

The Tenth District Economy: Continued Sluggishness Ahead

By *Tim Smith*

Economic growth was sluggish during 1986 in the states of the Tenth Federal Reserve District—Colorado, Kansas, Missouri, Nebraska, New Mexico, Oklahoma, and Wyoming (Figure 1). More of the same sluggish growth also seems likely in 1987. The lackluster growth of the district economy stems mainly from continued weakness in its two dominant sectors—energy and agriculture. Despite overall weakness in the district, growth in employment and income improved in 1986, with most of the states in the district showing improvement over 1985. States with more diversified economies are expected to continue performing better than states that depend heavily on energy and agriculture. It is unlikely, however, that the district as a whole will outpace the nation anytime soon.

Overview of recent economic performance in the district

The overall economic performance of the

Tim Smith is an economist at the Federal Reserve Bank of Kansas City. Kim Norris, an assistant economist at the bank, assisted in the preparation of the article.

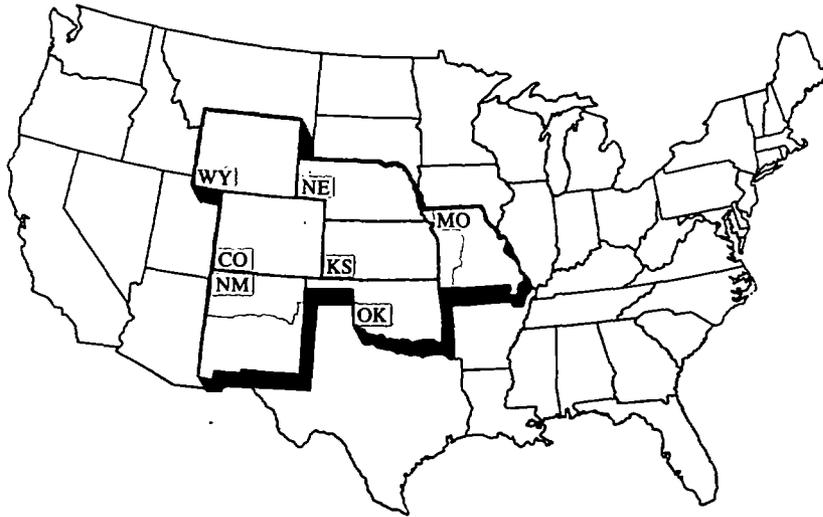
district in 1986 was slightly better than in 1985.¹ Employment in the district rose at an annual rate of 1.1 percent in the first three quarters of 1986, compared with 0.9 percent for the whole of 1985 (Chart 1).² However, low overall employment growth and large job losses in the energy industry kept the district's unemployment rate higher than the national rate (Chart 2). Real personal income in the district rose at an annual rate of 6.4 percent in the first half of 1986, a significant improvement above the 1.3 percent gain in 1985 (Chart 3).³ The patterns of growth in employment established in early 1986 very likely continued

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

² Growth rates are fourth quarter to fourth quarter. For periods of less than a year, growth rates are calculated from the fourth quarter to the most recent quarter and annualized.

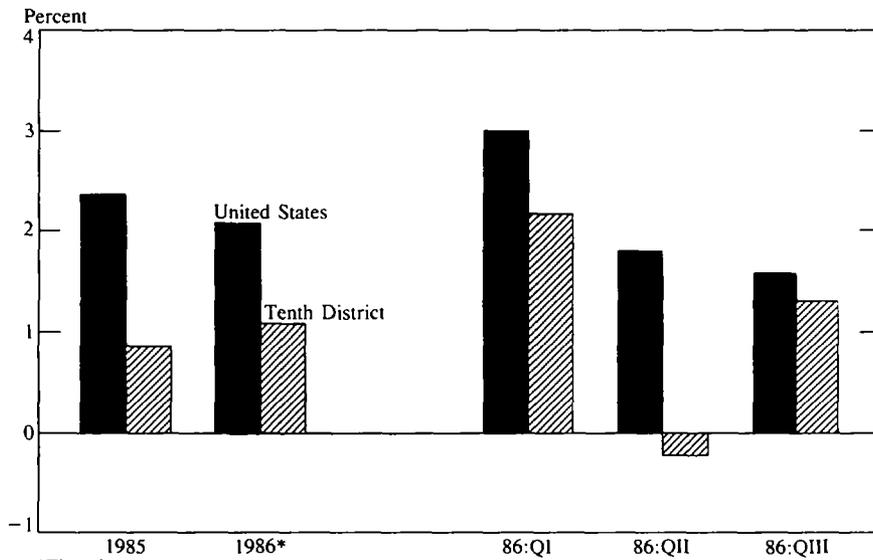
³ Growth in district real personal income during the second quarter of 1986 was large because of large Commodity Credit Corporation purchases and deficiency payments to farmers. Real personal income growth in district states for all of 1986 is not expected to be as strong as data for the first half might suggest. Government payments were especially large in Nebraska and Kansas. See also Chart 5.

