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The Eighth District Business Economy in 1989: Exiting the Eighties with Vigor

ENTERING the 1980s, the business economy of the Eighth Federal Reserve District was weakening, employment levels were declining and unemployment rates were rising sharply. As we exited the 1980s, however, District economic conditions contrasted sharply with the early part of the decade. In 1989, the District's unemployment rate was at its lowest level of the decade while employment and income continued a long rise, albeit at a moderate pace.[1]

Despite this general good news at the close of the decade, not all sectors of the region's economy fared well in 1989. While District employment rose, its rate of increase slowed from the pace of the previous two years. Building activity was flat, as declines in residential building offset gains in nonresidential building. Furthermore, the economic performance of the District's individual states and sectors varied widely.

INCOME AND CONSUMER SPENDING

District real nonfarm personal income rose moderately in 1989; as it has over the entire decade, however, it trailed the national average.[2] As table 1 shows, District real nonfarm income in 1989 rose 2.3 percent compared with 2.7 percent nationally. The slower-than-national regional growth last year reflected a relatively slow expansion of both nonfarm earnings and dividends, interest and rent.

The District's 2.3 percent gain in real nonfarm income was a slight deceleration from a 2.7 percent increase in 1988. Although income growth from transfer payments and dividends, interest and rent picked up last year, the expansion of nonfarm earnings—the largest source of income—was sluggish. From a longer-run perspective,

[1]The Eighth Federal Reserve District includes the entire state of Arkansas and parts of Illinois, Indiana, Kentucky, Mississippi, Missouri and Tennessee. This article uses data for the entire states of Arkansas, Kentucky, Missouri and Tennessee, where the bulk of District economic activity is concentrated, to represent the District.

[2]Growth rates for all indicators compare the average for 1989 with the average for previous years.

Table 1
Growth Rates of Selected Economic Indicators[1]

Indicator	United States 1979-89	United States 1989	District 1979-89	District 1989
Real nonfarm personal income	2.4%	2.7%	1.9%	2.3%
Real retail sales[2]	2.7	1.4	2.2	2.0
Durables	4.6	2.6	3.8	4.8
Nondurables	1.6	0.6	1.3	0.2
Payroll employment	1.9	2.8	1.6	2.9
Goods-producing	−0.3	1.5	−0.3	1.6
Manufacturing	−0.7	1.0	−0.2	2.0
Construction	1.7	3.5	0.0	1.0
Mining	−2.8	0.2	−4.4	−4.8
Services-producing	2.7	3.3	2.4	3.4
Wholesale/retail trade	2.5	2.7	2.3	3.0
Services	4.6	5.1	4.4	5.1
Government	1.1	2.0	0.7	2.2
Finance, insurance and real estate	3.2	2.1	2.4	0.3
Transportation and public utilities	1.1	2.8	1.5	3.5
Real value of building contracts[3]	1.1	−0.9	−0.1	0.1
Residential	0.5	−4.1	−1.2	−4.1
Nonresidential	2.0	3.2	1.2	4.8

[1]1979-89 growth rates are compounded annual rates of change. 1989 rates are percent changes from 1988.

[2]Retail sales data are from DRI/McGraw-Hill.

[3]Excludes nonbuilding construction. Growth rates are based on current-dollar data from F.W. Dodge *Construction Potentials*, which were deflated by the author.

the District's income growth in 1989 was slightly above the average for the decade, as shown in table 1.

Retail sales grew slower at the District than the national level in the 1980s, reflecting the region's slower population and income growth.[3] District retail sales growth also trailed well behind the U.S. average in the middle years of the decade: District sales rose at a 2.6 percent annual rate between 1984 and 1988, after adjusting for inflation, compared with the nation's 3.9 percent rate.

