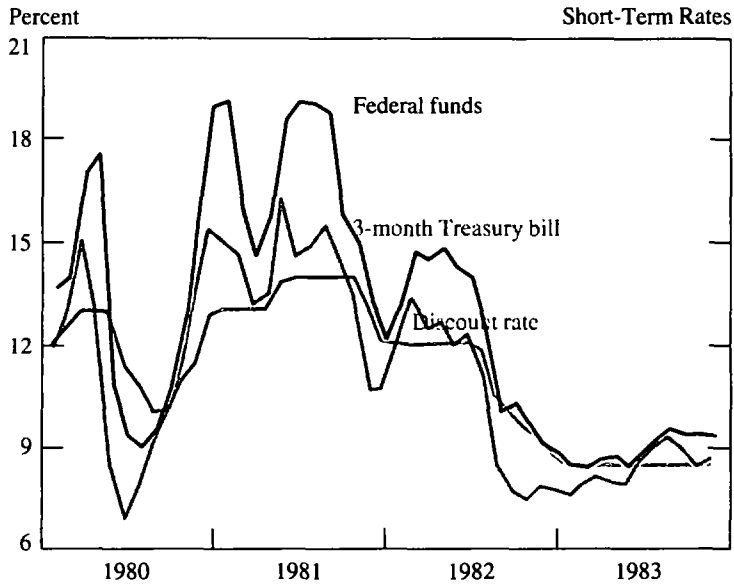


TABLE 1
Selected interest rates, 1980-83

<u>Period</u>	<u>Federal Funds</u>	<u>3-Month Treasury Bills</u>	<u>Moody's Seasoned Corporate Aaa</u>	<u>U.S. Government 20-Year</u>
1980 High*	18.90	15.49	13.21	12.49
Low	9.03	7.07	10.58	9.89
Average†	13.36	11.43	11.94	11.39
1981 High	19.10	16.30	15.49	15.13
Low	12.37	10.85	12.81	12.29
Average	16.38	14.03	14.17	13.72
1982 High	14.94	13.48	15.27	14.57
Low	8.95	7.71	11.68	10.57
Average	12.26	10.61	13.79	12.92
1983 High	9.56	9.34	12.51	11.92
Low	8.51	7.86	11.46	10.63
Average	9.05	8.58	11.99	11.28

* High and low monthly average rates for each calendar year.

† Average of the monthly rates for each calendar year.

and long-term interest rates helped restore confidence to financial markets after years of uncertainty.

Like nominal interest rates, measured real interest rates were lower in 1983 than in the previous three years, but still high by historical standards. In the third quarter of 1983, the measured real prime rate was 7.4 percent, significantly lower than the 11 percent rate in the third quarter of 1982. Despite this decline, measured real interest rates were comparatively high in 1983, as shown in Table 2. The rate averaged 6.7 percent in the first three quarters of 1983, whereas in the first three quarters of the last five economic recoveries prior to 1980 the measured real prime rate averaged 1.5 percent.

Measured real interest rates remained at historically high levels because of factors that kept short and long-term nominal rates high. These factors included the large federal budget deficit, comparatively volatile interest rates, and high inflation expectations.

The large federal budget deficit put upward pressure on interest rates in 1983. Federal borrowing amounted to \$212.4 billion in fiscal 1983, \$77.5

billion more than in 1982. The large deficit contributed to the high level of both short and long-term rates by increasing the competition between government and private borrowers for a limited supply of credit.

Although nominal interest rates were not as volatile in 1983 as in the three previous years, they were volatile by historical standards. By increasing the risk of holding financial instruments, volatility put upward pressure on interest rates as investors

TABLE 2
Nominal and measured real prime rates

<u>Date</u>	<u>Nominal</u>	<u>Real</u>
1980	15.3	5.1
1981	18.9	10.2
1982: First Half	16.4	11.4
Second Half	13.3	9.6
1983: I	10.9	5.4
II	10.5	7.2
III	10.8	7.4

Note: The measured real prime rate is defined in this table as the quarterly nominal prime rate minus the rate of inflation as measured by the annualized percent change in the GNP deflator.

demanded a risk premium as compensation for the greater uncertainty.

Inflation expectations contributed to high nominal and measured real interest rates, especially long-term rates. Expectations of inflation led investors to add an inflation premium to nominal lending rates to compensate for the possibility of being repaid in dollars with less purchasing power. Two factors may have augmented investors' inflation forecasts in 1983. One was that investors were probably hesitant to lower their inflation expectations after the long period of inflation that had hurt fixed-income investors. The other was that the prospect of continuing large federal budget deficits might cause the Federal Reserve to monetize the government's borrowings. Government borrowing is projected to remain at near-record highs for several years. Massive credit demands by the Treasury raise inflation expectations by increasing concern that as nominal interest rates rise, the Federal Reserve will be forced to stabilize interest rates by increasing the money supply — which serves to monetize the debt.

