

Economic Review



FEDERAL RESERVE BANK OF KANSAS CITY

December 1984

The U.S. Economy
and Monetary Policy in 1984

The Tenth District Economy:
Review and Outlook

Another Troubled Year
for U.S. Agriculture

The *Economic Review* (ISSN 0161-2387) is published ten times a year by the Federal Reserve Bank of Kansas City. Subscriptions and additional copies are available without charge. Send requests to the Research Division, Federal Reserve Bank of Kansas City, 925 Grand Avenue, Kansas City, Missouri 64198. If any material is reproduced from this publication, please credit the source. Second-class postage paid at Kansas City, Missouri. Postmaster: send address changes to the address above.

Economic Review



FEDERAL RESERVE BANK OF KANSAS CITY

December 1984

The U.S. Economy and Monetary Policy in 1984 3

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

The economy grew rapidly in the first half of 1984, as real GNP rose sharply and unemployment declined. After midyear, however, economic growth turned sluggish and unemployment leveled off. In 1985, the economy likely will expand at a moderate pace.

The Tenth District Economy: Review and Outlook 19

By Tim R. Smith and Marvin Duncan

Conditions in the Tenth Federal Reserve District improved more in 1984 than in 1983, with the district's economic performance coming more in line with the nation's. But the performance was still modest and growth is expected to slow somewhat in 1985.

Another Troubled Year for U.S. Agriculture 30

By Mark Drabenstott and Marvin Duncan

Farm income rose sharply in 1984, but heavy debts and declining asset values kept the agricultural recovery far from robust. And with softening crop prices and reduced government payments, the outlook is for continued farm stress in 1985.

The U.S. Economy and Monetary Policy in 1984

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

Midyear 1984 appears to have been an important watershed for the current economic expansion. Rapid growth through 1983 was followed by even more rapid growth in the first half of 1984, accompanied by further declines in the unemployment rate and continued moderation in inflation. After mid-1984, economic growth slowed markedly and the unemployment rate leveled off, while inflation remained moderate.

Financial developments in 1984 moved in a similar pattern. Rising interest rates and rapid money growth early in the year were succeeded by falling interest rates and sluggish money growth. Monetary policy actions also tended to move with economic developments in 1984.

This article provides a review of the economic and financial developments of 1984 and examines the factors contributing to them. The article also briefly discusses the outlook for

economic activity and the posture for monetary policy in 1985.

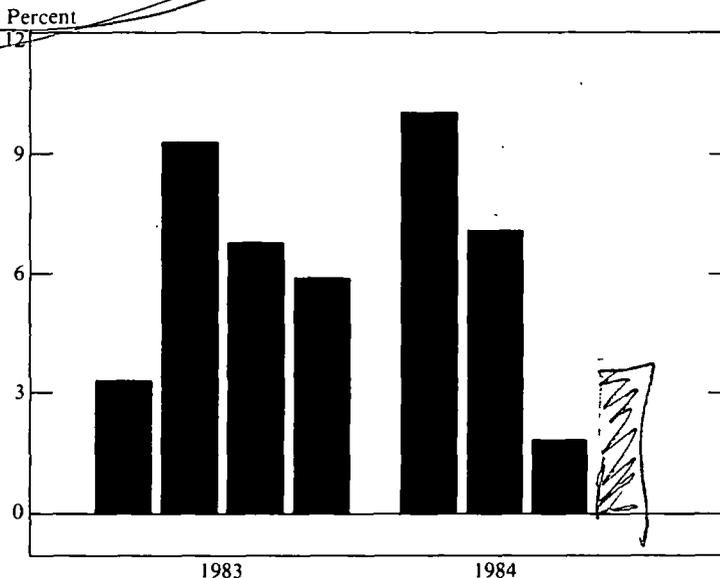
Economic performance in 1984

The first half of 1984 was a time of continued strong economic expansion. Real GNP rose sharply, the unemployment rate declined, and wages and prices continued to rise moderately. Several factors contributed to good economic performance, including monetary and fiscal policies, a strong dollar, business fixed investment, consumer spending, and labor costs and union settlements.

Stronger GNP growth in the first half of 1984 came from all major spending sectors except net exports. Real GNP grew at an annual rate of about 8.5 percent in the first half of the year, accelerating from a rate of 6.3 percent in 1983 (Chart 1). Business fixed investment continued to boom at a 21 percent annual rate in the first half of 1984, while residential construction and government purchases both increased at annual rates of about 10 percent. Personal consumption expendi-

J. A. Cacy is a Vice President and Associate Director of Research and Glenn H. Miller, Jr. is a Vice President and Economic Adviser in the Economic Research Department at the Federal Reserve Bank of Kansas City.

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



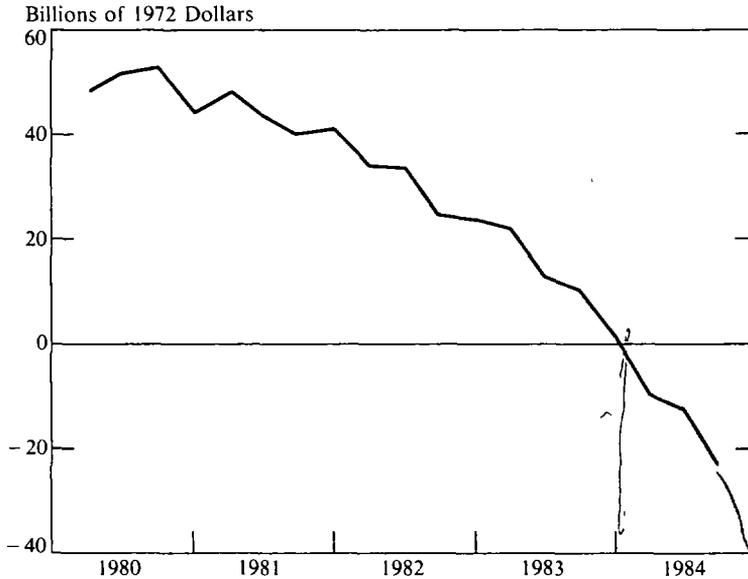
tures increased at an annual rate of about 6 percent, making up nearly half of the total dollar increase in real GNP. Inventory accumulation also contributed to strong GNP growth in the first half of 1984. Net exports of goods and services, however, continued to decline sharply (Chart 2) and made a substantial drag on GNP growth. In the first half of 1984, the increase in the real dollar value of U.S. imports was nearly four times the modest rise in U.S. exports.

Resource use, reflecting the rapid pace of economic activity in the first half of 1984, strengthened with output growth. Employment increased strongly and the unemployment rate fell from 8.2 percent at the end of 1983 to 7.1 percent in June 1984. The rate of capacity use in manufacturing rose from 79 percent at the

end of 1983 to 82 percent in June 1984.

Moderation in price inflation also continued in the first half of 1984. The GNP deflator rose at an annual rate of about 3.8 percent, and the Consumer Price Index (CPI) remained in the neighborhood of 4 percent (Chart 3). Wage inflation, as shown by the increase in the average hourly earnings index, continued to slow steadily through the first half of 1984, rising at an annual rate of just under 3.5 percent (Chart 4). Unit labor costs—compensation per hour divided by output per hour or productivity—grew at a modest 1 percent annual rate in the first half of 1984 and put little upward pressure on prices. Productivity growth accelerated, contributing even more than moderate compensation growth to keeping the rise in unit labor costs modest.

CHART 2
Real net exports of goods and services
 (seasonally adjusted annual rate)



The slowdown in economic growth after midyear was substantial. Real GNP growth was sharply lower in the third quarter—increasing at a rate of only 1.9 percent (Chart 1). All the third-quarter rise in real GNP was attributable to a more rapid accumulation of inventories. Consumption barely increased at all, as consumer purchases of both durable and nondurable goods declined. Net exports also declined sharply, as the increase in imports was about six times as large as the increase in exports. Growth in business fixed investment and government purchases was less than their rapid second-quarter advances and was not enough to offset declines in other sectors. Indicators for the autumn months, while somewhat mixed, indicate that economic activity remained sluggish in the fourth quarter.

Resource use after midyear continued to reflect the pace of economic activity. The civilian unemployment rate in November was 7.2 percent, slightly higher than its 1984 low of 7.1 percent in June. The November rate of capacity use in manufacturing was below its June level, after reaching a post-recession peak in July.

Inflation after midyear remained moderate, as the GNP deflator rose at a 3.7 percent rate in the third quarter and the CPI rose at an annual rate of 4.6 percent over the three months ending in October. Changes in wages and labor costs gave a mixed picture for the third quarter. Average hourly earnings grew more slowly in the third quarter than in the first half of 1984 and did not grow at all in October. Compensation growth was somewhat

CHART 3
Change in consumer price index
(percentage change from one year earlier)

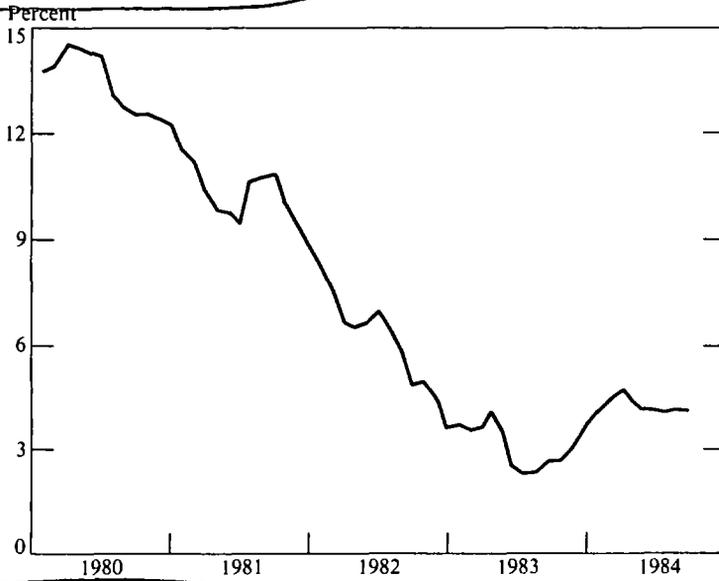


CHART 4
Change in average hourly earnings index
(percentage change from one year earlier)

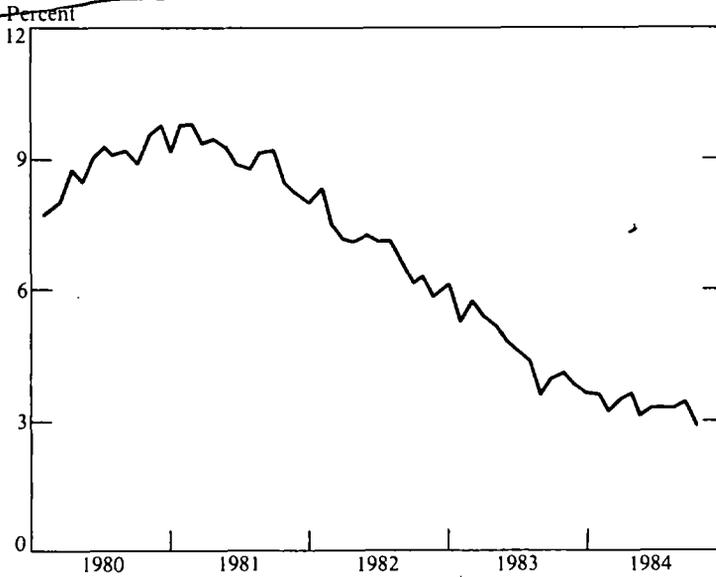
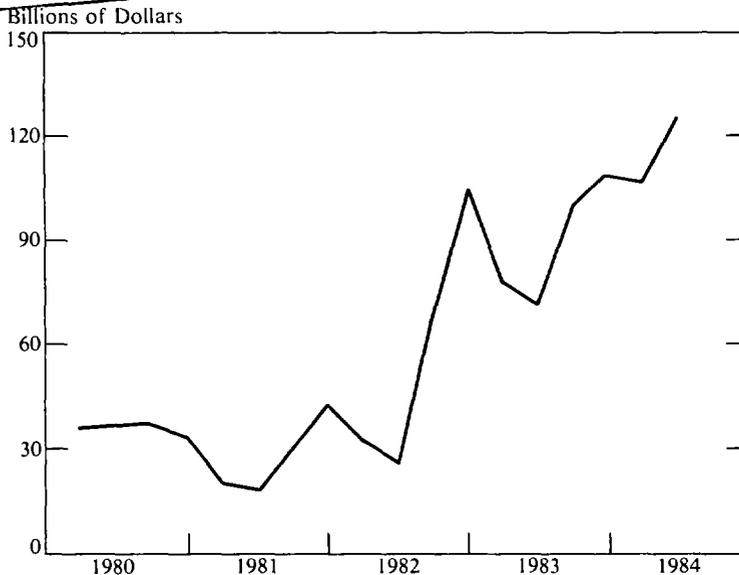


CHART 5
High employment budget deficit
 (seasonally adjusted annual rate)



1 1/2 YR
 LAG.

faster in the third quarter and combined with a decline in productivity growth to give a further-boost to growth in unit labor costs.

Factors influencing economic performance in 1984

Fiscal stimulus

While much of the recent discussion of the federal budget has focused on the potential impact of future deficits, the growing deficits of the recent past played an important role in the economy's rapid expansion in the first half of 1984. Reduced fiscal stimulus, on the other hand, may have played a role in the second-half slowdown.

Chart 5 shows the high employment deficit, a measure of fiscal stimulus. Movements in

the direction of larger deficits indicate increased discretionary fiscal stimulus, while movements toward smaller deficits show reduced fiscal stimulus.