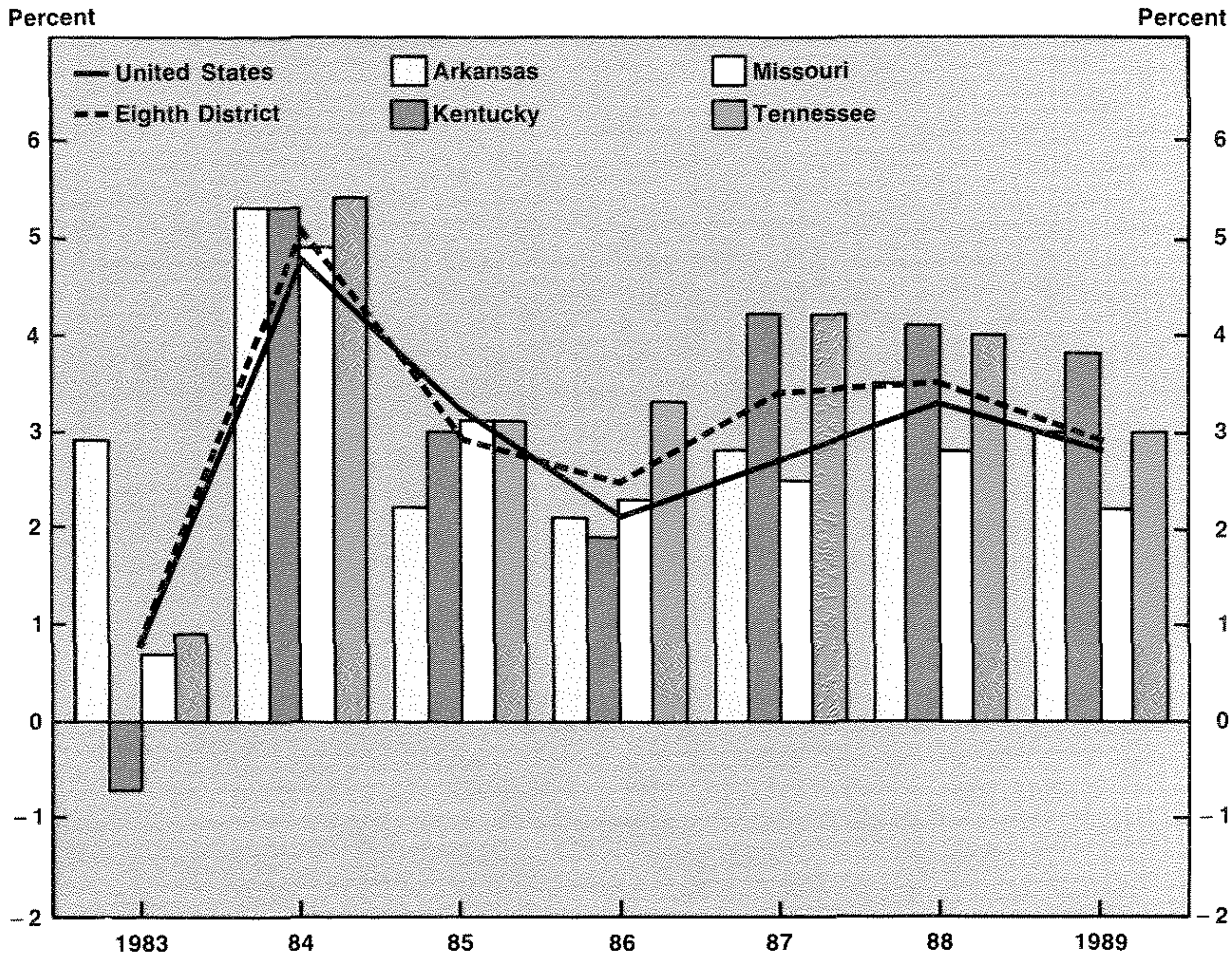
District real retail sales, however, rose 2 percent in 1989, exceeding the nation's 1.4 percent rate. While sales of nondurable goods showed only marginal increases in both the District and the nation, sales of durable goods rose 4.8 percent in the District, more than two percentage points higher than the U.S. rate of increase. One reason for weak durable goods sales in the nation was the sharply slower sales of automobiles; U.S. consumers purchased fewer autos in 1989 than in any year since 1983. Among District states, sales of durables were particularly strong in Arkansas where even auto sales were up moderately, according to tax revenue data.

LABOR MARKETS

Payroll employment increased in the 1980s at a 1.6 percent annual rate in the District, reaching almost 6.8 million workers by 1989. In comparison, U.S. payroll employment rose at a 1.9 percent rate. The District's slightly slower job

[3]District population grew at a 0.6 percent annual rate between 1979 and 1989 compared with 1 percent nationally.

