

Economic Review



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The U.S. Economy in 1985 and 1986 3

By J.A. Cacy, Glenn H. Miller, Jr., and Dan H. Hoxworth

The U.S. economy grew modestly in 1985, while unemployment showed little change and inflation remained moderate. The pace of economic growth may quicken somewhat in 1986, although not enough to reduce unemployment significantly. Inflation is expected to be moderate again in 1986.

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Rapid growth in the narrowly defined money supply, M1, has been associated in the past with rapid inflation. Due to a decline in monetary velocity, however, the rapid M1 growth of 1985 does not portend a return to rapid inflation.

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The U.S. Economy in 1985 and 1986

By J. A. Cacy, Glenn H. Miller, Jr., and Dan H. Hoxworth

The U.S. economy continued on an upward path in 1985, but its upward momentum slowed considerably in the first half of the year. While economic growth was supported by a healthy growth in the demand for goods and services, domestic production grew sluggishly because the demand was met in part by imports from abroad. The economy grew more rapidly in the second half of the year, leading to improved expectations for continued expansion in 1986. However, uncertainties are numerous as the economy moves into its fourth year of expansion. This article summarizes the economic and financial developments in 1985, and then discusses some of the uncertainties and the economic outlook for 1986.

The economy in 1985

A slow first half

Economic growth was sluggish in the first half of 1985, with real gross national product (GNP) growing at a rate of only 1 percent after growing at a 3 percent rate in the last

half of 1984 (Table 1). A decline in inventory investment and a further worsening of the nation's net export position in the first half of 1985 largely offset a moderately strong increase in domestic final purchases of goods and services, which includes personal consumption expenditures, business fixed investment, residential construction, and government purchases. U.S. households provided most of the strength in final purchases, due to strong growth in consumption and an increase in residential construction spending. Business capital spending also rose in the first half of 1985 and government purchases showed a small increase.

Faster growth after midyear

Economic growth quickened after midyear, with real GNP growing at a 4.3 percent rate in

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TABLE 1
Real gross national product and components
 (percent change at seasonally adjusted annual rates)

	1984		1985	
	First Half	Second Half	First Half	Third Quarter
GNP	8.6	3.0	1.1	4.3
Final sales	7.0	3.5	2.2	5.7
Domestic final purchases	8.7	3.6	4.6	6.6
Personal consumption expenditures	6.3	2.2	5.0	5.4
Nonresidential fixed investment	21.0	11.1	6.5	-3.7
Residential fixed investment	11.3	-5.1	5.9	11.5
Government purchases	9.8	5.7	2.0	19.0
Addendum*				
GNP	66.1	23.6	8.9	17.6
Inventory investment	13.1	-2.5	-8.5	-5.8
Final sales	53.1	27.1	17.4	23.4
Domestic final purchases	66.5	28.9	37.9	28.0
Net exports	-13.4	-2.0	-20.4	-4.6

*Change from preceding period, seasonally adjusted annual rates, billions of 1972 dollars

the third quarter. Domestic final purchases grew even faster in the third quarter than in the first half of the year and net exports declined less. Inventory investment declined somewhat more rapidly than in the first half, largely because of a sharp rundown in new domestic automobile stocks.

The third-quarter strength in domestic final purchases was due partly to a sharp rise in government purchases of goods and services. Federal purchases rose because of increased use of Commodity Credit Corporation loans by farmers and a large increase in defense purchases. Residential fixed investment also rose

in the third quarter while nonresidential fixed investment declined. Personal consumption expenditures again grew strongly in the third quarter.

The economy apparently continued to grow at a moderate pace in the fourth quarter of 1985. As a result, economic growth for all of 1985, likely to be no more than 2.5 percent, was considerably below that of 1984. Growth in domestic final purchases was relatively strong all year, due in large measure to the strength of personal consumption expenditures. There was less drag on real GNP from worsening net exports in the second half of the

year, but the negative impact of decreasing inventory investment continued past midyear.

Resource use and inflation

Output growth in 1985 was not strong enough to significantly reduce the underuse of resources. The civilian unemployment rate fell slightly, from 7.2 percent in December 1984 to 7.0 percent in November 1985. Nonfarm payroll jobs increased moderately but manufacturing employment declined. Another measure of resource use—the rate of capacity utilization in industry—declined about one percentage point, reflecting the greater slack present in the industrial sector than in the total economy.

The U.S. inflation rate was kept in check by the slack in the economy combined with the impact of the strong dollar on prices of imports and import-competing goods. Unit labor costs rose at a moderate rate, and favorable performances of food and energy prices also contributed to relatively mild inflation in 1985. The GNP deflator, the broadest general price index, increased at a 3.75 percent annual rate over the first three quarters of 1985. The index of prices of finished goods sold at wholesale was about 1.5 percent higher in November 1985 than a year earlier, as food prices declined significantly and energy prices dropped slightly. Consumer price inflation also continued to be restrained. The Consumer Price Index, benefiting from moderate growth in food prices, was only 3.6 percent higher in November 1985 than a year earlier.

Summary

The year 1985 saw moderate U.S. demand growth changed into sluggish output growth by a worsening in net exports and a reduction in inventory investment. Sluggish output

growth kept the amount of idle resources relatively large. The slack in the economy, along with the direct influences of the strong dollar and weak food and energy prices, kept price inflation restrained.

Financial developments in 1985

Interest rates

Interest rates were lower and more stable in 1985 than in other recent years. Short-term interest rates were their lowest since 1978, while long-term rates declined to levels that had not been seen since 1980. Short-term interest rates were more stable than in any year except one since 1978, while long-term interest rates also fluctuated less than in most recent years. Real interest rates—nominal rates adjusted for inflation—were also lower in 1985 than in recent years, although they remained very high by historical standards.

Interest rates fluctuated some during the year. From late January to early March, both short and long-term interest rates rose moderately to yearly highs, due in part to strong demand for business credit and the ending of a period during which the Federal Reserve eased pressures on bank reserve positions. After peaking in March, interest rates declined in April and June. The weak performance of the economy and a corresponding sharp drop in the demand for business loans were factors in the rate decline. A cut in the Federal Reserve's discount rate also contributed to the second-quarter drop in interest rates.

After midyear, short-term rates fluctuated in a narrow range slightly above their June lows. By early December, the 3-month U.S. Treasury bill rate was 7.10 percent, about one percentage point less than at the end of 1984 (Chart 1). Long-term interest rates also fluctuated in a narrow range in the third quarter, but

CHART 1
Selected short-term interest rates

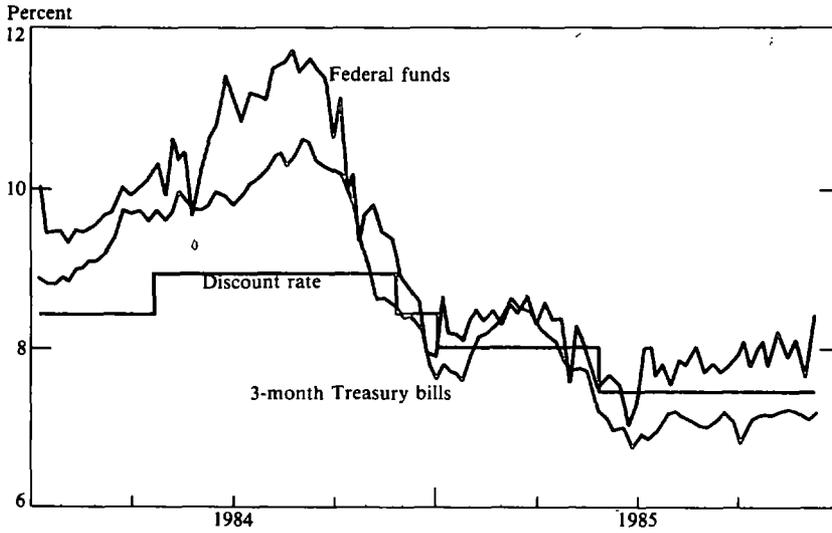


CHART 2
Selected long-term interest rates

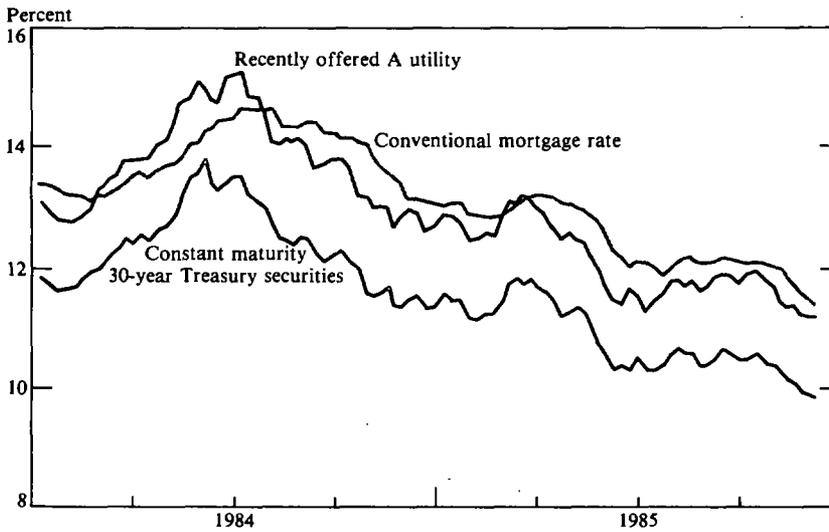


TABLE 2

Selected interest rates: yearly highs, lows, and averages

<u>Period*</u>	<u>Federal Funds</u>	<u>3-Month Treasury Bills</u>	<u>U.S. Government 30-Year</u>
1980 High	18.90	15.49	12.40
Low	9.03	7.07	9.81
Average	13.36	11.43	11.30
1981 High	19.10	16.30	14.68
Low	12.37	10.85	12.14
Average	16.38	14.03	13.44
1982 High	14.94	13.48	14.22
Low	8.95	7.71	10.54
Average	12.26	10.61	12.76
1983 High	9.56	9.34	11.88
Low	8.51	7.86	10.48
Average	9.05	8.58	11.18
1984 High	11.64	10.47	13.44
Low	8.38	8.06	11.52
Average	10.22	9.52	12.39
1985 High	8.58	8.52	11.81
Low	7.53	6.95	10.06
Average	8.09	7.51	10.91

*Calculations are based on monthly average rates for each calendar year. 1985 calculations are based on data through November.

then dropped rapidly in late October. By early December, the yield on 30-year U.S. Treasury securities had dropped to 9.61 percent, almost two percentage points lower than at the end of 1984 (Chart 2). Contributing to the drop in long-term rates was continued low inflation, signs that the economy would remain sluggish, and indications that monetary policy would not tighten. Also, progress toward a congressional budget resolution intended to reduce the federal budget deficit placed downward pressure on long-term rates.

Interest rates in 1985 were more stable than in most recent years. Short-term interest rates

fluctuated within a narrow range of one and one-half percentage points during the year, compared with three percentage points in 1984 and considerably less than in any year except one during the 1980-84 period (Table 2). Long-term rates were also relatively stable in 1985, fluctuating in a relatively narrow range of less than two percentage points.

Like nominal interest rates, real interest rates declined in 1985 but remained high by historical standards. The real prime rate averaged 6.3 percent for the year, lower than in 1984 and during the 1981-84 period, but significantly above the average of only 1.8 per-

TABLE 3
Nominal and measured real prime rate

Date	Nominal	Real
1970-74	7.5	1.5
1975-79	8.6	1.8
1980-84	14.4	8.4
1984	12.0	8.4
1985	9.9	6.3
1985:Q1	10.5	5.2
Q2	10.2	7.6
Q3	9.5	6.2
Q4	9.5	6.2

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 percentage change at an annual rate in the GNP deflator. Data for 1985 assume that the prime rate averaged 9.5 percent in the fourth quarter and that the inflation rate equaled that of the third quarter.

cent in the last half of the 1970s (Table 3). Real interest rates remained at historically high levels because of the large federal budget deficit and continuing investor concerns that the deficit may eventually lead to inflationary growth in the supply of money and credit.

Growth of the monetary aggregates in 1985

Growth in the monetary aggregates in 1985 generally exceeded that of 1984. M1 grew considerably faster than in any recent year and M2 rose faster than in 1984. The growth rate of M3, however, was less in 1985 than in 1984.

M1, the narrowly defined money supply, grew at an annual rate of 11.6 percent in the first 11 months of 1985, more than twice 1984's growth rate (Table 4). This rapid growth stemmed from the resurgence of the growth in demand deposits and a rebound in

the growth of other checkable deposits. After exhibiting little growth on balance in the past five years, demand deposits grew at an annual rate of 8.0 percent in the first 11 months of 1985. Other checkable deposits, which include interest-bearing NOW and Super NOW accounts, grew at an annual rate of 22.1 percent during the same period, almost twice that of 1984.

M1's turnover, or velocity, declined sharply in 1985, as M1 grew much more rapidly than nominal GNP. During the first three quarters of the year, M1's velocity declined at an annual rate of 6.2 percent (Table 5). In contrast, velocity rose in 1984 and during the 1980-84 period as a whole. The decline in M1's velocity was due in part to the drop in interest rates that occurred in late 1984 and 1985. The decline in interest rates reduced the yield on alternative investments and made it less costly for the public to hold its assets in M1 balances. Concern over the stability of the financial system and the economy also may have encouraged the public to place more of its funds in M1 balances.

M2 grew at an annual rate of 8.6 percent in the first 11 months of 1985, somewhat more than in 1984 (Table 4). In contrast with M1 growth, M2 growth in 1985 was in line with its average growth during the 1980-84 period.

In addition to M1, several of the other components of M2 grew more rapidly in 1985 than in 1984. Savings deposits increased in 1985 after contracting in 1984. MMDA's also grew more rapidly in 1985 than in 1984. Some of the 1985 growth of both MMDA's and savings deposits may have come at the expense of small time deposits (certificates of deposit under \$100,000). Small time deposits declined sharply in 1985, compared with sharp growth in 1984.