By this measure, the large increase in the high employment deficit in the last half of 1982 indicates a fiscal policy that was rapidly becoming more stimulative. This stimulus, due importantly to the Economic Recovery Tax Act of 1981 (ERTA), was a noticeable contributor to the continuing expansion of the economy in 1983 and the first half of 1984.

As the chart shows, following an interruption to its continuing increase in the first half of 1983, fiscal stimulus in late 1983 resumed somewhat slower than in 1982. This moderation in the high employment deficit probably contributed somewhat to the slowing of economic activity since mid-1984.

Business fixed investment

Real business fixed investment (BFI), an important factor throughout this expansion, continued to contribute to the strong output growth in the first half of 1984. Following its surge to an average annual rate of 25 percent in the last half of 1983, investment growth slackened only slightly to a 21 percent annual rate in the first half of 1984. Real BFI's slower growth in the third quarter, while still strong at a 16 percent rate, did not match its earlier booming pace and thus provided less impetus to total growth after mid-1984.

Part of the purpose of ERTA was to stimulate business investment in new plant and equipment through significant reductions in business taxes. These business tax cuts permitted higher rates of return on new investment and undoubtedly contributed to the rapid growth in BFI in this expansion.

Domestic producers of investment goods have not garnered the full benefits of the boom in purchases of new plant and equipment. Import growth, much of it in the form of manufactured goods generally, has included a significant amount of investment goods, while exports of U.S. capital goods have been sluggish.

The dollar and net exports

More than investment goods production has been affected by the substantial rise in the value of the dollar since 1980 and the deterioration in the nation's net export position. Real net exports, which have fallen steadily since 1980, fell further in 1984 and were a serious drag on U.S. growth (Chart 2).

The rise in the value of the dollar has been responsible for much of the fall in net exports. Perception of the United States as a safe haven for funds, lower inflation in the United States

than abroad, and higher real interest rates in the United States have all contributed to the strengthening of the dollar's value. The weighted average exchange value of the dollar weakened slightly in early 1984 and appreciated only a little more than 1 percent in the first half of the year, after an 11 percent increase in 1983 (Chart 6). The brief period of weakening of the dollar in early 1984 was neither large enough nor prolonged enough to turn U.S. trade around. The value of the dollar rose about 9 percent in the third quarter of 1984 and in early December was about 13 percent higher than at the end of 1983.

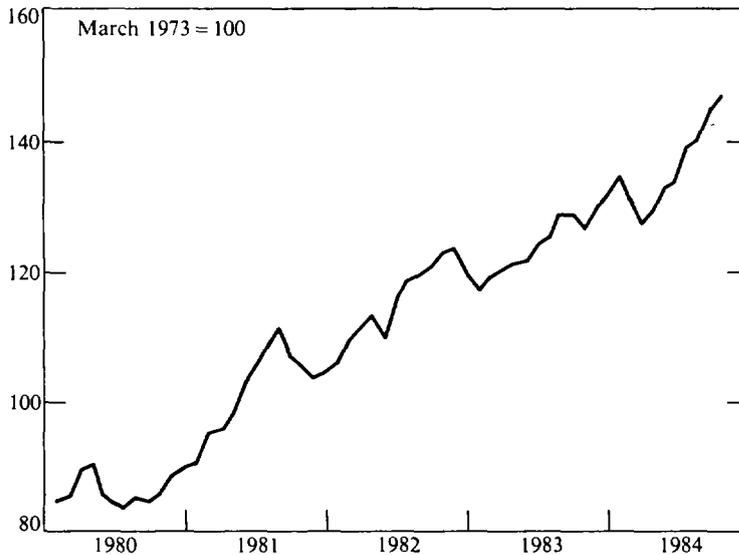
While weak foreign demand for U.S. output has been a drag on U.S. economic growth, the strong dollar has also brought increased imports into the country at lower prices. Lower import prices have helped restrain inflation in the United States, both directly and indirectly by helping hold down the prices of import-competing U.S. goods.

Labor costs and union settlements

Substantial slowing in increases in labor compensation also has contributed heavily to U.S. price disinflation. Wage disinflation occurred steadily through the fall of 1984 (Chart 4). Growth in unit labor costs also has slowed substantially, with rapid cyclical productivity growth and slow compensation growth both participating.

A significant part of the slowdown in compensation growth came from the unionized sector of the labor force. Negotiated wage concessions in several industries and subsequent lower negotiated contract settlements occurred in response to increasing foreign competition, stagnation in certain sectors of domestic business activity, and weak labor markets. As a result, average growth in compensation has recently slowed more for union

CHART 6
Weighted average exchange value
of the U.S. dollar



workers than for nonunion workers (Table 1).

Negotiated wage rate changes under major collective bargaining settlements (those covering 1,000 or more workers) moderated in both the first half and the third quarter of 1984. Settlements in the first nine months covered 1.4 million workers and brought average wage adjustments of 2.5 percent for the new contract's first year and 2.8 percent a year over the life of the contract. These increases were considerably less than the adjustments made when the same parties bargained two or three years ago—8.6 percent and 7.2 percent, respectively.

Consumption

Total personal consumption expenditures (PCE)—benefiting from disinflation, lower

TABLE 1
Employment cost index,
private industry workers*
 (percentage change for 12 months
 ending in June)

	<u>Union</u>	<u>Nonunion</u>
1980	10.2	8.7
1981	10.1	9.0
1982	8.1	6.5
1983	7.0	5.9
1984	4.9	5.7

*Changes in total compensation costs (wages, salaries, and employer costs for employee benefits), farm and household workers excluded.

interest rates, pent-up consumer demand, and gains in employment and income—played a major part in the rapid economic expansion of the first half of 1984. Durable goods purchases were especially strong, as housing and automobile sales reached peaks early in the year. Goods sales then hit the summer doldrums, and declines in consumer purchases of both durable and nondurable goods were important factors in the sharp third-quarter fall in GNP growth. Continued growth in spending for services kept total PCE growth positive, but the increase was less than 1 percent at an annual rate—a significant slowing factor for the economy since consumer spending is approximately two-thirds of total spending.

Financial developments and monetary policy

Financial developments largely mirrored developments in the economy in 1984. Interest rates rose in response to a strong economy in the first part of the year, then fell as the economy slowed in the third and fourth quarters. Similarly, relatively rapid monetary growth early in the year was followed after midyear by slower growth. Monetary policy actions generally paralleled economic and monetary developments in 1984, as the degree of reserve restraint tightened somewhat in the first part of the year and eased in the second part. These changes in the short-run stance of monetary policy reflected Federal Reserve efforts to bring about growth in the monetary aggregates consistent with low inflation and sustainable economic growth.

Interest rates

Interest rates fluctuated moderately in 1984, generally rising during the first half of the year and falling in the second half. At

yearend, most interest rates were lower than a year earlier.

Short-term interest rates began rising in January 1984, continued on an upward trend through August, and then declined sharply during the latter part of the year. For example, the 3-month U.S. Treasury bill rate rose from around 9.0 percent in early January to over 10.5 percent in late August, then fell to around 8.4 percent by the first part of December (Chart 7).

Long-term interest rates also began increasing in January but peaked in June rather than in August. For example, average yields on 30-year U.S. government bonds rose from around 11.8 percent in early January to over 13.5 percent in the last week of June, then dropped to 11.6 percent by the first part of December (Chart 8).

Movement in interest rates, as noted earlier, closely paralleled developments in the economy. The strong economy in the year's first half was accompanied by a large increase in the demand for funds, which was a major factor in the first-half upward movement in interest rates. For example, reflecting in part the strong economy, total loans at the nation's commercial banks rose at a rapid annual rate of 15.9 percent during the first six months of the year, compared with 8.6 percent in 1983. By the same token, the economic slowdown that developed in the last half of the year was accompanied by slower growth in the demand for funds, with total loans at commercial banks rising only 9.7 percent at an annual rate from July through November. This drop in the demand for funds was the major factor in bringing about lower interest rates after mid-year.

A second important factor in the interest rate picture in 1984 was the continued large demands placed on credit markets by the federal government's need to finance large budget

CHART 7
Selected short-term interest rates

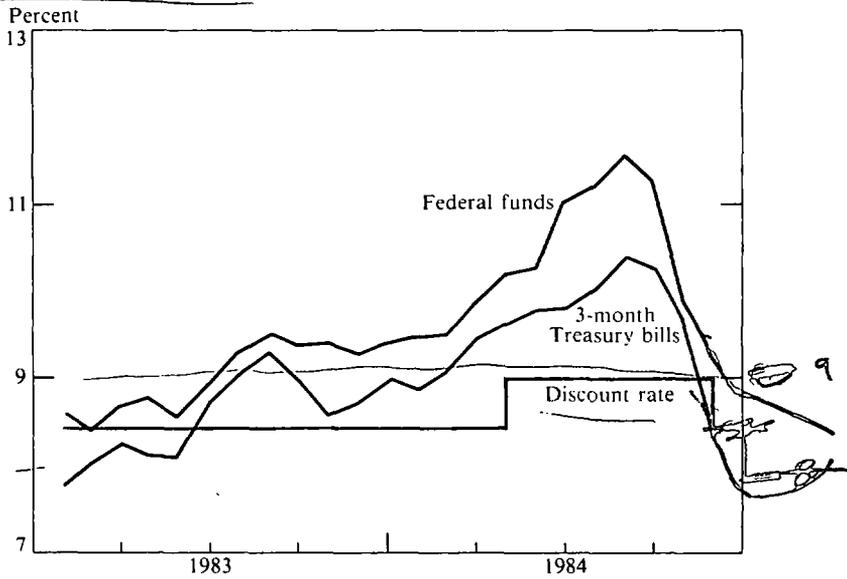
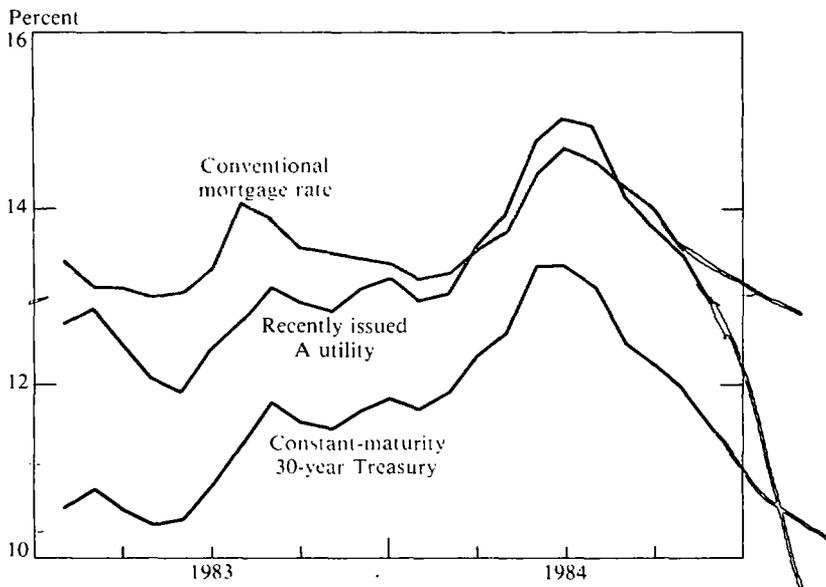


CHART 8
Selected long-term interest rates



deficits. In the first half of the year, this factor reinforced the upward pressure on interest rates emanating from the strong economy. Similarly, in the last part of the year, the continued large budget deficit partly countered the downward pressure on interest rates coming from the cooling economy, keeping interest rates from declining as much as they would have done otherwise.

The impact of the budget deficit can be seen by considering the behavior of real interest rates in 1984. The real interest rate, the nominal rate less the rate of inflation, represents the real cost of funds to borrowers, after adjustment for the decline in the burden of debt repayment caused by inflation. Real interest rates have remained at historically high levels in recent years. For example, the real prime interest rate rose sharply in 1980 and 1981 and has remained at a high level throughout the early 1980s (Table 2). The real prime rate declined in the latter part of 1984, reflecting the economic slowdown. In the fourth quarter, it averaged 8.1 percent, lower than in 1980 and 1981 but significantly higher than in the 1970s. The tendency for real interest rates to persist at high levels reflects to an important extent the impact of historically high budget deficits.

Monetary policy was a third factor affecting financial markets in 1984. A moderate firming in the degree of reserve restraint reinforced upward pressure on interest rates during the first part of the year, while an easing in the short-run policy stance supported the decline in rates in the latter part of the year.

Monetary aggregates

In line with the rapid economic growth of the first half of 1984, the nation's monetary aggregates grew fairly rapidly in the first and second quarters of the year. As the economy

TABLE 2
Nominal and measured real prime rates

Date	Nominal	Real
1970-74	7.5	1.5
1975-79	8.6	1.8
1979	12.7	4.7
1980	15.3	5.5
1981	18.9	10.2
1982	14.9	10.7
1983	10.8	7.1
1984	12.0	8.3
1984:Q1	11.1	6.7
Q2	12.3	9.0
Q3	13.0	9.3
Q4	11.8	8.1

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 the fourth quarter assumes that the prime rate averaged 11 percent in December and that the inflation rate equaled that of the third quarter.

cooled after midyear, however, aggregate growth slowed, although growth apparently accelerated toward yearend.

For 1984 as a whole, M1 and M2 grew less rapidly than in 1983, while M3's growth was about the same in the two years. During the period from the fourth quarter of 1983 through November 1984, the narrowly defined money supply, M1, rose at a rate of 5.0 percent, sharply less than 1983's 10.0 percent growth (Table 3). The more broadly defined money supply, M2, rose at a rate of 7.5 percent during the first 11 months of 1984, also sharply less than in 1983, when M2 grew 12.1 percent. M3, a broadly defined money concept, rose at a rate of 10.0 percent during the fourth quarter 1983-November 1984 period, compared with 9.7 percent in 1983.