Although measured real interest rates were comparatively high in 1983, real interest rates — especially real long-term rates — were probably closer to their historical norms. Real interest rates, rather than measured real interest rates, influence spending and investment decisions. The real rate is the nominal interest rate less the rate of inflation expected over the life of the investment. Because of the recent experience with rapid inflation, the expected inflation rate was probably higher than the actual rate in 1983. As a result, real long-term interest rates were probably less than measured real rates. Low real long-term interest rates may be one explanation for the rapid recovery, despite high long-term measured interest rates.

One of the significant interest rate developments in 1983 was the sharp reduction in risk premiums on the debt instruments of lower rated private firms. The risk premium is measured as the spread between interest rates on the debt of high-rated pri-

vate firms and low-rated firms. The spread follows a cyclical pattern. Because bankruptcies affect smaller, lower rated firms disproportionately, investors demand a higher premium to compensate for the increased risk. As a result, the spread increases during recessions and decreases during expansions.

As usual in economic expansions, the risk premiums required on debt of lower rated firms declined in 1983. As shown in Chart 7, the spread between Aaa rated bonds and Baa bonds reached an all-time high of 2.7 percentage points in September 1982. Over the next year, the spread fell to less than 1.2 percentage points. There was a similar reduction in the risk premiums paid by lower rated firms on short-term securities. The spread between high and medium-grade commercial paper declined from 1.4 percentage points in the third quarter of 1982 to 0.5 percentage point a year later. The extent of the decline in risk premiums, which came faster than in other recovery periods, indicates renewed investor confidence in the economic recovery.

The reduction in the level and volatility of interest rates and the reduction in risk premiums in 1983 were typical of the early phase of an economic expansion. These interest rate developments influenced — and were influenced by — the money and credit aggregates.

Growth of the monetary aggregates in 1983

Growth in the monetary aggregates in the first 11 months of 1983 generally exceeded that of recent years. M1 — the narrowly defined money supply consisting of currency held by the public, traveler's checks, demand deposits, and other checkable deposits — grew at an annual rate of 9.4 percent, a pace considerably faster than in each of the previous two years (Table 3). Growth of M2 — consisting of M1, savings deposits, small time deposits, shares in mutual money market funds, overnight repurchase agreements and Eurodollar transactions, and the

TABLE 3
Growth of the monetary aggregates: 1980-83
 (percentage change at annual rates)

<u>Period</u>	<u>M1*</u>	<u>M2</u>	<u>M3</u>	<u>Total Nonfinancial Domestic Debt</u>
1980	7.2	9.0	9.7	9.5
1981	5.1	9.4	11.7	9.6
1982	8.5	9.3	10.1	9.2
1983: First 11 Months†	9.4	11.9	9.4	10.2‡
1983: I	14.1	20.3	10.2	8.8
II	12.2	10.1	8.1	10.6
III	8.9	7.8	8.3	11.6

Note: Annual rates of growth are based on quarterly average data.
 * M1 is equivalent to M1-B in 1980 and M1-B adjusted for deposit shifts into NOW accounts in 1981.
 † Fourth quarter 1982 through November 1983.
 ‡ Fourth quarter 1982 through October 1983.

new money market deposit account balances — also rose faster than in recent years. Only M3 — the most comprehensive aggregate, which includes M2, large time deposits, and institution-only money market funds — grew slower in 1983.

Nonfinancial domestic debt also grew faster in 1983 than in previous years. This aggregate consists of the outstanding debt of all domestic governmental units (federal, state, and local), households, and nonfinancial businesses. In the first 11 months of 1983, nonfinancial debt increased at an annual rate of 10.2 percent, slightly faster than in 1981 and 1982.

All three monetary aggregates followed a similar pattern, growing rapidly in the first quarter and slowing gradually as the year progressed. The rapid growth of the aggregates early in the year was due mainly to three factors. These factors include the introduction of new deposit accounts, the lagged effects of declining interest rates and lower inflation rates, and the uncertain economic outlook.