In contrast with M1 and M2, growth of M3 slowed sharply in 1985. M3 grew at an annual

TABLE 4

Growth of the monetary aggregates: 1980-85
(percent change at seasonally adjusted annual rates)

<u>Period</u>	<u>M1</u>	<u>M2</u>	<u>M3</u>	<u>Domestic Non-financial Debt</u>
1980-84	8.5	11.5	12.9	13.1
1983	10.4	12.2	10.0	11.2
1984	5.2	7.7	10.4	14.1
1985: First 11 months*	11.6	8.6	7.8	12.8
1985:Q1	10.6	12.1	10.7	13.6
Q2	10.2	5.3	5.2	11.8
Q3	15.0	10.2	8.1	12.2
1985:July	9.3	8.6	4.8	12.6
Aug.	20.3	11.3	9.7	12.0
Sept.	11.9	7.1	10.1	11.0
Oct.	-1.6	2.1	3.9	11.6
Nov.	13.0	6.6	5.0	16.1

*Fourth-quarter 1984 through November 1985

Note: Annual rates of growth are based on quarterly average data. M1 is the sum of currency held by the public, plus travelers' checks, demand deposits, and other checkable deposits, including negotiable order of withdrawal (NOW and Super NOW) accounts, automatic transfer service (ATS) accounts, and credit union share draft accounts.

M2 is M1 plus savings and small-denomination time deposits, plus money market deposit accounts, shares in money market mutual funds (other than those restricted to institutional investors), overnight repurchase agreements, and certain Eurodollar deposits.

M3 is M2 plus large time deposits, large-denomination term repurchase agreements, shares in money market mutual funds restricted to institutional investors, and term Eurodollar deposits.

Domestic nonfinancial sector debt is outstanding debt of domestic government units (federal, state, and local), households, and nonfinancial businesses.

rate of 7.8 percent in the first 11 months of 1985, considerably less than in any recent year. This slower growth was largely due to a sharp drop in the growth of large-denomination time deposits. Growth of term repurchase agreements and institution-only money market funds also slowed considerably in 1985.

Growth of domestic nonfinancial debt also slowed in the first 11 months of 1985, growing at a rate of 12.8 percent, moderately less than in 1984. Domestic nonfinancial debt consists of the outstanding debt of all domestic government units (federal, state, and local), households, and nonfinancial businesses.

TABLE 5
Growth of nominal GNP, M1, and velocity of M1 and M2
 (percent change at seasonally adjusted annual rates)

<u>Period</u>	<u>GNP</u>	<u>Money Supply</u>		<u>Velocity</u>	
		<u>M1</u>	<u>M2</u>	<u>M1</u>	<u>M2</u>
1970-79	16.0	8.9	15.4	3.8	0.2
1980-84	10.0	8.5	11.4	1.0	-0.9
1984	9.5	5.2	7.7	4.1	1.7
1985: First three quarters	5.6	12.3	9.4	-6.2	-3.5
1985:Q1	5.6	10.6	12.0	-4.9	-6.3
Q2	4.5	10.2	5.3	-5.6	-0.8
Q3	6.7	15.0	10.2	-8.2	-3.5

TABLE 6
FOMC growth rate ranges
 (percent change at seasonally adjusted annual rates)

<u>Period</u>	<u>M1</u>	<u>M2</u>	<u>M3</u>	<u>Domestic Non-financial Debt</u>
1985 actual	12.0	8.6	7.8	12.8
1984 FOMC growth ranges	4-8	6-9	6-9	8-11
1985 FOMC growth ranges	3-8	6-9	6-9 ^{1/2}	9-12
1986 FOMC tentative growth ranges	4-8	6-9	6-9	8-11

Note: The fourth quarter of the previous year normally serves as the base period for the targeted ranges. M1 was rebased in 1985 from the fourth-quarter base of 1984 to the second quarter of 1985. The 1985 actual growth rates are calculated from the base period through November 1985.

Monetary policy in 1985

Monetary policy in 1985 continued to be directed toward providing adequate growth in the monetary aggregates needed to promote

sustained economic growth in a noninflationary environment. Consistent with this objective, the Federal Reserve System's Federal Open Market Committee (FOMC), at its meeting in February, established growth rate

ranges for the monetary and credit aggregates for 1985. The growth rate range for M1, for the period from the fourth quarter of 1984 to the fourth quarter of 1985, was set at 4 to 7 percent, compared with 4 to 8 percent in 1984 (Table 6). M2's growth rate range was left unchanged from 1984 at 6 to 9 percent, while the 1985 range for M3 was set at 6 to 9 1/2 percent, compared with 6 to 9 percent in 1984. The range for domestic nonfinancial debt was set at 9 to 12 percent, higher than its 1984 range. Even with the increases in their ranges, the growth rates targeted for M3 and the debt aggregate were considerably below their actual growth in 1984.

The 1985 target ranges for the aggregates were evaluated at the July FOMC meeting. The ranges remained unchanged for all aggregates, except M1. The Committee decided, in light of M1's rapid first-half growth, to rebase M1's growth rate range to the second quarter of 1985 and to widen the range to 3 to 8 percent. These changes were made because the Committee found the decline in M1's velocity and the associated rapid first-half M1 growth to be an aberration. In establishing a new range, the Committee expected M1 velocity to behave more in line with past experience during the last half of 1985. The M1 growth range was widened, however, due to uncertainties surrounding the possible behavior of velocity.

In implementing monetary policy on a day-to-day basis in 1985, the Federal Reserve considered several factors in addition to the behavior of the monetary aggregates. These factors included the state of the economy, the behavior of inflation, movements in the exchange value of the dollar, and conditions in domestic financial markets. With inflation remaining moderate throughout the year, responses to incoming information on monetary growth were tempered by the need to sup-

port a sluggish economy and by concerns about the adverse effects of an overly strong dollar. Thus, despite M1 growth above its targeted range, pressures on bank reserve positions remained relatively unchanged throughout 1985. As a result, adjustment plus seasonal borrowing from the Federal Reserve—a measure of reserve pressures—moved within a relatively narrow range. Borrowing fluctuated between a daily average of about \$450 million in the first quarter and about \$600 million in the second quarter. Also, the federal funds rate fluctuated within a relatively narrow range, remaining on a monthly average basis between a low of about 7.5 percent in June and a high of about 8.6 percent in March.

Some adjustments were made during 1985 in the pressures on reserve positions. In light of slow economic growth and the continued strength of the dollar in foreign exchange markets, policy was directed toward easing reserve conditions in late 1984 and early 1985. But, due in part to rapid growth of the monetary aggregates, the easing ended by early February and bank reserves were provided somewhat more cautiously. The sluggish growth of the economy, strains in financial markets, and declining market interest rates prompted the Federal Reserve to reduce the discount rate one-half percentage point to 7 1/2 percent on May 20. In late summer, reserve conditions were tightened somewhat in response to rapid growth in M1 and M2 and in light of evidence of stronger economic growth and a decline in the dollar's foreign exchange value.

For 1985 as a whole, the Federal Reserve was successful in achieving its monetary growth objectives for M2 and M3. From the fourth quarter of 1984 through November 1985, M2 rose at an 8.6 percent annual rate, within its targeted range of 6 to 9 percent

(Table 6). M3's growth rate of 7.8 percent in the first 11 months also fell within its 6 to 9½ percent range. Due to the continued decline of M1's velocity, M1 growth in the last half of the year exceeded its rebased range of 3 to 8 percent, expanding at a 12.0 percent annual rate from the second quarter of 1984 through November 1985.

Economic outlook for 1986

With economic weakness in the first half of 1985 giving way to faster growth later in the year, expectations have improved for continued business expansion in 1986. But substantial uncertainties remain as the economy moves into its fourth year of cyclical expansion. These uncertainties include the strength of consumer spending, the declining dollar's effect on production and inflation, the direction of inventory investment, and the course of the federal government's fiscal policy.

Consumer spending

Strong growth in personal consumption expenditures in the first three quarters of 1985 undergirded a generally weak economy. And consumption growth will again be particularly important for the performance of the economy in 1986.

Consumer spending will depend on income growth and the behavior of the personal saving rate, as influenced by consumer attitudes and the use of consumer credit. With household income expected to grow only moderately in 1986 (though faster than in 1985), consumer spending may also be expected to grow only moderately. But the performance of personal saving is more likely to restrain the growth of consumer spending in 1986 than to enhance it as occurred in 1985. In particular, the personal saving rate in 1986 may be higher than

in the second half of 1985, when it was held down by the very low third-quarter rate associated with the surge in purchases of durable goods, especially new automobiles.

The magnitude of the rise in the saving rate will depend in part on whether consumers decide to cut back on the use of credit. Consumer credit outstanding continued to grow rapidly in 1985. As a result, the ratio of consumer installment credit outstanding to disposable personal income reached a new high in 1985, rising above the former peak attained in 1979 (Chart 3). Because of the high debt-income ratio, consumers will no doubt be more cautious about taking on new debt and will be using more income for debt repayment, both factors that would raise the saving rate in 1986.

The consumer debt burden may appear larger and more likely to restrict consumption growth than it really is, however. Part of the increase in consumer credit outstanding reflects an expanding use of credit cards as a convenient payment substitute for cash or checks, as charges are paid in full each month. Since this is not consumer borrowing, strictly speaking, it should not be included in a measure of debt burden. There has also recently been a lengthening of maturities for some loans, such as for purchases of new cars. By lessening monthly repayment sizes, maturity lengthening tends to reduce the burden of debt on consumers for a given amount of credit outstanding.

While the influence of these special factors might reduce concerns about the high ratio of consumer credit to income, the rise in the ratio to a level above its previous peak cannot be easily dismissed. Thus, efforts by consumers to prevent their debt burden from rising or to reduce it are likely to lead to a rise in the saving rate in 1986.

The burden of debt outstanding may be only

CHART 3
Ratio of consumer installment credit outstanding
to disposable personal income

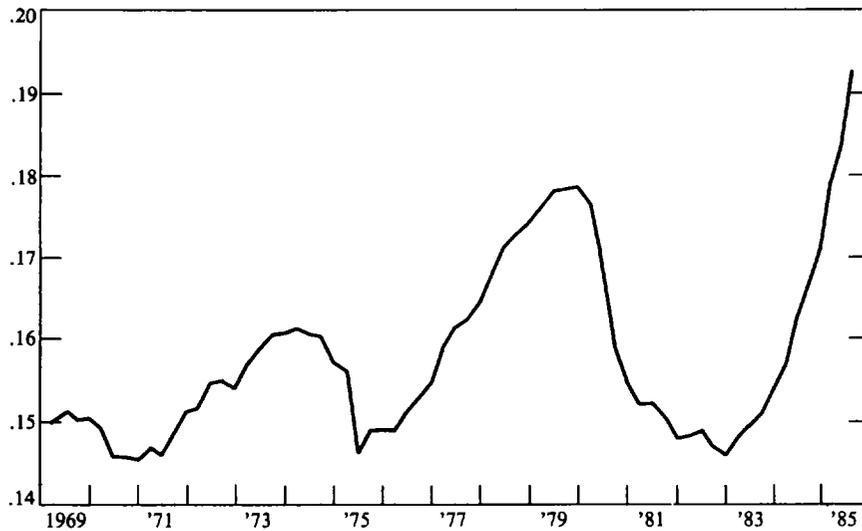
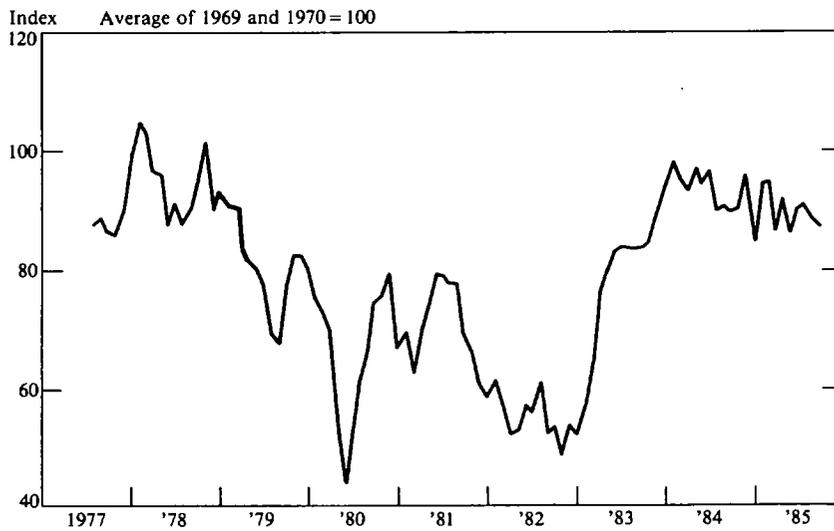


CHART 4
Index of consumer confidence



Source: Conference Board

one of several factors affecting the proportion of income consumers want to save in 1986. For example, consumer confidence appears to be waning. The Conference Board index of consumer confidence, while still high, has been edging downward since early 1984 (Chart 4).

On balance, major determinants of consumer spending seem to point toward slower growth in real personal consumption expenditures in 1986 than in 1985. Income growth, while slow, may be slightly faster in 1986 than in 1985. But the increase in income is likely to be more than offset by a rise in the saving rate, due to the high ratio of consumer debt to income and waning consumer confidence. Personal consumption expenditures will rise at a moderate rate in 1986, but will not be the engine for expansion to the extent that they were in 1985.

Other final purchases

Other spending sectors are unlikely to take up enough of the slack left by slower growth of personal consumption expenditures to bring total growth in domestic final purchases to the rate attained in 1985. In fact, domestic final purchases other than personal consumption expenditures on balance are expected to contribute little to economic growth in 1986. Low rates of utilization and high real interest rates will keep business fixed investment spending growth in check, a conclusion supported by the results of early surveys of capital spending plans for 1986. Commercial and office construction activity is also expected to slacken. Nor is residential construction expected to contribute much to total output growth. Multifamily starts are likely to weaken in the face of high vacancy rates in existing structures. Only slight improvement is expected in single-family starts, because of slower income

growth, tighter mortgage loan standards, and little further reduction in mortgage rates. Government purchases of goods and services are likely to grow modestly and contribute only slightly to GNP growth.

Inventory investment

Reductions in inventory investment were a drag on real GNP growth in 1985, and the ratio of inventories to sales reached a low level during the year. But businesses are not expected to engage in much inventory building in 1986, as economic growth and sales increases are expected to be modest. Although the inventory-sales ratio is historically low, there appears to be little desire to see it rise much, with carrying costs high and commodity inflation expectations low. Thus, increased inventory investment is not likely to boost GNP growth much in 1986.

