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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 that 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

	M1-B*	M2	M3	Bank Credit
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 transactions 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.

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

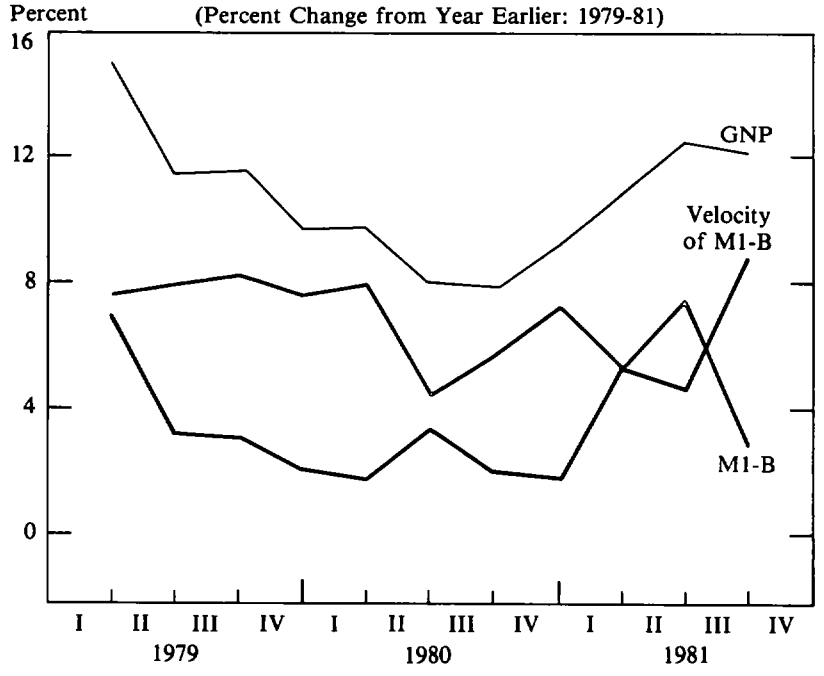
THE BEHAVIOR OF SHIFT-ADJUSTED M1-B

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
(Percent Change from Year Earlier: 1979-81)



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 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

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[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.

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 expectations, 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 tax 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.

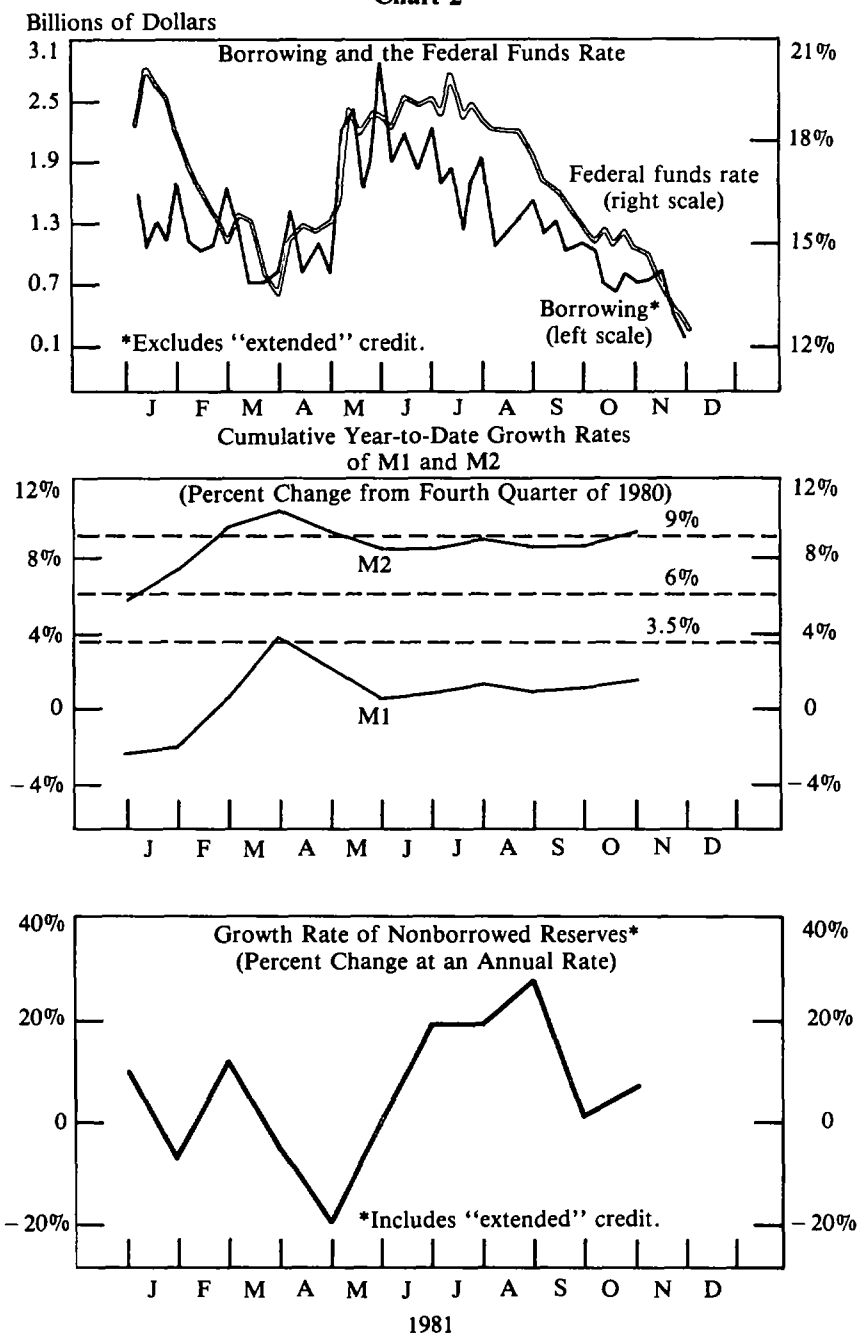
The general correspondence between discount window borrowing and the federal funds rate in 1981 is shown in the top panel of Chart 2. The middle panel of the chart shows the cumulative year-to-date growth rates of shift-adjusted M1-B and M2, while the lower panel shows the monthly growth rates of nonborrowed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