FIGURE 1
Tenth District states



Shaded area is Tenth District boundaries

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



*First three quarters

Source: Data Resources, Inc.

CHART 2
Unemployment rate

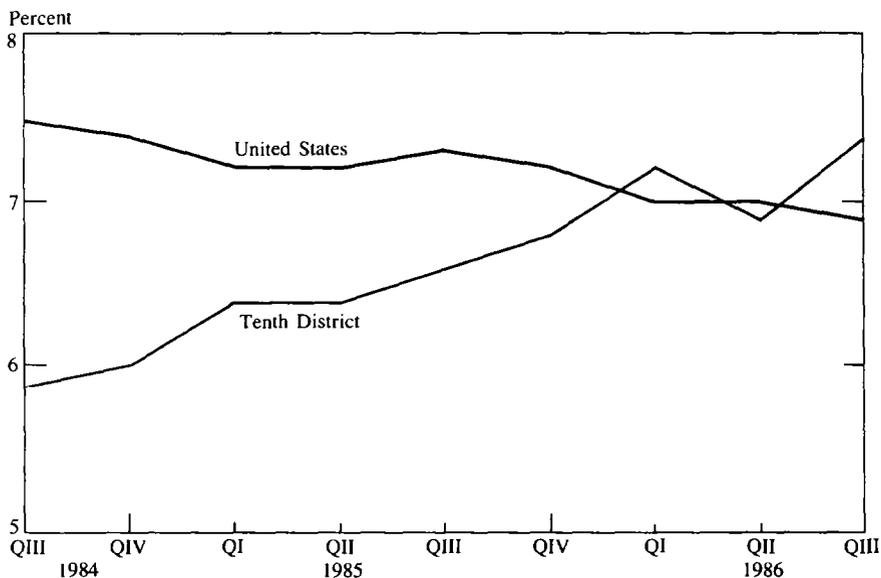
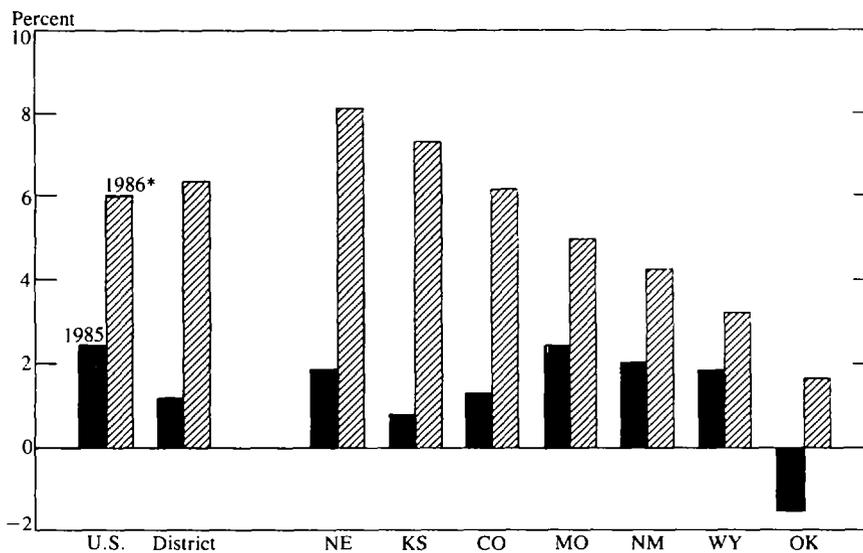


CHART 3
Growth in real personal income
(Seasonally adjusted annual rates)



*First two quarters

Source: Data Resources, Inc.

during the latter part of the year, though large gains in personal income coming from government payments to farmers in the second quarter were not likely repeated.