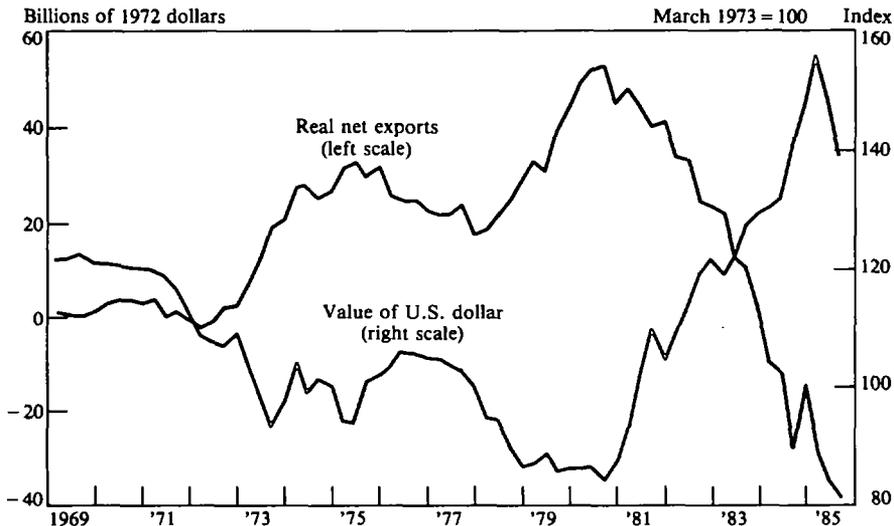
Net exports

U.S. net exports in 1986 will depend heavily on the strength of the dollar in foreign exchange markets, as well as on the impact of the decline in the dollar that has already occurred.

There has been a close relationship in the past between the value of the dollar and net exports. The value of the dollar declined in the 1970s and real net exports increased (Chart 5). But from its low in mid-1980, the dollar's value increased more than 80 percent to a peak in early 1985. Over that period, U.S. real net exports fell from about \$53 billion to about -\$28 billion.

The five-year uptrend in the value of the dollar was reversed in early 1985, partly because of lower U.S. interest rates and greater uncertainty about prospects for the U.S. economy. More recently, after the meet-

CHART 5
Real net exports vs. index
of weighted-average exchange value of U.S. dollar



ing of the Group of Five countries—the United States, Japan, Germany, France, and the United Kingdom—foreign exchange market intervention by some of these countries has also contributed to downward pressures on the dollar's value. As a result, the dollar's value in the third quarter of 1985 was about 11 percent below its first-quarter peak. However, even after this recent decline, the dollar is still strong compared with the past decade and a half. And the dollar's fall has not yet reversed the worsening in U.S. real net exports. This is not surprising since improvement in U.S. net exports can be expected to follow a weakening of the dollar only with a lag of up to a year.

Considerable uncertainty still exists about future movements in the value of the dollar relative to foreign currencies. The large and sustained increase in the value of the dollar since 1980 is mainly attributable to a substantial difference between U.S. interest rates and

rates elsewhere in the world. Relatively high U.S. interest rates are themselves due importantly to large federal budget deficits and the associated large federal demand for credit. Future movements in the value of the dollar are closely linked to efforts to reduce the budget deficit.

On balance, given the recent decline in the dollar's value, some improvement in net exports and in their contribution to GNP growth may be anticipated some time in 1986. Thus, for 1986 as a whole, net exports will be a source of economic growth, stimulating U.S. production and strengthening the U.S. economy, especially its goods-producing industries.

Monetary and fiscal policy in 1986

In 1986, the task for monetary policy will again be to provide adequate growth in the

TABLE 7
Congressional Budget Office projections
of federal deficit, billions of dollars
 (fiscal year, including off-budget entities)

	<u>1985*</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
Baseline projections	212	212	229	243	264	285	—
Budget resolution†	212	175	163	143	132	120	—
Gramm-Rudman Targets	212	172	144	108	72	36	0
*Actual							
†Congressional Budget Office estimate							
Source: Congressional Budget Office, "The Economic and Budget Outlook: An Update," August 15, 1985							

monetary aggregates to support balanced economic expansion and progress over time toward price stability. To achieve these objectives, the FOMC has established tentative 1986 growth rate ranges for the monetary and credit aggregates. The tentative ranges for M2 and M3 for 1986 were set at 6 to 9 percent, while the monitoring range for domestic nonfinancial debt was set at 8 to 11 percent. The tentative M1 range for 1986 was established at 4 to 7 percent.

Fiscal policy has been highly stimulative in recent years as the structural, or high employment, budget deficit has increased rapidly. This measure of the deficit, which estimates its level at an assumed high level of resource use, is regarded as a good indicator of the thrust of fiscal policy. Because the structural deficit is expected to show little change in 1986, little change is expected in fiscal stimulus—another reason for anticipating only moderate economic growth.

The actual federal budget deficit of \$212 billion for fiscal year 1985 was \$27 billion, or 15 percent larger than the 1984 deficit (Table

7). The congressional budget resolution for fiscal year 1986 sets the projected 1986 deficit at \$175 billion. Deficit reductions resulting from the resolution's spending cuts would extend through the rest of the decade, slowing the growth of the federal debt and reducing the government's share of total credit demand. Furthermore, the Gramm-Rudman bill requires larger annual deficit reductions designed to bring the budget into balance by 1991.

Resource use and inflation

Given the outlook for only moderate real GNP growth in 1986, it is unlikely that there will be much, if any, reduction during the year in the relatively large amount of slack in the economy. Neither the overall unemployment rate nor the rate of capacity utilization in industry will show much change from 1985. Labor compensation increases should continue to be moderate in such an environment, as should unit labor cost increases. Food price increases are not expected to raise inflation much in 1986, while oil price changes could

put downward pressure on the inflation rate. All of these factors should continue to keep inflation subdued in 1986.

At the same time, however, a falling dollar is likely to increase U.S. inflation. As the dollar's value increases, cheaper imports contribute to disinflation in the United States, both directly and indirectly by restricting the freedom of domestic producers to raise prices on import-competing goods. Thus, depreciation in the dollar's foreign exchange value would reduce downward pressures on the U.S. inflation rate. This impact would be lessened to the extent that foreign sellers were willing to accept smaller profit margins rather than increase prices in an effort to maintain market share. Nevertheless, the falling dollar is the factor most likely to cause a significant rise in the inflation rate in 1986.

Conclusion

The U.S. economy will continue to grow in 1986, but the growth of GNP is not likely to greatly exceed its estimated long-run trend rate of 3 percent. Domestic final purchases are expected to grow moderately. Consumer spending is likely to be an important contributor to growth, but less so than in 1985. Among the remaining major sectors, residential construction appears likely to make the most significant contribution to a growing economy. Inventory investment may increase, and if net exports cease to worsen and improve—as expected—they will no longer be a drag on GNP growth but a contributor to it. Inflation should continue to be moderate in 1986, and the rate of resource use is not likely to change much.

Recent M1 Growth and Its Implications

By J. A. Cacy

The nation's narrowly defined money supply, M1, expanded very rapidly throughout most of 1985. Consisting mainly of currency and checkable deposits, M1 is the nation's basic supply of money available for the day-to-day conduct of economic transactions. For this reason, its behavior is closely monitored by market participants, Federal Reserve officials, and economists both inside and outside the Federal Reserve System.

Some of these observers say that the recent rapid growth in M1 will lead to a near-term sharp pickup in economic activity. Some also contend that the rapid growth is laying a foundation for the reemergence of double-digit inflation experienced by the United States during the late 1970s and early 1980s. These observers want the Federal Reserve to take steps immediately to bring about a slowdown in the M1 growth rate. Other observers argue,

however, that the erratic behavior of M1 velocity in recent years has greatly reduced M1's usefulness as a policy guide and indicator of future economic developments. While these observers would probably welcome slower monetary growth, they do not want the Federal Reserve to tighten monetary policy in an effort to reduce M1's growth rate.

In light of these concerns and divergent views about the recent behavior of M1, this article analyzes the implications of this behavior for inflation, the economy, and monetary policy.

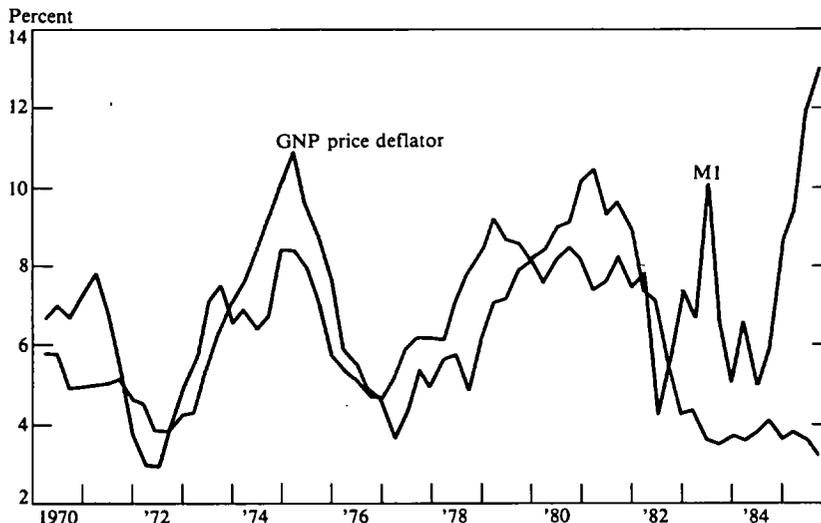
The idea that rapid monetary growth may affect both economic activity and the rate of inflation is one of the major tenets of monetary theory. According to theory, an increase in the supply of money creates an imbalance between the amount of money people have available and the amount they want to keep on hand. People respond to the imbalance either by increasing their spending on goods and services or by buying financial assets. The latter tends to lower interest rates, which will stimulate spending on goods and services. In

J. A. Cacy is vice president and associate director of research at the Federal Reserve Bank of Kansas City. The article is based on a presentation he made to the board of directors of the bank. Dan H. Hoxworth, a coordinating analyst at the bank, helped in the preparation of the article.

CHART 1

Growth rates of M1 and GNP price deflator

(Percent change from year earlier, with M1 lagged eight quarters)



this way, rapid monetary growth tends to stimulate greater spending on and production of goods and services. However, if the money supply increases more rapidly than the economy's ability to produce goods and services, demand will begin to outstrip supply and create upward pressure on prices. In this way, rapid monetary growth leads to inflation. Thus, economic theory indicates that rapid monetary growth may both stimulate economic activity and lead to rapid inflation.

The theoretical proposition that rapid monetary growth leads to rapid inflation is supported, to some extent, by historical experience. Chart 1 plots the growth rate of M1 against inflation, as measured by the growth rate of the GNP price deflator. Because M1's impact on inflation occurs over a relatively long time span, the chart allows for a two-year or eight-quarter time lag between changes in the M1 growth rate and corresponding changes

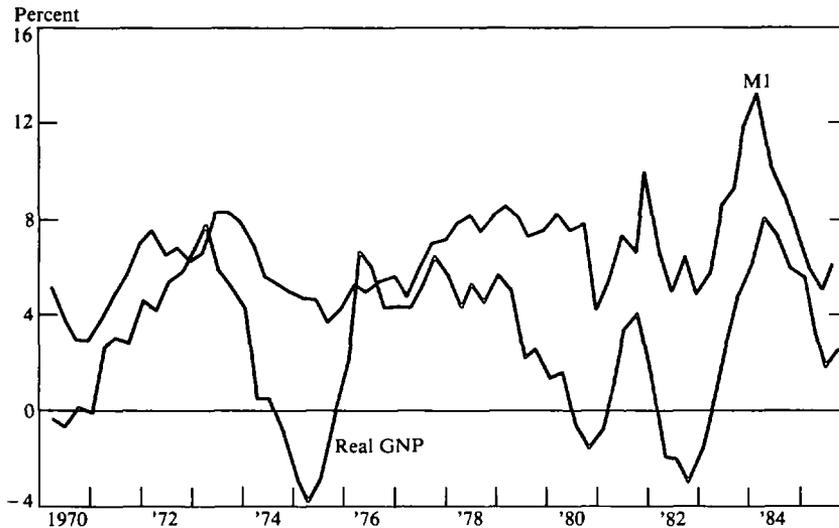
in the rate of inflation. The chart shows that the relationship between M1 and inflation was fairly close in the 1970s. Inflation and M1 growth rose and fell together in the first half of the decade and a reacceleration in M1 growth in the last half of the 1970s was again accompanied by an upward movement in inflation.

During the 1980s, however, the relationship between M1 and inflation began to break down. As suggested by Chart 1, while the growth rate of the narrowly defined money supply has been erratic in recent years, M1 has grown more rapidly in the 1980s than it did in the last half of the 1970s. Unlike the late 1970s, though, the rapid M1 growth of the 1980s has not been accompanied by high inflation. Inflation declined sharply in the early 1980s and has remained at a relatively low level since that time. With M1 growing rapidly and erratically and inflation remaining

CHART 2

Growth rates of M1 and real GNP

(Percent change from year earlier, with M1 lagged eight quarters)



low and stable, it is evident that the strong linkage between M1 and inflation of the 1970s has faded in the 1980s.

What about the relationship between M1 and the economy? Did a close relationship exist in the 1970s? If so, has it also broken down in the 1980s? To help answer these questions, Chart 2 plots the growth rate of M1 against the economic growth rate, as measured by the growth rate of real GNP. Because M1's impact on the economy occurs over a relatively short time span, the chart allows for a two-quarter time lag between changes in the M1 growth rate and corresponding changes in the economic growth rate. Chart 2 shows a fairly close relationship during the 1970s between M1 and the economy. Moreover, unlike the relationship between M1 and inflation, the linkage between M1 and real GNP has held up fairly well in the 1980s. Thus, for example, the 1982-83 spurt in M1 growth was accompanied by a spurt in real GNP growth,

and the subsequent drop in M1 growth was accompanied by a drop in real GNP growth. A close examination of the chart, however, shows that the linkage between M1 and real GNP has changed in one respect. M1 has grown faster relative to real GNP growth in the 1980s than in the 1970s. Thus, in this important respect, the relationship between M1 and real GNP has suffered a partial breakdown.