Figure 1
Annual Percent Change in Payroll Employment

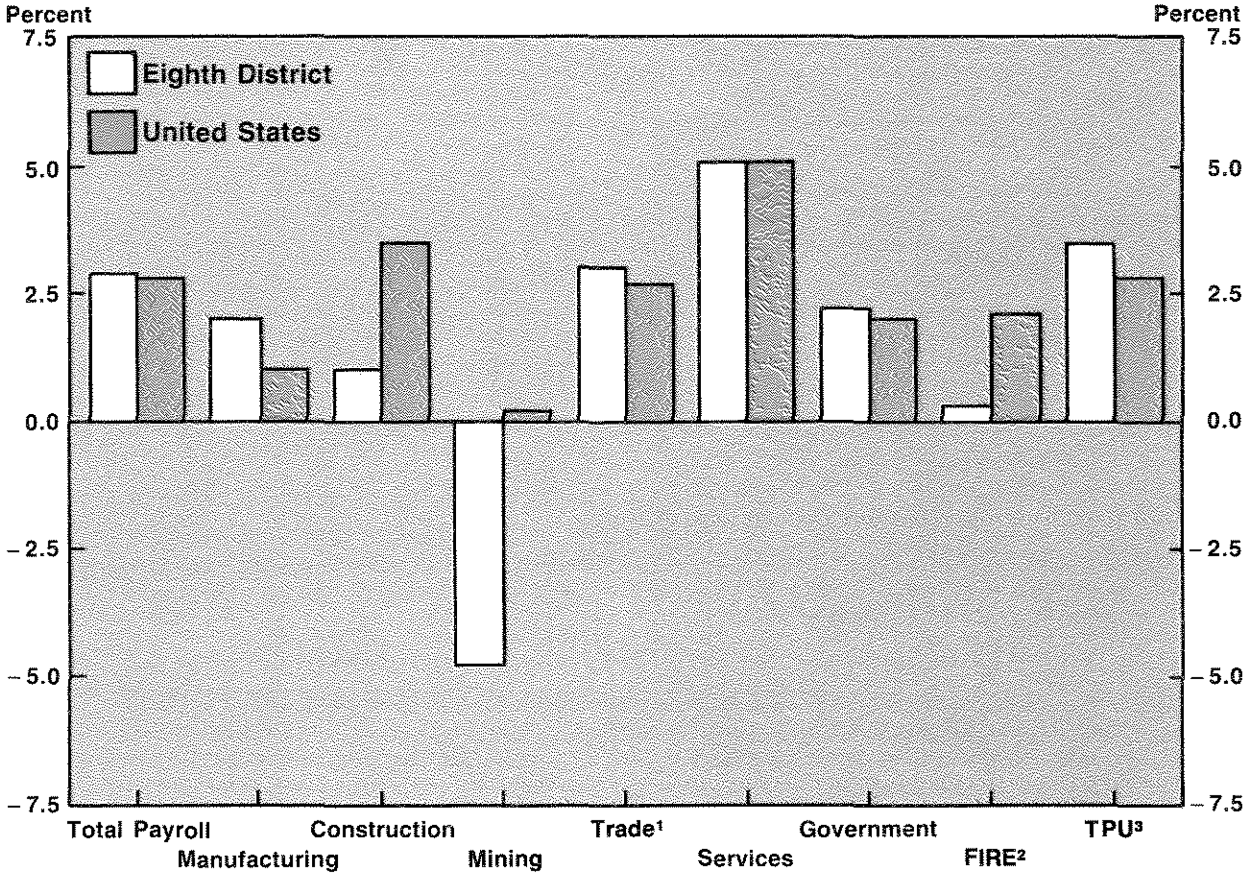


growth resulted mainly from a downturn in the decade's early years that was considerably more severe than at the national level. Between 1979 and 1982, District nonfarm employment dropped more than a quarter of a million jobs, or nearly 5 percent, while changing little nationally. The cyclically sensitive goods-producing industries — manufacturing, mining and construction — accounted for 94 percent of the region's job losses during this period. As employment weakened, the District's unemployment rate doubled, rising from 5.4 percent in 1979 to 10.8 percent in 1983.

Figure 1 shows that District job growth was slightly stronger than its national counterpart in every year except 1985 of the current recovery. In 1989, District employment growth slowed, but remained above the national average. District employment gains since 1982 allowed its unemployment rate to fall to 5.8 percent in 1989, the lowest value since 1979.

In 1989, payroll employment rose 2.9 percent in the District and 2.8 percent in the nation. As figure 2 shows, the District's largest economic sectors—wholesale/retail trade, services, manufacturing and government—expanded as fast or faster than at the national level. The following sections discuss factors that contributed to the performance of the Eighth District's goods-producing and services-producing sectors last year.

Figure 2
Eighth District and U.S. Employment Change by Sector, 1988-89



[1]Wholesale and retail trade
[2]Finance, insurance and real estate
[3]Transportation and public utilities

GOODS-PRODUCING SECTORS

Following four years of decline, District goods-production employment has risen for the last six years, resulting in an employment figure approaching the 1979 level. As the 1979-89 growth rates in table 1 indicate, 1989 levels of manufacturing and construction employment were not substantially different than 1979 levels, while mining employment declined substantially over the decade. In 1989, mining employment declined while manufacturing and construction employment continued to expand.