Billions of Dollars
Borrowing and the Federal Funds Rate
3.1
2.5
1.9
1.3
0.7
0.1
21%
18%
15%
12%
Federal funds rate
(right scale)
Borrowing*
(left scale)
*Excludes "extended" credit.
J F M A M J J A S O N D
Cumulative Year-to-Date Growth Rates
of M1 and M2
(Percent Change from Fourth Quarter of 1980)
12%
8%
4%
0
-4%
9%
6%
3.5%
M2
M1
Growth Rate of Nonborrowed Reserves*
(Percent Change at an Annual Rate)
40%
20%
0
-20%
*Includes "extended" credit.
1981

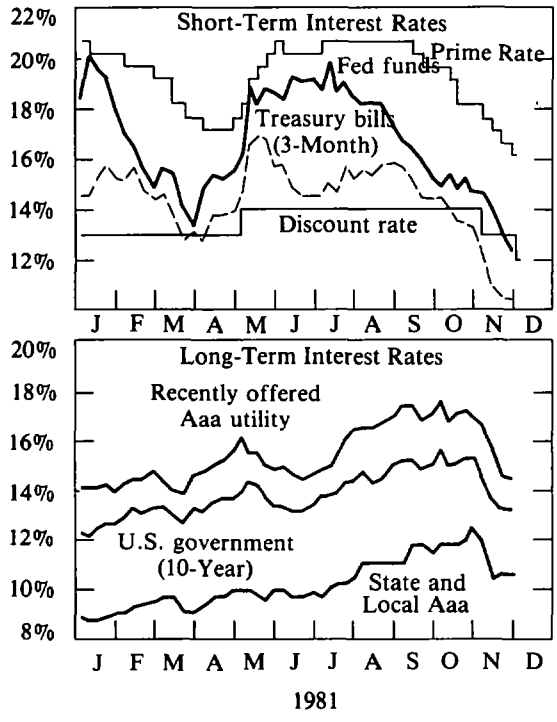
demand for reserves due to rapid monetary growth, led to a sharp rise in the federal funds rate and in borrowings. The federal funds rate rose from 13.5 percent in late March to 18.7 percent by the end of May, while borrowings rose from $1.0 billion in March to $2.2 billion in April.

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.

The Farm Outlook: Recovery in 1982?

By Marvin Duncan

The past year has been a disappointing one for U.S. farmers. Although 1981 began in an atmosphere of optimism over prospects for stronger farm product prices and improved farm income, that optimism proved to be largely unfounded. Not only have farmers experienced the adverse price impact of abundant farm product supplies, but more importantly they have also experienced a drag on farm income resulting from generally unfavorable economic conditions in the U.S. economy and in the economies of major U.S. trading partners.

While cash receipts from farm marketings increased slightly during 1981, higher production expenses will hold net farm income before inventory adjustment to about $19 billion. Large grain and cotton inventories should add about $3 billion. Thus net farm income, after inventory adjustment, may total about $22 billion this year.

THE YEAR IN REVIEW

As 1981 began, world food supplies had been reduced to the lowest levels since the world food crisis of the early 1970s. Moreover, prospects for good crop production in 1981 appeared more tentative than usual. As a result, grain prices rose during much of the latter half of 1980. Prospects seemed favorable for higher livestock prices as well. Indeed, one of the few apparent problems was the rapid rise in interest rates late in the year. But, as 1981 unfolded, the prospects for farm income deteriorated.

Farm Prices and Income

Slow growth in the U.S. economy coupled with sluggish demand in world markets have depressed farm product prices during 1981. Prices received by farmers in November were about 10.4 percent below year-earlier levels. Prices received for crops were off about 14.3 percent during the same period, while prices received for livestock were off 7.4 percent compared to a year ago. Prices paid by farmers during the same period, however, have increased about 4.9 percent.

Because of large farm marketings in 1981, farm cash receipts are expected to increase by about 6 percent to a record level of $144 billion. Crop receipts will likely be up about 7 percent to $74 billion, reflecting higher levels of production and marketings. Livestock receipts are expected to be up about 4 percent to $70 billion.