Some individual district states participated in the improvement in economic performance while others did not. States with more diversified economies and strong growth in service sector employment—Missouri, Kansas, Colorado, and Nebraska—showed improvement. The economies of states with large employment losses in the energy sector—New Mexico, Oklahoma, and Wyoming—were weakened in 1986.

The district economy continued to grow slower than the national economy in 1986. Employment in the district rose at only about half the rate of the nation's gain. While personal income growth was slightly stronger in the district than in the nation, a large part of this gain was due to government payments to farmers; hence, the improvement in income growth does not reflect any fundamental improvement in economic activity in the district. In fact, much of the farm income received in 1986 was used not to fuel real economic growth but to pay down debt.

The sectors

Review of recent sector performance

Weakness in energy and agriculture accounted for a large part of the district's sluggish economic performance in 1986. The performance in other sectors was more mixed. Manufacturing was generally weak, but the government and service sectors continued to lend some strength to the district economy.

Energy and mining. The district's energy industry received a major shock in 1986 as oil prices fell nearly two-thirds in the first half of the year. The plunge in oil prices led to substantial reductions in exploration, development, and production activity in an industry already weakened

by sluggish world demand and large supplies for two to three years.

Oil and gas exploration and development activity fell drastically in the Tenth District during 1986. The number of drilling rigs in operation fell from a weekly average of about 600 at the beginning of the year to about 200 in the third quarter, a rate of decline four times greater than in the same period a year earlier. Sharp cuts in drilling contributed to a loss of over 27,000 mining jobs in the district during the first three quarters of 1986. There was a modest rebound in drilling late in the year as oil prices firmed, but the upturn was not nearly enough to make a dent in the losses incurred earlier in the year.

Energy production also fell in the district during 1986. Cumulative production of crude oil in the district for the first six months of 1986 was 2.5 percent less than in the same period a year earlier. The district's production of natural gas in the first six months was 7.2 percent less than in the same period a year earlier. Coal production fell significantly, with mined tonnage through the end of the third quarter of 1986 down almost 10 percent from 1985 levels.

Other mining in the district also remained depressed in 1986. Uranium, copper, and molybdenum mining continued to operate far below capacity. Production of soda ash and precious metals was stable, but bentonite production fell as a result of the decline in oil and gas drilling, for which bentonite is an important input.

Agriculture. Agriculture gained some stability in 1986, but considerable financial stress and surplus problems remained. Grain prices weakened due to a large crop and weak export markets. But livestock prices firmed as inventories waned, making 1986 a solid profit year for livestock producers. Farm income, buoyed by large government payments, declined only slightly in 1986. While financial problems remained serious for farmers in the Tenth District during the year, steady farm income and a slowing rate of decline in collateral

values provided some relief. Nonetheless, the prolonged farm recession continued to batter most farm communities in the district, as farm income was used to service debt rather than finance discretionary purchases and capital goods.

Manufacturing. The district's manufacturing sector continued to weaken in 1986, partly from the weight of the nation's huge trade deficit and partly from weakness in other sectors, especially energy and agriculture. Overall, the rate of decline in the district's manufacturing employment worsened slightly in 1986. Manufacturing employment fell in the first three quarters of 1986 at an annual rate of 2.8 percent, compared with a decline of 2.4 percent for all of 1985.

Automobile assembly in district states declined somewhat in 1986. The number of units produced in plants in district states fell 11.4 percent in the 1986 model year, compared with an increase of 4.0 percent in the 1985 model year. Even with this decline, however, nearly 1.5 million units, about 19 percent of the U.S. total, were produced in district plants during the 1986 model year. As the 1987 model year began, district plants continued to operate at capacity, although some workers had been laid off and a General Motors truck plant in St. Louis was due to be closed.

The district's general aviation industry, plagued by weak demand and strong foreign competition, remained very weak in 1986. The value of aviation production in the district was down an average of about 35 percent in the first three quarters of 1986 from the same period in 1985. Unit sales of new aircraft were also down more than a third in the three-quarter period.