The slower growth in M1 and M2 in 1984 reflects rapid increases in the velocity or turn-

TABLE 3
Growth of the monetary aggregates: 1980-84
 (percentage change at annual rates)

<u>Period</u>	<u>M1</u>	<u>M2</u>	<u>M3</u>	<u>Domestic Non-financial Debt</u>
1982	8.7	9.5	10.6	9.1
1983	10.0	12.1	9.7	10.8
1984: First 11 Months*	5.0	7.5	10.0	13.4
1984: Q1	7.2	6.9	8.9	12.9
Q2	6.2	6.9	10.3	13.1
Q3	4.5	6.2	8.2	12.7
Sept.	4.8	7.7	7.7	10.2
Oct.	-7.4	6.0	10.7	11.4
Nov.	8.6	14.9	15.9	14.2

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), and overnight repurchase agreements and certain Eurodollar deposits.

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

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

*Fourth-quarter 1983 through November 1984.

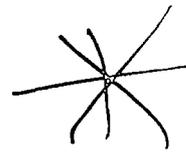
over of money. For example, the velocity of M1 rose at a rate of 4.2 percent during the first three quarters of 1984, compared with a growth of 0.3 percent in 1983 and an average increase of 0.4 percent during the 1980-83 period. M2's velocity rose in the first three quarters of 1984 at a rate of 3.6 percent, in contrast with declines both in 1983 and during the 1980-83 period (Table 4). This greater increase in the velocity of money in 1984 indicates the public was economizing more on money balances than earlier. Due to this

greater economizing, the public's demand for money grew less rapidly in 1984, and the slower growth in demand for money contributed to a slower monetary growth rate.

Monetary policy

Monetary policy continued to be guided in 1984 by the need to bring about moderate growth in the monetary aggregates consistent with continued long-run progress against inflation as well as continued growth in the econ-

TABLE 4
Growth of nominal GNP, M1, and velocity of M1 and M2



Period	GNP	Money Supply		Velocity	
		M1	M2	M1	M2
1970-79	16.0	8.9	15.4	3.8	0.2
1980-83	9.3	8.8	11.6	0.4	-0.6
1980	9.3	7.4	8.9	1.8	0.3
1981	10.7	5.2	9.3	5.2	1.2
1982	2.7	8.7	9.5	-5.5	-6.2
1983	10.4	10.0	12.1	0.3	-1.5
1984: First Three Quarters	10.2	6.1	6.8	4.2	3.6
1984:Q1	14.2	7.2	6.9	6.9	7.1
Q2	10.3	6.2	6.9	4.1	3.4
Q3	5.5	4.5	6.2	1.6	0.1

omy at a sustainable pace.

In seeking moderate monetary growth in 1984, the System's Federal Open Market Committee (FOMC) established growth rate ranges for the various monetary aggregates.

For the period from the fourth quarter of 1983 to the fourth quarter of 1984, M1's growth rate range was established at 4 to 8 percent, while the ranges for M2 and M3 were both set at 6 to 9 percent. A range was also set for total domestic nonfinancial debt at 8 to 11 percent.¹

As the FOMC implemented monetary policy during the first six months or so of 1984, the Committee acted to tighten somewhat the degree of restraint on bank reserve positions. This tightening in the short-run stance of policy was effected in response to greater than expected growth in the monetary aggregates, especially M1, in the context of greater than

expected growth in the economy.

While monetary growth during the first six months of 1984 was broadly consistent with FOMC expectations and objectives, most of the monetary aggregates grew somewhat more rapidly than expected. For example, the FOMC expected M1 to grow at a rate of 7.0 percent during the December 1983-March 1984 period and at a rate of 6.5 percent during the March 1984-June 1984 period. As it turned out, M1 increased at a rate of 7.3 percent in the December-March period and 8.1 percent in the March-June period. While M2 grew somewhat less rapidly than expected in the first half of 1984, both M3 and domestic nonfinancial debt grew more rapidly than expected.²

Under the FOMC's operating procedures, this tendency for the monetary aggregates to

¹ *Record of Policy Actions of the Federal Open Market Committee*, meeting held on January 30-31, 1984, p. 17.

² For expected first-half monetary aggregate growth rates, see *Record of Policy Actions of the Federal Open Market Committee*, meetings held on January 30-31, 1984, March 26-27, 1984, and May 21-22, 1984.

grow more rapidly than expected would ordinarily be accompanied by a tightening in the short-run stance of monetary policy. Thus, the monetary policy directive issued following the March FOMC meeting, after stating that the Committee seeks to maintain pressures on bank reserve positions consistent with stipulated growth in the money supply, indicated that

Greater restraint would be acceptable in the event of more substantial growth of the monetary aggregates, while somewhat lesser restraint might be acceptable if growth of the monetary aggregates slowed significantly. . . .³

The short-run stance in monetary policy, however, is not automatically altered when the money supply grows more or less rapidly than expected. Other factors are considered. For example, in the above directive, the FOMC stated that a change in the degree of reserve pressure in response to the emergence of unexpectedly high or low monetary growth

. . . would be considered in the context of appraisals of the continuing strength of the business expansion, inflationary pressures, and the rate of credit growth.⁴

Thus, in making changes in the short-run stance of policy in 1984, the Federal Reserve evaluated the behavior of the money supply in the context of other developments, such as the course of the economy and inflation.

As was noted, the economy grew rapidly during the first half of 1984. In fact, economic

³ *Record of Policy Actions of the Federal Open Market Committee*, meeting held on March 26-27, 1984, p. 13.

⁴ *Record of Policy Actions of the Federal Open Market Committee*, meeting held on March 26-27, 1984, p. 13.

growth was much greater than the FOMC expected. The FOMC members expected the economy to continue expanding in 1984, although at a slower rate than in 1983. For the period from the fourth quarter of 1983 through the fourth quarter of 1984, FOMC members expected real GNP to increase between 3.5 and 5.0 percent.⁵ In the first half of 1984, though, real GNP grew at a rate of 8.5 percent.

The stronger than expected economic growth provided the appropriate context for responding to relatively rapid monetary growth by firming the short-run stance of policy. As a result, the pressure on bank reserve positions was tightened some. This tightening was accompanied by an increase in adjustment plus seasonal borrowing at the discount window from an average of \$712 million in January to \$974 million in August, while the federal funds rate rose from an average of 9.6 percent in January to 11.6 percent in August.⁶ Also, the discount rate was increased from 8.5 percent to 9.0 percent on April 9, 1984.

During the latter part of 1984, the FOMC acted to reduce the restraint on bank reserve positions. This easing in the short-run policy stance was in response to sluggish growth in the monetary aggregates, in the context of the economic slowdown.

In general, the money supply grew much less rapidly than expected during the last half

⁵ *Record of Policy Actions of the Federal Open Market Committee*, meeting held on January 30-31, 1984, p. 7.

⁶ Adjustment plus seasonal borrowing was considerably higher than the August level in the April-June period due mainly to borrowing by a bank having liquidity problems. Later, borrowing by this bank was classified as extended rather than adjustment borrowing. Also, the federal funds rate rose more during the January-August period than normal, given the relatively small increase over the seven-month period in adjustment plus seasonal borrowing. The relatively large increase in the funds rate was due to a greater than normal reluctance on the part of some banks to borrow at the discount window that developed over the late spring and summer months.

of the year. For example, M1 was expected to grow at a rate of 5.5 percent during the June 1984-September 1984 period and at a rate of 6.0 percent during the September 1984-December 1984 period.⁷ During the five months ending in November, however, M1 grew at a rate of only 1.4 percent.

As the economic growth rate slowed the second half of the year, the Federal Reserve responded to this weakness in the money supply and the economy by bringing about an easing in the stance of policy. The Record of Policy Actions for the meeting held on October 2 notes:

Against the background of monetary growth that was weaker than anticipated, indications of a slowing in the pace of economic advance, and a rapidly rising dollar in foreign exchange markets, open market operations were conducted, as the intermeeting period [the period between the August 21 meeting and the October 2 meeting] progressed, so as to lessen pressures on bank reserve positions.⁸

The record goes on to say that adjustment plus seasonal borrowing declined between meetings and the easing in bank reserve positions was reflected in a decline in the federal funds rate.

Further declines in borrowing and the federal funds rate developed after the October FOMC meeting. During the four weeks that ended

⁷ For expected second-half monetary aggregate growth rates, see *Record of Policy Actions of the Federal Open Market Committee*, meetings held on July 16-17, 1984, August 21, 1984, and October 2, 1984. At the August 21 meeting, the expected growth of M1 for the June-September period was revised to 5 percent.

⁸ *Record of Policy Actions of the Federal Open Market Committee*, meeting held on October 2, 1984, p. 5.

December 5, the level of borrowing declined to \$675 million, compared with \$974 million in August. The federal funds rate declined to around 8.8 percent in the first week of December, compared with around 11.8 percent at the end of August. On November 21, 1984, the discount rate was lowered from 9 percent to 8.5 percent.

As the Federal Reserve altered its short-run policy stance in 1984 in response to the monetary and economic developments, the growth rates of M1 and M2 for the year as a whole remained within their established growth rate ranges. The growth rate of M1 through November 1984 was moderately below the midpoint of its FOMC range. M2's 11-month growth rate was at the midpoint of its range, while M3's growth rate was above the upper end of its range. For the period from the fourth quarter of 1983 through October 1984, the growth rate of total domestic nonfinancial debt also exceeded its 1984 growth rate range (Table 5).

The outlook for 1985

The factors important in the economy in 1984 are likely to continue to play significant roles in 1985. Increases in the high employment deficit are expected to be moderate in the near term, implying only moderate additional fiscal stimulus. Some modest weakening in the dollar's value is still expected, but not enough to affect net exports significantly or to relax the dollar's downward pressure on U.S. prices. With a rapidly rising factory use rate no longer in evidence, the pressure for increased business fixed investment has been lessened. According to survey results, businesses intend to increase their purchases of new plant and equipment by about 4 percent in 1985, following an estimated 13 percent increase in 1984—both in real terms. Consumers appear to be fairly con-

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

<u>Period</u>	<u>M1</u>	<u>M2</u>	<u>M3</u>	<u>Domestic Non-financial Debt</u>
1984 Actual*	5.0	7.5	10.0	13.4
1984 FOMC Growth Ranges	4-8	6-9	6-9	8-11

*Growth rate from fourth-quarter 1983 through November 1984.

fidant and reasonably liquid, which should combine with expected income growth to provide moderate growth in consumer spending. With little, if any, further tightening in labor markets expected, only modest pressures of rising labor costs on prices are expected.

Given these factors, the pace of economic expansion is likely to remain moderate in 1985. Real GNP is expected to grow in the neighborhood of 3 percent for 1985, somewhat more than in 1984's last half but lower than in 1984 as a whole.⁹ Inventory investment will probably contribute little if anything to total output growth. Among final demand sectors, government purchases, especially defense purchases, should support growth, as should consumer expenditure growth at a somewhat more rapid pace than in late 1984. Growth in business fixed investment will be an important contributor to total economic activity, but plant and equipment spending growth will be well below the pace of 1984. Residential construction is likely to provide only minor support to

overall growth. Finally, net exports are expected to continue to be a drag on GNP growth, even if the dollar weakens modestly, as is widely expected.

Real GNP expansion in 1985 at the expected 3 percent pace, which is near the economy's long-run trend growth rate, will allow little further reduction in unused resources. The overall unemployment rate and the capacity use rate in manufacturing may be expected to improve only slightly, at best, through 1985.

The rate of inflation is likely to increase moderately as the expansion continues. Further increases in compensation growth can be expected to combine with a slowing of productivity growth from its recent cyclical surge to bring somewhat more rapid growth in labor costs and an associated upward pressure on prices. Overall, inflation should continue to benefit from a relatively favorable behavior of food and energy prices. While the effect of a sharp and large decline in the value of the dollar is perhaps the greatest risk to continued moderate inflation, such a decline is not generally expected.

Monetary policy in 1985 will continue to seek moderate growth in the monetary aggregates and tentative growth rate ranges for 1985 were established at the July 1984 FOMC meeting. In line with the goal of further progress

⁹ A 3 percent real GNP growth, from the fourth quarter of 1984 through the fourth quarter of 1985, is consistent with the midpoint of the range projected by the members of the Federal Open Market Committee. See the transcript of the Statement by Paul A. Volcker, Chairman, Board of Governors of the Federal Reserve System, before the Joint Economic Committee, July 30, 1984.

over time in reducing inflation, these tentative ranges were set somewhat lower than the 1984 ranges. M1's tentative growth rate range for the period from the fourth quarter of 1984 through the fourth quarter of 1985 was set at 4 to 7 percent, slightly less than the 1984 range of 4 to 8 percent. M2's tentative 1985 range is also lower, 6 to 8.5 percent, compared with 6 to 9 percent in 1984. The tentative 1985 range for M3 is 6 to 9 percent, the same as in 1984. Also, the tentative range for domestic nonfinancial debt was set at the 1984 range of 8 to 11 percent. These tentative growth rate ranges will be updated when the FOMC meets in early 1985.

In conducting monetary policy in 1985, it is likely that the Federal Reserve will continue to be guided by the behavior of the monetary aggregates relative to the growth rate ranges. The need for policy actions due to any emergence of unexpectedly high or low monetary

growth is likely to be evaluated in the context of broader economic and financial developments, as was the case in 1984. Under these circumstances, the course of interest rates in 1985 will reflect developments in the economy and with regard to inflation and the federal budget deficit. Given the outlook for moderate economic growth and continued low inflation in 1985, the outlook for interest rates depends heavily on budget developments. If no progress is made in reducing the large deficits, interest rates may tend to firm¹ if, as expected, economic activity accelerates from the sluggish pace of late 1984. On the other hand, significant progress in reducing the budget deficit in 1985 could be expected to alleviate credit market pressures and set the stage for a sustainable decline in real interest rates that would support good economic performance in 1985 and beyond.