The relatively modest increase in cash receipts during 1981 has been more than offset by an expected increase in farm production costs. For the year, these costs are likely to be up about 9 percent—the smallest increase for any year since 1977. Inputs of farm products

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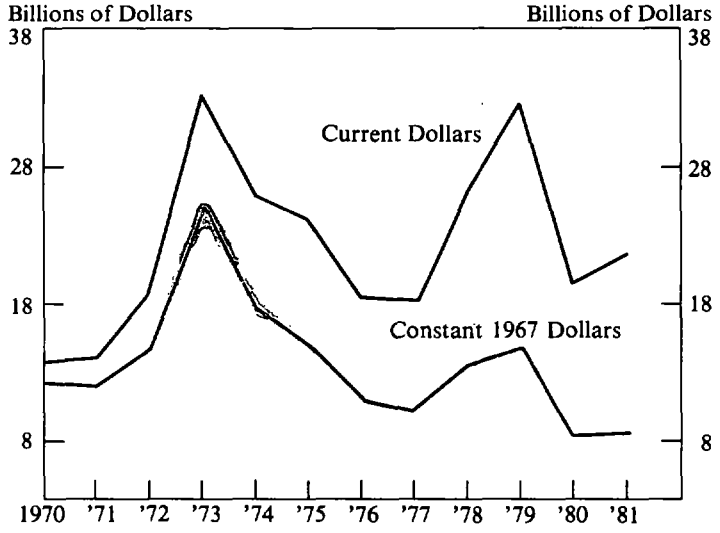
Chart 1
NET FARM INCOME
(After Inventory Adjustment)



SOURCE: U.S. Department of Agriculture.

account for about one-fourth of all farm production expenses. Among these inputs, feed costs were up only modestly during the year, while seed costs were up by about one-fifth. Feeder livestock expenses declined during the year, offsetting in part the increase in prices for other farm-produced inputs. Among farm production inputs purchased from off the farm, petroleum-based inputs posted significant cost increases during the year. Fuel costs were up about 13 percent, while fertilizer costs were up about 12 percent. In both instances, the 1981 cost increases were less than those experienced in 1980. Pesticide expenses were up about 10 percent. Hired labor costs—up about 10 percent—increased in line with the rate of price inflation.

Perhaps the most noticeable increase in farm production costs was the interest bill on real estate and non-real estate farm debt in 1981. Over the past five years farm debt has about doubled. Servicing this debt has placed a significant demand on the cash flow of the farm sector. Interest costs in 1981 will account for more than 13 percent of farm production costs, contrasted with 7.5 percent a decade ago. Because of both higher farm debt levels, close to $200 billion by yearend, and an increase of about one percentage point in the average interest rate on all farm debt outstanding, to over 10 percent, interest costs for farmers will climb nearly 20 percent this year.

The most common measure of farm income—net farm income after inventory adjustment—is expected to reach $22 billion for 1981 (Chart 1).[1] This would be an improvement from the $19.9 billion earned in 1980. In 1981, inventory adjustment will add about $3 billion to net farm income due to the large crops being harvested. In 1980, the inventory adjustment

[1] Inventory adjustment accounts for the change in value from one year to the next of the farmer-held stocks of crops and livestock.

subtracted $2 billion from net farm income.

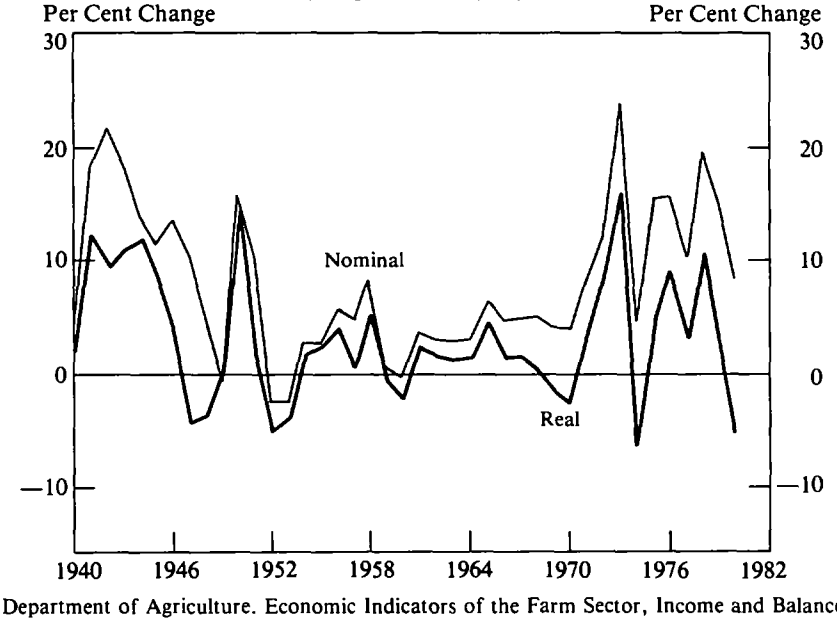
The volatility of inventory levels in recent years has caused agricultural finance economists to place somewhat less emphasis on this adjusted measure of net farm income. Instead, somewhat more emphasis is placed on two other measures of farm income—net farm income before inventory adjustment and net cash income. Net farm income before inventory adjustment is expected to total about $19 billion this year. This represents a decline of more than 13 percent in this measure of farm income from 1980 levels.