What has caused this partial breakdown in the relationship between M1 and the economy, as well as the more serious breakdown in the linkage between M1 and inflation? The breakdown's source lies in a dramatic shift in the behavior of M1's turnover or velocity.

M1 velocity is an important factor affecting both relationships. This can be seen by Table 1, which sets out one of the fundamental equations economists use to analyze the impact of money on the economy. The equation states that the growth rate of M1 plus the

TABLE 1
Relationship between money supply,
velocity, inflation, and the economy

Growth Rate of Money Supply	+	Growth Rate of Velocity	=	Economic Growth Rate	+	Rate of Inflation
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growth rate of velocity is equal to the economic growth rate plus the rate of inflation. As this equation shows, if there is no change in the growth rate of velocity, an increase in the growth rate of M1 will be accompanied by either an increase in the economic growth rate or a rise in the rate of inflation.¹ However, these relationships hold only if the growth rate of velocity remains constant. If the velocity growth rate varies, then the linkages will be weakened or destroyed. For example, if an increase in the M1 growth rate is accompanied by a decline in velocity, M1's impact on the economy and inflation will be offset, at least in part. As it turns out, velocity has tended to decline in recent years. As shown by Chart 3, velocity trended upward throughout the 1970s, but has declined in the 1980s. This decline in velocity is the reason that the rapid M1 growth of the 1980s has not been accompanied by rapid inflation and that M1 growth has been unusually rapid relative to the growth of the economy.

This discussion of the relationship between the money supply, velocity, the economy, and inflation can be summarized by looking at Table 2, which provides the growth rates of these variables over different periods. The breakdown in the linkage between M1 and inflation is most clearly seen by comparing the

period since mid-1982 with the last half of the 1970s. As shown in the table, M1 grew at an annual rate of 9.0 percent in the 1982-85 period, noticeably higher than the 7.0 percent growth rate of the second half of the 1970s. However, the rate of inflation was only 3.5 percent in the 1982-85 period, sharply lower than the 7.0 percent of the 1974-79 period.

The partial breakdown in the relationship between M1 and real GNP is less obvious but evident nevertheless. As shown in Table 2, M1's growth rate was higher relative to that of real GNP in the 1982-85 period than in the late 1970s. In the post-1982 period, M1's growth rate exceeded real GNP's by 5.5 percentage points (that is, 9.0 minus 3.5), compared with 3.1 percentage points (that is, 7.0 minus 3.9) in the earlier period.

The role played by velocity in the breakdown in these relationships is also evident by the figures in the table. Velocity declined at an annual rate of -1.4 percent during the 1982-85 period, in contrast with an increase at a rate of 3.9 percent in the late 1970s. Thus, the decline in the growth rate of velocity since mid-1982 has, on balance, more than offset the impact on real GNP and inflation of the higher growth in M1.

A number of reasons can be advanced to explain the behavior of velocity in the 1980s, including financial innovation and deregulation, declining interest rates, disinflation, and perhaps increased uncertainty about the financial system. While these explanations appear reasonable, economists have not been able to

¹ More precisely, if the growth rate of velocity remains constant, an increase in the growth rate of M1 will be accompanied by an increase in the sum of the economic growth rate plus rate of inflation.

CHART 3
M1 velocity

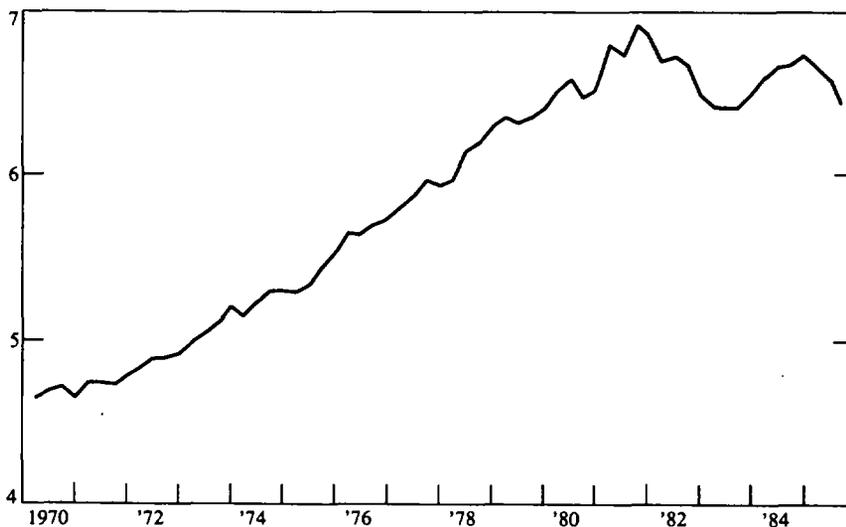


TABLE 2
Growth rates of M1, velocity, real GNP, and the real GNP deflator

	<u>M1</u>	<u>Velocity</u>	<u>Real GNP</u>	<u>Real GNP Deflator</u>
First Half of 1970s (1969:Q4-1974:Q4)	6.1	2.6	2.5	6.2
Second Half of 1970s (1974:Q4-1979:Q4)	7.0	3.9	3.9	7.0
First Half of 1980s (1979:Q4-1985:Q3)	7.7	0.1	2.2	5.6
Since Mid-1982 (1982:Q2-1985:Q3)	9.0	-1.4	4.1	3.5

model velocity very well in recent years. Its behavior has been unpredictable, making it difficult to determine the appropriate monetary growth rate and what any particular growth rate implies for the economy and inflation.

In conclusion, what can be said about the implications of M1's recent rapid growth for the economy, inflation, and monetary policy?

With regard to the economy, experience both in the 1970s and the 1980s suggests that an acceleration in the growth rate of M1 is followed in the short run by a pickup in economic activity. And, the improvement in the economy in the second half of 1985—which followed the sharp rise in M1's growth rate—shows that the linkage between M1 and real

GNP remains at least partially intact.

With regard to inflation, experience in the 1980s does not support the proposition that the recent rapid M1 growth will lead to an acceleration of inflation in the period ahead.

Finally, the implications of the recent rapid growth in M1 for current monetary policy are difficult to identify precisely. On the one hand, experience in the 1980s would seem to suggest that, since rapid M1 growth is not inflationary and is needed for economic

growth, it should be welcomed rather than feared and avoided. On the other hand, experience over a longer period, as well as economic theory, suggests that the potential inflationary implications of rapid M1 growth cannot be ignored by monetary policymakers. Thus, monetary policy actions will no doubt continue to be aimed, in part, toward bringing about moderate M1 growth in order to support balanced noninflationary growth in the economy.

Slower Growth in the Tenth District

By *Tim R. Smith*

For the Tenth Federal Reserve District, 1985 was a year of sluggish economic growth. Weakness in two major sectors of the district economy—agriculture and energy—kept district economic performance below that of the United States. Growth was slower in 1985 than in 1984 for most district states—Colorado, Kansas, Missouri, Nebraska, New Mexico, and Oklahoma.¹ Only Wyoming, which started from a weak base, showed improvement. In 1986, the pattern of sluggish economic growth is expected to continue in the Tenth District.

Overview of the district

Economic activity in the district increased in 1985, but at a slower pace than in 1984.

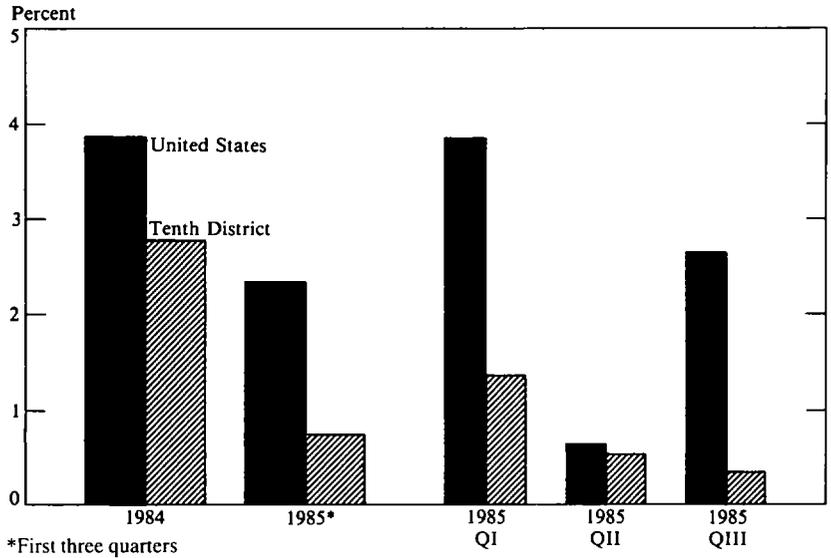
¹ At the time of writing, the latest available personal income data were through the second quarter. For employment, third-quarter data are estimates based on two months of historical data.

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For example, district employment rose at an annual rate of 0.8 percent in the first three quarters of 1985, compared with a 2.8 percent increase in the year 1984 (Chart 1). Reflecting the slow growth of employment, the district's unemployment rate increased to 6.5 percent in 1985 after declining in 1984. Thus, the gap between the district and U.S. unemployment rates narrowed (Chart 2). Also, real personal income in the district rose at an annual rate of 0.9 percent in the first half of 1985, considerably less than the 4.6 percent gain posted in 1984 (Chart 3). Income and employment growth during the latter part of 1985 very likely continued on the same slow path set earlier in the year.

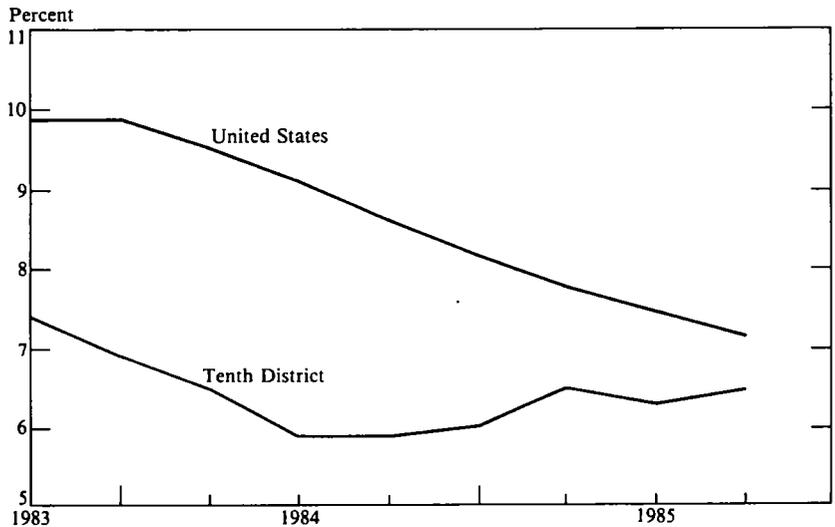
Not only did the district economy slow in 1985, but it also performed less well than the national economy. The district's real personal income growth was only about two-fifths that of the nation's in the first half of 1985, while in 1984 income growth in the district was four-fifths that of the nation's growth. Employment growth was also slower in the district than in the nation during 1985.

CHART 1
Growth in nonagricultural employment
 (seasonally adjusted annual rates)



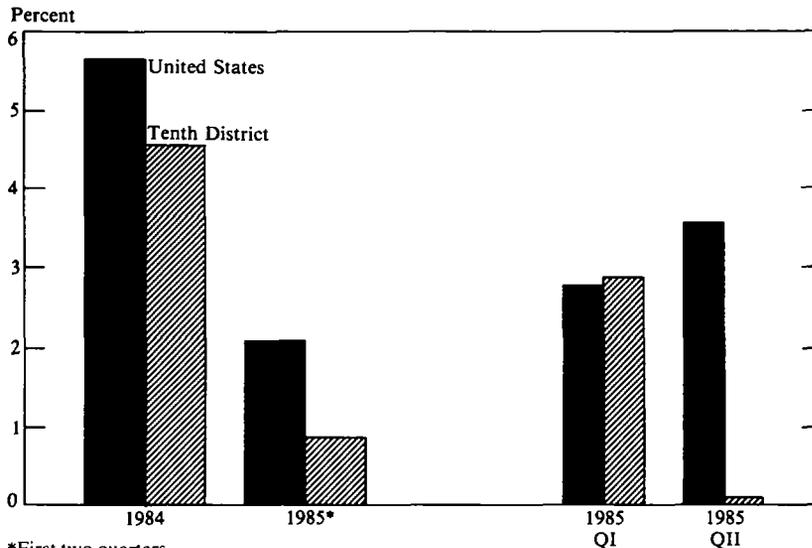
*First three quarters
 Source: Data Resources, Inc.

CHART 2
Unemployment rate



Source: Data Resources, Inc.

CHART 3
Growth in real personal income
 (seasonally adjusted annual rates)



*First two quarters
 Source: Data Resources, Inc.

Sectoral performance: a mixed bag

The district's sluggish economic performance in 1985 was tied closely to continued weakness in agriculture and energy. The performances in other sectors were somewhat uneven. The government and service sectors continued to lend some strength to the district economy, but the manufacturing sector's performance was generally weak. Automobile manufacturing, however, remained a bright spot for the district.

Energy and mining

The district's energy industry in 1985 was adversely affected by weak world demand, large supplies, and soft energy prices. The downward slide in crude oil prices and a per-

sistent surplus of natural gas led to lower exploration, development, and production activity.

Oil and gas exploration and development activity in the Tenth District decreased markedly during 1985. The weekly average number of operating drilling rigs fell almost a fifth during the first three quarters of 1985 compared with the first three quarters of 1984. This drop, from already low levels, is a widely accepted signal of the failing health of the energy industry.

Energy production also fell in most parts of the district during 1985. Cumulative production of crude oil in the district for the first six months of 1985 was nearly 1 percent less than in the same period in 1984. The district's production of natural gas was off even more. Through June 1985, cumulative marketed pro-

duction of natural gas stood 4.6 percent below production for the same period a year earlier. Coal production rose slightly, as mined tonnage through the third quarter of 1985 was up 3.7 percent from 1984 levels.

There was no recovery in other mining over the past year. Uranium and copper mining was still in the doldrums, with many mines either closed or operating far below capacity. Production of bentonite, soda ash, and precious metals was stable, though at low levels. The molybdenum industry operated at only 60 percent of capacity.