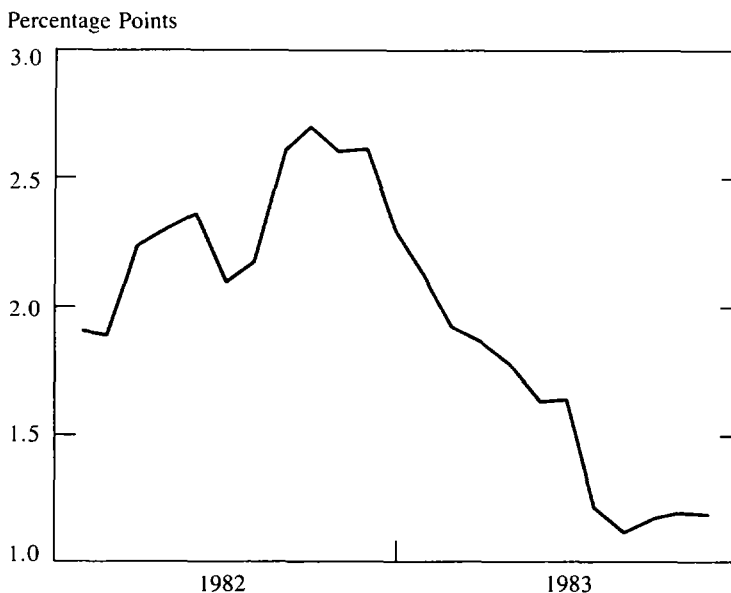
The introduction of two new deposit accounts heavily influenced the first quarter growth of the monetary aggregates. In response to the mandates

of the Garn-St Germain Act, all depository institutions were authorized to offer money market deposit accounts (MMDA's) on December 14, 1982. These investment-oriented accounts require a \$2,500 minimum balance, have no reserve requirement, allow a limited number of transactions, and have no interest rate ceiling. These institutional features of MMDA's make MMDA's directly competitive with shares at money market mutual funds (MMMF's). In addition, unlike MMMF's, MMDA's are insured up to \$100,000 by either the FDIC or FSLIC. Since MMDA's are designed for investment, they are not included in M1 but in the broader M2 and M3 aggregates.

Closely following the introduction of MMDA's, Super NOW accounts were introduced on January 5, 1983. In addition to the features available in MMDA's, Super NOW's offer unlimited checking. As a result, they are included with NOW accounts in the other checkable deposit component of M1 and are subject to a 12 percent reserve requirement.

Because of unprecedented interest rate competition, massive advertising, and the lure of deposit insurance, MMDA balances had soared to \$341 bil-

CHART 7
Long-term risk premium



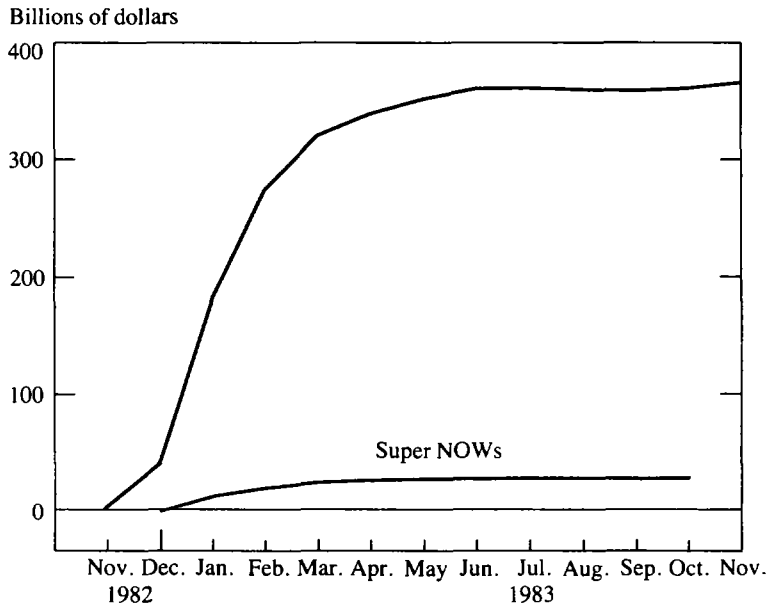
lion by April 1983 (Chart 8). Much of this growth in MMDA's came at the expense of noninstitutional MMMF's and small time and savings deposits. As all three of these accounts are included in M2, the transfer of funds among accounts did not affect total M2. Growth of MMDA's also came at the expense of large time deposits and institution-only MMMF's, which are in M3. Flows from these accounts into MMDA's inflated the growth of M2 but did not affect total M3 because all three accounts are included in M3. MMDA's also attracted funds from accounts in M1. These flows had no effect on total M2 because M1 is included in M2. The flows did, however, suppress the growth of M1.

The introduction of Super NOW's had much less effect on the monetary aggregates. Super NOW's grew to only \$30 billion in the first four months of 1983 (Chart 8). Because Super NOW's attracted

only a modest amount of funds, they accounted for little of the rapid growth in M1 in the first quarter of 1983.