Mining

District mining employment fell sharply in 1989, the fifth consecutive year of decline. Meanwhile, nationally, slight gains were reported for the second successive year.[4] The diverging employment trends stem from the different compositions of mining in the District and the nation. Oil and gas extraction account for most U.S. mining jobs; however, coal mining, centered in Kentucky, dominates the District's workforce. The District's mining employment losses last year partially reflect productivity

[4]See Karrenbrock (September 1989) for a discussion of the Eighth District's mining industry.

gains. In Kentucky, for example, coal production rose 1.6 percent last year, while mining employment levels dropped 5.4 percent. This production rise was mostly due to increased demand by electrical utilities in Virginia and the Carolinas, as well as by those within Kentucky's own boundaries.

Manufacturing

The Eighth District economy is more sensitive to manufacturing's ups and downs than is the U.S. economy. Manufacturing employed 22 percent of Eighth District nonfarm workers last year compared with 18 percent for the nation. Furthermore, manufacturing produced 27 percent of the District's real output in 1986 compared with 22 percent nationally.[5]

Given manufacturing's comparatively large size in the District, last year's slowdown in manufacturing activity had a relatively severe impact. Manufacturing employment rose 2.0 percent in 1989, down from 3.2 percent in 1988. While employment growth slowed in several of the District's major industry groups, the most severe deceleration, as table 2 shows, occurred in the chemicals and fabricated metals industries.

Despite frequent temporary layoffs of auto workers throughout the region, the 1989 level of District transportation equipment employment was 4 percent higher than in 1988. Many of the new jobs in this sector were due to gains in Kentucky, especially in Louisville and Lexington, where motor vehicle assembly plants and their suppliers have expanded. Employment gains in aircraft and parts plants in St. Louis account for many of the other new jobs in this sector.

As table 2 shows, job growth was slowest in the food processing and electrical equipment industries. Although employment in food processing exhibited little change in Kentucky, Missouri and Tennessee last year, it rose moderately in Arkansas, where poultry processing plants expanded.[6] The sluggish employment expansion in electrical equipment production, in part, was due to weak demand for home appliances which reflected a decline in homebuilding.

Table 2

Employment Growth in the Eighth District's Largest Manufacturing Industries

Industry	1988	1989
Manufacturing	3.2%	2.0%
Durables		
Fabricated metals	5.3	3.3
Electrical equipment	0.4	0.8
Nonelectrical machinery	3.0	3.8
Transportation equipment	5.5	4.0
Nondurables		
Food and kindred products	0.7	0.6
Textile mill and apparel	1.1	1.6
Printing and publishing	2.4	2.7
Chemicals and allied	3.9	2.0

Construction

After plunging 30 percent between 1979 and 1982, Eighth District building activity rebounded strongly in 1983 and 1984 (see figure 3). The real values (1982 prices) of building contracts in 1988 and 1989, however, were slightly below those in 1984.[7] District contracts fell 8.6 percent in 1988 before stabilizing in 1989 at $7.8 billion.

District residential construction has been weakening since 1987. This decline, which also occurred nationwide is due in part to revisions in the federal income tax code that eliminated provisions that had previously stimulated construction.[8] In 1989, the real value of District residential contracts fell 4.1 percent, while the number of housing units authorized by permits fell 4.9 percent to approximately 79,200 units, their lowest level since 1982. Permits for single-