Agriculture

Financial problems continued to mount for farmers in the Tenth District during 1985. They harvested a bumper crop, export markets remained weak, and farm prices continued to slump. Moreover, livestock prices were softer than anticipated, bringing additional financial stress to many areas in the district. Farm lenders came under increased financial stress as loan losses increased and collateral values declined. Most farm communities remained plagued by the prolonged farm recession. Businessmen in rural communities saw farmers further cut their purchases of discretionary items and capital goods as farm income dropped sharply. Sales of tractors, combines, and other big-ticket items were especially soft.

Manufacturing

District manufacturing activity weakened considerably in 1985. Although the automobile industry fared well, energy and agriculture-related manufacturing showed no signs of recovery. Overall, manufacturing employment in the district fell in the first three quarters of 1985 at an annual rate of 1.6 percent, compared with an increase of 4.0 percent in 1984.

Automobile assembly in district states maintained the strong momentum gained during the 1984 model year. Plants in district states recorded an additional increase in production during the 1985 model year. Moreover, these plants continued to operate at capacity as they moved into the 1986 model year.

Performance was again mixed for the district's high-technology industry. Deepening problems in the computer and semiconductor segments of the industry resulted in layoffs and plant closings as firms made further efforts to forestall financial losses. These firms found themselves facing fierce competition from abroad. But defense-related firms performed well, and the application of high-technology production methods to traditional sectors continued to gain importance throughout the district.

Recovery in the district's important general aviation industry remained elusive in 1985. The average quarterly value of aviation production decreased about 10 percent over the first three quarters of 1985 from the same period in 1984. Unit sales of new aircraft were also down about 10 percent in the three-quarter period, but aircraft shipments did improve as the year wore on. That improvement reflected a modest pick-up in sales of moderately priced propeller-driven aircraft. However, in both years, sales were concentrated in more expensive business aircraft. In addition, military contracts helped buoy district general aviation manufacturers in this period of weak demand and strong foreign competition.

Energy and farm equipment-based manufacturing in the district showed no signs of rebounding in 1985. Dormant exploration and development in the oil and gas industry have kept demand for oilfield equipment soft. Farm equipment sales for 1985 continued the downward trend established during the previous three years.

Construction

Despite a weaker-than-expected residential housing market, construction remained a source of strength to the district economy in 1985. The disappointing performance in the district's residential construction industry generally matched the performance of that industry nationwide. Despite lower mortgage rates, district housing starts reached an annual rate of only about 116,000 units in the second quarter of 1985, compared with about 157,000 starts in 1984.

The overall strength in the construction industry in 1985 can therefore be attributed to nonresidential activity. The value of nonresidential construction contracts was up 5.3 percent through the third quarter of 1985 from the same period a year earlier. Cities participating in the growth included Kansas City, Omaha, Colorado Springs, and Albuquerque. Office construction slowed sharply in Denver, a city that appears overbuilt with one of the nation's highest office vacancy rates. Nonresidential construction remained weak in Oklahoma City and Tulsa, due mainly to the energy recession.

Services, retail trade, and wholesale trade

The district's service industry slowed in 1985 after registering solid gains during the previous year. Moreover, growth in services activity in the district remained less than for the United States as a whole. Service employment in the district increased at an annual rate of 2.3 percent during the first three quarters of 1985 compared with 5.5 percent in the year 1984. Nationwide, employment in services increased 3.5 percent during the first three quarters of 1985.

Employment in wholesale and retail trade also improved in the same period, but at a slower rate than employment in services.

Growth in district wholesale and retail trade has been tempered by depressed rural economies across much of the district. Employment in the district's wholesale and retail trade increased 0.5 percent during the first three quarters in 1985 compared with 5.3 percent in 1984. Again, growth was less than for the nation as a whole.

Government

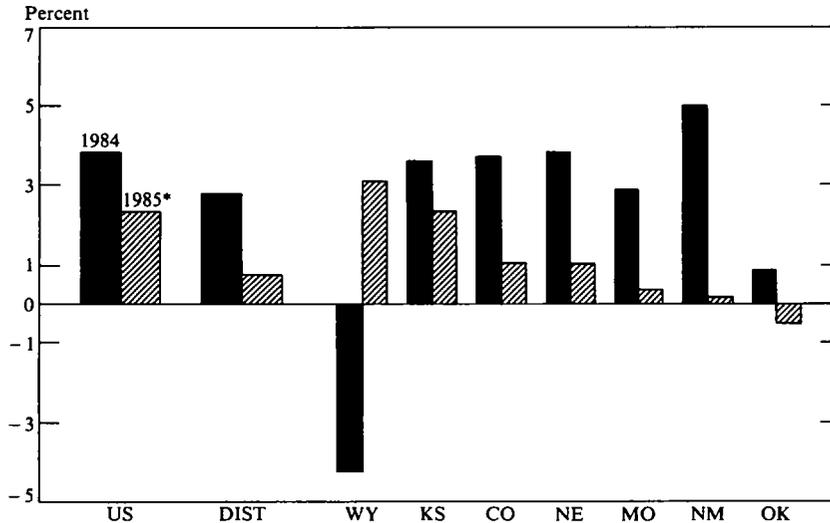
Federal government spending contributed significant strength to many district states in 1985. The Energy and Defense departments accounted for a large part of federal spending in the district. As a proportion of total federal spending, defense spending ranges from a high of nearly 40 percent in Kansas and Missouri to a low of about 15 percent in Nebraska and Wyoming.

The fiscal position of several district states tightened in 1985, reflecting the generally weak economic conditions in the district. For example, state legislatures in Kansas and Oklahoma announced plans to impose substantial restraints on state spending. The spread between revenues and expenditures has been narrowed in some states by shortfalls in the collection of severance taxes resulting from the decline in crude oil prices.

The states: varied performance

As in the district as a whole, economic activity in most district states slowed in 1985. For all states except Wyoming, growth in employment during the first three quarters of 1985 was slower than during the year 1984 (Chart 4). Real personal income grew more slowly during the first half of 1985 than in 1984 in all district states (Chart 5). Though growth was slow overall, there was some variation in the rates of change in income and employment across individual states.

CHART 4
Growth in nonagricultural employment
 (seasonally adjusted annual rates)



*First three quarters
 Source: Data Resources, Inc.

Wyoming

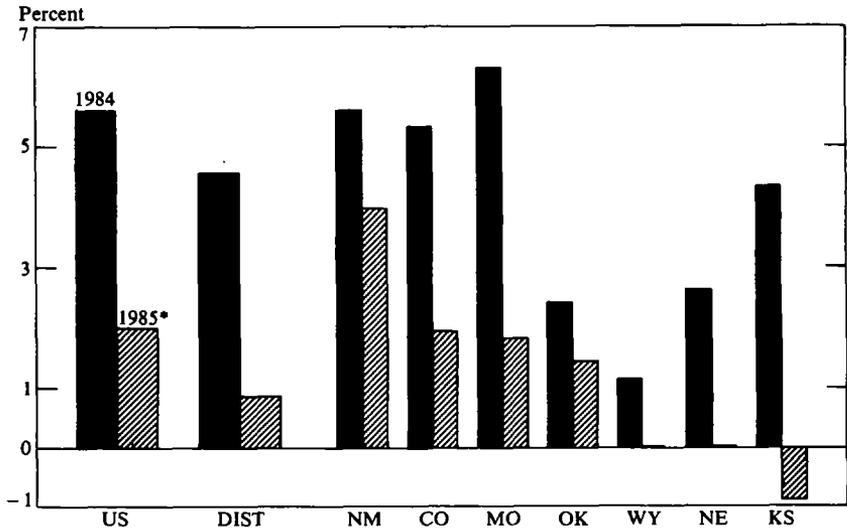
Wyoming's economy staged a modest recovery in 1985, despite its heavy reliance on natural resources. Employment growth, though moderate, improved substantially compared with the decline experienced in 1984. This growth was stimulated by a stronger tourist industry and growth in the state's service sector. On the other hand, real personal income was flat during the first half of 1985, reflecting continued weakness in mining and agriculture.

Tourism rebounded in Wyoming in 1985 after two weak years. The state's national parks had a good year, dispelling fears that a downward trend in tourism had been established. Tourism made a substantial contribution to overall growth in the state's service sector during 1985.

Performance in the state's mining industry was mixed in 1985. Though production of oil, gas, and coal increased, production levels were still low compared with earlier years. Production of oil and gas increased more than 10 percent during the first six months of the year. However, the number of drilling rigs in operation averaged 15 percent less in the first three quarters of 1985 than in the same period in 1984, reflecting expectations that general weakness in the energy industry will persist. Other mining activity in the state remained stable. Production of both soda ash and bentonite remained about the same in 1985 as in 1984.

Construction activity was also mixed in 1985. A surge in nonresidential construction offset a very weak residential market. The nonresidential construction activity was mainly associated with natural gas and carbon

CHART 5
Growth in real personal income
 (seasonally adjusted annual rates)



*First two quarters
 Source: Data Resources, Inc.

dioxide processing in the southwestern part of the state.

Agriculture contributed little to economic growth in Wyoming in 1985. Since agricultural sales in the state are dominated by livestock and livestock products, soft cattle prices brought additional financial troubles to Wyoming's ranches.

Kansas

Evidence of economic growth in Kansas was mixed in 1985. While employment grew at a moderate rate and above the average for all district states, real personal income fell. Also, economic performance as measured by changes in employment and income was weaker than in 1984. Growth in income did not occur during the first half of 1985 as it did during 1984 due partly to reduced farm

income. Employment growth fell less sharply than income, reflecting uneven performance across sectors. Automobile manufacturing contributed solidly to growth during 1985, but the energy and general aviation industries showed little strength.

The state's manufacturing sector continued to draw strength from the thriving automobile industry based in the Kansas City area. Automobile production continued at capacity throughout the 1985 model year after increasing 22 percent during the 1984 model year. In addition, plans were announced for a new highly automated automobile assembly plant that will represent a \$750 million investment.

General aviation, another manufacturing industry important to Kansas, did not perform nearly as well. Production over the first three quarters of 1985 averaged less than for the same period a year earlier, though the quar-

terly levels trended upward. The industry continued to face stiff competition from foreign producers, while the strong U.S. dollar also limited sales abroad of new aircraft. However, military contracts and large civilian air transports did provide some resilience.

Energy and mining failed to provide strength to the Kansas economy. Following significant increases in production during 1984, oil and gas output was flat in 1985. Cumulative production of coal in Kansas during the first three quarters of 1985 was almost 22 percent lower than in the same period a year earlier.

Colorado

The Colorado economy made only modest gains in 1985, whether measured by growth in employment or income. The 1985 performance is in contrast with the relatively strong growth in 1984. Both employment and real personal income in the state grew at annual rates during the first three quarters of 1985 that fell short of the rates in 1984. Colorado's diverse economic resources provided some economic stability in 1985. The service sector had a strongly positive effect on growth, while manufacturing and mining lost ground.

High-technology activity, centered along the Front Range from Fort Collins to Colorado Springs, slowed significantly during 1985. High technology had been a strong stimulus for the state in both 1983 and 1984. Layoffs and plant closings became commonplace as the demand for computers, component parts, and peripheral equipment continued to soften. These developments were reflected in slower overall growth in manufacturing employment. Defense-related manufacturing, however, remained a source of stability to the manufacturing sector.

Construction activity also slowed considera-

bly in 1985. High vacancy rates for office space in downtown Denver brought nonresidential construction to a near standstill there. Moreover, residential construction in Colorado, as in the nation, was disappointing despite lower mortgage rates.

The important recreation industry fared well in 1985. Visits to national parks and monuments in Colorado increased, and the 1984-85 ski season was very successful. A 5 percent gain in skier visits, compared with the previous season, made 1984-85 the third consecutive record season for the Colorado ski industry. As a result, many larger ski areas announced ambitious expansion plans in addition to major improvements put in place during the summer.

Federal government spending, particularly for military purposes, remained a stabilizing force in the Colorado economy in 1985. For example, continued development of the Consolidated Space Operations Center in Colorado Springs spurred growth there during the year.

Nebraska

The Nebraska economy had another difficult year in 1985. There was a modest percentage gain in employment during the first three quarters of the year, but no gain was made in real personal income. Thus, income growth was weaker than most other district states and substantially weaker than during 1984, when the PIK program benefits boosted farm income to Nebraska farmers. Most of the moderate economic growth in Nebraska was fueled by growth in services, while manufacturing remained weak.

Reduced farm income in 1985 added to the serious levels of financial stress that were evident in 1984. Sales of farm equipment were down again, accounting for the continued weakness in the state's farm equipment manu-

facturing industry. Food processing, the largest manufacturing industry in Nebraska, had a solid year but showed less strength than in 1984. This was most likely due to slower growth in the national economy and the associated weaker national market for food products.

Problems in agriculture have affected rural areas more than urban areas in the state. While nonmetropolitan Nebraska is heavily dependent on agriculture and thus depressed, metropolitan areas such as Omaha and Lincoln are more diversified. In these cities, growth in services, particularly finance and telemarketing, has contributed to overall employment growth.

Missouri

The Missouri economy, as in 1984, showed growth that roughly matched growth for the district. Accordingly, growth in income and employment slowed in Missouri as it did across the district. Sluggish performance in these economic measures reflects poor performance in the state's agricultural and manufacturing sectors, coupled with residential construction that was weaker than expected.

Automobile production ranks first among Missouri's manufacturing industries. Though automobile plants operated at capacity throughout the 1985 model year, the strong U.S. dollar remained an obstacle for other manufacturers such as electrical machinery producers. In general, high technology did not contribute as much to growth in manufacturing in 1985 as it did in 1984.

Residential construction activity was weaker than expected in 1985. Housing starts remained flat through the first three quarters without showing improvement over 1984. Nonresidential construction remained healthy, stimulated by resurgent office construction in

Kansas City and St. Louis. The value of non-residential construction contracts through the third quarter of 1985 was 18 percent higher than a year earlier.

Depressed farm earnings in the state reflected a large harvest nationwide, weak export markets, and low commodity prices. These conditions contributed to a worsening of financial problems in Missouri's agricultural sector.

New Mexico

Economic growth in New Mexico was moderate in 1985, after relatively strong performance in recent years. Employment growth during the first three quarters of the year was considerably slower than in 1984. Although real personal income growth remained healthy, it nevertheless slowed during the first half of 1985 compared with rates achieved in 1984. This moderation in growth can be attributed to some slowing in all important sectors.