High-technology manufacturing remains a source of strength in some parts of the district. However, fierce foreign competition and weak domestic demand continue to stay the rapid growth that these industries had come to expect. The computer and semiconductor manufacturing segments of the industry have suffered most from worldwide overcapacity. Aerospace and other defense-related

firms, on the other hand, continued to perform relatively well in 1986.

Oilfield and farm equipment manufacturing weakened again in 1986. Sharp cuts in drilling for oil and gas brought with them significant reductions in demand for oilfield equipment. Likewise, farm equipment sales remained depressed by the weak farm economy.

Construction. Construction activity in the district was flat in 1986. Despite lower mortgage rates, district housing starts increased only slightly to an annual rate of about 118,000 units in the second quarter of 1986. Gains in some parts of the district, especially metropolitan areas, were offset by weakness in energy-dependent and rural areas that caused housing activity in the district to lag national housing activity.

Nonresidential construction did not add as much strength to the district economy in 1986 as it had in 1985. Construction of office buildings slowed significantly in most cities, and high vacancy rates slowed retail and industrial construction. The value of nonresidential construction contracts through the third quarter of 1986 was down 19.2 percent from the same period a year earlier.

Services, retail trade, and wholesale trade. The service industry in the Tenth District slowed somewhat in 1986 from the healthy pace in 1985. Service employment in the district increased at an annual rate of 2.9 percent in the first three quarters of 1986, compared with an increase of 4.0 percent in 1985. Moreover, growth in the district's service industry in 1986 lagged slightly behind growth for the nation.

Growth in the district's wholesale and retail trade continued to be held back by the depressed rural economy across much of the district. Employment in this sector grew at an annual rate of 1.7 percent during the first three quarters of 1986, only slightly more than in 1985. As in the service sector, growth in trade was less than for the nation as a whole.

Government. Federal government spending added substantial fuel to an otherwise lackluster district economy. Nearly a third of federal spending in the district was for defense purposes, reflecting recent record high levels of peacetime procurement spending. The proportion of defense spending varied significantly across states. Those with the highest proportions of defense spending—Missouri, Colorado, and Kansas—were helped most in the wake of cuts in nondefense federal spending.

Generally weak economic performance caused the fiscal condition of most district states to tighten in 1986. With the sharp drop in oil prices, budgets were especially tight in states depending heavily on revenues from severance taxes—Wyoming, New Mexico, and Oklahoma.

Sector outlook

The outlook for the sectors is mixed, as some sectors will continue to bolster the economies of district states while others will remain a drag. The mix of sectors in each state, then, shapes the outlook for state economic performance in 1987.

The future for energy and mining in the district is clouded by large world supplies of most resources mined in the region. Even if oil prices rise slowly throughout 1987, they are not likely to reach the levels needed to spur a resurgence in exploration and stop the decline in production. Political instability in South Africa has brought higher gold prices, possibly boding well for precious metal mining in some district states, but other mining is likely to remain in the doldrums during 1987.

No marked improvement in agriculture is expected in 1987. Low grain prices will stimulate export demand somewhat, but stocks are not expected to be drawn down significantly. Farm income, therefore, will remain largely a function of government payments. The moderation in the decline of farmland values established in 1986 is

expected to continue, but some farm financial problems will remain to be worked through in 1987.

The outlook for district manufacturing in 1987 is for modest growth at best. The expected improvement in the nation's trade balance will provide some stimulus to regional manufacturing, but the mix of industries in district states suggests that manufacturing activity in the region will remain sluggish and continue to lag manufacturing activity nationwide. Defense spending in the district is due to begin leveling off in 1987 and, therefore, is expected to contribute little additional strength to high-technology industries. Recent layoffs at automobile plants and gathering signs of sluggish auto sales suggest a somewhat bearish outlook for auto production in 1987. Recovery in the district's general aviation, oilfield equipment, and farm equipment manufacturing industries will almost certainly remain elusive again in 1987.

High vacancy rates in commercial buildings and the generally sluggish regional economy suggest that construction activity will not lend much additional strength to the district in 1987. The weakness in commercial real estate markets is likely to push increasing numbers of real estate loans at district financial institutions into troubled categories. Moreover, even if mortgage interest rates remain relatively low in 1987, housing activity will probably not improve much because of the sluggish regional economy and the expected decline in multifamily starts due to the removal of tax incentives.