The Tenth District Economy: Review and Outlook

By *Tim R. Smith and Marvin Duncan*

For the Tenth Federal Reserve District, as for the nation, 1984 was another year of economic expansion. Despite sluggish growth toward yearend, the district's pace of expansion for the year as a whole was more lively than in 1983. Based on available data, growth was greater in 1984 than in 1983 for all the district states—New Mexico, Colorado, Nebraska, Kansas, Missouri, Oklahoma, and Wyoming.¹ As a result, the district's economic performance matched that of the nation more closely in 1984 than in 1983. Stronger growth in several important district industries accounts for the district's stronger relative performance. The district economy is expected to continue expanding in 1985, though at a more moderate pace than in 1984.

Overview of the district

Economic activity increased more rapidly across the Tenth District in 1984 than 1983, as shown by greater growth in both income and employment. Real personal income in the district rose at an annual rate of 6.6 percent in

the first three quarters of 1984, considerably more than in 1983 (Chart 1).² Employment growth also improved in 1984. District employment rose at a rate of 2.8 percent in the first three quarters of 1984, compared with less than 1 percent in 1983 (Chart 2). The district's unemployment rate continued to decline through the first half of 1984, though it turned slightly upward in the third quarter (Chart 3). Income and employment no doubt grew less rapidly in the fourth quarter than in the previous three quarters. Nevertheless, it is not likely that this slower yearend growth reduced growth for the year below that of 1983.

In addition to showing an improved per-

¹ Third quarter data are estimates based on the most current monthly data available.

² Growth in district real income during the first quarter of 1984 was large because of payments under the Payment-In-Kind (PIK) program, especially in Nebraska and Kansas. See also Chart 5.

Tim Smith is an economist with the Economic Research Department at the Federal Reserve Bank of Kansas City. Marvin Duncan is a vice president and economist with the Federal Reserve Bank of Kansas City. Marla Borowski, a research associate, assisted in preparing this article.

CHART 1
Growth in real person income (seasonally adjusted annual rates)

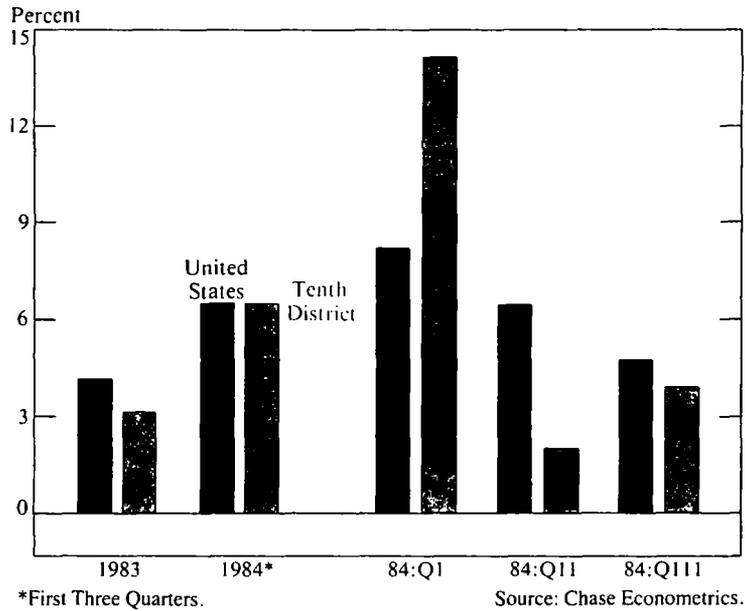


CHART 2
Growth in nonagricultural employment (seasonally adjusted annual rates)

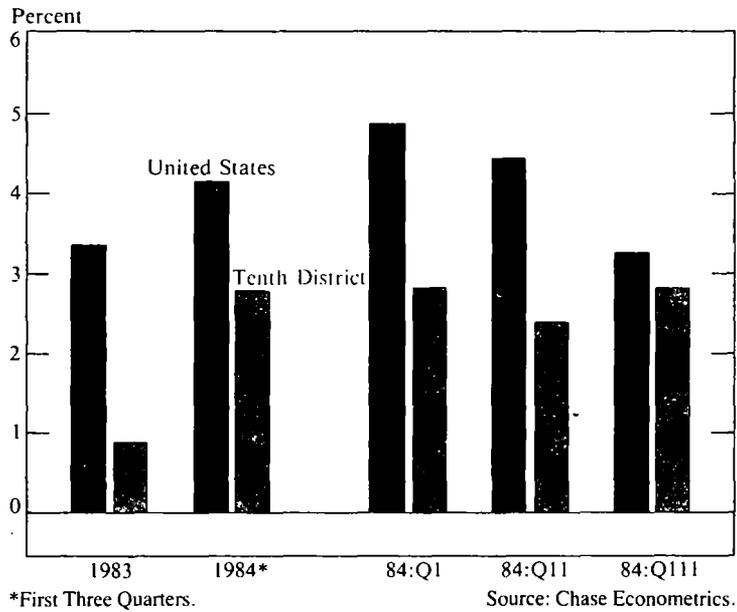
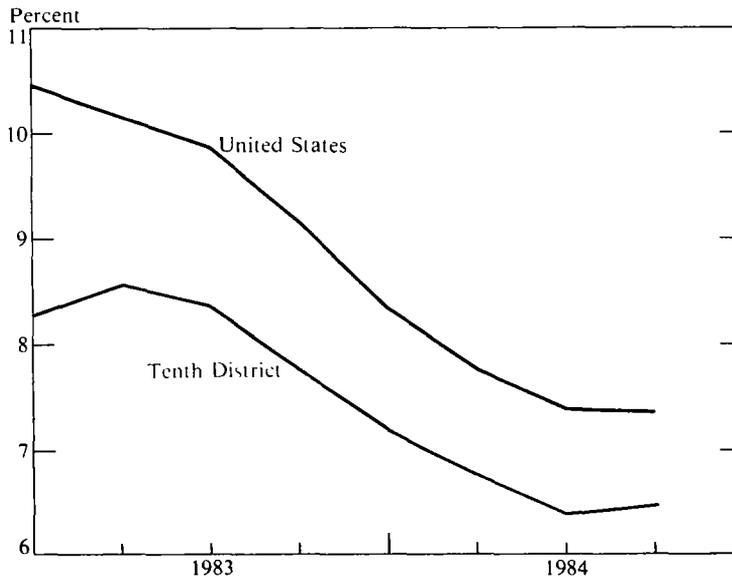


CHART 3
Unemployment rate



Source: Chase Econometrics.

formance over 1983, the district economy also performed better in 1984 relative to the nation. The district's real personal income growth was only about three-fourths that of the nation's in 1983. In 1984, income growth in the district equaled that of the nation. Similarly, employment growth in the district more closely approached national employment growth in 1984 than in 1983.

Despite stronger performance in 1984, the district's performance during the current economic recovery has been unusually weak. For example, during the first seven quarters of the recovery—from the fourth quarter of 1982 through the third quarter of 1984—district employment increased at an annual rate of only 1.7 percent, less than half the increase for the nation. In sharp contrast, during the first seven quarters of the recovery from the

1974-75 recession, district employment grew at a rate of 3.3 percent, higher than the national employment growth rate and twice the district pace during the current recovery. The weaker recent performance at the district level reflects weakness in energy, agriculture, capital goods manufacturing related to energy and agriculture, and general aviation manufacturing. All of these sectors were strong in the earlier recovery.

Sectoral performance

The diversity of the Tenth District economy contributed to its increased strength during 1984. Several sectors—nonresidential construction, high technology, and automobile manufacturing—showed particularly strong growth. Agriculture, although troubled by

large supplies of farm products and weak market growth, did better than in 1983. Other sectors, such as energy and general aviation manufacturing, showed weak growth.

Energy and mining

A strong rebound remained elusive for much of the district's energy industry during 1984. The industry continued to be buffeted by weak world demand and soft energy prices.

There were some increases in energy production. Cumulative production of crude oil in the district for the first six months of 1984 was 3.3 percent higher than for the same period in 1983, although the district's monthly crude production was relatively stable during the first six months of 1984. District natural gas production fared better, showing renewed strength in 1984. Through June 1984, cumulative marketed production of natural gas exceeded production for the same period a year earlier by 19 percent. Coal production in the district increased, reflecting the increased demand for coal used in generating electrical power as the nation's economy expanded. Tonnage mined through the second quarter of 1984 exceeded that mined during the same period a year earlier by about 26 percent.

Weak growth in the energy industry was further reflected in only slight increases in oil and gas exploration and development. The average weekly number of drilling rigs working in the district was only 690 through October 1984, slightly more than in 1983 but about half the record number working in 1982.

Growth in other mining was slow and uneven over the past year. Uranium mining in the district has been hit hard in recent years by an oversupply in international markets and a virtual standstill in the growth of the domestic nuclear power industry. In addition, district copper mining appears to be in a secular

decline, as does U.S. copper mining generally. Competition from foreign producers has depressed the world price of copper, while a strong U.S. dollar in foreign exchange markets made imported copper even more attractive during 1984. Other mining activity, however, has begun a slow recovery. Molybdenum, soda ash, and precious metals posted modest gains in production during 1984.

Agriculture

Although 1984 brought higher net farm income to an austere rural economic landscape, for most farm communities there was little or no recovery from the prolonged farm recession. Businessmen in rural communities saw farmers cut their discretionary purchases. Farmers also sharply curtailed their purchases of capital goods, such as tractors, combines, and farm buildings, with the result that rural capital goods dealers saw sales plummet. The sales volume of firms selling seed, fertilizer, and pesticides is closely linked to planted acreage of crops, and hence such volume grew as a result of larger 1984 planted acreage. But prices of these supplies were under downward pressure that limited profit margins for most suppliers.

Manufacturing

Manufacturing in the Tenth District picked up some momentum during 1984. Strong gains in automobile manufacturing and to a lesser extent in high technology manufacturing compensated for weaker growth in energy and agriculture-related manufacturing. Overall, district gains in manufacturing employment over the first three quarters of 1984 reached an annual rate of 4.5 percent, compared with an increase of only 3.2 percent in 1983.

The automobile industry fared very well in district states in 1984. This was a particularly good model year, with plants in district states recording a sharp 79 percent increase in production above 1983 model-year levels. District plants continue to operate at capacity as they move into the 1985 model year. The performance in the district's high technology industry was mixed during 1984. While defense-related firms performed well, some computer software and peripheral firms recently reduced employment to stem financial losses resulting both from excess capacity in the industry and inability to keep pace with a rapidly changing market environment.

The district's important energy and farm equipment-based manufacturing showed no significant growth in 1984. Declines in world prices for oil and gas and reduced domestic drilling kept demand for oilfield equipment soft. After declining substantially in the previous two years, farm equipment sales for 1984 indicate that the expected large increase in sales of big-ticket items—combines and tractors—did not materialize.

The recovery in the district's large general aviation industry also was slow in 1984. The value of aviation production showed some signs of gain through the first half of the year, reflecting a trend toward greater production of more expensive jet and propeller-driven aircraft. But the quarterly average number of aircraft produced declined nearly 30 percent over that period, with no clear evidence of recovery. The picture looked much better for production related to military contracts and civilian jetliners, with substantial gains in employment resulting for a major district producer.

Construction

Construction was a major source of strength to the district's expansion in 1984. Perform-

ance in the district's important residential construction industry generally matched that of the nation. District housing starts reached an annual rate of 176,000 units in the second quarter of 1984 before declining somewhat along with national starts in the second half of the year. The 1984 performance compares with about 169,000 starts in 1983.

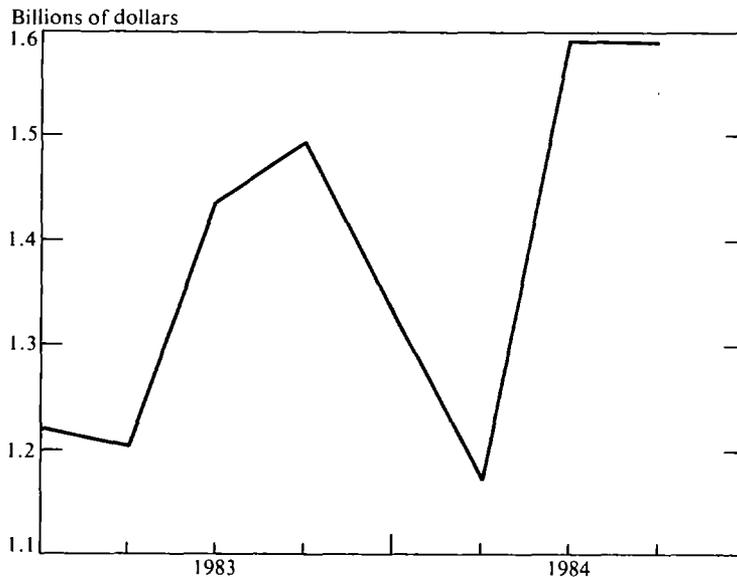
The value of nonresidential building contracts was up 5.5 percent through the third quarter of 1984 from the same period a year earlier, evidence of growing strength in the industry (Chart 4). Kansas City and Omaha exhibited great strength and, after only a brief recession-induced pause, the tempo of construction in Colorado Springs, Denver, Albuquerque, and Santa Fe again quickened. Activity in Oklahoma City and Tulsa, both hard hit by the energy recession, remained very weak.

Services, retail trade, and wholesale trade

There was considerable growth during 1984 in the service sector in the Tenth District, although growth was less than for the U.S. as a whole. Service employment in the district increased at an annual rate of 2.4 percent between the fourth quarter of 1983 and the third quarter of 1984 compared with 2.1 percent a year earlier. Nationwide, employment in services increased 4.7 percent in both periods.