Net cash income represents the difference between total cash income to the farm sector and total cash expenses. As such, this measure can be considered a rough approximation of farm sector cash flow. Net cash income also represents those farm sector funds available for debt retirement, replacement of capital stock, family cash expenses, and savings. This measure of income will total about $31 billion in 1981, an 18 percent decrease in the past two years.

Farm family welfare is determined by other factors in addition to net farm income. An important source of wealth that adds substantial resilience to farm businesses is growth in farm sector equity—from retained earnings and from unrealized capital gains. That equity reached $916 billion at the beginning of 1981. During the 1979-81 period, proprietor's average per farm equity rose from $303,000 to $379,000, a 25 percent increase in two years. The real rate of increase in farm sector equity, however, was negative in 1980 and will likely be so in 1981 as well. The real rate of increase has been negative on a number of occasions over the past 40 years, as illustrated in Chart 2.

Farm families also obtain substantial

Chart 2
NOMINAL AND REAL RATES OF GROWTH IN FARM SECTOR EQUITY
(Proprietors Equity)



SOURCE: U.S. Department of Agriculture. Economic Indicators of the Farm Sector, Income and Balance Sheet Statistics, 1980, ERS, p. 123.

amounts of income from off-farm sources. In 1980, about 60 percent of total farm operator family income came from off-farm sources. Those earnings are not uniformly distributed across agriculture. Farm families with less than $5,000 in annual sales earned 90 percent of their income off the farm, while families with annual sales over $100,000 earned only about one-fourth of their income from off-farm sources. Growth in nonfarm income levels is more a function of growth in the general economy than of growth in the farming sector, of course. While farm families' net income from farm sources will be low in 1981, total income per farm from both farm and nonfarm sources may exceed $25,000, second only to 1979 when total income per farm reached $27,123.

Crops

Lingering drought, freezes, and floods all had supported a cautious outlook for U.S. crop production in 1981. However, near ideal growing weather through the summer and fall, coupled with large planted acreages, resulted in bumper harvests for major grain crops and for cotton (Table 1).

U.S. wheat production was a record 2.75 billion bushels. An all-time high of 88.8 million planted acres, a nearly 14 percent increase in harvested acreage from a year earlier, and a near record yield of 34.1 bushels per acre were responsible for the high level of output. When large carryovers are added, supplies for the 1981-82 marketing year total a record 3.74 billion bushels, up 14 percent from a year earlier.

U.S. feed grain production of 246 million metric tons was a record high in 1981 and was up about 24 percent from the drought-reduced output of 1980. Total feed grain supplies for the 1981-82 marketing year are expected to reach 281 million metric tons, only about 4

Table 1
BALANCE SHEET FOR MAJOR CROPS
(Millions of Bushels, Bales, or Tons)

	Corn (bu) Marketing Year Oct. 1-Sept. 30		All Feed Grains (metric tons) Marketing Year*		Soybeans (bu) Marketing Year Sept. 1-Aug. 31		Wheat (bu) Marketing Year June 1-May 31		Cotton (bales) Marketing Year Aug. 1-July 31	
	1980-81	1981-82†	1980-81	1981-82†	1980-81	1981-82†	1980-81	1981-82†	1980-81	1981-82†
Supply										
Beginning Carryover	1,617	1,034	52.4	34.6	359	320	902	988	3.0	2.7
Production and Imports	6,649	8,098	198.5	246.0	1,792	2,077	2,372	2,752	11.1	15.6
Total	8,266	9,132	250.9	280.6	2,151	2,397	3,274	3,740	14.1	18.3
Demand										
Domestic	4,877	5,050	146.9	155.5	1,107	1,162	776	932	5.9	6.0
Exports	2,355	2,450	69.4	72.2	724	830	1,510	1,900	5.9	7.0
Total	7,232	7,500	216.3	227.7	1,831	1,992	2,286	2,832	11.8	13.0
Ending Carryover	1,034	1,632	34.6	52.8	320	405	988	908	2.7	5.4

SOURCE: U.S. Department of Agriculture.
*Marketing Year begins October 1 for corn and grain sorghum, July 1 for barley and oats.
†Preliminary USDA estimates as of November 1980.

million metric tons short of the record level for 1979-80.

The U.S. corn crop of 8.1 billion bushels was the largest ever, reflecting both near record yields and a slightly higher harvested acreage than last year. The corn crop will raise total market supplies for 1981-82 to 9.13 billion bushels. Other feed grain production was higher as well. Sorghum output, at 877 million bushels, was the largest since 1973, while barley production of 476 million bushels was the largest crop since 1958. Oat production topped 500 million bushels, up 11 percent from a year earlier.

U.S. oilseed production is forecast to be about 20 percent higher in 1981 than in 1980. Soybean production, accounting for 85 percent of U.S. oilseed output, is expected to total 2.1 billion bushels, up 16 percent from 1980. As a result, U.S. soybean supplies for the 1981-82 marketing year will total 2.4 billion bushels, only slightly below the record supplies of 1979-80.

Other U.S. oilseed output will be higher this year as well. Cottonseed output will be record high. Sunflower seed output will be up about 20 percent over 1980 levels. Finally, U.S. peanut production is expected to reach near record output, recovering sharply from 1980.