The service sector is expected to continue adding strength to the district economy in 1987. There is a chance, though, that sluggish overall regional economic performance will again cause the district's service sector to lag the nation's. Retail and wholesale trade will continue to grow slowly in 1987. There is also a probability that such trade will be slower in the district than the nation, since this sector depends almost entirely on overall economic activity in the region.

Federal government spending will probably not add much, if any, additional strength to the regional economy in 1987. Defense spending will remain strong, but it is not expected to increase substantially. State governments will no doubt spend the year adjusting to reduced revenue flows by trimming expenditures and seeking new revenue sources.

Lackluster growth in district states

The small increase in economic activity in the district during the first part of 1986 was not shared equally across district states. Employment growth improved in Missouri, Kansas, Colorado, and Nebraska, but the improvement was almost entirely offset by employment losses in the district's energy-dependent states (Chart 4). Real personal income grew more rapidly in all district states in the first half of 1986 than in 1985 (Chart 5). The largest gains were in the states most dependent on agriculture. Economic performance in the different states reflects the influence of the industries important to each state. Similarly, the outlook for the different states in 1987 is colored by the outlook for key sectors in each state.

Missouri

Missouri, with the most diversified economy in the district, fared better than the district as a whole. The state's economy continued to be restrained in 1986 by poor performance in manufacturing and agriculture, but the state's employment and income growth showed improvement over 1985. Employment grew at a more rapid rate in Missouri than in the nation during the first three quarters of 1986, but real personal income growth in the state lagged slightly behind.

Two manufacturing industries provided strength to the state economy. Automobile assembly plants operated at capacity throughout the year and aerospace manufacturing was boosted by large

federal government defense expenditures. However, the decline in the U.S. dollar did little to help the state's export-dependent industries in 1986. As a result, manufacturing remained generally weak in Missouri.

Missouri's agricultural sector continued to suffer from large stocks and weak export markets. Grain prices were weak, but farm earnings were bolstered by large government payments. The state's important cattle industry had a fairly good year, though prices ranged widely.

The construction industry provided strength to the Missouri economy in 1986. Most of the strength came early in the year, when residential construction activity surged and nonresidential construction was still strong. Nonresidential construction picked up as mortgage interest rates fell, but the pace of nonresidential construction slowed as many large projects in Kansas City and St. Louis neared completion.

Missouri is expected to continue performing better than the district as a whole in 1987. Unless national economic performance improves significantly, however, it is not likely that growth in Missouri will improve in 1987. No additional strength is expected from defense spending, automobile production, or construction. Moreover, the outlook for the agricultural sector is for another year of large surpluses and low prices. Even if government payments keep farm income from falling substantially in 1987, stable farm income is not likely to rejuvenate Missouri's depressed rural economy. Overall, Missouri can be expected to at least match the nation in growth in employment and income in 1987.

Kansas

Kansas achieved moderate economic growth in 1986, even with a weak farm economy. Growth in both employment and income improved over the rates in 1985. Employment growth in Kansas was moderate and above the district and national