The lagged effects of declining interest rates and slowing inflation also contributed to the rapid growth in the monetary aggregates by reducing the opportunity cost of holding money. This factor is particularly important in explaining growth in M1. High interest rates make currency, demand deposits, and other checkable deposits (OCD's) — principally NOW accounts — unattractive because these holdings earn little or no interest. High inflation also makes these holdings unattractive, because they offer no protection against inflation. Comparatively low interest rates and reduced inflation in 1983 made these holdings much more attractive than in recent years, with the result that most components of M1 grew rapidly in 1983. Currency and OCD's, each accounting for about a fourth of

CHART 8
New deposit accounts



M1, grew rapidly in 1983. Demand deposits grew much slower.

Another factor influencing growth in the monetary aggregates was the uncertain economic outlook. When times are uncertain, people tend to increase their holdings of money balances for precautionary reasons. The severity of the recent recession and the modest pace of recovery expected in early 1983 undoubtedly contributed to strong precautionary demands for money in the first quarter.

Unusually large demands for money were manifested in the first half of 1983 in the abnormal behavior of M1 velocity — the rate of turnover in the nation's transactions balances. The velocity of M1 normally follows a cyclical pattern. As confidence increases in an economic expansion, individuals and businesses usually reduce their precautionary balances and increase their spending. By spending more of the funds held in transactions bal-

ances, they increase the rate at which these balances turn over, and so velocity increases. Conversely, as confidence declines in an economic recession, individuals and businesses reduce their spending to build precautionary balances. By spending less of the funds held in transactions balances, they reduce the rate at which the balances turn over, and so velocity declines.

The velocity of M1 has not followed the usual pattern in this economic expansion. Growth in velocity slowed sharply in the first quarter of 1983, the first quarter of the recovery (Table 4). The slowing resulted from exceptionally strong demands for money relative to GNP. Growth in velocity turned positive in the second and third quarters, increasing 0.5 and 1.9 percent, respectively, but this growth remained far below that of previous periods of economic recovery.

The effect on the monetary aggregates of new

TABLE 4
Growth of nominal GNP, M1,
and velocity of M1

Period	GNP	M1*	M1 Velocity
1980	9.3	7.2	2.1
1981	10.8	5.1	5.7
1982	2.6	8.5	-5.8
1983: First Three Quarters†	10.8	12.0	-1.2
1983: I	8.0	14.1	-5.9
II	12.7	12.2	0.5
III	10.8	8.9	1.9

Note: Annual rates of growth are based on quarterly average data.
 * Equivalent to M1-B in 1980 and M1-B adjusted for deposit shifts into NOW accounts in 1981.
 † Annualized percentage change from fourth quarter 1982 to third quarter 1983.

deposit accounts and reductions in interest rates, inflation, and economic uncertainty appears to be subsiding. Growth of MMDA balances slowed sharply in the second quarter and stabilized in the third quarter. Account adjustments made in response to the decline in interest rates and inflation also dissipated in the later quarters as interest rates rose and inflation stabilized. The need for precautionary balances was greatly reduced by the increase in economic activity and the decline in unemployment in the second and third quarters.

The slowing in the growth of the monetary aggregates confirms the reduced effect of these factors. After growing rapidly in the first quarter of the year, the growth of all the monetary aggregates slowed in the second quarter and moderated further in the third quarter (Table 5). This trend would seem to foreshadow a return to more normal monetary growth in 1984.

Monetary policy in 1983

As 1983 opened, the Federal Reserve reaffirmed its commitment to restraining inflation, promoting

economic recovery, and contributing to international financial stability. Several unusual circumstances, however, made the formulation and implementation of a policy to achieve these goals especially difficult. In addition to the introduction of new deposit accounts and the uncharacteristic behavior of velocity, monetary policymaking was complicated by the potential for renewed inflation, large budget deficits, and international economic concerns.

Long-run targets

As required by the Full Employment and Balanced Growth Act of 1978, tentative growth ranges for the money and credit aggregates for 1983 were announced in July 1982. The tentative ranges were the same as those set for 1982 — 2.5 to 5.5 percent

TABLE 5
Growth of the monetary aggregates in 1983
(seasonally adjusted annual rates)

Monthly	M1	M2	M3
1983: Jan.	9.8	30.9	13.0
Feb.	22.4	24.4	13.6
Mar.	15.9	11.2	8.1
Apr.	-2.6	2.8	3.3
May	26.3	12.4	10.9
June	10.2	10.4	11.0
July	8.9	6.8	5.5
Aug.	2.8	6.0	8.6
Sept.	0.9	4.8	7.4
Oct.	1.9	9.3	8.5
Nov.	0.5	7.8	12.5
FOMC 1983 growth ranges	5-9*	7-10	6.5-9.5
Nov./1982:IV	5.1†	7.9‡	9.4

* Revised upward from 4-8 percent at the FOMC's July meeting.