Weak national and international markets for semiconductors and computers dampened New Mexico's economic growth in 1985. In the past few years, both manufacturing and construction had benefited from a movement toward new high-technology industries. High-technology firms least affected by the slowdown were those engaged in national defense research and contracting. Defense-related activities remained especially important in Albuquerque, Las Cruces, Alamogordo, Santa Fe, and Los Alamos. These communities also benefited from the increased importance of commercial applications of defense research.

Mining activity slowed sharply in 1985, the result of continued weakness in copper and uranium mining. Most copper mines in New Mexico remained closed or underutilized and uranium production was almost nonexistent due to depressed mineral prices. Production of

oil, gas, and coal lent some strength to the mining sector in 1985, though not as much as in 1984.

Given the problems in mining and high technology, the New Mexico economy was healthier than might have been expected. Government, financial services, and nonfinancial services such as those associated with tourism lent some strength. Though more sluggish than in 1984, the service industry provided stability to metropolitan areas of the state. Federal spending remained a major contributor to New Mexico's economic growth through the substantial number of military installations in the state and the large number of defense contracts let to the state's high-technology firms.

Oklahoma

The Oklahoma economy was weak overall in 1985. Employment fell slightly and real personal income growth slowed in 1985. This slowing can be attributed to weakness in the two anchors of the Oklahoma economy—energy and agriculture.

The energy sector was a drag on the state's economy in 1985. Falling crude oil prices led to a sharp reduction in exploration and development activity. The result was overcapacity in drilling and associated declines in the value of oilfield equipment. In addition, cumulative production of both crude oil and natural gas through the first six months of 1985 were below levels for the same period in 1984. Consequently, there was no recovery in the state's oilfield equipment manufacturing industry.

As in other states, financial problems for Oklahoma's farmers continued to mount in 1985. These problems especially affected the economic climate of rural areas of the state.

Automobile production continued at a

healthy pace in 1985, partially offsetting the weakness in energy and agriculture. Oklahoma remained second among automobile-producing states in the district in 1985, after doubling production during the 1984 model year.

The outlook for 1986: more of the same

The economy of the Tenth District is expected to remain sluggish in 1986. The moderate economic growth expected for the nation in 1986 will add little additional strength to district performance. Thus, district income and employment can be expected to continue growing at a relatively slow pace. Moreover, persistent weakness in energy and agriculture will likely cause overall district growth to continue to lag behind that of the nation.

Ongoing financial problems for energy and agriculture will figure importantly in the sluggishness of the district economy. Although spot crude oil prices remained firmer than expected in late 1985, due partly to reduced shipments from the Persian Gulf and the Soviet Union, they are expected to be lower by spring. Increased supplies of OPEC and non-OPEC oil and soft crude oil prices are expected to combine with continued surplus conditions in the market for natural gas to prevent any significant improvement in energy exploration and development activities in the district.

Nor are conditions in the district's agricultural sector expected to improve much in 1986. Continued large stocks and weak exports will keep crop prices low. Farm income may weaken somewhat in 1986, adding to already high levels of financial stress. Livestock prices, however, are expected to firm in 1986, bringing relief to some areas in the district.

The manufacturing sector will likely grow only slowly in 1986. The combined weakness in energy and agriculture will forestall improvement in oilfield and farm equipment manufacturing. Continued softness in general aviation and high-technology manufacturing also suggests sluggish performance in the manufacturing sector.

Performance in 1985 is a good indicator of

individual state performance in 1986, since no big changes are expected in overall economic growth in the district. While most states will experience sluggish growth as in 1985, those states with more diversified economies—Colorado, Missouri, and New Mexico—will likely do better than states that depend more heavily on agriculture and energy—Kansas, Nebraska, Oklahoma, and Wyoming.

U.S. Agriculture: The Difficult Adjustment Continues

By Mark Drabenstott

U.S. agriculture endured a difficult year in 1985. Farm income dropped and farmland values fell further. But the most striking toll of 1985 was the mounting number of financially pressed farm businesses, rural merchants, and farm lenders. Farm business failures and farm lender closings occurred at a rate not witnessed since the Great Depression.

Another difficult year lies ahead in 1986. Farm income probably will worsen modestly in the coming year. With a normal growing year, crop stockpiles will grow bigger. Thus, weak crop prices likely will more than offset some improvement in livestock prices. Farm credit conditions will remain troublesome in 1986. While the 1985 farm bill promises to keep government farm payments large, fundamental recovery for U.S. agriculture still awaits lower real interest rates and improved export markets.

This article reviews farm events in 1985 and

then examines the austere outlook for 1986. Areas of focus include farm credit conditions, farm income, the farm bill, and crop and livestock market conditions.

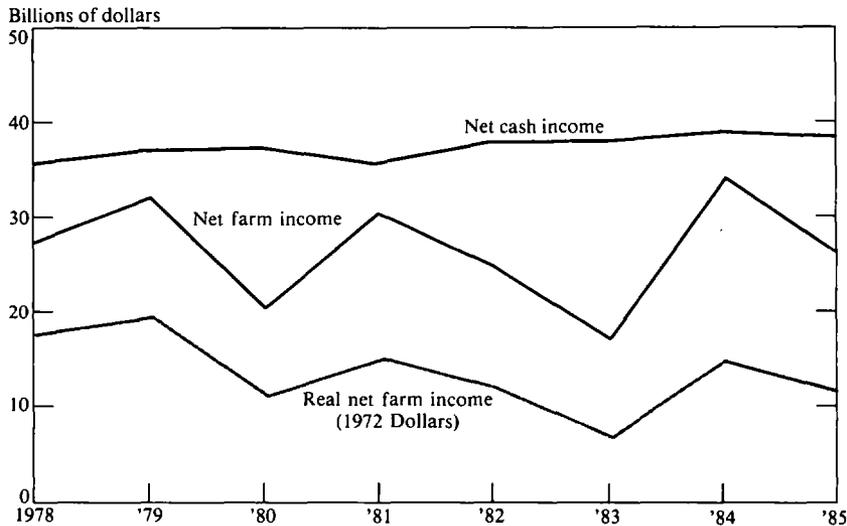
The year in review

The year began with concern over crop prices but with hopes that livestock profits would bolster farm finances. The year also began amid hopes that the worst farm financial problems might be nearly finished. Many hoped that a weaker dollar would turn around sagging farm exports. All of these hopes soon faded as 1985 wore on.

The farm economy deteriorated throughout 1985. Large spring plantings and excellent growing weather soon led to large crops that began depressing crop prices. Despite continued growth in the U.S. economy and consumer spending, red meat prices fell sharply in 1985, eliminating the comfortable profit margins producers and lenders had expected. The widespread spring credit crunch that many predicted was largely avoided. But farmland

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CHART 1
Farm income



Source: U.S. Department of Agriculture

values fell dramatically throughout the year while farm loan problems grew bigger and more vexing to farm lenders. The dollar did weaken more than 20 percent during the year, but U.S. farm exports remained captive to the stagnant Third World economy.

Farm income

Net farm income declined sharply in 1985. It is currently estimated at about \$27 billion, 22 percent less than the revised \$34.5 billion in 1984 (Chart 1). In real terms, net farm income was only an estimated \$12 billion (1972 dollars), nearly a fourth less than in 1984 and far less than in the 1970s. Weaker crop prices and disappointing livestock prices account for much of the decline. Large government payments, however, added some resilience to farm income. Direct payments totaled an estimated \$9 billion, up slightly from 1984 when crop prices were stronger. Continued strength in the general economy

kept off-farm income at \$41 billion, a little higher than in 1984. Most of that income goes to smaller farmers.

Net cash income data suggest a somewhat brighter picture for farmers. Net cash income is estimated to have remained unchanged in 1985 at \$39 billion. Total cash receipts fell slightly, to \$138 billion. Livestock cash receipts declined markedly, while crop cash receipts were unchanged from 1984. Cash expenses also declined, to \$110 billion. Farmers apparently were careful about purchases because of their strained finances.

Government commodity support programs provided strong cash flows to some producers in 1985. Corn growers in many parts of the Corn Belt enjoyed record yields. Those that participated in the feed grains program (70 percent of all corn producers) had very good 1985 revenues. Participants received a loan rate on corn of \$2.55 a bushel plus a deficiency payment based on the target price of \$3.03. Thus, some producers with superior

TABLE 1

Farm balance sheet excluding operator households on December 31
(billions of dollars)

	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985p</u>	<u>1986f</u>
Assets					
Real estate	745.6	736.1	639.6	575-625	555-620
Nonreal estate	232.2	220.4	216.5	200-230	190-235
Total assets	977.8	956.5	856.1	790-840	770-830
Liabilities					
Real estate	101.2	103.7	102.9	96-101	93-99
Nonreal estate	102.4	98.8	96.0	98-102	99-105
Total liabilities	203.7	202.5	198.9	195-202	194-201
Proprietors equity	774.2	754.0	657.2	595-635	570-630
Debt-asset ratio	20.8%	21.2%	23.2%	23-25%	23-26%
p = preliminary f = forecast					
Source: U.S. Department of Agriculture, 1985 Agricultural Outlook Conference					

yields received an equivalent market price well above \$3.00 for their base acreage.

Farm input suppliers generally posted profits in 1985 on the basis of modest gains in sales. Large spring plantings helped bolster demand for fertilizer, seed, and chemicals. But again, demand for farm machinery and equipment remained extremely weak. Depressed farm earnings, still high debt-carrying costs, and a large supply of used equipment for sale resulted in further stress for the equipment industry. Reflecting that stress, three long-standing hallmarks in the farm equipment industry were merged with other firms—International Harvester joined J. I. Case, Allis-Chalmers merged with Deutz, and New Holland was purchased by Ford.

Farm credit conditions

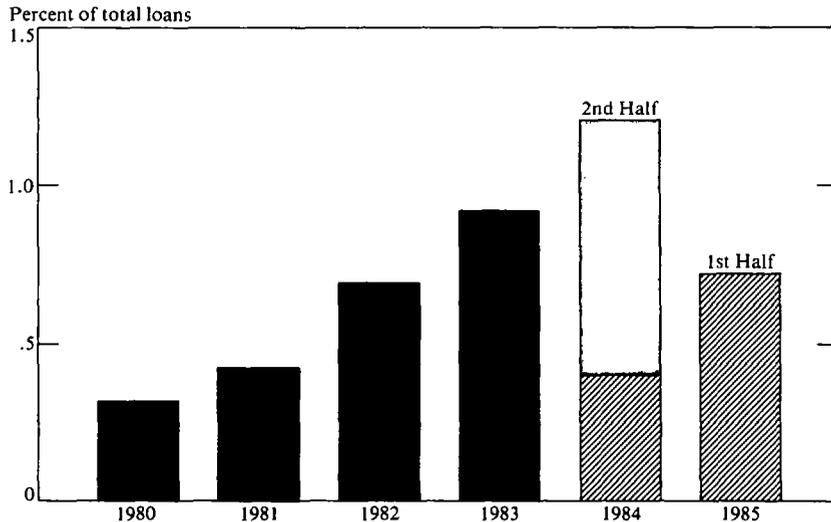
The focal point of U.S. agriculture in 1985 was its deteriorating credit conditions.

Farmers and ranchers throughout the country underwent far more financial stress than normal, and more than in 1984. Farm loan problems intensified for farm lenders—a fact highlighted by deepening financial pressures for the Farm Credit System and commercial banks that lend to agriculture. The weak farm economy also manifested itself in a growing number of nonfarm rural business failures.

The farm sector balance sheet deteriorated further in 1985. The statement for December 31, 1985 is expected to show a 2 to 8 percent decline in total farm assets, marking five straight years of decline (Table 1). Total liabilities probably will decline slightly as producers trim long-term debts somewhat. Based on these changes, proprietors' equity probably will decline sharply to about \$615 billion, 6 percent less than the previous year. The debt-asset ratio is expected to increase slightly.

The administration's Debt Assistance Program was a much heralded effort to slow the

CHART 2
Loan loss rate at agricultural banks



Source: Board of Governors of the Federal Reserve System

deterioration of farm credit conditions. That program offered government loan guarantees in exchange for lenders writing down interest rates enough to make a loan cash flow. Lenders made relatively little use of the program. Instead, nearly \$3.6 billion in direct operating loans were extended by the Farmers Home Administration (FmHA). Those direct FmHA loans and steps lenders took on their own to extend credit proved to be the main safety valves this past spring. The FmHA did approve \$1.1 billion in loan guarantees, but almost all of this was outside the Debt Assistance Program.

According to a survey of agricultural banks in the Tenth Federal Reserve District, farm liquidations were much higher than normal in 1985. For the 12 months ended October 1, full liquidations were 6.7 percent of all farms and ranches, a rate bankers considered nearly two and a half times normal. Partial liquidations during that period totaled 7.3 percent, almost six times normal. Although financial stress

may be most intense in the western Corn Belt and Great Plains states, the problem appears national in character.

Farmland values continued their sharp decline in 1985. With weak commodity markets, relatively high farm mortgage rates, and uncertainty surrounding farm and tax legislation, potential buyers of farmland remained on the sidelines. And even though the amount of land actually trading hands remained small, a large supply was poised for sale just off the market.

In the Tenth District, farmland values fell throughout the year. Values have been declining at an annual rate of 20 to 25 percent for nearly two years. At the end of the third quarter, district land values were 44 percent below the market peak reached in 1981.