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

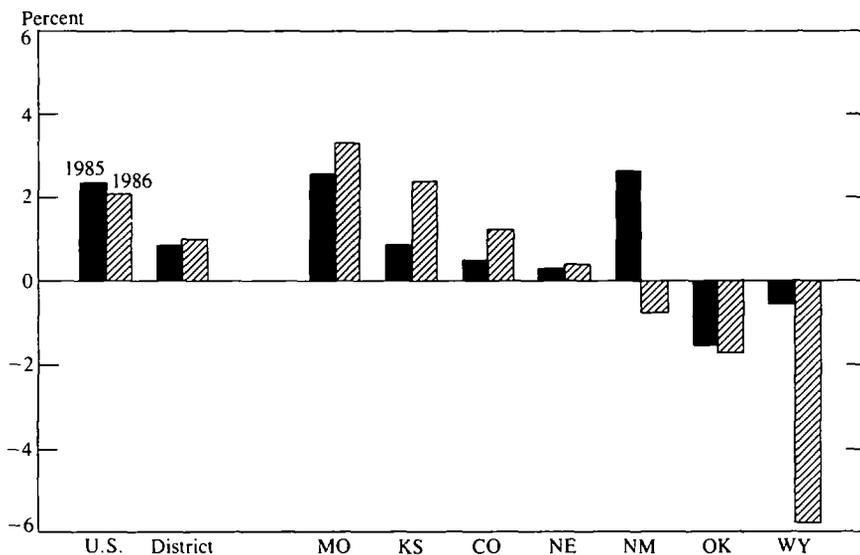
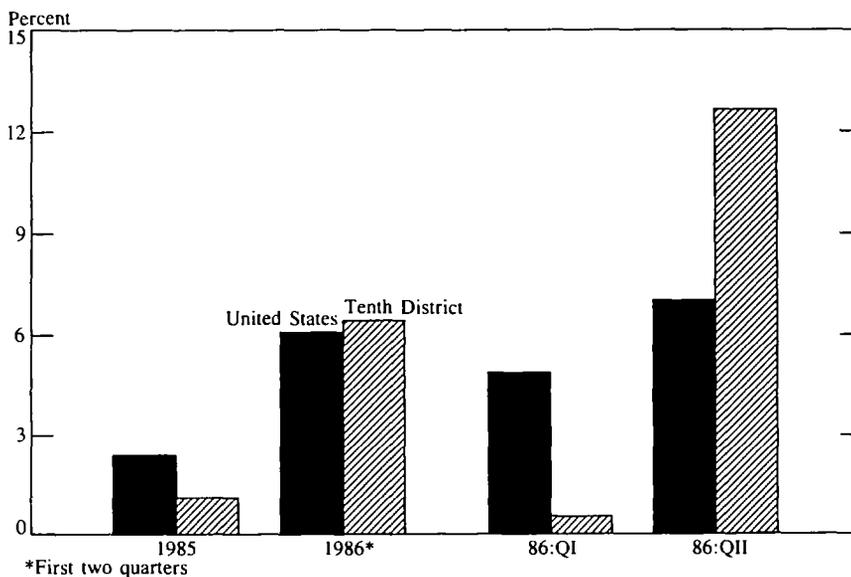


CHART 5
Growth in real personal income
 (Seasonally adjusted annual rates)



*First two quarters

Source: Data Resources, Inc.

averages. Income growth in the first half of 1986 was 2 percent greater than for the nation, with government payments to farmers accounting for much of the increase. Performance in major sectors outside agriculture was mixed in 1986.

The decline in oil prices caused a substantial slowing in exploration and development activity in Kansas. Oil production also fell as many of the state's numerous stripper wells—those producing less than ten barrels a day—were shut down. Crude oil output in Kansas for the first half of 1986 was about 5 percent lower than the same period a year earlier. Natural gas production was flat in the first half of 1986. Coal production rebounded somewhat, however, after declining significantly in 1985. Total mining employment in the state fell at an annual rate of nearly 40 percent in the first three quarters of 1986.

Performance of the state's manufacturing sector was mixed in 1986. Strength came from the automobile industry and defense-related aircraft manufacturing, but this strength was offset to some extent by weakness in the state's important general aviation industry. Budget trimming by many U.S. corporations and changes in tax laws have softened demand for private business aircraft. The Kansas City-based automobile industry operated near capacity throughout the 1986 model year. Military aircraft production and assembly of civilian jet aircraft components provided additional stability. The general aviation industry, on the other hand, did not fare well in 1986. The industry suffered large declines in both the number of units produced and the value of those units.

The Kansas economy probably will perform about the same in 1987. The service sector will continue to bolster employment growth in the state, but other sectors are not expected to post significant gains. The oil and gas industry is not likely to improve much, nor will the manufacturing sector gather much additional strength from automobile assembly and military spending. The general aviation industry is expected to remain

under pressure from foreign competitors and weak domestic demand. These factors, combined with the weak farm economy, point toward continued slow growth for Kansas in the year ahead.

Colorado

The Colorado economy improved in 1986, with stronger income and employment gains than in 1985. Growth in Colorado employment and income was nearly equal to growth in the district as a whole for 1986. However, employment growth was slower in Colorado than in the nation. Sluggishness in the Colorado economy was due to weakness in mining and agriculture and slow growth in high-technology manufacturing.