U.S. cotton production is expected to reach 15.6 million bales in 1981, a 28-year high in production and up nearly 40 percent from 1980. Total supplies for the 1981-82 marketing year are expected to top 18 million bales.

Livestock

Cattle producers continued to expand their herds during 1981, despite generally unprofitable conditions for the cattlemen and for the entire livestock industry. Producers had expected better prices than those realized in 1981. The inventory of cattle and calves on July 1 was up 2 percent from a year earlier compared to 4 percent increases at midyear in 1979 and 1980. Midyear beef cow numbers increased by 2 percent as well. Yearend total cattle inventory figures will likely be up 2-3 percent from 1980, to about 118 million head. Hence it is clear that producers are still in the expansion phase of the cattle cycle and will likely continue to increase herd size during the next two years.

Cattle slaughter during 1981 is expected to increase by about 3 percent, while beef production is expected to rise 2-3 percent above 1980 levels. Much of the increase in slaughter has come from steers and heifers outside feedlots. Nonetheless, the feeder cattle supply outside feedlots has increased slightly during 1981 because of reduced feedlot placements. Numbers of calves below 500 pounds outside of feedlots were 2 percent higher on October 1 than a year earlier, while the yearling feeder cattle supply on July 1 was 1 percent higher than a year earlier.

U.S. hog producers in 1981 continued the reduction in breeding inventory begun in 1979. Nonetheless, pork production continues to be large. Output in 1981 is expected to be second in volume only to the record high 1980 output, despite a 6 percent decline from last year's production. While September 1 breeding inventory figures suggested continued declines in pork output through 1982, the largest declines will be early in the year, with production levels perhaps equal to 1981 by yearend. Prospects for lower feed costs could mitigate—or perhaps reverse—the trend toward lower pork output, however. Indeed, winter quarter farrowings could be nearly as high as a year earlier.

Broiler producers, perhaps anticipating lower pork production, expanded output in each quarter of 1981 compared to year-earlier levels. This has resulted in negative returns to producers for much, if not all, of the year. While production in 1982 appears likely to level off, the industry can turn output around rapidly if incentives to do so appear. Turkey production in 1981 is expected to end up more than 5 percent above 1980 levels. While beginning inven-

tory levels were low, per capita consumption lagged behind 1980 levels. Turkey prices have hence fallen significantly below year-earlier levels.

Dairy producers in 1981 continued their pattern of increasing output begun in mid-1979. Milk production this year will likely be 3 percent above the 1980 level. The increased output will come from about a 0.7 percent increase in cow numbers and a gain of over 2 percent in milk production per cow. Since the continued increase in dairy production is apparently linked to milk support prices at 80 percent of parity and adjusted twice a year, production adjustments in 1982 will be primarily dependent on farm program changes reducing dairy price subsidies.

Farm Policy

A number of policy changes of importance to farmers occurred during 1981. For the longer term the most important is probably the Economic Recovery Tax Act of 1981. Passage of this act affects farmers in three major areas: individual income tax rates, estate tax reform, and capital cost recovery. Marginal income tax rates are now scheduled to be reduced in total by 25 percent over two years, with tax brackets indexed for inflation starting in 1985. Maximum capital gains tax rates, affecting sales of land and breeding stock, are being reduced from 28 percent to 20 percent. Imputed interest on land sales between family members may now be limited to 7 percent for tax purposes.

Estate tax reforms include changes that permit estates of as much as $600,000 to be passed to heirs without federal inheritance tax liability, as well as reduction in the top estate tax rate from 70 percent to 50 percent by 1985. The permitted size of annual tax-free gifts has been increased from $3,000 to $10,000 per individual. More estates can qualify for special use valuation on farmland to reduce inheritance tax liability, and the eligibility has been broadened under certain circumstances for stretched-out payment of inheritance taxes at 4 percent interest rates. The intergenerational transfer of property has thus been greatly facilitated.

Capital cost recovery (depreciation allowance) has been accelerated for most classes of assets held by farmers. Additionally, same-year expensing limits are scheduled to increase to $5,000 in 1982, rising by 1986 to $10,000. Finally, regulations governing machinery leasing with an option to buy have been relaxed.

The task of preparing new farm legislation to replace that expiring in 1981 has been a difficult one. Congress and the administration have resolved their differences over commodity price support levels and have agreed upon a legislative package that is expected to cost taxpayers about $11 billion over the next four years.

If the legislation becomes law, minimum price supports for dairy would be set at $13.10 per hundredweight for 1982, and escalate to $14.60 by 1985. Depending on the amount of government purchases required under the program, the minimum price support level could rise to 70 or 75 percent of parity.