With declining farm asset values and a weak farm economy, farm loan problems multiplied for the nation's agricultural banks (Chart 2). Loan losses at these banks totaled 1.1 percent of total loans for the first nine

TABLE 2
U.S. farm product price projections

Crops	Marketing Years		Percent Change
	1984-85	1985-86	
Wheat	\$3.38/bu	\$3.00-3.20/bu	-8.3
Corn	\$2.65/bu	\$2.35-2.55/bu	-7.5
Soybeans	\$5.85/bu	\$5.00-5.30/bu	-12.0
Cotton	.59/bu	N/A	N/A

Livestock	Calendar Years		Percent Change
	1985	1986	
Choice steers	\$57-59/cwt	\$62-67/cwt	11.2
Barrows & gilts	\$43-45/cwt	\$45-50/cwt	8.0
Broilers	\$50-51/lb	\$48-52/lb	-1.0
Turkeys	\$75-76/lb	\$60-66/lb	-16.6
Lamb	\$69-71/lb	\$70-75/lb	3.6
Milk	\$12.75/cwt	\$12.15-12.65/cwt	-2.7

Source: U.S. Department of Agriculture, 1985 Agricultural Outlook Conference

months of the year, twice the loan loss percentage a year earlier. Furthermore, sharply higher volumes of past due and nonaccrual loans in 1985 indicate that problems are still coming. Total past due loans at the nation's agricultural banks ran about 20 percent higher than in 1984. Even more disturbing, nonaccrual loans ran almost 50 percent higher than in 1984. Nonaccrual loans point to further potential loan losses in the future.

Crops

U.S. farmers harvested record and near-record crops in 1985. Planted acreage was very large, despite farm programs aimed at reducing wheat acreage 30 percent, feed grains 10 percent, and cotton 30 percent. Growing conditions were excellent in nearly all portions of the country, although wet weather hampered harvesting in some regions. Only two years after the Payment-in-Kind (PIK) program, carryover stocks are rapidly

approaching the levels that spawned the program.

Wheat production was relatively large in 1985 due to large acreage and good yields. Total production was 2.4 billion bushels, 8 percent less than the year before. But reduced consumption and surplus stocks kept prices low all year. The nationwide average price was \$3.38 in the 1984-85 marketing year, 5 percent less than in the previous year (Table 2).

Feed grain producers harvested record crops in 1985. On the strength of large plantings and a record yield of 117 bushels an acre, corn production exceeded 8.7 billion bushels, the largest corn harvest ever. Corn prices trended down all year, staying 20 to 25 percent below 1984 prices. For the 1984-85 marketing year, corn prices averaged \$2.65 a bushel, nearly a fifth lower than the 1983-84 average.

Soybean production also was very large in 1985. Output totaled 2.1 billion bushels, second only to the 1982 crop. The national aver-

age yield set a new record. Soybean prices sagged all year under the weight of the large supplies. Farm-level soybean prices averaged just \$5.85 in the 1984-85 marketing year, a fourth less than in the previous year.

Cotton production also increased in 1985. Record yields raised output to 13.8 million bales, up slightly from 1984. Export demand proved very weak, and with large competing supplies from other exporters, cotton prices generally declined throughout 1985. Prices averaged 59 cents a pound in the 1984-85 marketing year.

Overall, crop producers gathered a harvest of plenty in 1985. But swelling stockpiles and dormant export markets sharply reduced prices. And the supplies being carried over into 1986 suggest prices could weaken even more.

Livestock

Livestock producers surprised everyone again in 1985. Meat production was expected to decline 2 percent. Instead, it increased 1 percent to another record level. While not large in percentage terms, the increase led to dramatically lower prices, especially for cattle. The economy enjoyed its third year of economic expansion, but consumers still appeared to be shying away from meat purchases. Soft consumer demand appears to be one main reason for the disappointing red meat prices in 1985.

Beef production was unchanged in 1985, even though a 2 percent decline had been forecast. The numbers of cattle slaughtered fell 2 percent, but slaughter weights increased a substantial 4 percent. The result was a net increase in pounds of beef produced. Producers held cattle off the market in the spring, expecting higher prices in summer months. Weather was mild, allowing rapid feed con-

dition, and the net effect was heavier cattle going to market. Thus, the large supply of beef and relatively weak consumer demand led to a sharp fall in cattle prices. A widening spread between retail and market prices also dampened the stimulative effect of lower market prices. Many analysts had forecast \$70 a hundredweight finished steer prices by mid-year. Instead, prices dipped to almost \$50 in midsummer. Prices did rally in the fourth quarter, but for the year prices for choice steers at Omaha averaged an estimated \$58, down substantially from 1984.

Pork production also was unchanged in 1985. Financial stress for Corn Belt producers may have contributed to higher than expected slaughter rates. Canadian and Danish pork imports were a significant supply factor again in 1985, amounting to 7.5 percent of U.S. production. Despite cheap feed, most producers were kept below breakeven profit levels by low hog prices. Prices for barrows and gilts at the seven regional markets averaged \$44 a hundredweight, down a tenth from 1984.

Broiler production rose 4 percent in 1985 as the industry continued its expansion. Low feed costs and strong consumer demand encouraged the growth in output. Nevertheless, large red meat supplies helped push broiler prices slightly below year-earlier levels. The 12-city price averaged 50 cents a pound in 1985, down moderately from 1984. Turkey production, meanwhile, shot up 9 percent in 1985. Strong profits throughout the past two years have encouraged strong growth in turkey production. Turkey prices averaged 75 cents, up slightly from 1984.

Lamb and mutton production fell 6 percent in 1985, continuing the industry's long-standing downward trend. Despite lower production, profit margins were bolstered by low feed grain prices and excellent range condi-

tions. Slaughter lamb prices averaged \$70 a hundredweight, up sharply from 1984.

Dairy producers increased output again in 1985. Total milk production was a record 143 billion pounds, 6 percent more than 1984. The number of dairy cows was slightly higher than 1984, and milk per cow ran about 4 percent better. Because of weak consumer demand, government purchases rose sharply to an expected 13.5 billion pounds, 57 percent greater than in 1984. Due to the large purchases, the Department of Agriculture lowered the milk support price 50 cents to \$12.10 a hundredweight on April 1 and then to \$11.60 on July 1. Because of large dairy surpluses and the reduction in the support price, producer milk prices averaged an estimated \$12.75 a hundredweight.

The year ahead

U.S. agriculture faces another difficult year in 1986. Farm income is expected to weaken further due to weak crop prices and sluggish exports. Credit problems will remain widespread and highly visible, and land values can be expected to continue their decline. Attention will again focus on farm lenders, and possible government assistance to these lenders will continue to be debated. Overall, the year begins with some deep concerns about further weakening in the farm economy.

Farm income and financial conditions

Farm income is expected to weaken somewhat in 1986. Stronger livestock profits probably will be more than offset by weak crop prices and a possible reduction in crop production. Livestock prices are expected to increase in the first half of the year as supplies decline. Red meat prices in particular should benefit. In addition, livestock profit margins will be

helped by cheap feedstuff prices. Crop prices likely will remain weak throughout the year, although prices may not decline much further from current levels due to the large amount of stocks held under Commodity Credit Corporation (CCC) loan. Still, huge carryover stocks will be the major factor depressing prices. The weaker dollar may lead to some improvement in farm exports, but sales are expected to remain sluggish due to weak economies in the developing world. Overall, farm income may decline \$2 to \$5 billion in 1986. Net cash income may be unchanged. Adjusted for inflation, farm income probably will be in the \$9 to \$11 billion range (1972 dollars).

Financial stress is almost certain to mount with that level of farm income. Stress will remain concentrated among commercial scale farms that are highly leveraged. In particular, many farmers and ranchers with debt-asset ratios over 40 percent will continue to have serious difficulty servicing their debt.

By any measure, the farm credit problem has significant dimensions. Two recent studies further clarify the amount of farm debt that is troubled. The U.S. Department of Agriculture (USDA) estimated in July that 129,000 commercial farms—a fifth of all farms with annual sales over \$40,000—began 1985 under serious financial stress.¹ These were farms with both negative cash flows and debt-asset ratios of more than 40 percent. These producers were estimated to owe about 39 percent of farm operator debt, or about \$46 billion.² Of the

¹ Source: U.S. Department of Agriculture, *Financial Characteristics of U.S. Farms, January 1985*. Agriculture Information Bulletin, No. 495.

² Farm debt of about \$120 billion was reported by the 1.7 million farm operators covered by the Farm Costs and Returns Survey. The remaining \$93 billion of farm sector debt—as based on reports by lenders—presumably is in the hands of landlords, is owed by the surveyed farmers for nonfarm purposes, or is in the hands of the 700,000 small farms not covered by the survey.

129,000 farms in this category, 54,000 were severely stressed—debt-asset ratios of more than 70 percent and negative cash flows. They owed nearly a fifth of the farm operator debt, or about \$23 billion.

Other estimates also suggest that a considerable farm loan problem still lies ahead. Using the same USDA survey data, Emanuel Melichar recently classified the financial position of farm operators according to debt-asset ratio, amount of equity, return on assets, and return on equity.³ His results also suggest that a substantial portion of the nation's farm assets will move from weak to stronger hands. He concluded that about 10 percent of commercial farms, or about 63,000 farms, were "vulnerable" at the beginning of 1985. These are farms that might be thought of as in peril of failing within the next year or two. Interestingly, he estimated that these farms owed about \$23 billion to all farm lenders, the same amount the Department of Agriculture found for their worst borrower category. Melichar also estimated that another 44,000 farms were "stressed," or headed for trouble in the next few years. These farms, 7 percent of U.S. commercial farms, owe another \$10 billion to farm lenders.

Thus, comparison of USDA estimates for farms with negative cash flows having debt-asset ratios over 70 percent and Melichar's "vulnerable" category suggests that 55,000 to 65,000 farm operators are in danger of failing in the near term. These farm businesses appear to owe about \$23 billion to all farm lenders.

With low farm income projected for 1986, therefore, the stage appears to be set for a period of significant financial stress and reckoning. Lenders reluctantly have renewed many

farm loans in recent years—and especially last spring—because they were unwilling to force settlement of loans when faced with losses from the sale of acquired assets. Increasingly, however, lenders lack the freedom to renew troubled loans. Stockholders are worried about bank earnings, and in some cases bank soundness. Regulators continue to voice concern over the deteriorating quality of farm loan portfolios. Thus, farm liquidations, both full and partial, can be expected to run well above normal in 1986, particularly in the early spring, when most credit decisions are finalized.

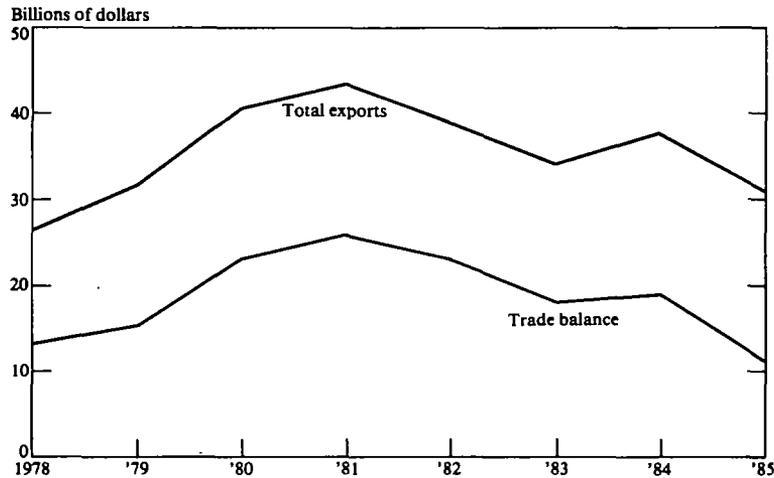
With many farm assets for sale and the outlook bleak for the farm economy, farm asset values will remain under downward pressure in 1986. Inflation-adjusted interest rates for farm real estate likely will remain relatively high, contributing to lower land values. Many are now asking how far land values could fall. The answer is uncertain at present, but two key factors will govern the outcome.

The first is net cash returns. Most observers agree that a positive cash flow given a reasonable debt level is the market fundamental that will eventually support values. With land in some parts of the country now 60 percent off the market high, a positive cash flow for some producers is not far distant. Uncertainty about future farm programs has made cash flow projections difficult for potential land buyers. Final passage of a farm bill will help to eliminate some of that uncertainty.

The second key factor is the rate at which land is put on the market. Even though rural asset markets have been strained by a relatively large supply of land for sale, agriculture's painful adjustment has remained relatively manageable thus far. That is, the decline in land prices has—for the most part—been orderly. But if troubled farm loans are settled at a faster rate, for whatever reason,

³ Source: Emanuel Melichar, "Farm Financial Experience and Agricultural Banking Experience," Testimony before the House Banking Committee, October 23, 1985.

CHART 3
U.S. agricultural trade



Source: U.S. Department of Agriculture

that could still lead to disorderly markets and precipitous declines in values. Thus, there remains a need to assess the role for public policy in moderating asset market adjustments.

In other respects, agricultural credit conditions in 1986 will mirror those in 1985. Agricultural banks will have ample funds, and creditworthiness will be the critical factor in loan decisions. Farm loan interest rates could decline somewhat as rural banks adjust to the lower money market rates that prevailed in the second half of 1985. Nevertheless, high farm loan losses can be expected to add upward pressure to farm loan rates.

The coming year promises to be another challenging one for the Farm Credit System. Depending somewhat on the outcome of federal assistance legislation, Wall Street likely will remain skittish about FCS bonds, and the spread over Treasury securities probably will remain historically high. Structural change in the system will continue. Production Credit associations and Federal Land Bank associa-

tions are likely to merge into fewer local associations, thereby allowing consolidation of capital and earnings within Farm Credit districts.

Export outlook

Farm exports resumed their downward trend in 1985. The value of U.S. agricultural exports was \$31 billion in fiscal 1985, down 19 percent from the previous year (Chart 3). Export volume also declined, to 126 million metric tons, 13 percent less than in 1984. The agricultural trade balance dropped sharply to \$11 billion, a move that also reflected much higher food imports.

Exports fell in the face of two positive market developments in 1985. First, the trade-weighted exchange value of the dollar declined more than 20 percent from its February peak. Second, for much of the year U.S. commodity prices were as much as 25 percent below 1984 levels. But despite lower prices

and a weaker dollar, U.S. farm exports failed to respond.

Several market factors contributed to weak exports. First and foremost, economic and financial problems persisted in many developing countries, notably such middle income countries as Mexico, Brazil, and Indonesia that remain our best potential markets. World grain supplies were very large, and competitors were anxious to market their stocks. Finally, while the Soviet Union bought a record amount of grain from the United States, it still did not fulfill all the conditions of the U.S.-U.S.S.R. long-term grain agreement. The Soviets apparently were unwilling to honor the wheat portion of the agreement when U.S. prices were well above world prices.