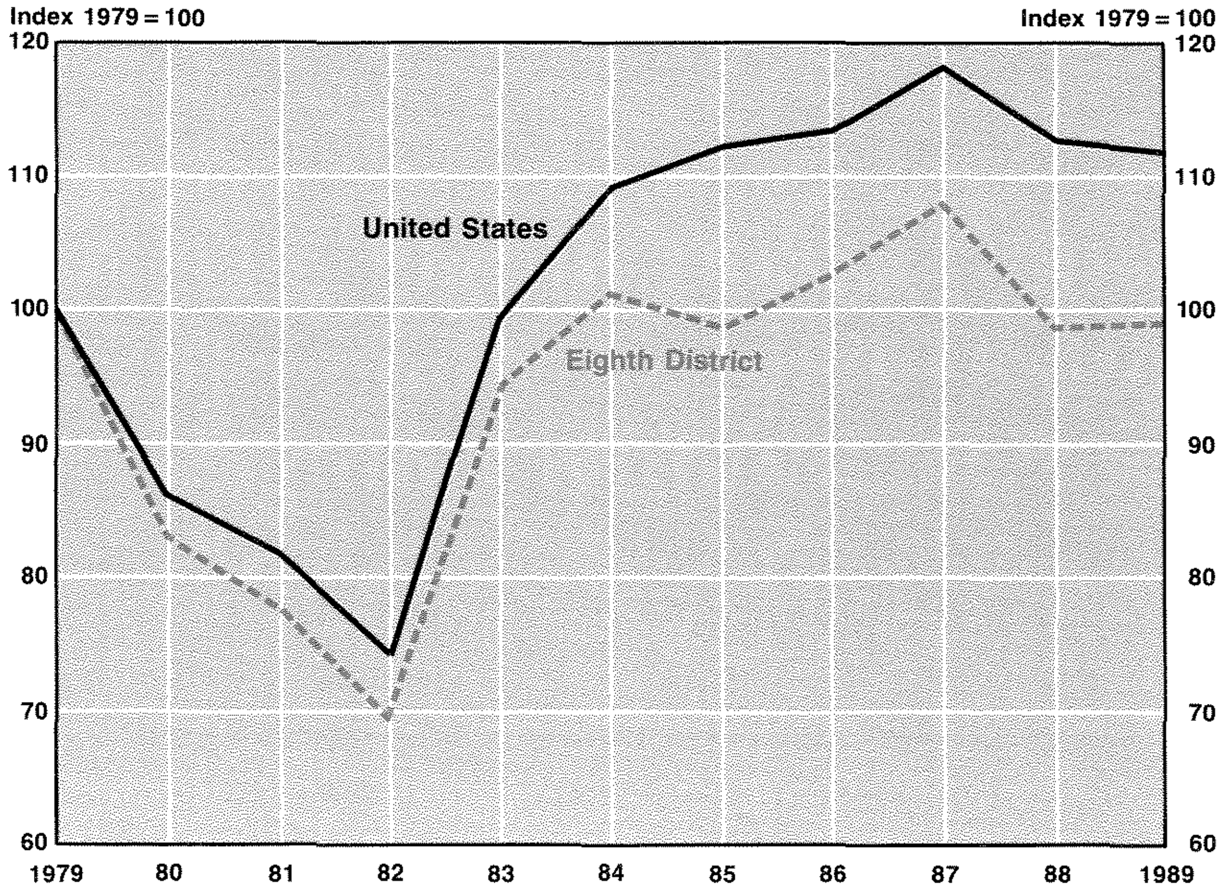
[5]1986 is the most recent year for which output data are available. The output figures are based on Gross State Product data from the U.S. Department of Commerce, Bureau of Economic Analysis. See Mandelbaum (September 1989) for a comprehensive comparison of the industrial structures of the Eighth District and U.S. economies based on this data.

[6]See Karrenbrock (December 1989) for a discussion of the Eighth District's food processing industry.

[7]Building contracts exclude those for so-called non-building projects, such as roads, bridges and public utilities.

[8]For a discussion of housing trends in the Eighth District's largest metropolitan areas, see Mandelbaum (December 1989).

Figure 3
The Real Value of Building Contracts



family dwellings, which represented more than three-fourths of all District permits, declined by 4.5 percent in 1989. Although mortgage interest rates fell in the second half of 1989, they were relatively high during the critical home sales period in spring and early summer.[9]

After falling 7.3 percent in 1988 from its 1987 peak, the real value of District nonresidential contracts recovered in 1989, rising by 4.8 percent to almost $3.9 billion. Much of this gain stemmed from growth in Arkansas, where a $283 million contract to build a paper plant north of Texarkana in Little Rock County and a number of smaller contracts caused the state's nonresidential contracts to more than double.

SERVICES-PRODUCING SECTORS

For several decades, consumers have spent an increasing proportion of their rising incomes on services. This consumption shift, in conjunction with slower productivity gains in services-pro-

[9]Effective rate on conventional mortgages (primary market), for example, rose from 9.78 percent in the first quarter of 1989 to 10.26 percent in the second quarter, peaked at 10.48 percent in July, then declined slightly to 10.09 percent in the fourth quarter. This series, published by the Federal Housing Finance Board, reflects fees and charges as well as the contract rate.

Table 3
Annual Percentage Change of Selected Economic Indicators for 1989

Indicator	U.S.	District	Arkansas	Kentucky	Missouri	Tennessee
Real nonfarm personal income	2.7%	2.3%	1.8%	2.4%	2.0%	2.9%
Real retail sales	1.4	2.0	7.0	2.1	−0.3	2.5
Durables	2.6	4.8	6.5	3.2	4.9	4.7
Nondurables	0.6	0.2	7.3	1.5	−3.9	0.7
Payroll employment	2.8	2.9	3.0	3.8	2.2	3.0
Goods-producing	1.5	1.6	1.0	2.9	1.0	1.6
Manufacturing	1.0	2.0	1.6	3.6	1.2	1.9
Construction	3.5	1.0	−2.6	4.7	0.2	0.7
Mining	0.2	−4.8	−2.5	−5.4	−2.5	−4.6
Services-producing	3.3	3.4	3.9	4.1	2.6	3.5
Wholesale/retail trade	2.7	3.0	3.9	4.1	2.5	2.4
Services	5.1	5.1	5.6	5.7	4.1	5.7
Government	2.0	2.2	2.7	3.0	1.9	1.8
Finance, insurance, and real estate	2.1	0.3	0.5	1.9	−0.5	0.4
Transportation and public utilities	2.8	3.5	4.4	3.4	1.8	5.4
Real value of building contracts[1]	−0.9	0.1	55.7	4.5	−9.2	−7.4
Residential	−4.1	−4.1	13.2	2.2	−10.8	−6.3
Nonresidential	3.2	4.8	118.3	7.0	−7.2	−8.6