Commodity Credit Corporation (CCC) minimum loan levels for wheat and corn would be set at $3.55 and $2.55 per bushel respectively. Wheat target prices, set at $4.05 per bushel for 1982, would escalate to $4.65 by 1985. Corn target prices would escalate from $2.70 per bushel to $3.18 over the same period.[2]

The legislation is expected to include an authorization for a set-aside (i.e., acreage reduction) for wheat producers, to be imposed at the discretion of the Secretary of Agriculture. The Secretary has announced a voluntary 15 percent set-aside for wheat producers in 1982. However, participation in the set-aside would be necessary to quality for CCC loans and target price protection for 1982 wheat pro-

duction. The call price provisions (the price levels at which CCC loans on grain in the Farmer Owned Reserve become due and payable) will be stricken from procedures governing operation of the reserve, a move likely to please farmers. A controversial sugar support program with a 17-cents-per-pound loan level is also included in the proposed legislation. Peanut acreage allotments will be eliminated, permitting anyone to grow and market peanuts. However, historical allotment holders are eligible for a higher quota loan than producers who did not hold allotments.

Lanuguage included in the legislation provides—under carefully defined circumstances—for government payments to farmers in the event of a U.S. agricultural export embargo. Farmers are assured 100 percent of parity on embargoed basic farm commodities produced within compliance of the government farm program, providing the country against which the action is directed purchased more than 3 percent of total U.S. agricultural export sales. CCC loans may also be made at commodity prices equal to 100 percent of parity. However, these legislative provisions are to be effective only in the event of a selective embargo of agricultural products for foreign policy reasons.

Finally, the legislation provides a $600 million authorization for an economic emergency loan program for farmers to be operated at the discretion of the Secretary of Agriculture.

Current attention is focused on the farm legislation package. However, the Economic Recovery Tax Act of 1981 and economic policies to reduce price inflation will probably be considerably more beneficial to farmers in the long run than the specialized farm legislation.

THE YEAR AHEAD

Even more than in 1981, prosperity in the U.S. farm sector will be closely linked to the performance of the general economy and to the economic performance of countries that provide markets for U.S. agricultural products. In the case of the U.S. economy, slower growth resulting from economic policies to combat price inflation will continue to adversely affect demand for farm products during 1982. It seems unlikely that the U.S. economy will begin to experience significant real growth before mid-year, when a 10 percent income tax cut and the annual Social Security benefits adjustments are scheduled. Hence, strength in consumer demand for agricultural products may remain depressed until the second half of the year.

Many U.S. trading partners have also adopted slow economic growth policies to combat price inflation. These countries—primarily Western industrialized nations—may experience only moderate economic growth during 1982. Developing countries without oil reserves will continue to experience serious shortages of foreign exchange, limiting their ability to import farm products. Finally, sales to centrally planned countries will continue to depend on an appropriate political climate, as well as on comparative economic advantage. On balance, growth in export demand for U.S. farm products in 1982 may be somewhat less rapid than farmers had become accustomed to in recent years.

Export Sales

Export sales have become increasingly important to U.S. farmers and to U.S. agribusiness. For example, from 1970 to 1980

[2] When average market prices received by farmers in the first few months of a marketing year fall below the target prices, a deficiency payment (government subsidy) is paid to farmers. The size of this payment is calculated by multiplying the difference between the average price received by farmers in the early months of the marketing year and the target price for the commodity by the number of bushels of the commodity produced by farmers participating in the government farm program.

the proportion of the U.S. wheat crop exported grew from 55 percent to 64 percent. In the case of corn and grain sorghum, the proportions increased during that decade from 12 to 36 percent and from 21 to 51 percent respectively. Soybean exports as a fraction of U.S. production remained about level at just over 50 percent, while cotton exports increased from 38 to 53 percent during the same time period. Over the decade, the value of U.S. agricultural exports as a proportion of total U.S. export sales increased from 16.8 to 19.3 percent.

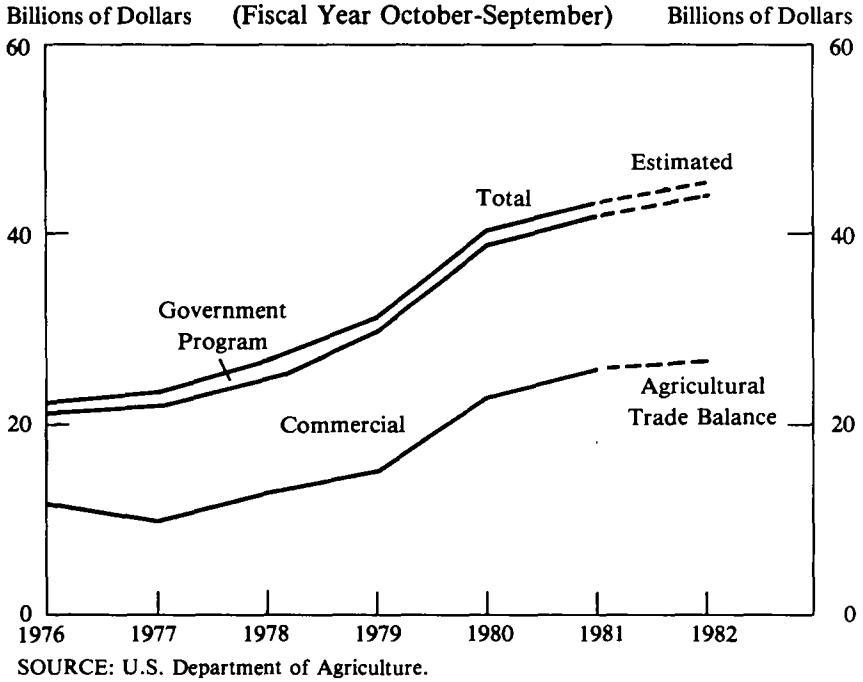
Export sales are expected to increase from the record $43.8 billion of fiscal 1981 to a range of $44-48 billion in fiscal 1982 (Chart 3). The current point estimate forecast is $45.5 billion in sales. The U.S. agricultural trade surplus is expected to reach $28 billion. Export tonnage is expected to increase by about 10 percent to 180 million tons after declining slightly in fiscal 1981.