Current global supply and demand forecasts suggest that U.S. agricultural exports could weaken still further in 1986. World grain trade is not expected to grow in the coming year, and competing supplies will be large. Commodity prices likely will average lower than in 1985, while export volume declines modestly. Thus, the value of farm exports may decline to perhaps \$29 billion in 1986.

Over the next few years, the overriding concern for restoring U.S. farm exports will be the strength of trading partner economies. A weaker dollar does make U.S. producers more competitive, but it does not generate stronger income in trading partner countries. And that essential buying power is what is scarce in the current world food market. Reductions in U.S. federal budget deficits that would lead to lower interest rates here and abroad would be beneficial in stimulating economic growth in Third World countries. In addition, a long-range strategic plan for expanding exports and reducing government grain stocks would bolster the U.S. position in the world food market.

Farm policy outlook

The 1985 farm bill debate has been long and labored, dominated by two approaches to the farm problem. First, the administration advocated a rapid move toward a free market farm policy in a proposed bill unveiled in March. That proposal, coming in the middle of the spring credit crunch, quickly met strong opposition from many quarters. Opponents argued that the farm sector was under too much financial stress for a sudden removal of government income supports. Instead, opponents proposed a second approach—continuation of current policy with only minor adjustments. The administration has voiced concern about the high cost of this approach.

Congress passed the farm bill on December 18. The final bill reflects efforts to maintain farm income while allowing market forces to influence farmer decisions to a greater extent. The president had not yet signed the bill at the time of this writing.

The final bill has four important provisions. First, the bill allows loan rates for major crops to move toward world market prices. Loan rates would be set at 75 to 85 percent of average market prices for the preceding five years, except that prices could not decline more than prescribed limits, usually 5 percent a year. The Secretary of Agriculture, however, would have discretionary authority to lower loan rates another 20 percent a year, 10 percent mandated for 1986. Most analysts agree that lower loan rates are needed to make U.S. farm products more competitive in world markets.

With very large carryover stocks of major crops, the Secretary likely will exercise his authority to lower loan rates further, quite possibly by the full 20 percent. But if that happens, the bill exempts from the current \$50,000 payment limitation any additional deficiency payments that might result from the

reduced loan rate. That is, producers would receive target price deficiency payments based on the loan rates set by Congress up to a maximum of \$50,000 per farm. Then, if market prices remained low, producers would receive additional deficiency payments based on the loan rate set by the Secretary of Agriculture. For some large farmers, that second payment might well exceed the initial \$50,000 payment.

The second important provision of the bill is a freeze on target prices. The bill freezes target prices on most program commodities for two years. Wheat and feed grain target prices are frozen for two years, and then allowed to decline 10 percent over the next three years. Cotton and rice targets are frozen in 1986 and then decline 10 percent in the next four years. With current surplus commodity stocks and a bleak outlook for exports, a two-year target price freeze will almost certainly lead to large government payments, quite possibly much larger than current expenditures.

A third major provision is an attempt to expand exports. The bill would bolster credit and other programs to increase exports. Commodity Credit Corporation export credit guarantees would be increased to at least \$5 billion in each of the fiscal years from 1986 through 1989. The intermediate export credit program, which guarantees loans of three to ten years, also would be strengthened to at least \$1 billion per year. The bill also would extend and enhance the Bonus Incentive Export Program (BICEP), sometimes called the export PIK program. Finally, Congress would extend P.L. 480, the Food for Peace Program, with improved steps to make sure American food reaches the needy abroad.

A fourth major provision is a long-term Conservation Reserve. Advocated by Secretary Block, this provision would idle as many as 45 million acres of marginal cropland. The

program would target lands subject to high rates of erosion. Producers would contract with the USDA to shift such acreage to less intensive use, such as grass or forest production, for a period ranging from ten to 15 years. The provision also would discourage further "sodbusting" by making those who so engage ineligible for commodity program benefits.

In short, the bill essentially maintains current farm policy with some fine tuning. Loan rates are allowed to move toward market clearing levels, but within limits. Target price protection remains generous. Export promotion is bolstered. A Conservation Reserve that harkens back to the 1950s Soil Bank was established. Taken together, these provisions will make the bill very expensive.

Two farm credit policies will be important in 1986. First, FmHA loan programs will remain a key source of credit to financially stressed farmers. Currently, it appears that about \$4 billion will be made available for all FmHA programs in 1986. Half of that amount will be for direct operating loans, the other half will be for loan guarantees. While FmHA will stress the guarantee program, direct loan programs probably will remain important for the next few years.

A second farm credit policy issue is government assistance to the Farm Credit System. Legislation to provide assistance moved rapidly through Congress. The final bill—likely passed just before Congress adjourned—contained three basic elements. First, the legislation would establish a back-up line of credit for the system with the Treasury. The amount of assistance is not specified, but would be supplied only when the system had used all of its nonstock capital. Second, the legislation gives authority to the Farm Credit Capital Corporation to marshal capital resources within the system. Troubled loans would be

TABLE 3
U.S. agricultural supply and demand estimates
December 10, 1985
(millions of bushels, bales, or metric tons)

	Corn (bu)		Feed Grains (mt)		Soybeans (bu)		Wheat (bu)		Cotton (bales)	
	Oct. 1-Sept. 30		Oct. 1-Sept. 30		Sept. 1-Aug. 31		June 1-May 31		Aug. 1-July 31	
	1984-85	1985-86	1984-85	1985-86	1984-85	1985-86	1984-85	1985-86	1984-85	1985-86
Supply										
Beginning stocks	723	1,379	31.5	49.9	176	318	1,399	1,425	2.78	4.10
Production & imports	7,659	8,718	237.1	271.5	1,861	2,129	2,595	2,427	12.98	13.81
Total	8,382	10,097	268.6	321.3	2,037	2,447	4,003	3,852	15.78	17.94
Demand										
Domestic	5,165	5,420	162.7	169.7	1,121	1,157	1,155	1,110	5.55	6.00
Export	1,838	1,625	56.0	48.9	598	675	1,424	1,000	6.22	3.10
Total	7,003	7,045	218.7	218.7	1,719	1,832	2,579	2,110	11.76	9.11
Ending Stocks	1,379	3,052	49.9	102.7	318	615	1,424	1,742	7.07	8.97

Source: U.S. Department of Agriculture

channeled to the corporation to be serviced and worked out, and the corporation would fund the acquisition of those loans by assessing transfers of capital from all banks in the system. Finally, the legislation strengthens the regulatory authority of the Farm Credit Administration, making it a true arms-length regulator.

Crop outlook

The crop outlook for 1986 is not bright. Carryover stocks are huge, nearly as big as in 1983. Current signals concerning administration commodity programs suggest that production cutbacks probably will not be big enough to curtail the 1986 crop significantly. Meanwhile, export markets hold forth little promise of renewed vigor. Thus, crop prices can be expected to remain soft all year, and prices will trend even lower if another large crop takes shape and if loan rates are cut for the 1986 crop year. With government stocks very large, however, market prices will find some

support at loan rate levels.

Although total wheat supplies will be less than in 1985, a sharp drop in demand casts shadows on the outlook for wheat. Because of 1985's smaller crop, total supplies will decline 4 percent to 3.8 billion bushels (Table 3). At the end of the 1985-86 marketing year, however, carryover stocks are expected to exceed 1.7 billion bushels, 22 percent more than in the 1984-85 marketing year.

Weak domestic and foreign demand is the main problem in the wheat outlook. Feed use will decline in the United States as livestock feeders shift back to cheaper corn. World consumption also appears weaker than expected. The Soviet Union and Brazil, two major importers, have cut back substantially on their plans to buy wheat. Total world wheat trade may fall 13 percent in 1986. That coupled with record world stocks will keep U.S. prices low. Farm-level prices are expected to average \$3.00 to \$3.20 a bushel, down moderately from 1985 and the lowest since 1975.

Even larger supplies encumber the feed grain outlook. Feed grain supplies will total 321 million metric tons, up substantially from last year. Corn supplies, the major feed grain, will approach 10 billion bushels, the largest in many years. Corn carryover stocks will more than double in the coming marketing year, reaching 3.1 billion bushels, second in size only to the carryover in 1983.

Feed grain demand is expected to remain unchanged in 1986. A small decline in exports probably will be offset by greater domestic feed use. Farm-level corn prices may average \$2.35 to \$2.55 a bushel, just below the loan rate and down moderately from 1985. Grain sorghum prices are expected to average \$2.15 to \$2.35 a bushel, also down from the previous year. Barley prices also are expected to decline, to a range of \$1.95 to \$2.15 a bushel.

The large 1985 U.S. soybean crop points to a weak profit picture for soybean growers in 1986. Supplies in the upcoming marketing year will top 2.4 billion bushels, a fifth more than the previous year. Carryover stocks will nearly double, reaching a new record of 615 million bushels. A record world oilseed crop also will exert downward pressure on U.S. prices, especially for soybean oil.

Soybean demand will improve in 1986, but not enough to soak up the large supplies. Domestic crush is expected to be steady, and exports may improve slightly. A large Brazilian crop, however, could dissipate any improvement in U.S. exports. With another large U.S. crop expected, farm-level soybean prices may average only \$5.00 to \$5.30 a bushel, the lowest price since 1976.

Cotton supplies also will be very large in 1986. U.S. supplies may increase to nearly 18.0 million bales, while world stocks will be record large at 40 million bales. Intense competition from other exporters, such as China and the Soviet Union, will cut U.S. exports

nearly in half. Domestic mill use is expected to be steady in the coming year. But total cotton use will be only 9.1 million bales, the lowest this century. As a result, cotton prices will be at or below the 57 cent loan rate for most of the year.

Overall, crop supplies likely will grow bigger in 1986. As in 1985, many producers will look to government programs to market their crops. And even though loan rates could decline sharply in 1986, stable target prices will offer generous benefits to those who participate. In short, government programs will be the market for many crop growers.

Livestock outlook

The livestock industry looks forward to improved profits in 1986. Red meat supplies are expected to decline 5 percent, led by a 5 percent reduction in beef supplies. Total meat production, however, is forecast to be only 2 percent less than 1985 as the poultry industry continues its expansion. Continued growth in the U.S. economy will help strengthen prices, but the pattern of the past few years suggests that the livestock industry cannot look to consumers to bring higher prices. Low feed costs, however, should lead to wider profit margins throughout 1986.

Beef production is expected to decline 5 percent in 1986. Both fed and nonfed marketings should decline through the first half. Feed yard placements in the third and fourth quarters of 1985 were down from the previous year, pointing to lower fed marketings in the first two quarters of the coming year. In addition, dressed weights should return to normal, contributing to lower beef production compared with 1985. The cattle inventory likely will decline again in 1986.

Choice steer prices at Omaha are expected to improve markedly in 1986. Prices should

trade in the mid-\$60 a hundredweight range for much of the year. By midyear, the industry might see \$70 for the first time in a couple of years. Poultry supplies will be large, but total meat supplies should favor beef prices more in 1986. Declining corn prices and prospects for improved finished cattle prices should lend strength to feeder cattle prices in early and mid-1986. Prices could be near \$70 in the second quarter before declining somewhat in the second half as competing meat supplies increase.

Pork production is expected to decline 1 percent in 1986. Producers retained fewer sows than expected in late 1985, probably due to ongoing financial stress in the Corn Belt. Cheap feed likely will stimulate increased production in the second half. Although still important, pork imports may moderate somewhat in 1986. Imposition of countervailing duties will temper Canadian imports.

Barrow and gilt prices at the seven regional markets are expected to average \$45 to \$50 a hundredweight in 1986. Lower red meat supplies should bolster first half prices. Prices could be near \$50 by midyear. Prices may weaken in the second half when pork supplies could be increasing.

Broiler producers look forward to another year of strong profits. Cheap feed will keep breakeven prices low, while consumer demand keeps market prices up. Total broiler production could rise 4 percent in 1986. The 12-city broiler price is expected to average about 50 cents a pound for the year.

Turkey supplies also may increase 6 to 7 percent in 1986. Solid profits should continue, encouraging the expansion. Turkey prices are expected to average about 63 cents a pound, down from 75 cents in 1985.

Dairy output probably will increase in 1986. Dairy cow numbers in late 1985 were the highest in over a decade. Production also will be

enhanced by technology and genetic advancements. Milk per cow could increase 1 to 4 percent. Total milk production, then, is expected to increase 2 to 5 percent. With that record output, government purchases would again be very large, perhaps approaching 16.5 billion pounds.

The chronic dairy surplus may abate somewhat in 1986 because of a new dairy buy-out program that will be implemented. The program will attempt to cut dairy output 7 percent a year by encouraging the slaughter of 600,000 dairy cows. Producers would contract with the USDA during the next 18 months and agree to slaughter their entire herd. In exchange, they would receive subsidies based on the contract bid for each gallon of milk the herd would have produced. The program will be financed through a 40 cent a pound assessment on all dairy producers beginning April 1, 1986, and a 25 cent a pound levy in 1987. Finally, the bill freezes dairy support prices at \$11.60 a hundredweight in 1986, but allows prices to drop as much as 50 cents if the dairy surplus remains large.

Conclusion

U.S. agriculture continued its difficult adjustment in 1985. That story was written in slumping farm income, declining farm asset values, and mounting numbers of farm liquidations, rural business failures, and rural bank closings. Record large crops raised crop carry-over stocks to levels that will concern commodity markets throughout the coming year.

But despite all the troublesome problems in 1985, a few bright spots did emerge. Farm legislation took shape that does move U.S. agriculture toward global market realities, albeit at a slow pace. Government commodity programs, while expensive, helped stabilize income for some producer groups. Corn growers, in particular, enjoyed healthy reve-

nues in 1985. Finally, agriculture has demonstrated remarkable resilience. There is no question that great financial pressure has been exerted on the industry. Yet, in retrospect, agriculture has adjusted at a fast but even pace. Precipitous adjustments have, for the most part, been avoided.

The year ahead will challenge agriculture's resilience again. Although livestock profits likely will improve, huge crop supplies probably will depress crop prices all year. Farm

income may decline modestly in 1986. Farm financial stress will remain highly visible and widespread across the industry. But when 1986 draws to a close, the most difficult portion of agriculture's adjustment may be nearly finished. The prolonged drop in farm asset values could be nearly complete. And if some life begins to return to world food trade, the agriculture that emerges from the current adjustment will be more able to compete in that world market.

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