[1]Excludes nonbuilding construction. Growth rates are based on F. W. Dodge *Construction Potentials*.

ducing than in goods-producing sectors and the increasing tendency of manufacturers to purchase business services rather than produce them internally, has resulted in steadily rising employment levels in services-producing sectors. Table 1 shows that employment in all District services-producing sectors rose in 1989, as well as over the decade. Each sector grew more slowly in 1989 than it had in 1988.

The services subsector, which includes personal, business, legal, repair and health services, experienced the most rapid job growth of any sector in 1989, as it has throughout the decade. Its 5.1 percent growth in 1989 approaches its rapid 5.2 percent annual growth rate over the preceding six years. The strong expansion of most types of services continued, including health services. The aging of the population has contributed to this expansion and most likely will continue to do so.

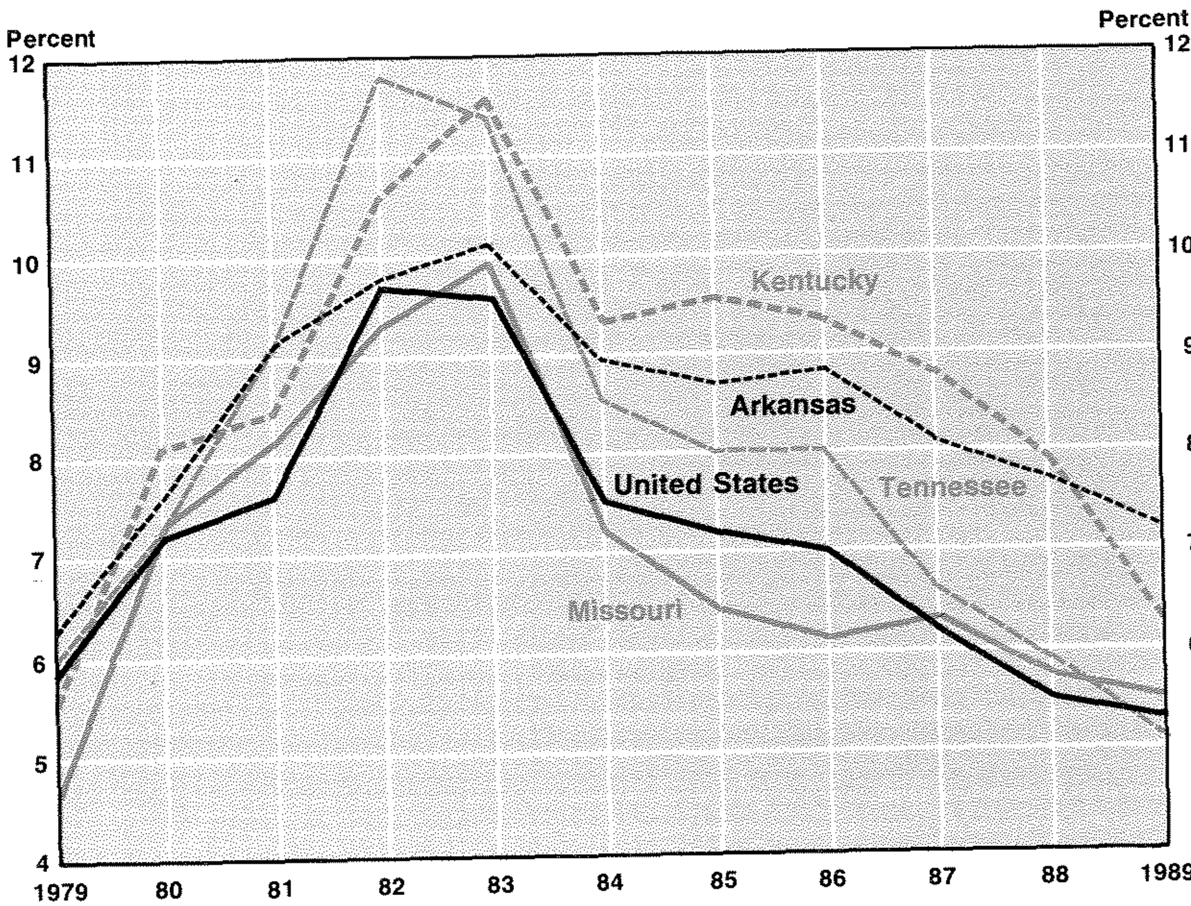
DIFFERENCES IN ECONOMIC PERFORMANCE AMONG STATES