† Base period for M1 is 1983:II.

‡ Base period for M2 is the average of February and March 1983.

for M1, 6 to 9 percent for M2, and 6.5 to 9.5 percent for M3. It was also announced that, as in past years, the base used in calculating the growth ranges would be the average level of the aggregates in the fourth quarter of 1982.

Circumstances unforeseen in mid-1982 led the FOMC to conclude at its February meeting that adoption of the tentative policy for 1983 would result in excessive monetary restraint. One factor contributing to this decision was the introduction of MMDA's and, to a less extent, Super NOW's. By February, these new accounts had greatly increased the aggregates, particularly M2. Retention of the tentative ranges would mean that the aggregates would be well above the upper limits of these ranges from the very start and leave little room for growth for the rest of the year. Another factor leading the FOMC to abandon its tentative ranges was unusually low growth in velocity. By February, velocity growth was expected to be atypically low in 1983, as it had been in 1982, a possibility that had not been foreseen in mid-1982. Growth of the monetary aggregates in 1983 in the same ranges as in 1982 might thereby result "in a much more restrictive monetary policy than had been intended" when the tentative ranges were announced.¹

As a result of the new accounts and the unusual behavior of velocity, only the tentative range for M3 was maintained when the FOMC announced its actual objectives for 1983 in February. The tentative fourth quarter to fourth quarter M3 growth range of 6.5 to 9.5 percent was kept on grounds that the new deposit accounts and the erratic behavior of velocity would affect this aggregate less than the other aggregates.

The growth ranges announced for the other aggregates were modified substantially from the tentative ranges. The expansion of M2 as a result of

rapid growth of MMDA's led the FOMC to suspend M2 targeting in the first quarter of 1983. When M2 targeting was resumed in the second quarter, the FOMC announced it would use the February-March average of M2 as the base for calculating the M2 growth range. This base was chosen on grounds that shifts into MMDA's from other assets would be largely complete by March. The FOMC also announced it intended to seek M2 growth of between 7 to 10 percent from the February-March base to the fourth quarter of 1983. This range, somewhat higher than the 6 to 9 percent range announced in mid-1982, was adopted to allow for further shifting of assets into MMDA's after March. The higher range also reflected the belief that velocity would continue to grow slowly in 1983.

For M1, the aggregate most affected by the atypically low velocity growth, the FOMC announced a growth range of 4 to 8 percent from the fourth quarter of 1982 to the fourth quarter of 1983. Considerably higher and wider than the tentative 2.5 to 5.5 percent range announced in mid-1982, this range reflected the belief that precautionary demands for money would continue to be exceptionally high and that the relation between money, output, and interest rates would continue to be unpredictable in 1983.

At the same time the revised growth ranges were announced, the FOMC announced it would regard the M1 range as tentative and place substantially more weight on the broader M2 and M3 aggregates in implementing monetary policy. This decision represented a significant departure from the past, when M1 was given primary weight in implementing policy. It was felt that the weight placed on M1 could be increased subsequently if there was evidence that velocity growth had returned to more normal patterns.

In addition to emphasizing the broader aggregates, the FOMC announced it would monitor the expansion of nonfinancial domestic debt, a very broad measure of credit. This was the first time this aggregate had been used in implementing monetary

¹ "Record of Policy Actions of the FOMC, Meeting Held on February 8-9, 1983," Federal Reserve press release, April 1, 1983, p. 9.

policy. The monitoring range for this aggregate was set at 8.5 to 11.5 percent.

The behavior of the monetary aggregates during the first half of 1983 justified the FOMC's modifying its aggregate objectives and procedures for 1983. MMDA's grew strongly, as indicated earlier, and velocity slowed sharply despite fairly stable interest rates and a slight increase in output and spending. As a result, M1 and M2 increased rapidly from January to March while M3 increased at rates that caused it to exceed only slightly the upper limit of its growth range (Table 5). As the FOMC had anticipated, large inflows into MMDA's subsided after March. Growth in M2 slowed substantially, falling to near the midpoint of its long-run growth range for the next several months. Growth in M3 continued near the upper limit of its growth range through the first half of the year.

In contrast to the broader aggregates, M1 continued to grow rapidly in the second quarter of 1983, with the result that M1 consistently exceeded the upper limit of its growth range by wide margins. Rapid growth in M1 resulted from unexpectedly large demands for very liquid assets that caused all the major components of M1 — demand deposits, other checkable deposits, and currency — to expand sharply. Consequently, velocity growth continued significantly lower than usual for the early quarters of an economic recovery.