Growth in district employment in wholesale and retail trade also improved over the same period, but again the growth was less than for the nation as a whole. Employment in the district's wholesale and retail trade increased 3.1 percent in 1984, compared with 4.5 in the nation. These improvements, compared with essentially unchanged employment in trade in 1983, reflect improvement in a number of sectors across the district.

CHART 4
Value of nonresidential construction contracts
(Tenth District)



Source: F. W. Dodge Construction Potentials.

Government

For several of the states in the Tenth District, spending by the federal government was a source of economic growth in 1984. The Energy and Defense departments accounted for a large part of the federal spending in the district. Military spending was important in all the district states except Wyoming and Nebraska, where this spending was substantially less than that in other states.

Increases in state government spending were especially strong in fiscal 1984 in all district states except New Mexico and Oklahoma. Overall, the increase averaged an estimated 8 percent more for the district in fiscal 1984 than in fiscal 1983. Growth in spending was supported in some states of the district by special nonrecurring tax revenues. In a number of cases, these revenues have been related to

court adjudicated mineral severance tax collections.

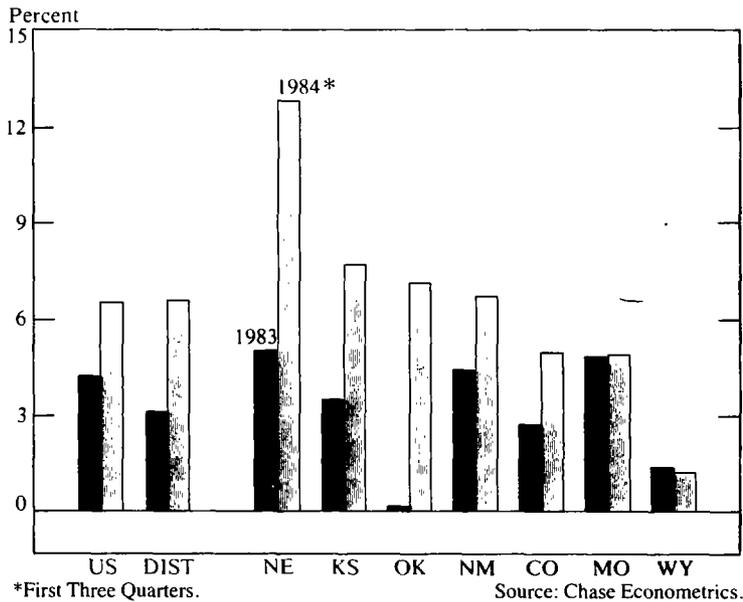
State performance

As in the district as a whole, economic activity in each of the district states grew more rapidly in 1984 than in the previous year. For most states, growth in real personal income during the first three quarters of 1984 was higher than in 1983 (Chart 5). Employment growth in every state also was stronger than in 1983 (Chart 6).

New Mexico

Economic growth was especially strong in New Mexico. Income and employment growth was considerably stronger during the first three quarters of 1984 than in 1983. This

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



growth can be attributed to strength in all important sectors.

Although all sectors performed well, movement toward new high-technology industries contributed to particularly sharp increases in employment in manufacturing and construction. High-technology activity was especially important in Albuquerque, Las Cruces/Alamogordo, and Santa Fe/Los Alamos, where national research laboratories and state universities provided a compatible atmosphere for firms engaged in electronics, communications, aerospace, energy, and national defense research and contracting.

Mining activity showed a sharp turnaround in 1984, increasing faster in New Mexico than in the nation as a whole. This growth was in contrast to a substantial decline in mining activity in 1983. Almost all of the gain in 1984 was due to moderate increases in produc-

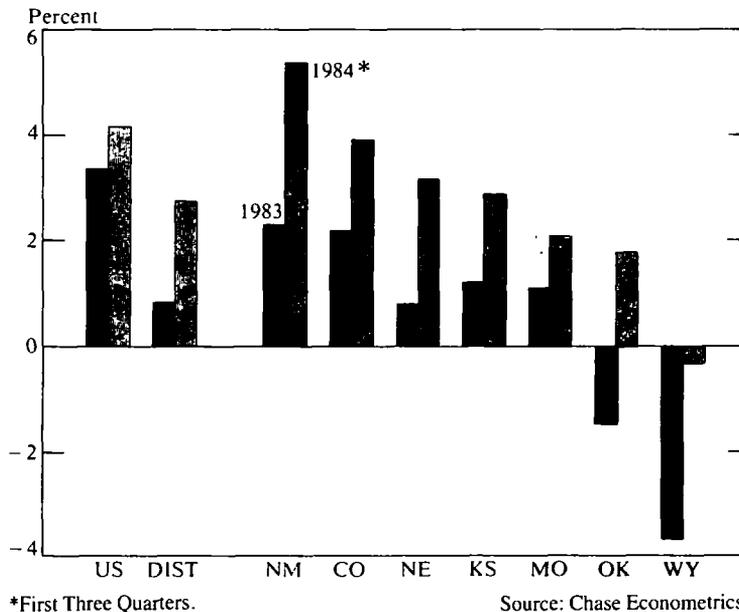
tion of oil, gas, and coal. On the other hand, copper and uranium mining in New Mexico have shown essentially no growth during the year after having been hit hard by low world prices and, in the case of uranium, an uncertain future for nuclear power generation in the United States.

The federal government was a major contributor to New Mexico economic growth in 1984. Federal spending and employment have increased far more than the national average in New Mexico because of the large number of defense contracts let to the state's high-technology firms and its substantial number of military installations.

Colorado

Colorado was another strong performer in 1984. Both employment and income in the

CHART 6
Growth in nonagricultural employment
 (seasonally adjusted annual rates)



state grew at annual rates during the first three quarters that exceeded the rates in 1983. Although the state's economy is quite heterogeneous, manufacturing and construction had especially positive effects on growth in 1984.

The increase in high-technology activity along the Front Range from Fort Collins to Colorado Springs was a source of manufacturing growth through mid-1984. Since then, there has been some slowing, particularly in computer peripheral manufacturing.

Along with the growth in the manufacturing sector were considerable increases in construction activity, particularly in the rapidly growing metropolitan areas along the state's Front Range. However, high vacancy rates for office space in downtown Denver had a cooling effect on growth in nonresidential construction there during 1984, despite continued strong growth in suburban office parks.

Another center of construction activity was Colorado's ski resorts. Significant condominium development, as well as more generalized ski industry-related construction was evident in several mountain areas in 1984. This activity reflects the importance of recreation to the Colorado economy. The 1983-84 ski season was particularly long and successful. During that season, skier visits increased by 5.1 percent, adding more than 2,000 to ski industry employment.

Federal government activity, particularly military spending, was important to the Colorado economy in 1984. A notable development was the decision to locate the Consolidated Space Operations Center in Colorado Springs.

Nebraska

Economic growth in Nebraska was moderate during 1984. While growth in real personal

income was much greater during the first three quarters of the year than in 1983, a substantial part of this strength was due to improvement in farm income, an important component being Payment-in-Kind (PIK) program subsidies to Nebraska farmers. Employment growth showed a less dramatic increase, indicating moderate overall economic performance. Increased farm income in the state stimulated services and wholesale and retail trade. Food product manufacturing gained some strength, but farm equipment manufacturing remained weak.

The service sector grew substantially more than in 1983, and wholesale and retail trade increased even more. Food processing, the largest manufacturing industry in Nebraska, gained some strength in 1984, contributing to an increase in the overall growth of manufacturing. This growth stemmed from a stronger national market for food products.

Nebraska's heavy dependence on agriculture, coupled with soft product prices in recent years, resulted in more financial stress than in most other states of the district. Thus, despite higher farm income, the state's farm equipment manufacturing industry remained weak. For example, sales of big ticket items like tractors and combines were down from a year before.

Kansas

Kansas, another state where agriculture is important, also showed moderate growth during 1984. As in Nebraska, growth in income was much greater during the first three quarters of 1984 than during 1983, due partly to improved farm incomes and to the PIK program. Employment growth increased less than income growth, reflecting mixed performances across sectors. Automobile manufacturing and mining contributed most to growth in 1984 while general aviation manufacturing showed little strength during the year.

The state's performance in manufacturing was bolstered predominantly by a thriving automobile industry centered in the Kansas City area. Production for the 1984 model year was up 22 percent over the 1983 model year.

Energy mining, especially oil and gas, improved in Kansas in 1984. Cumulative crude oil production, from predominantly stripper wells, was up 4.5 percent in the first half of 1984 over the same period in 1983. The increase in natural gas production was more dramatic. Although monthly gas production declined between January and June 1984, cumulative production over that period was up from a year earlier by almost 33 percent.

The state's important general aviation manufacturing industry, centered in the Wichita area, remained weak during 1984. The widespread availability of used aircraft at attractive prices substantially affected the market for new aircraft. Weak world economic growth and the strong U.S. dollar also limited foreign sales of new aircraft. The situation was much better for production related to military contracts and large civilian air transports, with substantial gains in employment resulting for a major Kansas producer.

Missouri

The Missouri economy showed only modest growth in 1984 compared with 1983. Growth in income during the first three quarters of 1984 was about the same as in 1983, while employment growth was somewhat stronger than in 1983. The 1984 improvement came mainly from manufacturing and construction. Overall, growth in the state's economy was perhaps less than expected because of the poor performance of the state's agricultural sector.

Most important among Missouri's manufacturing industries is automobile production. With plants operating at capacity throughout

the 1984 model year, production is estimated to have nearly doubled compared with the 1983 model year. Another contributor to manufacturing growth was high technology, though its effects were not as pronounced as in New Mexico and Colorado.

Construction was also a major source of growth in Missouri. The upswing was particularly strong in Kansas City, where work began on several new office towers. The value of nonresidential construction contracts through August 1984 was 18 percent higher than a year earlier.

Farm earnings did not boost personal income in Missouri as much as in other agricultural states in the district in 1984. Also, unfavorable weather cut the size of crops in Missouri below expected levels. These factors brought serious farm financial problems to the state's agricultural sector.

Oklahoma

The Oklahoma economy did not show much growth overall in 1984. There were improvements, however, in both employment and real personal income above 1983 levels. Employment turned around from a decline in 1983, and PIK subsidies contributed to growth in income. Automobile production and, to a much lesser extent, energy production showed growth in 1984. Oilfield equipment manufacturing was weak, however, and the financial stress in the state's farm sector increased.

Automobile production contributed a great deal to growth in manufacturing. Production in Oklahoma more than doubled during the 1984 model year, placing Oklahoma second among automobile producing states in the Tenth District.

Although the energy sector remained weak, there were some gains during 1984, particularly in natural gas production. Cumulative

production of natural gas was up 26 percent in the first six months of 1984 over a year earlier. There was, however, only a slight increase in exploration and development throughout the oil and gas industry leaving Oklahoma's oilfield equipment manufacturing industry with only weak growth in 1984.

As in other states, the financial stress in agriculture increased in Oklahoma. The problem was exacerbated by drought in the southwestern part of the state.

Wyoming

Wyoming's natural resource-based economy was weak during 1984. Income growth remained about the same as in 1983, and total employment fell, though not nearly as much as in 1983. Despite some slow growth, continued weakness in mining adversely affected most other sectors as did a weak tourist industry. Only construction showed signs of growth in 1984.

The state's mining industry mounted a slow recovery in 1984. Production of oil and coal increased slightly. Cumulative production of natural gas increased 13 percent during the first six months of the year over the very low levels recorded in 1983. Performance in non-energy mining was somewhat better. Production of both soda ash and bentonite increased moderately in 1984.

Tourist visits to Wyoming's national parks were down in 1984, as they were in 1983. Possibly part of a long-term trend, the decline adversely affected performance of the service sector and retail trade.

Wyoming's construction industry, largely associated with mining, showed some strengthening in 1984. This improvement over 1983 was most likely due to the slight upturn in mining activity experienced in the state.

The outlook for 1985

The improved economic performance turned in by the Tenth District in 1984 is not expected to maintain its momentum in 1985. The slower economic growth expected nationwide in 1985 will likely impinge on district performance. Moreover, the effects of slower national growth will be reinforced by continued weakness in energy and agriculture, sectors that are especially important in the district. Thus, district income and employment likely will grow less rapidly in 1985 than in 1984, and overall district growth may lag behind that of the nation. Among the seven district states, the more diversified ones may outpace the national pattern in 1985, while growth may lag in states greatly dependent on energy and agriculture.

The major reason for slower district growth in 1985 stems from the nationwide slowdown. In line with this moderation, U.S. real personal income is projected to grow only about 3.0 percent in 1985, compared with an estimated 5.5 to 6.0 percent in 1984, while employment is projected to grow about 2.4 percent, compared with an estimated 3.5 to 4.0 percent in 1984.³ The slowdown in national economic growth will be especially felt in the district construction and automobile manufacturing industries. Also, some slowing in the district's high technology manufacturing sector is suggested by recent layoffs and financial problems experienced by some firms.

Also supporting the outlook for slower district growth in 1985 is the dependence of the district economy on energy and agriculture. Weak world demand and soft energy prices are expected to postpone a rebound in U.S.

and district energy exploration and development activities. It appears that the recent decline in world crude oil prices may become general in the industry. In addition, natural gas prices may decrease somewhat during 1985, despite continued deregulation, because of a substantial gas surplus and competition from foreign suppliers.

In the district's agricultural sector, a large crop acreage and only slow growth in exports mean continued large stocks and soft prices in 1985. Moreover, financial stress will remain a problem and farm income is likely to weaken somewhat in 1985.