Colorado is another district state that suffered the adverse effects of the 1986 drop in oil prices. The resulting decline in oil and gas drilling activity further depressed the state's already ailing mining sector. The state's molybdenum industry operated at only half capacity in 1986.

High-technology manufacturing made only slight gains in 1986 from the slump that began in 1984. Layoffs and plant closings continued, but at a slower pace than in 1985. The state's microchip manufacturers continued to face a flood of output from foreign competition and soft demand for computers and peripheral equipment. However, defense-related high-technology activity remained strong.

Construction activity slowed significantly in Colorado in 1986. Weakness in residential construction was due to a sharp drop in multifamily starts. High vacancy rates for office space in downtown Denver kept nonresidential construction at a standstill there.

Expansion in the important recreation industry continued in 1986, spurred by a general increase in tourism and a particularly good 1985-86 ski season. The industry benefited from lower oil prices and interest rates, but not as much as expected. Visits to national park service areas were

estimated to have increased, and a 0.7 percent gain in skier visits over the previous season set a record for the fourth straight year.

Growth in the Colorado economy is expected to remain sluggish in 1987. The mining and agriculture sectors will continue to be a drag on state economic growth. The manufacturing sector is not likely to improve, given the expected moderation in defense spending. Nevertheless, defense spending will remain an important factor to the state's economy in 1987. Barring weather-related problems, the recreation industry will probably continue to lend strength to the state. Both recreation-related services and business services will continue to contribute to job growth in the state. On balance, the weaker sectors are likely to be offset by the stronger sectors, bringing another year of positive, though sluggish, growth to Colorado.

Nebraska

Economic growth in Nebraska was only slightly stronger than the slow pace recorded in 1985. Most of the state's modest employment gain was in the service sector. While personal income growth was much stronger in Nebraska in the first half of 1986 than in 1985 and much stronger in Nebraska than in the nation, a substantial part of this strength was due to large government income subsidies to Nebraska farmers.

Growth in services, particularly finance and telemarketing, continued to fuel the economies of Omaha and Lincoln. But the growth was limited to these metropolitan areas. Problems in the farm sector brought further distress to services in rural areas of the state.

Nebraska's manufacturing sector remained weak in 1986. The food processing industry had another solid year, but sluggish growth in the national economy did little to further improve the national market for food products. The state's farm equipment manufacturing industry had another very

weak year as a result of depressed sales of farm equipment.

The construction sector was weak, and the number of construction jobs increased very little in 1986. What growth there was resulted from a modest pickup in housing starts. The value of nonresidential contracts fell more than 40 percent during the first three quarters of 1986 from the same period in 1985.

The near-term outlook for the Nebraska economy is heavily influenced by the condition of the agricultural sector, which is not likely to improve significantly in 1987. For that reason, the state will probably again muddle through the coming year with very weak growth. If government farm payments are reduced, economic performance in Nebraska could deteriorate.

New Mexico

Economic growth in New Mexico slowed considerably in 1986 from the moderate pace achieved in 1985. Employment fell slightly during the first three quarters of the year after increasing 2.7 percent in 1985. Personal income growth remained relatively strong but fell behind growth rates in the district and the nation. The metropolitan areas in New Mexico—Albuquerque and Santa Fe—performed far better than the rural parts of the state that were depressed by the protracted farm recession and the sharp downturn in the energy industry.

Mining activity slowed sharply in New Mexico in 1986 due to the sharp decline in oil prices. The fall in production of oil, natural gas, and coal came when the state's mining industry was already suffering from weakness in copper and uranium production. A sharp drop in exploration and development activity contributed to a plunge in mining employment.

Growth in New Mexico's manufacturing sector was dampened by weak performance in high-technology industries. Semiconductor and com-

puter manufacturing in the state felt the effects of fierce foreign competition. Defense-related research and manufacturing contracts helped some firms, however, particularly in Albuquerque, Las Cruces, Alamogordo, Santa Fe, and Los Alamos.

The service and trade sectors provided some stability to the New Mexico economy in 1986. Growth in financial services bolstered urban areas of the state, and tourist-related services and retail trade brought some strength to many areas.