The major factors affecting export sales in fiscal 1981 as discussed earlier will continue to dominate in 1982. Finally, weather will play its usual important role in determining export demand and world agricultural trade flows.

The Crops Outlook

U.S. wheat producers look forward to record high exports during the 1981-82 marketing year—1.9 billion bushels, and possibly as high as 2 billion bushels if Southern Hemisphere crop prospects continue to deteriorate. Thus, the U.S. may supply nearly half of the world wheat trade this marketing year. Domestic use is also expected to be large, primarily due to an expected fourfold increase in feeding of wheat to livestock. With over 650 million bushels of wheat in the Farmers Owned Reserve or in Commodity Credit ownership by the end of the 1981-82 marketing year, which will be June 1, 1982, "free market stocks" at about 250

Chart 3
U.S. AGRICULTURAL EXPORTS



SOURCE: U.S. Department of Agriculture.

million bushels could be the lowest since 1974.

Thus, the stage may be set for significant improvement in wheat prices over the next few months. However, that improvement is from low price levels. As currently forecast, the U.S. average farm level price of $3.80-$3.95 per bushel will not exceed the average of $3.96 received in the 1980-81 marketing year. Indeed, prices were low enough during the first five months of the current marketing year to trigger government subsidy payments (deficiency payments) of about 15 cents per bushel under target price provisions of the current farm program legislation. With the 1982 winter wheat crop off to an excellent start, the announced 15 percent diversion of wheat acres—to qualify for government wheat program benefits—is not expected to reduce 1982 output by very much.

U.S. feed grain producers expect lower prices and improved livestock feeding margins to increase domestic feed utilization during the 1981-82 marketing year by about 6 percent over 1980-81. Export prospects appear favorable as well, especially to the USSR and to Western Europe. For the 1981-82 marketing year, feed grain exports are forecast to reach a record 72 million metric tons, 1 million above the previous record in 1979-80. Increased corn exports will probably account for more than 75 percent of this year's increase in exports over 1980-81.

These increases in use, however, will not offset the large increase in supplies. Hence, feed grain stocks at the end of the current marketing year are expected to reach 53 million metric tons, up 18 million metric tons from 1980-81. About half of the feed grain carryover will be tied up in the Farmer Owned Reserve and in Commodity Credit Corporation stocks. Corn stocks, accounting for most of the increase in feed grain carryover, will probably total 1.63 billion bushels.

Feed grain prices during the 1981-82 marketing year are expected to fall below the record levels of last year. U.S. average farm level corn prices are forecast in the $2.55-2.80 per bushel range compared with $3.10 in 1980-81. Sorghum prices are forecast in the $2.35-2.55 per bushel range compared to $2.95 last year. Barley prices are forecast at $2.35-2.50 per bushel compared to $2.91 last year.

U.S. soybean producers are expected to account for nearly 80 percent of world soybean exports in 1981-82. Exports of soybeans, soybean oil, and soybean meal are all expected to increase. U.S. export demand will be determined, in part, by the size of the Southern Hemisphere soybean crop. Domestic utilization is expected to increase from last year's level as well. However, higher stocks at the end of the current marketing year, coupled with the price depressing effect of low corn prices, will likely hold U.S. average farm level soybean prices in the range of $5.75-6.75 per bushel during the 1981-82 marketing year, well below the $7.61 average for last year.

Cotton use is expected to increase somewhat in both domestic and export markets during the 1981-82 marketing year. However, the forecast increase in use will not offset the higher 1981 production. Consequently, cotton stocks at the end of the 1981-82 marketing year are currently forecast to reach 5.4 million bales, about twice as high as the ending stocks for the previous year. Thus, if producers plant nearly as many acres of cotton in 1982 as in 1981, market prices are unlikely to show marked improvement unless weather intervenes to reduce 1982 production.

The Livestock Outlook

Significant improvement in cattle prices during 1982 will be largely dependent on increased income growth for U.S. consumers, and that may not occur until the latter half of the year. Beef supplies are expected to be large. Fed cattle marketings in 1982 may increase by 2-3 per-

cent above 1981 marketings. Total cattle slaughter, however, may increase slightly more—by 3-4 percent. This likely means an increase in beef production of about 3-4 percent for the year. Fed cattle prices under those circumstances may average only $1-2 per hundredweight above the price ranges of the past two years.

Choice steer prices in Omaha are expected to average in the mid to upper $60 per hundredweight range during the first half of 1982. Prices during the summer may improve somewhat but return to the upper $60 range in the fall as increased meat supplies about offset the expected effect of stronger consumer demand. Yearling feeder steer prices may average near or slightly above fed cattle prices during 1982. Feeder calf prices are expected to hold a $5-10 per hundredweight premium over yearling prices through most of 1982.