The combined weakness in energy and agriculture has implications for manufacturing in the district. Both oilfield and farm equipment manufacturing are likely to remain weak through 1985. This, along with continued softness in general aviation manufacturing, contributes to the outlook for slower economic growth in the district during 1985.

Each of the district states will be impacted differently by economic forces, depending on its particular industry mix. Those states with more diversified economies—New Mexico, Colorado, and Missouri—are likely to match and possibly outperform the nation during 1985. Other states more dependent on agriculture and energy—Kansas, Nebraska, Oklahoma, and Wyoming—may lag the nation.

³ These forecasts of U.S. real personal income and employment growth for 1985 were made using the Chase Econometrics macroeconomic model. The forecasts are consistent with a 3.0 percent growth in real GNP from the fourth quarter of 1984 through the fourth quarter of 1985, which is the midpoint of the range projected by the members of the Federal Open Market Committee. See the transcript of the statement of Paul A. Volcker, Chairman, Board of Governors of the Federal Reserve System, before the Joint Economic Committee, July 30, 1984.

Another Troubled Year for U.S. Agriculture

By Mark Drabenstott and Marvin Duncan

United States agriculture began 1984 with renewed hopes for a stronger farm recovery, and the record will show farm income did rebound sharply. But the financial stress evident among farm producers, agribusinesses, and rural mainstreet merchants suggests that the farm recovery is far from robust. Farm liquidations and declining farm asset values are visible symptoms of ongoing adjustments to market forces.

When will agriculture see a full recovery that will restore its financial health? Current market factors indicate that farm income will decline in 1985 as softening crop prices and lower government payments more than offset improved livestock profits. Farm financial stress, therefore, will remain visible in 1985. Although a new farm bill will be written next year, farm financial conditions are likely to reinforce the view that agriculture's financial health depends heavily on an appropriate mix

Mark Drabenstott is a senior economist and Marvin Duncan is a vice president and economist in the Economic Research Department at the Federal Reserve Bank of Kansas City. Kim Norris, a research associate, assisted in preparing this article.

of macroeconomic policies, lower real interest rates, and moderation in the exchange value of the U.S. dollar.

This article reviews the performance of the farm sector over the past year and considers the outlook for 1985. The article focuses on farm income, credit conditions, the farm policy agenda, and market conditions for crop and livestock commodities.

The year in review

The year began with several positive factors pointing to improved farm earnings. The PIK program coupled with a severe drought had sharply reduced carryover stocks of major crops, setting the stage for improved crop prices. The nation's economy was expected to continue its strong expansion, aiding demand for food and especially meat products. The dollar was expected to decline somewhat during 1984, providing a needed boost to farm exports.

As the year unfolded, these factors proved less positive. Large spring plantings, despite

administration acreage reduction programs, and favorable weather soon pointed to large crops in 1984, and commodity markets soon lowered prices in expectation of larger supplies. The U.S. economy was strong in 1984, especially in the first half of the year, but stronger consumer spending did not translate quickly into the strength expected for red meat demand. Consequently, livestock prices were weaker than expected. The U.S. dollar not only failed to depreciate, it set records in mid-1984, keeping U.S. farm products at a substantial price disadvantage in world markets.

Farm income

Net farm income will show a dramatic improvement in 1984. It is currently estimated at about \$31 billion, nearly twice the revised \$16.1 billion in 1983 (Chart 1).¹ In real terms, farm income will be about \$14 billion (1972 dollars) compared with \$7.5 billion in 1983. Higher average crop prices, larger crop production, and higher average livestock prices will all contribute to a rise in farm earnings. Importantly, direct government payments will again be very large, possibly \$6 to \$10 billion. With a strong general economy, off-farm income was again large in 1984—a record \$43 billion. Most of that amount was earned by small farmers.

The comparison of 1984 with 1983 is distorted somewhat, however. The major distortion is that more than half of the \$11 billion in commodities distributed to farmers in the PIK program were marketed in early 1984, adding

to farm cash receipts this year. A large inventory adjustment also complicates the comparison. The value of farm inventories declined a record \$11.7 billion in 1983 because of PIK and drought-reduced production. With large crop output in 1984, inventories will again rise sharply. The increase is currently estimated at \$7 to \$11 billion.

Despite improved net income, farmers were worse off in 1984 in terms of cash income. Net cash income declined from 1983's record \$40.1 billion, to \$36 billion, largely due to higher production expenses. Farm cash receipts increased sharply to \$141 billion from the PIK-reduced level in 1983. Crop cash receipts increased moderately, while livestock receipts rose substantially. Total cash expenses increased significantly to \$142 billion, with most of the increase due to greater quantities of purchased inputs as farmers returned to pre-PIK planted acreage.

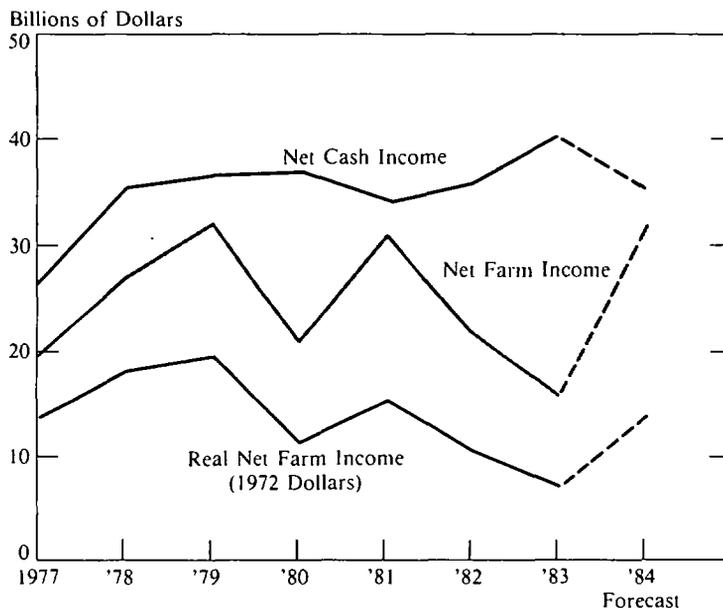
Because of the increase in purchases, input suppliers were able in many cases to post profits in 1984, after substantial losses in 1983. Fertilizer, seed, and chemical dealers gained back most of the fourth to a third drop in sales the PIK program brought about in 1983. But demand for machinery and equipment was still very weak. High costs of carrying debt, weak income, and substantial amounts of used equipment on the market, resulted in another poor sales year in 1984 for many machinery and equipment dealers.

Credit conditions

The farm balance sheet is expected to show some further deterioration at the end of 1984.² The farm sector statement for January 1, 1985 will likely indicate a 2 to 4 percent decline in total farm assets, the fourth straight year of decline (Table 1). Total liabilities probably will decline very slightly as farm producers

¹ The revision of 1983 net farm income was very large. At the end of 1983, net farm income was estimated initially at about \$25 billion. Later, the substantial downward revision resulted primarily from farmers shifting the marketing of more than half their PIK commodities into early 1984 and from a record large negative inventory adjustment, due almost entirely to PIK and the drought.

CHART 1
Farm income



continue to watch debt levels due to financial stress. With these shifts, proprietors' equity will decline further to perhaps \$786 billion. The debt-asset ratio is expected to change very little.

While aggregate indicators provide a useful frame of reference, the farm stress of 1984 has been more apparent in credit conditions at the farm level. These conditions reveal that farmers and ranchers across the United States underwent far more financial stress than normal in 1984, and more than in 1983.

According to agricultural bankers responding to a survey of agricultural credit conditions in the Tenth Federal Reserve District, farm liquidations were much higher than normal in 1984. For the six months ended October 1, full liquidations due to financial stress were 4.5 percent of all farms and ranches, a

rate bankers considered nearly three times normal (Chart 2). Partial liquidations over that period totaled 5.7 percent, more than three times normal. Although the greatest stress may have been in the western Corn Belt and Great Plains states, evidence of mounting financial stress has spread to the Northwest and Southwest too.

The real source of the stress is the debt-service problem many producers face. In simple terms, over the past decade a noticeable subset of farmers and ranchers has built up debts that cannot be serviced in the current market environment. In aggregate measures, the farm sector debt-income ratio has risen from about three in the early 1970s to about ten now. That means the amount of debt supported by one dollar of income has increased more than threefold in the past ten years.

Table 1
Farm balance sheet on January 1
 (billions of dollars)

	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985f</u>
Assets					
Real estate	828	819	769	764	733-749
Nonreal estate	219	220	228	267	270-278
Total assets	1,090	1,083	1,045	1,031	990-1,010
Liabilities					
Real estate	96	106	110	112	110-113
Nonreal estate	86	96	107	103	101-104
Total liabilities	182	202	216	215	211-217
Proprietors equity	908	882	829	816	773-799
Debt-asset ratio	16.7%	18.6%	20.7%	20.8%	20.9-21.9%
f = forecast					
Source: U.S. Department of Agriculture, 1985 Agricultural Outlook Conference					

Adding to the financial stress is the continued decline in farmland values. High real interest rates and weak prospects for farm income have brought substantial declines in farmland values that in turn sharply reduced farmers' creditworthiness. In the Tenth District, farmland values dropped 6 percent in the first quarter, 2.5 percent in the second, and 7 percent in the third (the last quarter for which data are available).² Thus, 1984 already has produced the steepest declines in values since the market peaked in 1981. Farmland values in the Tenth District are off 27 to 32 percent from their market highs, depending on the category of land. In some isolated areas across the nation, especially where there have been weather problems in recent years, values may have dropped 50 percent or more from their

peaks. Land value data must be interpreted carefully, however. Much land is for sale currently, but relatively little is changing hands, except under distress sale circumstances.

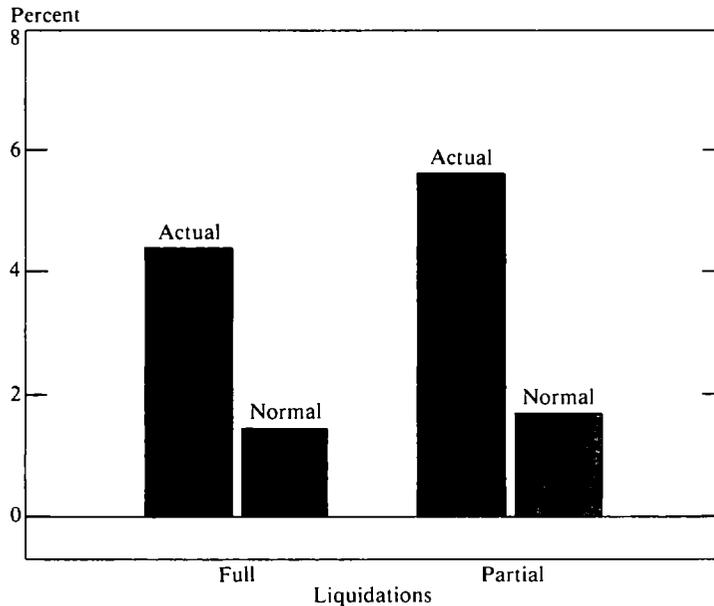
Agricultural lenders also felt the increased farm financial stress in the past year. Loan repayment rates slowed throughout the year and, more importantly, loan delinquencies and losses increased. Commercial banks and Farm Credit System outlets charged off more farm loans than in any year in the postwar period. However, despite increasing loan repayment problems, capital positions of most agricultural lenders remain adequate.

Crops

Crop production returned to near pre-PIK levels in 1984. Farmers seeded large acreages of all major crops, thwarting administration programs aimed at reducing wheat acreage 30

² Agricultural Credit Survey, Federal Reserve Bank of Kansas City.

CHART 2
Financial stress
 (liquidations for six months ended October 1, 1984)



percent, feed grains 10 percent, and cotton 25 percent. A wet spring followed by a late summer drought trimmed yields in the western Corn Belt but this was largely offset by excellent growing conditions in the eastern Corn Belt. With a large harvest, carryover supplies of nearly all major crops began increasing again in 1984.

Wheat production increased in 1984 due to large acreage and good yields. Total production was nearly 2.6 billion bushels, with yields just under last year's record high. Wheat prices averaged \$3.54 a bushel in the 1983-84 marketing year, almost the same as the year before (Table 2). Large stocks held prices down, but strong feed demand provided more overall support to prices than had been expected.

Production of feed grains bounced back

sharply in 1984. With large plantings and good yields, corn production totaled 7.5 billion bushels, up four-fifths from 1983's drought-stricken crop but still less than 1982's record output. Average farm-level corn prices increased sharply to \$3.20 a bushel for the 1983-84 marketing year due to the unusually small 1983 harvest. Corn prices peaked, however, by the end of 1983, and then began a general decline in response to the large crop in prospect for 1984.

Soybean production increased in 1984 to about 1.9 billion bushels. An early frost followed by wet harvest conditions reduced yields, but output remained large by historic standards. Farm level soybean prices averaged \$7.75 a bushel in the 1983-84 marketing year, but most of the price strength came in the fourth quarter of 1983. The large 1984 crop

Table 2
U.S. farm product price projections

<u>Crops</u>	<u>Marketing Years</u>		<u>Percent Change</u>
	<u>1983-84</u>	<u>1984-85</u>	
Wheat	\$3.54/bu	\$3.35-3.55/bu	-2.5
Corn	\$3.20/bu	\$2.65-2.95/bu	-12.5
Soybeans	\$7.75/bu	\$5.75-7.25/bu	-16
Cotton	\$0.67/lb	N/A	N/A
<u>Livestock</u>	<u>Calendar Years</u>		<u>Percent Change</u>
	<u>1984</u>	<u>1985</u>	
Choice Steers	\$ 65/cwt	\$65-69/cwt	3.0
Barrows & Gilts	\$48-49/cwt	\$50-52/cwt	5.1
Broilers	\$54-56/lb	\$48-54/lb	-7.3
Turkeys	\$70-71/lb	\$65-69/lb	-5.7
Milk	\$13.25-13.45/cwt	\$13.50-14.10/cwt	3.4

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

and weak export demand led to softer prices as the year progressed.