Descriptions of economic trends in the Eighth District obscure considerable differences among its individual states. For example, as figure 1 and table 3 show, the 1989 growth of payroll employment varied from 2.2 percent in Missouri to 3.8 percent in Kentucky. As figure 4 illustrates, unemployment rates have fallen in all District states since 1983; however, jobless rates in Kentucky and Arkansas remained well above the national average in 1989.

These high jobless rates may reflect the comparatively low educational achievement of these states' residents that limits the job opportunities of many potential workers.[10] In 1989, for example, just 22.6 percent and 22.2 percent of adults in Arkansas and Kentucky had one or more years of college education compared with 31.8

[10]Berger (1989) found, after controlling for a number of structural, demographic and institutional factors, a statisically significant, positive relationship between a state's educational achievement levels and the proportion of its population that is employed. Educational attainment figures are from DRI/McGraw-Hill.

Figure 4
Annual Unemployment Rates in the 1980s



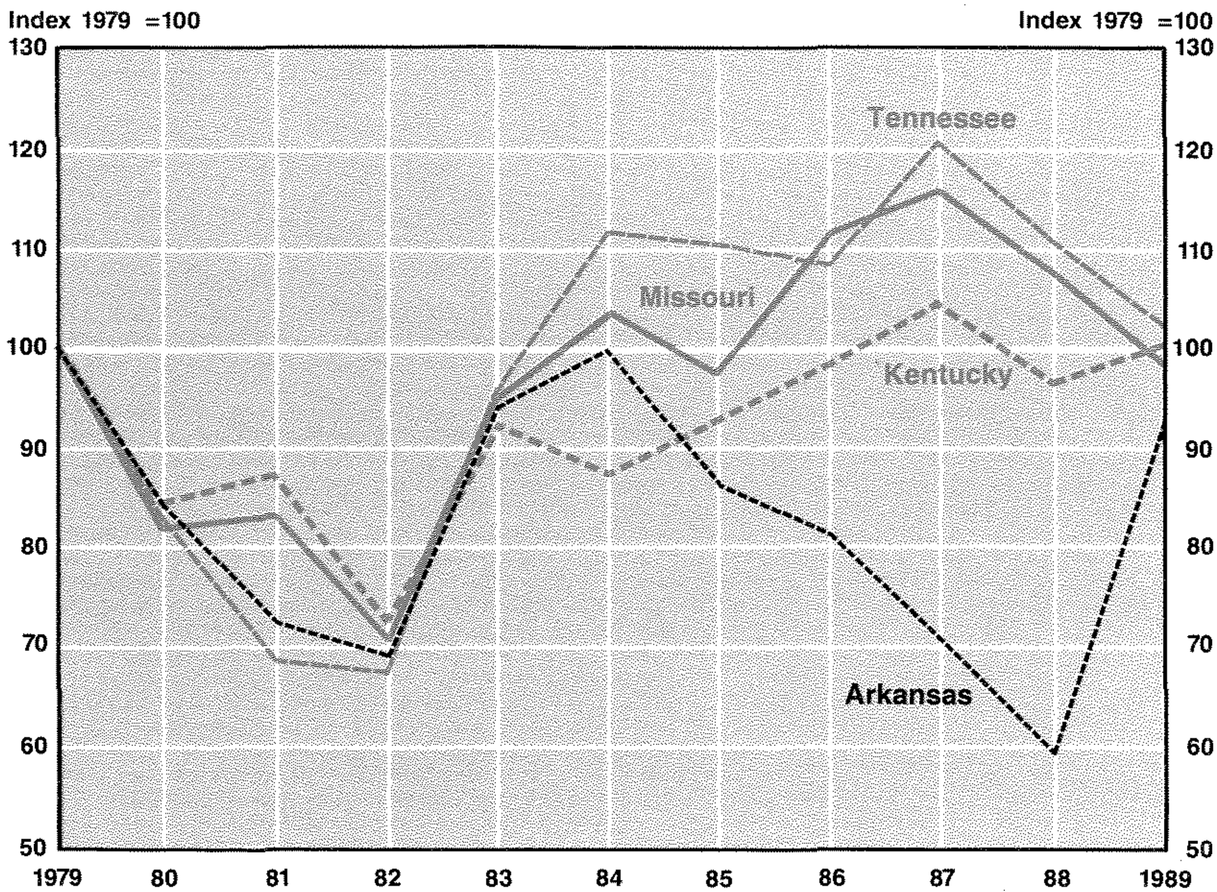
percent nationally. The corresponding figures for Missouri and Tennessee, 27.6 percent and and 25.1 percent, respectively, were closer to the national average, as were their unemployment rates.