Problems in mining and agriculture probably will prevent a strong rebound in the New Mexico economy in 1987. Other sectors may do fairly well. There is some prospect for improvement in the state's high-technology industry. The service and trade sectors in the state, boosted by tourism, will likely continue lending strength. Federal spending, though likely to increase slower than in 1986, will remain a major force in the New Mexico economy because of the substantial number of military installations in the state and the large number of defense contracts let to the state's high-technology industry. Moreover, commercial applications of defense research are likely to become more important as the state seeks new means of diversifying and developing its economy.

Oklahoma

The Oklahoma economy weakened markedly in 1986. Employment declined slightly faster than in 1985, as a result of the energy slump. Real personal income growth was positive, but remained weak compared with other district states and the nation as a whole. This weakness can be attributed to continuing problems in the agricultural sector and turmoil in the energy sector.

The state's already weak energy industry was dealt a severe blow when oil prices dropped in 1986. Sharply lower crude oil prices led to corresponding sharp declines in exploration and development activity. The average weekly number of drilling rigs in Oklahoma fell almost 60 per-

cent in the first three quarters of 1986. Production of oil and natural gas each fell 5 percent during the first half of the year. The result was a loss of 9,400 mining jobs in the state during the first three quarters of 1986.

The manufacturing sector in Oklahoma was generally weak in 1986. While automobile production continued at a healthy pace, the number of units produced was somewhat less than in 1985. The state's oilfield equipment manufacturing industry remained depressed as problems in the energy sector mounted during 1986.

There is little prospect for recovery in the Oklahoma economy in 1987. It does appear, however, that the downturn in the energy industry may taper off in 1987 when employment losses are expected to be much smaller than in 1986. Uncertainty about future oil prices will likely prevent a rebound in exploration and development activity. Overall, weak energy and agricultural sectors will keep economic performance in Oklahoma well below the district average in 1987.

Wyoming

Economic performance in Wyoming worsened considerably in 1987. As in other states of the district, weakness in energy and agriculture affected performance in the entire state economy. Employment in Wyoming fell at an annual rate of 5.8 percent during the first three quarters of 1986. Real personal income grew moderately in the first half of the year, partly reflecting some improvement in profit margins for livestock producers.

The state's important tourist industry was a source of strength to the Wyoming economy in 1986. The state's national parks had another good year but did not contribute as much to growth in service activity as had been expected. Nevertheless, employment losses in other sectors were slightly offset by tourist-related service employment growth.

Wyoming's mining industry was severely hit by the decline in oil prices in 1986. Although oil production was constant and natural gas production increased moderately during the first half of the year, production levels remained low compared with recent years. Exploration and development were harder hit. The average number of drilling rigs in operation fell nearly two-thirds during the first three quarters of 1986. Coal production fell 10 percent during the first three quarters, while other mining activity in the state was mixed. Soda ash production remained stable, but bentonite production suffered from cutbacks in oil and gas drilling.

The construction sector in Wyoming did not share in the benefits of lower mortgage interest rates because of the generally weak condition of the state economy. Housing starts during the first half of 1986 were well below starts during the same period in 1985. Likewise, a surge in nonresidential construction that occurred in 1985 was short-lived. The value of nonresidential contracts through the first three quarters of 1986 was down about 30 percent from the same period a year earlier.

Agriculture did not contribute any strength to the Wyoming economy in 1986. Firmer cattle prices improved profits from livestock operations, but the profits were used to reduce some of the

financial stress rather than to fuel general economic activity.

Another difficult year lies ahead for the Wyoming economy. Except possibly for tourism, most of the state's industries will almost certainly not contribute much to growth in 1987. But problems in energy and agriculture are not likely to worsen. Thus, the worst employment losses may be over, though a recovery is not likely in 1987.

Conclusion

Weakness in energy and agriculture—the two mainstays of the Tenth District economy—kept economic performance sluggish in the seven-state region in 1986. As a result, overall district growth continued to lag behind growth in the nation. The performance of each state was determined by the particular mix of industries in that state. States with the heaviest reliance on energy and agriculture recorded the weakest performances.

Performance of the district economy promises to be lackluster again in 1987. States with more diversified economies will likely do better than states depending heavily on energy and agriculture. As a result, performance will range widely from state to state. Overall, however, the Tenth District economy likely will continue to lag the national economy in 1987.