

# 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.<sup>1</sup> 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).<sup>2</sup> 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-

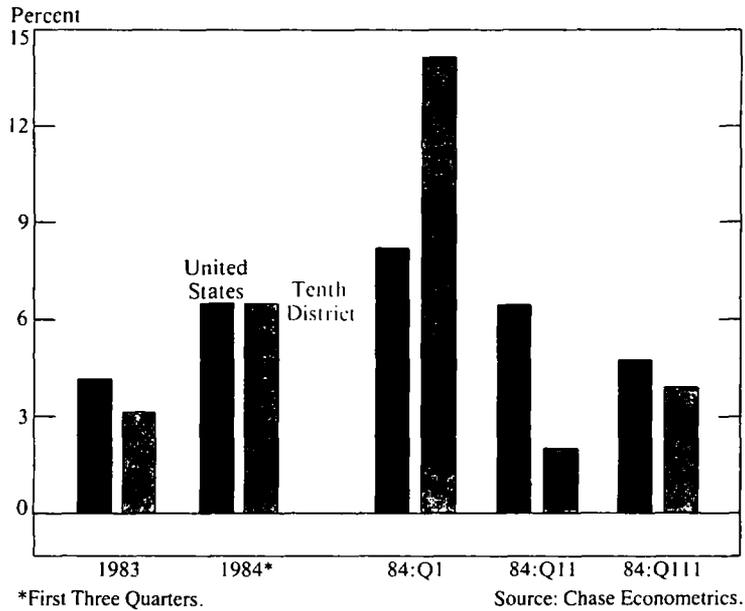
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<sup>1</sup> Third quarter data are estimates based on the most current monthly data available.

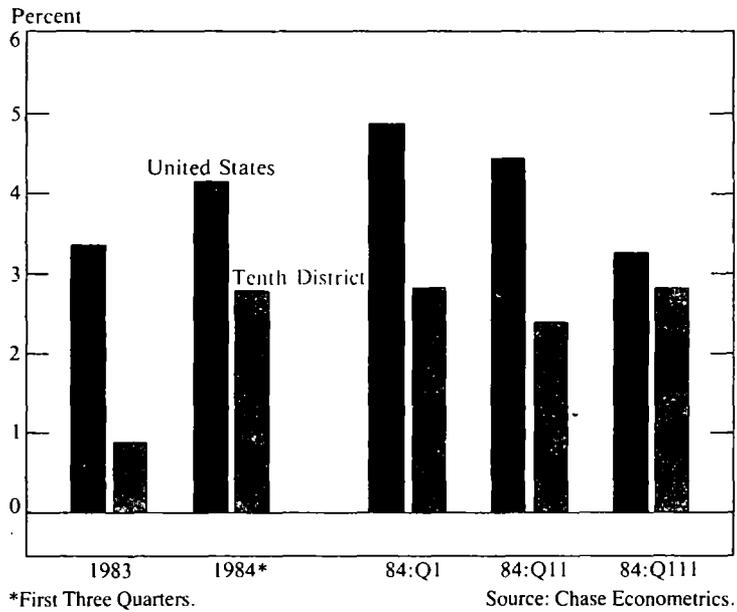
<sup>2</sup> Growth in district real income during the first quarter of 1984 was large because of payments under the Payment-In-Kind (PIK) program, especially in Nebraska and Kansas. See also Chart 5.

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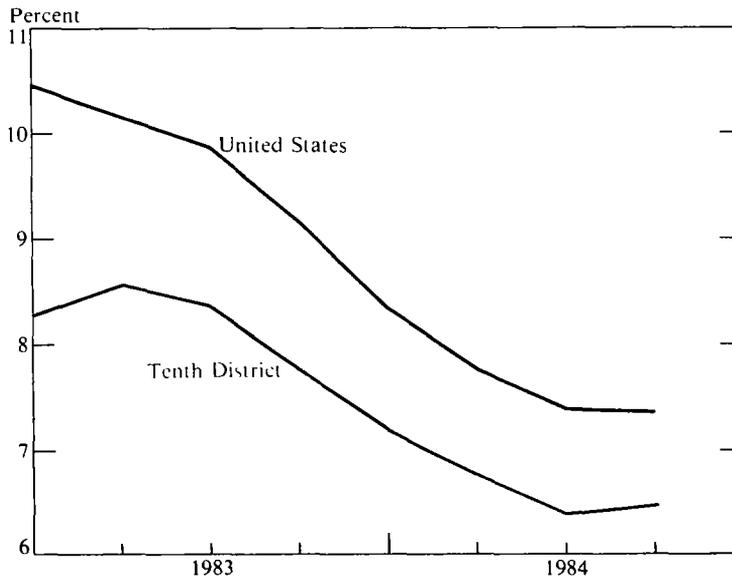
**CHART 1**  
**Growth in real person income (seasonally adjusted annual rates)**