Cotton production totaled 13.4 million bales, well above production in 1983. Yields were near their record high, despite wet weather that delayed harvest and lowered crop quality in the Delta states. Farm-level cotton prices increased to 67 cents a pound due to strong export demand and tight carryover supplies as the year began.

Overall, the crop situation changed dramatically in 1984. Large production and still weak export demand caused carryover supplies to increase again and prices to fall. Thus, crop producers look with concern toward 1985, when another large crop would swell supplies even more.

Livestock

Contrary to expectations, livestock production continued to rise in 1984, with total meat output up 1 percent from the record level in

1983. The increase was due largely to higher than expected beef slaughter and rising broiler production. Pork producers cut back their production.

Beef and veal production increased about 2 percent this year. A year ago, the forecast was for beef production to decline in 1984. Cow slaughter was high most of the year. Trimming of dairy herds was partly responsible, but probably more important were the financial stress on cattle producers and drought conditions in some areas that led to herd liquidation. Because the beef supply was large, cattle prices were weaker than expected, but higher than the year before. Slaughter steer prices at Omaha averaged an estimated \$65 per hundredweight in 1984, up from \$62.50 in 1983.

Pork production dropped 4 percent in 1984 as producers responded to narrower profit margins. Despite smaller supplies, pork prices were much weaker than expected due to large Canadian pork imports and larger than

expected supplies of beef and poultry. Prices for barrows and gilts at the seven regional markets averaged about \$48.50 per hundredweight in 1984, 1 percent more than in 1983.

Broiler production increased 4 percent in 1984 as producers responded to positive margins during most of the year. Continued strong demand for broilers pushed average prices to 55 cents a pound. Turkey production, meanwhile, remained large but unchanged from 1983. Turkey prices, however, averaged about 71 cents a pound this year, up nearly a fifth because of stronger demand.

Lamb and mutton production is expected to decline 2 percent in 1984, continuing the long-term trend toward lower output. Poor range conditions caused additional herd liquidations in the first half of the year. Prices farmers received averaged an estimated \$62.50 per hundredweight for lambs, up moderately from 1983.

Dairy producers reduced dairy output in 1984 for the first time in six years. Although fewer producers than expected signed up for the dairy diversion program, those that did contributed to a 3 percent decline in dairy production from the record level in 1983. Government purchases of dairy products declined for the first time in three years. Milk prices to producers were lowered by a 50 cent a pound deduction imposed on producers for excess milk production. As a result, milk prices averaged about \$13.35 a hundredweight, down slightly from the year before.

The year ahead

The outlook for U.S. agriculture is dominated by lower farm income, continued financial stress for debt-burdened producers, and larger supplies of major crops. Farm income is likely to decline in the year ahead, due largely to reduced crop prices. Debt service problems

will remain as agricultural lenders continue dealing with troubled loans. Farm export volume probably will improve, but the value of exports is expected to decline. The farm policy agenda will be crowded, as policymakers consider the Farm Bill. With no program in place to reduce supplies substantially, another large crop is likely to add further to stocks already enlarged in 1984. Thus, 1985 begins with some clear concerns.

Farm income and financial conditions

Farm income is expected to decline in 1985. Some improvement in livestock profits will be more than offset by lower crop prices and lower direct government payments. Prices for red meat should improve as meat supplies decline and demand improves, while lower feed costs will further widen profit margins. Crop prices will decline due to larger carryover supplies, although a weaker dollar would strengthen export demand and, thereby, prices. As large crops are expected again next year, yearend inventory adjustment to farm income should be positive and significant. Overall, net farm income could decline \$7 to \$10 billion next year, with as much as a \$5 billion decline in net cash income. Adjusted for inflation, farm income may fall below the \$11 to \$15 billion range (1972 dollars) that has characterized U.S. agriculture thus far in the 1980s.

That level of farm income means financial stress will grow more serious in the year ahead. With current interest rates and incomes, many producers with debt-asset ratios much above 40 percent will have difficulty servicing their debt. In 1984, 18 percent of all U.S. farms had debt-asset ratios greater than 40 percent. As a group, these producers controlled only 15 percent of farm assets but owed 56 percent of farm debt.³ These numbers

include part-time farmers, who often repay farm debt with off-farm income, and very large commercial farms with annual sales greater than \$500,000, most of which are quite profitable. Thus, these data likely overstate the severity of the debt situation. Nevertheless, many farm businesses in this category will survive only by restructuring their debts, assets, or both.

The most highly leveraged farm businesses have an even more difficult problem. In most cases, producers with debt-asset ratios exceeding 70 percent cannot survive in the current market environment. In 1984, 6.6 percent of all farmers had debt-asset ratios exceeding 70 percent. This group controlled less than 4 percent of farm assets but owed nearly one-fourth of all farm debt. With the debt service problem facing these producers, full and partial farm liquidations will continue to run well above normal in 1985, as producers sell assets to relieve financial pressure.

Most liquidation decisions, whether full or partial, will be made jointly by borrowers and lenders. Agricultural lenders were slow to adjust to the farm recession that began in 1980. They must now address troubled farm loan portfolios. Concerns by the regulators of financial institutions—and the institutions' own stockholders—over persistently high farm loan delinquencies and losses will keep pressure on lenders to resolve the most seriously troubled loans. Although the capital of most lending institutions is not endangered by troubled farm loans, a larger share of bank failures in 1984 were connected to farm loan losses. That trend is almost certain to continue in the year ahead.

Farm asset values are expected to remain under downward pressure in 1985. High real debt-carrying costs are expected to continue,

contributing to lower land values. Pressure on land values will be greatest during winter and early spring months when loan decisions are made and liquidations increase. Important unknowns at this point are how many farm assets will be liquidated and how well rural factor markets will absorb these assets. Current indications are that liquidations will be greater than a year ago. And while it seems clear that farmland values will decline further, precipitous declines do not appear likely except in isolated circumstances.

Three things will lend stability to farmland values. First, if the administration's debt restructuring program runs smoothly, it could provide some breathing room for farmers approaching the time when severe action must be taken to resolve financial stress. Although the current loan guarantee authority probably is not adequate for the size of the problem, further increases in this authority seem likely. Second, lenders can be expected to show restraint in putting foreclosed property on the market. Rather than dispose of the property immediately, as may have been typical in the past, lenders are increasingly holding farmland in their investment portfolios. That practice reduces the volume of assets for sale, cushions the decline in asset values, and allows the lending institution to liquidate the assets later when the losses may be less. Third, current farm product prices and interest rates seem likely to support land prices at about 50 percent of their previous market high. Continued declines in values could bring land prices at yearend close to levels supported by market fundamentals.

Otherwise, agricultural credit conditions will be similar to those in 1984. Loanable funds will be ample, but the main criterion for borrowers will again be their creditworthiness. Some counties that were declared disaster areas because of the late-season drought will

³ Source: U.S. Department of Agriculture.

be eligible for Farmers Home Administration (FmHA) disaster assistance. Interest rates for farm borrowers, which rose slowly in 1984, should decline somewhat in early 1985 as the easier money market conditions prevailing in late 1984 begin lowering the cost of funds for rural lenders. But stronger U.S. economic performance and high public credit demand could put rates back on an upward trend by midyear.

Export outlook

The value of U.S. agricultural exports increased in 1984, reversing three straight years of decline. The value of farm exports was \$38.0 billion in fiscal 1984, up 9 percent from 1983 (Chart 3). But more importantly, 1984 marked the fourth consecutive year of decline in the volume of exports. Volume totaled 141 million metric tons, 3 percent less than in 1983 and the lowest volume since 1979. The agricultural trade balance, meanwhile, increased to \$20.0 billion, despite more food imports all year.

Even with the improvement in export value, some negative market fundamentals remain. With volumes declining, the increase in value was due entirely to higher average prices. The dollar remained strong throughout the year, keeping U.S. farm products at a significant price disadvantage in world markets. Soybeans in late 1984, for instance, were the same price in U.S. dollars as three years earlier, but priced in most foreign currencies they were dramatically more expensive (Table 3). The still weak economies of developing countries limited growth in world demand. Finally, competing world grain supplies remained large, as world grain production outside the United States increased 1 percent.

Still weak export markets emphasize the need to reexamine policies that influence U.S. agricultural trade. Macroeconomic policies in

the United States, particularly the huge federal budget deficits that keep real interest rates high and the dollar strong, account for a large part of the problem. A weaker dollar alone, however, will not return the United States to its full stature in world food markets. Competitive pricing of U.S. farm products and a long-range strategic plan for expanding foreign markets also will be critical.

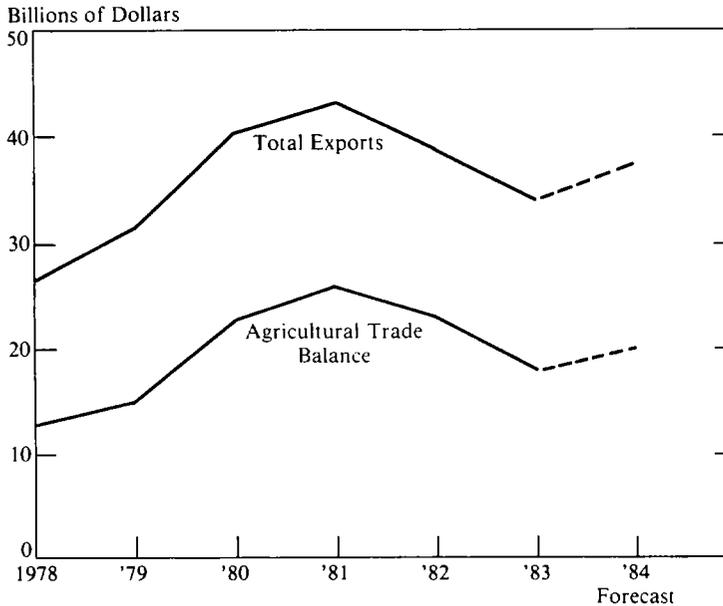
The outlook for farm exports in 1985 is mixed. Export value is expected to decline slightly to perhaps \$36.5 billion as farm product prices soften. Meanwhile, export volume is expected to increase moderately, the first increase in five years. A strengthening world economy will be a major factor in boosting demand. The large supplies available, however, will keep world prices lower than a year ago. A decline in the exchange value of the dollar would provide a boost to farm exports, but the timing and size of any prospective decline is currently an unknown.

An important force during the 1984-85 marketing year will be the amount of Soviet grain purchases. The Soviet Union had its third poor crop in a row in 1984. Because of adverse weather, a harvest of 170 million metric tons is currently expected, 25 tons less than in 1983. As a result, the Soviets are expected to import a near-record 45 to 50 million metric tons of grain, with up to half of that coming from the United States. Although the pressure of the Soviets in the market has strengthened commodity prices, prospective sales probably are fully accounted for in futures markets and world supplies are still large. Thus, U.S. export sales are not likely to be strong enough in 1985 to prevent crop prices from sagging if grain stocks climb.

Farm policy outlook

Farm policy actions in 1984 have been

CHART 3
U.S. agricultural exports



fairly low key and routine. Federal budget constraints and the realization that major farm policy legislation will be enacted in 1985 have limited actions in 1984. Policy discussion, on the other hand, has been unusually vigorous. Nearly all segments of agriculture have been rethinking their positions in anticipation of the coming 1985 legislation.

Farm policy changes that have been made largely affected commodity programs in 1984 and 1985. An effort has been made to limit federal budget exposure and send clearer market price signals to farm producers. For example, target price payments scheduled under the 1981 Agriculture and Food Act have been scaled back or frozen. As a result, wheat, corn, upland cotton, and rice target prices will be lower in 1985 than otherwise. To ease farmer cash flow, advance partial payments of

expected acreage diversion and target price payments for those crops will be made at program signup time. While probably helpful, that plan had an unexpectedly negative impact in 1984 when farmers had to refund overpayments totaling \$300 million.

Because of the severe drought in some parts of the country in 1983, the government provided that farmers in counties adjoining those counties declared eligible for natural disaster emergency loans also were eligible for such loans. Also, additional funding of at least \$310 million was to be made available in fiscal 1984 for insured economic emergency loans, with the Secretary of Agriculture having discretion to disburse the credit.

One agricultural credit program instituted in 1984 was neither low key nor routine. The Secretary of Agriculture, in response to grow-

Table 3
U.S. soybean prices in foreign currencies
(price per bushel)

	<u>Prices on</u> <u>October 1, 1981</u>	<u>Prices on</u> <u>October 18, 1984</u>	<u>Percent</u> <u>Change</u>	<u>Dollar Price</u> <u>As Seen By</u> <u>Foreign Buyers</u>
Dollars				
(Chicago cash price)	6.21	6.22	+0.2	—
British pounds	3.39	5.24	+55	9.63
French francs	34.5	59.5	+72	10.68
West German marks	14.4	19.4	+35	8.38
Mexican pesos	156.6	1,244.0	+794	49.31
Japanese yen	1,447.9	1,547.9	+7	6.64

Source: Iowa State University

ing farm financial problems, put in place a FmHA program to ease the farm debt problems. Initially covering Missouri, Kansas, Iowa, Nebraska, and Minnesota, the program will probably be extended to other states where farm financial problems are severe. The program has four major provisions.

One provision is that the FmHA can set aside as much as 25 percent of a FmHA borrower's debt—not to exceed \$200,000—for up to five years. Payments are then rescheduled on the indebtedness not set aside. The amount set aside is rescheduled over the remainder of the loan, with payments beginning after five years. No interest is charged on the set-aside amount for the whole five years, likely resulting in interest lost to the government of well over \$1 billion. All FmHA borrowers that are good managers and are in financial distress are eligible for the program, provided that it allows the borrower to create a positive cash flow on his operation.