Hog producers can look forward to improved prices in 1982, assuming reductions in pork output and stronger growth in consumer incomes during the latter part of the year. Hog slaughter in the first quarter may decline by as much as 7-9 percent from a year earlier, and by 4-6 percent from a year earlier in the second quarter. Prices for barrows and gilts at the seven major markets will likely average in the mid to upper $40 per hundredweight range during the first half of the year. Pork productions in the second half of 1982 may be nearly as large as a year earlier, with prices at the seven major markets perhaps averaging around $50 per hundredweight.

Broiler production in 1982 is currently expected to increase by about 1 percent from 1981 levels with most of the increase occurring in the first half of the year. Thus broiler prices during the first half of 1982 may be slightly weaker than a year earlier, while second half prices may exceed year-earlier levels. Turkey producers, on the other hand, are expected to reduce 1982 output, possibly by as much as 4-6 percent from year-earlier levels. Hence, turkey prices during the first half of 1982 will fall below prices of a year earlier while second half prices may exceed year-earlier levels.

The dairy outlook is directly linked to government farm policy. As a result of the 1981 farm legislation enacted by Congress, the support price for milk could hold at about $13.10 for fiscal 1982. Real returns to dairy farmers could decline somewhat during the year. As a result some adjustment in milk production may occur during the year. Production increases in the first half of the year could be offset by output declines in the latter half, with 1982 output about equal to that in 1981. Heavy government purchases of butter, cheese, and nonfat dry milk during the year will likely continue as a result of price support activities.

A proviso on the livestock outlook for 1982 should be noted. A deeper or longer downturn in the U.S. economy than is currently forecast could result in somewhat poorer performance for livestock prices.

Farm Income

The income outlook for 1982 is quite tentative since it is dependent on the timing and the strength of economic recovery for the United States and for our major trading partners, as well as on the vagaries of weather. Modest improvement is expected in farm product prices during 1982, but that improvement will likely be overshadowed by increased production costs. Based on current forecasts, it is possible that net farm income before inventory adjustment could decline somewhat below the $19 billion forecast for 1981—perhaps to about $17 billion. Thus, farmers must consider the prospect of three consecutive years in which net farm income in real terms is lower than at any time in more than 40 years.

While most farmers have sufficient equity in farm assets to cushion the current downturn in farm income, a small proportion probably do

not. Larger farms are more likely to experience problems in servicing debt than are small farms. Farms with $100,000 or more in annual sales as a class have a debt-to-asset ratio of 20 percent, as compared to a ratio of 5-7 percent for farms with less than $10,000 in annual sales. These larger farmers rely on farm income for a greater share of total family income, as well, making them more vulnerable to volatility in farm income than are smaller farms. However, loss of off-farm income due to job layoffs could seriously affect the cash flow projections for many small farms.

Credit availability at Farm Credit System outlets and at commercial banks appears adequate to meet the expected demands by farmers during 1982. Credit from government sources such as the Farmers Home Administration will be very substantially reduced from recent years. Thus, for those farmers who do not qualify for normal commercial credit, the option of government credit at subsidized rates may not be available. The cost of farm credit to borrowers will increasingly reflect national money market conditions. Thus, while ample credit will be available, farmers will have to compete for that capital with other sectors of the U.S. economy.

If farm income remains depressed through 1982, a small proportion of farmers may need to turn to subsidized government credit sources, sell some assets to remain in business, or liquidate their businesses. Thus, in the absence of additional government-subsidized credit, a somewhat higher turnover of farm operatorships than has occurred in recent years is likely.

While income prospects for 1982 are currently gloomy, mid-course adjustments during the year may raise farm income forecasts. Improved economic growth in the U.S. could increase demand for meat products and result in higher livestock prices. Stronger-than-expected export demand could raise grain and cotton prices. Easing of inflationary pressures could limit increases in production costs. For example, as little as a 1 percent increase in cash receipts received by farmers, coupled with a 1 percent reduction in forecast production expenses, could increase 1982 net farm income by nearly $3 billion.

Food Prices

Farm product prices are not expected to exhibit much strength in 1982, certainly not during the first half of the year. This is bad news for farmers but good news for consumers. Once again, farm product prices are restraining the rate of increase in retail food prices. Most of the 1982 increase will be due to higher marketing, processing, and transportation charges. Retail food prices in 1982 as measured by the Consumer Price Index are expected to rise between 5 and 9 percent, with an increase of 7-9 percent probably the likely outcome. This compares with a food price increase of about 8.2 percent in 1981.

SUMMARY

During 1981, farmers experienced the second year in a row of sharply depressed net farm income—about $22 billion after inventory adjustment. Current forecasts suggest 1982 will show a slight decline from 1981 levels. Improved farm prices are dependent on improved performance of the U.S. economy and the economies of U.S. trading partners. Thus, farmers may need to wait for 1983 to see significant income recovery.

It is possible, however, that forecasters may be too pessimistic about 1982. In 1981 the chances of error in farm income forecasts were primarily on the down side. Conversely, in 1982, if U.S. economic recovery is strong, adjustments in farm product prices and income projections could result in higher prices and income, not lower.

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Economic Review

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