In accordance with the Full Employment and Balanced Growth Act of 1978, the FOMC reviewed its monetary policy objectives for 1983 at its July meeting. Because the broader aggregates were well within their desired growth ranges, the FOMC decided to retain for the rest of the year the target ranges it announced in February for M2, M3, and nonfinancial domestic debt. The FOMC also reaffirmed its earlier decision to emphasize the broader aggregates in implementing monetary policy.

Unlike the broader aggregates, the previously announced policy for M1 was revised. The M1 monitoring range announced in February was reset at 5 to 9 percent, up from the previous range of 4 to 8

percent. The FOMC also rebased M1 from the fourth quarter of 1982 to the second quarter of 1983. This revision meant that the FOMC intended to accept the rapid growth of M1 in the first half of the year and would seek M1 growth between 5 and 9 percent at an annual rate from the second quarter to the fourth quarter.

The FOMC decided to rebase M1 in order to maintain a viable M1 target. Even though the M1 aggregate was being given less weight in implementing monetary policy, the FOMC felt that a viable M1 target was vital to the credibility of the Federal Reserve's anti-inflation monetary policy.² The target set previously was no longer viable, because only by sharply restraining M1 in the second half of the year could M1 be brought within the target range. Enough restraint to bring M1 within its previous target range would bring the broader aggregates well below the lower limits of their target ranges and threaten the recovery. The decision to rebase the M1 range also reflected the belief that the circumstances causing the rapid growth of M1 in the first half of the year would not be repeated in the second half.³

The FOMC decided to raise the long-run M1 growth range on grounds that growth in M1 faster than had been envisioned in February was appropriate for the second half of 1983. Two factors contributed to the upward revision. First, the FOMC believed that extremely large precautionary demands for money would persist in the second half of 1983, causing velocity growth to be low by historical standards.⁴ With lower velocity growth, a larger money supply would be needed to support a

² The FOMC discussed suspending M1 monitoring when it reviewed the long-run growth ranges in July. But a majority of the members believed a monitoring range should be retained for M1. "Record of Policy Actions of the FOMC, Meeting Held on July 12-13, 1983," Federal Reserve press release, August 26, 1983, p. 11.

³ Federal Reserve press release, August 26, 1983, p. 12.

⁴ Federal Reserve press release, August 26, 1983, p. 13.

given level of nominal GNP. Hence, an increase in M1 growth range was needed to avoid unnecessary restraint on nominal GNP growth.

Second, the FOMC believed that output and spending would increase faster in 1983 than had been forecasted in February.⁵ Since a higher level of economic activity requires a larger money supply, the stronger than expected recovery provided another reason for raising the M1 target.

Short-run policy implementation

In addition to setting and reviewing long-run growth ranges for the money and credit aggregates, the FOMC sets and revises short-run policy objectives when it meets every six to eight weeks. The short-run policy objectives, set at the start of each quarter and reviewed during the quarter, are consistent with the long-run ranges. By setting and implementing short-run objectives, the FOMC can adapt monetary policy to changing economic conditions without giving up the discipline longer run targets impose.

Short-run monetary policy was accommodative in the first five months of 1983. In the policy directives issued after the December 1982 and March 1983 meetings, the FOMC specified short-run growth paths for the monetary aggregates at or above the midpoints of the aggregates' long-run growth ranges. High short-run paths were set primarily to accommodate money growth caused by the introduction of MMDA's and Super NOW's.⁶

Not only were the short-run paths set relatively high in the first five months of 1983, but little effort

was made to resist growth in the aggregates in excess of these paths. Under the nonborrowed reserves targeting procedure in use since October 1979, above-target growth in the aggregates would have led to an increase in the federal funds rate as banks borrowed to meet larger reserve requirements. The federal funds rate was quite stable in the first three months of 1983, however, and was only slightly less stable in April and May.

Monetary policy gradually became less accommodative after the FOMC meeting in May. The policy directive from the May meeting stated the FOMC's intention to "increase only slightly the degree of reserve restraint."⁷ The directive from the July meeting stated that the FOMC intended to "increase slightly further the existing degree of reserve restraint."⁸ The directive issued after the August meeting indicated that the FOMC "seeks to maintain the existing degree of reserve restraint."⁹

The move toward monetary restraint after May was prompted by three considerations. The first was the FOMC's concern about the psychological effect on the market of continued rapid growth in M1. Despite the reduced emphasis on M1 as a monetary policy target and growth of the broader aggregates within or near the top of their long-run growth ranges, the FOMC was concerned that continued rapid growth in M1 was being interpreted as a sign that the Federal Reserve had abandoned its fight against inflation. Expectations of higher future rates of inflation, it was thought, were putting upward pressure on nominal interest rates by causing creditors to add larger inflation premiums to lending rates. Higher interest rates, in turn, would tend to

⁵ The FOMC members projected real GNP growth for 1983 between 5 and 5.75 percent at the July meeting. This range is significantly higher than the 3.5 to 4.5 percent range forecast at the February meeting.