**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.

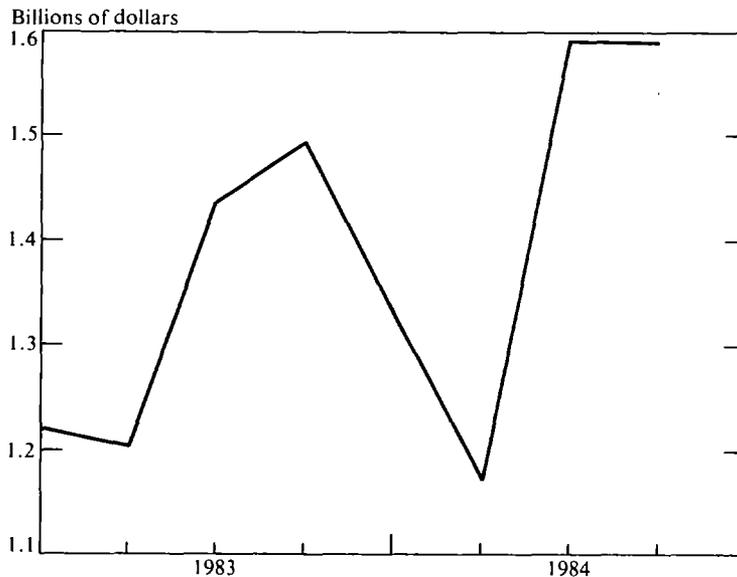
The value of nonresidential building contracts was up 5.5 percent through the third quarter of 1984 from the same period a year earlier, evidence of growing strength in the industry (Chart 4). Kansas City and Omaha exhibited great strength and, after only a brief recession-induced pause, the tempo of 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.

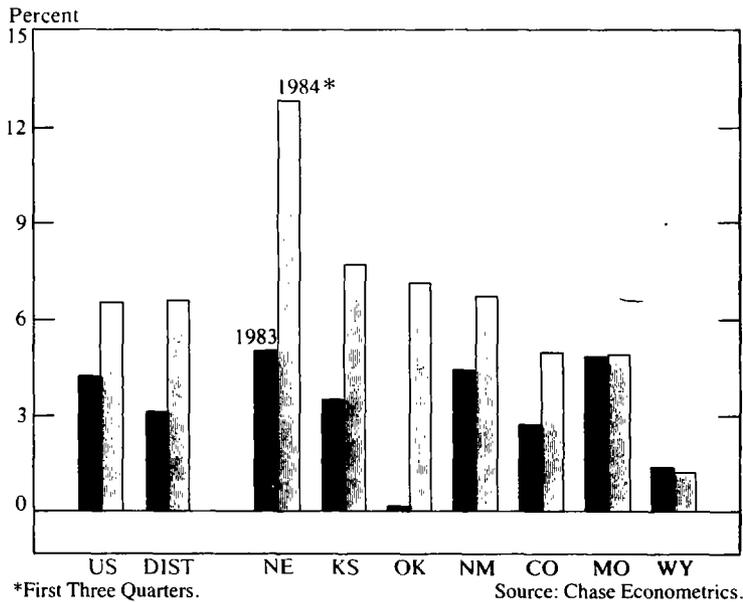
### **State performance**

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-

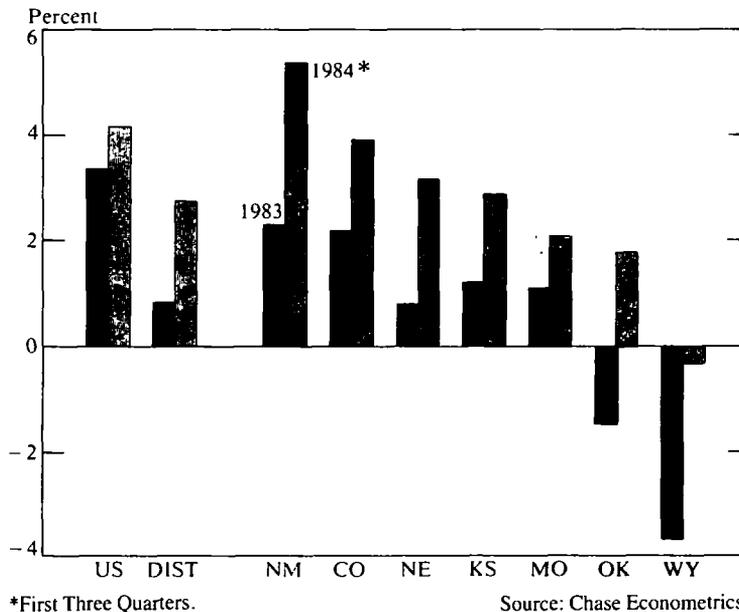
tion of oil, gas, and coal. On the other hand, copper and uranium mining in New Mexico have shown essentially no growth during the year after having been hit hard by low world prices and, in the case of uranium, an uncertain future for nuclear power generation in the United States.

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.<sup>3</sup> 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.

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<sup>3</sup> 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.