Another main provision makes debts of family farm owner-operators held by other lenders also eligible for restructuring. To be

eligible for federal assistance, both the borrower and the lender must agree to new loan terms entailing a writeoff by the lender of at least 10 percent of the loan principal. The writeoff must be enough to give the farmer a positive cash flow. A new note is then written with the FmHA providing a guarantee of up to 90 percent of the new loan balance. There are limits of \$400,000 per borrower on guarantees for operating purposes and \$300,000 for real estate purposes. A total of \$630 million in loan guarantee authority has been made available from the FmHA.

The other two provisions of the program involve credit management. The FmHA is taking steps to provide financial and management services to farmers under financial stress. In addition, the FmHA will contract with private lenders to assist in servicing FmHA-insured farmer program loans.

The farm policy action agenda will be crowded in 1985. The nation's farm financial problems likely will require substantial assistance from the government. Assistance could take the form of a much expanded FmHA loan

guarantee program, perhaps a few billion dollars in total authority and possibly with easier rules on loan writedowns by bankers and cash flow requirements for farmers. Lenders might, for example, be allowed to spread their writedown on principal in the form of a reduction in the interest charged the borrower. Lenders could then take their loss in the form of reduced earnings rather than an upfront reduction in bank capital, a change much more acceptable to banks.

Writing major new farm legislation to replace the 1981 Agricultural Act will be difficult in light of the farm financial stress and stringent budget constraints. Policymakers are not likely to approve a program as costly as those of recent years. They could well put a much tighter constraint on program costs, maybe to less than \$10 billion.

Most policy analysts agree that program emphasis should be shifted from income transfer and price support spending to market development and short-term adjustment assistance. There is general recognition of the need to put more program dollars into market development, which would have higher payoffs. The returns to producers from such spending will be earned in the long run. There could be short-term costs to some farmers as income transfers are cut back. Continued income pressures from high real debt-carrying costs and loss of export competitiveness due to a strong dollar could make farmers less willing to abandon current programs. It seems unlikely that farmers and policymakers will agree to more than modest shifts in emphasis for the upcoming legislation. Somewhat more likely will be an effort to cap total spending on farm programs. Such a cap is almost certain to create great pressure among commodity groups to determine how the limited program benefits are divided.

Of overriding importance to agriculture,

compared with any purely agricultural issues, are the continuing huge federal budget deficits. Those deficits keep real interest costs and the exchange value of the U.S. dollar unusually high, sharply increasing farm production costs, reducing farm asset values, and reducing farm product prices by limiting U.S. agriculture's competitive position in world markets. Without a prompt and reasonable solution to federal budget deficits, U.S. agriculture faces more financial stress and a shaky recovery.

The crop outlook

The crop outlook has changed markedly from a year ago. Then, drought and PIK-induced production declines reduced carryover supplies to tight levels. Now, the large 1984 harvest—large both here and abroad—has again pushed up available supplies. And while stocks are still well below the record levels of two years ago, another large crop in 1985 poses a threat to crop prices, next year and beyond.

The outlook for U.S. wheat is based on record supplies and record disappearance. The 1984 crop, the third largest ever, coupled with already large carryover stocks will mean a record wheat supply next year, nearly 4 billion bushels. Carryover stocks will total 1.4 billion bushels, just less than a year ago. Three-fourths of that total, however, will be in the Farmer Owned Reserve (FOR) or Commodity Credit Corporation (CCC) stocks (Table 4).

Demand for wheat in the 1984-85 marketing year will be strong, both here and abroad. Feed use will be at a record high for the current marketing year, as the result of livestock producers switching from corn to wheat during the summer of 1984, the first quarter of the wheat marketing year. World consumption will be quite strong, boosted by increased

Table 4
U.S. agricultural supply and demand estimates
December 12, 1984
(millions of bushels, bales, or metric tons)

	Corn (bu)		Feed Grains (mt)		Soybeans (bu)		Wheat (bu)		Cotton (bales)	
	Oct. 1-Sept. 30	1983-84 1984-85	Oct. 1-Sept. 30	1983-84 1984-85	Sept. 1-Aug. 31	1983-84 1984-85	June 1-May 31	1983-84 1984-85	Aug. 1-July 31	1983-84 1984-85
Supply										
Beginning stocks	3,120	722	97.3	31.4	345	175	1,515	1,398	7.9	2.8
Production & imports	4,168	7,528	136.7	232.4	1,636	1,902	2,424	2,575	7.8	13.4
Demand										
Domestic	4,700	5,050	146.8	156.7	1,066	1,087	1,112	1,067	5.9	5.3
Export	1,866	2,075	55.7	61.3	740	775	1,429	1,525	6.8	6.3
Total	6,566	7,125	202.5	218.0	1,806	1,862	2,541	2,592	12.7	11.6
Ending Stocks	722	1,125	31.4	45.9	175	215	1,398	1,381	2.8	4.7

Source: U.S. Department of Agriculture

Soviet buying. World trade in wheat is expected to reach a record high. But because of large wheat crops elsewhere, notably the European Economic Community, U.S. wheat exports will increase only 10 percent. Some improvement in world demand will limit the price softening effect of very large U.S. and world wheat supplies. Farm level prices are expected to average \$3.35 to \$3.55 a bushel in the 1984-85 marketing year, down slightly from a year earlier.

Feed grain supplies also will be large next year. Corn supplies, the main feed grain, will be more than 8.2 billion bushels, over a billion bushels more than last year. While still less than the record supply of two years ago, carryover stocks will rise to 1.1 billion bushels. Free stocks, supplies outside of FOR and CCC ownership, will increase more than four-fold. That will still be an historically tight free market supply situation.

Although tight free stocks will support prices somewhat, demand is not likely to

increase enough to keep prices from easing. Corn exports and domestic use both will improve some in 1985, but supplies will be more than adequate. Farm level corn prices may average \$2.65 to \$2.95 a bushel in the 1984-85 marketing year, well below the \$3.20 in 1983-84. Sorghum prices are expected to average \$2.40 to \$2.65 a bushel at the farm level, down from \$2.75 a year earlier. Barley prices are expected to average \$2.15 to \$2.45 a bushel, down from \$2.50.

The soybean outlook is influenced by a weather-reduced 1984 crop and weak export demand. Adverse harvest weather cut yields in 1984, and the final crop was less than earlier expected. As a result, total soybean supplies will increase only modestly from a year ago. Total carryover stocks may be only moderately higher than last year's 175 million bushels, a tight supply.

The demand for soybeans, however, is expected to be weak. Domestic feed use is expected to be down because of cuts in meat

production. Exports had been expected to increase, but reduced shipments of soybean exports in the last quarter of 1984, usually the heaviest period, suggest that world demand is still weak. The People's Republic of China, an important buyer of world-traded soybeans, had a large crop and may not purchase any soybeans in world markets during the coming year. With a large 1985 crop in prospect, farm level soybean prices are expected to average only \$5.75 to \$7.25 a bushel, far below the \$7.75 a year earlier.

Cotton supplies also will be more than adequate in the coming year. Total U.S. cotton supplies will increase 2.5 percent. World cotton supplies, boosted by a record Chinese crop, will jump to a record level. Slower U.S. economic growth and increased textile imports will contribute to a reduction in domestic mill use. Exports also will decline as competing world supplies prevent growth in sales. Without a large acreage reduction program in 1985, production may be high again. Thus, cotton prices are expected to weaken in the 1984-85 marketing year from the 67 cent a pound average the previous year.

The livestock outlook

Livestock producers should enjoy improved profits in 1985. Reduced red meat supplies, stronger consumer demand, and lower feed-grain prices will contribute to better profits. For the year as a whole, red meat supplies will decline about 2 percent, but increased poultry production will leave total meat production unchanged. Consumer demand is expected to improve slowly as the economic expansion continues. Feed costs are likely to remain low throughout the year.

Beef production is expected to decline 4 percent in 1985. The recent pattern of large cow and heifer slaughter may continue during

the first quarter, in part spurred by continuing financial stress. For the remainder of the year, however, nonfed slaughter should drop back to a more normal rate, accounting for nearly all the expected reduction in beef production. Fed cattle placements are likely to remain large, and fed cattle marketings are expected to change little. Consistent with declining beef production, the cattle inventory should decline during the year.

Choice steer prices at Omaha may be fairly steady in 1985. Prices are expected to range between \$64 and \$70 a hundredweight throughout the year. Prices should be strongest in the second quarter, when beef output will decline most sharply from year-earlier levels. Large competing pork and poultry supplies in the second half may lead to prices nearer the lower end of the range. Cattle feeder profit margins should widen next year, especially if another large corn crop pushes feed prices lower. Favorable feeding margins may boost feeder cattle prices in 1985, with a wider premium to fed cattle prices likely most of the year.

Pork production is expected to be unchanged in 1985. Output will likely decline in the first half as producers continue their cutbacks, but with cheaper feed as the year progresses production probably will begin increasing by the fourth quarter. If the dollar remains strong, Canadian pork imports could remain an important supply factor in 1985.

Continued economic expansion should improve pork demand, but pork may not benefit from growth in consumer income as much as other meats. A potential structural change in consumer preferences for meat may limit growth in demand for pork products in 1985. Per capita pork consumption declined 2.3 percent during 1984, despite strong economic growth.

Prices for barrows and gilts at the seven

major markets probably will average \$48 to \$52 a hundredweight in the first half. Seasonal declines in red meat production during the summer should push prices into the \$51 to \$55 range in the third quarter. Prices should then retreat to the earlier range in the fourth quarter, when total meat supplies will be larger.

Broiler producers face generally favorable conditions in 1985. The improved profit margins of the past year will encourage large production in 1985. For the year, output could rise 5 percent. Smaller supplies of competing red meats along with continued strong demand will bolster broiler prices in the first half. The 12-city broiler price is expected to average in the mid-50 cent a pound range in the first two quarters. Larger total meat output in the second half could lead to weaker broiler prices then.

Turkey producers are expected to increase supplies 3 to 5 percent in 1985. Strong profits in 1984 and lower feed costs will encourage expansion. With these additional supplies, turkey prices may average 65 to 69 cents a pound, down from 71 cents in 1984.

With the dairy paid diversion program over, dairy output may increase again in 1985. With cheaper corn available, dairy producers are likely to increase feeding in 1984. One-fourth of the 1984 reduction in milk production resulted from less output per cow. Higher grain feeding rates, then, could add quickly to total production. Producers also have retained large numbers of dairy heifers. If these are added to the total number of milk cows when the dairy diversion program ends, production could rise substantially. Or, if the heifers only replace cows culled from herds, output might rise only modestly. In that case, however, beef production would increase as cull cows are slaughtered. So, while the government support prices will be lower, production may

increase as much as 1 to 2 percent, pushing market prices below 1984 levels.

Conclusion

This was a year of contrast for U.S. agriculture. Higher crop production, strong crop prices early in the year, higher livestock prices, and generous government subsidies lifted net farm income sharply from the depressed level of a year earlier to a near record of \$31 billion. But farm asset values—indeed asset values across agriculture—continued to decline and farm financial stress was at the greatest level since before World War II.

The year ahead could present a different contrast. Large planted acreage could keep major crop prices under continued downward pressure. The volume of farm exports will improve, but export value will decline because of lower prices. Government subsidies likely will be less generous than in other recent years. Higher livestock prices will not be enough to offset other adverse market factors, and farm income will fall somewhat from the 1984 level. Farm financial stress will remain high, with many highly leveraged operators leaving the farming business.

Yet by the end of 1985, a sense of optimism may begin spreading across agriculture. The downward adjustment in asset values could then be about complete. With continued world economic growth, export demand could be strengthening. Prompt and prudent action to reduce the federal budget deficit would likely result in declining real interest rates and an easing in the exchange value of the U.S. dollar. As 1985 ends, therefore, the stage could be set for higher future farm profits, stable or slowly rising farm asset values, and increased competitiveness in world markets.

1984 Index Economic Review

“Agricultural Policy: Objectives for a New Environment,” June.

“Alternatives to the Current Individual Income Tax,” September/October.

“Another Troubled Year for U.S. Agriculture,” December.

“Capital Adequacy at Commercial Banks,” September/October.

“The Competitive Effects of Interstate Banking,” November.

“Deposit Insurance and the Deregulation of Deposit Rates,” April.

“Enterprise Zones as a Means of Reducing Structural Unemployment,” March.

“Exchange Rate Volatility and Federal Reserve Policy,” July/August.

“Fiscal Condition of Tenth District States,” January.

“Futures Markets: A Primer for Financial Institutions,” November.

“The Impact of Discount Rate Changes on Market Interest Rates,” January.

“The 1978-83 Increase in U.S. Business Failures,” July/August.

“Industrial Change and Public Policy,” February.

“The Instruments of Monetary Policy,” May.

“Mortgage Finance: Why Not PLAM's?” September/October.

“Oil Shale in the United States: Prospects for Development,” May.

“Prospects for LDC Debt and the Dollar,” January.

“The Productivity ‘Slowdown’: A Sectoral Analysis,” April.

“Recent Developments in the Credit Union Industry,” June.

“Recent Experience With M1 as a Policy Guide,” March.

“Recent Techniques of Monetary Policy,” May.

“Rising Protectionism and U.S. International Trade Policy,” July/August.

“The Tenth District Economy: Review and Outlook,” December.

“Theories of Price Determination,” April.

“The U.S. Economy and Monetary Policy in 1984,” December.

Economic Review
Federal Reserve Bank of Kansas City
Kansas City, Missouri 64198
December 1984, Vol. 69, No. 10