⁶ "Record of Policy Actions of the FOMC, meeting held on December 20-21, 1982," Federal Reserve press release, February 1983, pp. 7-10, and "Record of Policy Actions of the FOMC, Meeting Held on March 28-29, 1983," Federal Reserve press release, April 1, 1983, pp. 4-5.

⁷ "Record of Policy Actions of the FOMC, meeting held on May 24, 1983," Federal Reserve press release, July 15, 1983, p. 13.

⁸ "Record of Policy Actions of the FOMC, meeting held on July 12-13, 1983," Federal Reserve press release, August 26, 1983, p. 19.

⁹ "Record of Policy Actions of the FOMC, meeting held on August 23, 1983," Federal Reserve press release, October 7, 1983, p. 12.

weaken the recovery. A slightly more restrictive policy, it was reasoned, would reduce the expected inflation rate, put downward pressure on long-term interest rates, and promote the recovery.¹⁰

The second consideration leading to greater monetary restraint was the FOMC's concern about the effect on the recovery of continuing large structural federal budget deficits. Large debt-financed deficits reduce the amount of credit available to finance private borrowing. When private demands for credit are strong, deficits put upward pressure on interest rates. Since private credit demands strengthen as the economy strengthens, the faster than expected pace of the recovery beginning in the second quarter of 1983 increased the likelihood that the inevitable clash of private and public credit demands and ensuing higher interest rates would occur sooner rather than later. In view of this scenario, the FOMC decided that "a slight further increase in the degree of reserve restraint . . . would provide some insurance against the possible need for a considerably greater degree of reserve restraint later. . . ."¹¹

The third consideration in the decision to seek greater monetary restraint was the FOMC's concern about the debt problems of several developing countries. The debt problems of these countries —

particularly Mexico, Brazil, and Argentina — are significant in view of the large exposure of U.S. banks to these borrowers. The burden of the debt on these countries increases with an increase in U.S. interest rates, because much of their debt carries floating rates. Hence, the prospect of higher interest rates as a result of greater inflation expectations or a clash of private and public credit demands has severe implications for the debt service problems of these countries and the stability of the U.S. banking system. In view of these implications, the FOMC decided in favor of a slightly more restrictive policy. The FOMC acknowledged that in the short run a more restrictive policy would add to the debt service problems of these countries by raising interest rates. In the longer run, however, it was believed that moderate restraint early in the recovery would promote lower interest rates and a more sustained recovery. These goals, the FOMC believed, were in the interests of both the developing countries and the United States.¹²

The restrictive stance the FOMC took at its May, July, and August meetings was accompanied by a sharp deceleration in the growth of the monetary aggregates (Table 5). By the end of August, M2 was in the lower half of its long-run growth range while

¹⁰ "[A] number of members . . . saw a need to move toward restraining its (M1's) growth. . . . Several members commented that slightly greater restraint on reserves would be desirable at this point. . . . Reference was made to the favorable effect such a move might have on market perceptions about monetary policy and the outlook for containing inflation, with the consequence that prospects for stable or declining interest rates in long-term debt markets would be enhanced. . . ." "Record of Policy Actions of the FOMC, Meeting Held on May 24, 1983," Federal Reserve press release, July 15, 1983, p. 10.

¹¹ "In their review of the economic situation and outlook, the members focused on evidence of the economy's strong forward momentum and the prospects for continuing sizable gains in real GNP during the months immediately ahead . . . members were concerned that the need to finance large Treasury borrowing in a period when private credit demands were accelerating would put increasing upward pressure on interest rates and curtail the availability of financing to private borrowers . . . [a] view was expressed that a decline in interest rates from present levels

would probably be needed to prolong the recovery during 1984." "Record of Policy Actions of the FOMC, Meeting Held on July 12-13, 1983," Federal Reserve press release, August 26, 1983, pp. 6, 15.

¹² "A number of members were . . . concerned that under current circumstances even a modest tightening of reserve conditions might have a disproportionate impact on sentiment in domestic and international financial markets and lead to sizable increases in domestic interest rates . . . appreciably higher U.S. interest rates might have particularly damaging consequences internationally by raising the foreign exchange value of the dollar and intensifying the severe pressures on countries with serious external debt problems. The view was also expressed that the external debt difficulties of a number of foreign countries were continuing problems. The Federal Reserve could best contribute to the resolution of those problems by following policies that would foster sustained, noninflationary economic growth. Deferring any action could well pose a greater dilemma at a later time." "Record of Policy Actions of the FOMC, Meeting Held

M1 and M3 were in the upper halves of their ranges. With all three monetary aggregates growing within their target ranges, market participants began anticipating an easing of monetary policy. Exceptionally good performance of the monetary aggregates probably contributed to the decline in short and long-term interest rates beginning in mid-August.

The market's expectation of some easing was confirmed when the policy directive from the FOMC's October 4 meeting was made public. The FOMC voted

. . . to maintain the slightly lesser degree of reserve restraint sought in recent weeks. The action is expected to be associated with growth of M2 and M3 at annual rates of around 8.5 percent from September to December. . . . The Committee anticipates that M1 growth at an annual rate of around 7 percent from September to December will be consistent with its fourth-quarter objectives for the broader aggregates.¹³

If the FOMC's fourth-quarter policy objectives are realized, all three aggregates will be within their long-run growth ranges at yearend.

In brief, 1983 was a year in which extraordinary judgment was needed to implement a monetary policy geared to restraining inflation, promoting economic recovery, and maintaining international financial stability. The introduction of new deposit accounts and the unusual behavior of velocity complicated the setting of long-run growth ranges for the money and credit aggregates by disrupting historical relationships among economic variables. Promoting economic recovery without reigniting inflation or contributing to instability in interna-

on May 24, 1983." Federal Reserve press release, July 15, 1983, pp. 9-10.

¹³ "Record of Policy Actions of the FOMC, Meeting Held on October 4, 1983," Federal Reserve press release, November 18, 1983, pp. 12-13.

tional financial markets required that the FOMC reassess its short-run policy objectives quickly in response to changes in economic data to prevent policy from becoming too easy or too restrictive. Despite the complexities, the goals of monetary policy were largely achieved in 1983. The inflation rate remained low, the recovery strengthened, and conditions in international financial markets remained stable. Moreover, it appeared that for the first time since the new operating procedures were adopted, all three monetary aggregates would be within their long-run growth ranges at yearend.

The outlook for 1984

The pace of the recovery in 1983 is not likely to be maintained through 1984. A major reason for slower growth is that nominal and real interest rates are not expected to decline significantly below their present levels. Real output is widely expected to grow in a range between 4 to 5 percent in 1984, a growth rate about average for the second year of a recovery. Housing and consumer spending are expected to provide less impetus to growth than in 1983, and in spite of continued gradual accumulation of stocks, inventory investment is due to contribute less to growth in GNP. Business fixed investment, however, is generally expected to provide more support to the expansion as capacity use rates rise. Government purchases should also provide support as military spending boosts federal purchases and state and local government revenues benefit from strengthening economic activity. Only the foreign sector appears to be a likely drag on growth as the strength of the dollar and weakness of recoveries abroad restrain the growth in net exports.

The moderate growth in output in 1984 should further reduce the amount of unused resources in the economy. The rate of use of industrial capacity is due to continue rising, and the rate of unemployment can be expected to decline further, though the decline may be slower than in 1983.

The outlook for inflation remains favorable. Even though the rate of price increase will almost certainly rise as the expansion proceeds, the rise is expected to be moderate in 1984. Relatively stable energy prices and continued slow increases in labor costs are expected to take the edge off increases in food prices.

The task for monetary policy will be to provide money and credit adequate for economic expansion while progressing toward reasonable price stability. In July 1983, the FOMC set tentative 1984 target ranges for M2, M3, and nonfinancial domestic debt one-half of one percentage point below the 1983 ranges. A tentative 1984 monitoring range for M1 was set one percentage point lower than in 1983. These tentative ranges will be reconsidered at the FOMC's February meeting.

One of the main issues facing the Federal Reserve in 1984 will be the importance of M1 in monetary policymaking. If velocity returns to a more normal pattern, the FOMC may consider giving more weight to M1 in the formulation of monetary policy.

Another issue in 1984 will be the monetary policy dilemma created by fiscal policy. The federal budget deficits projected for the next several years will absorb a large part of private savings. As private credit demands strengthen along with the economy, private and government borrowing will likely clash, putting upward pressure on interest rates and reducing growth in output. Higher interest rates reduce output growth by reducing housing and business investment and pushing up the foreign exchange value of the dollar, which reduces net exports. The dilemma for monetary policy is that the damage federal budget deficits do to economic growth can be delayed through an expansion of money and credit that lowers interest rates. These temporary gains, however, are bought at the expense of a greater long-run inflation rate and even more restrictive monetary policy later.

The task of formulating monetary policy in 1984 that is neither excessively easy nor excessively restrictive will require careful judgment. In making

these judgments, the Federal Reserve remains committed to promoting sustainable economic growth and reducing inflation.