As figure 5 shows, construction activity was another sector that varied substantially across states. Most notably, building activity in Arkansas declined sharply for four years before rebounding in 1989, while such activity in Tennessee remained well above 1979 levels until last year.

Arkansas Posts Solid Job Gains

The Arkansas economy, which expanded moderately in the 1980s, continued to grow substantially in 1989. As figure 1 shows, Arkansas' nonfarm employment growth slightly exceeded the national and District rates in 1989, allowing a sharp drop in the state's unemployment rate. Despite this healthy job growth, real nonfarm personal income grew somewhat slower last year than in the other states for two reasons. First, many of Arkansas' new jobs last year were in low-paying sectors: miscellaneous services, wholesale/retail trades and food and kindred products. Annual earnings in Arkansas food processing, for example, averaged approximately $14,400 last year, about four-fifths of Arkansas' all-industry manufacturing average. Second, income rose comparatively slowly in Arkansas because transfer payments and dividends, interest and rents showed modest growth last year.

Figure 5
The Real Value of Building Contracts



Manufacturing employment in Arkansas, showing growth in nearly every major industry, rose 1.6 percent in 1989. Almost 1,100 of the 3,708 new manufacturing jobs were in the food and kindred products sector, mostly in poultry processing. Poultry processors have expanded rapidly in Arkansas for several years. Some have recently announced plans for further expansion, so continued gains are likely. On the other hand, employment declined in electrical equipment production. Some of the losses, such as those in home appliance production, reflect the nation's homebuilding slump and relatively high interest rates for much of 1989.

After declining sharply between 1984 and 1988, construction contracting in Arkansas rebounded in 1989 (see figure 5). While construction employment continued to fall, reflecting the earlier decline in contractings, the real value of building contracts rose 55.7 percent in 1989 as building in both residential and nonresidential sectors expanded. Contracts for nonresidential projects more than doubled last year. As noted previously, a contract for a paper manufacturing plant in southwest Arkansas accounted for much of this increase; however, the Fayetteville-Springdale, Fort Smith and Pine Bluff metropolitan areas also reported strong nonresidential building growth.

Kentucky's Cyclical Expansion Continues

Heavily dependent on goods production, the Kentucky economy was severely affected by the early-1980s recession. State payroll employment fell 7.5 percent between 1979 and 1983, and the state unemployment rate rose to more than 11 percent in 1983 (figure 4). As figure 1 indicates, employment did not begin rising until 1984, one year after the other District states. Since 1983, however, nonfarm employment has grown slightly faster than the national rate, and rose 3.8 percent last year.

More than half of the state's 52,600 new jobs last year were in the wholesale/retail trade and services sectors. Many new jobs were generated in department stores, grocery stores, eating and drinking establishments, and firms providing business and health services.

Manufacturing employment's strong 3.6 percent expansion last year was fueled by widespread gains across most industries. The transportation equipment industry generated the most new manufacturing jobs last year, despite temporary layoffs at some motor vehicle assembly plants. Most of the state's new transportation equipment jobs were related to motor-vehicle and parts production concentrated near assembly plants in Louisville, Bowling Green and near Lexington.

Workers producing major home appliances in Louisville, that area's largest industry, experienced temporary layoffs during the year, contributing to the state's slow job growth in the electrical equipment industry. Projected strengthening in appliance sales in the second half of 1990, however, may lead to job gains.

Real nonfarm income received by Kentuckians has risen at just a 1.2 percent annual rate since 1979, considerably slower than the District or national averages. In 1989, however, real nonfarm income rose 2.4 percent, compared with the national average of 2.7 percent, as income from earnings and dividends, interest and rent rose moderately.

As figure 5 indicates, the real value of building contracts awarded in Kentucky has trended slowly upward since 1983. In 1989, both residential and nonresidential building expanded, allowing total building contracts to rise 4.5 percent. Moderate gains in the Louisville and Owensboro metropolitan areas contributed to the state's growth in 1989, while building activity weakened in the Lexington-Fayette area.

Missouri's Growth Trails the Nation's

With its diversified economy, Missouri's economic growth paralleled the nation's for most of the 1980s. State unemployment rates, shown in figure 4, followed the U.S. rates throughout the decade. The growth of income and employment, however, fell below the national average in recent years. Real nonfarm income rose 2 percent in 1989, reflecting the comparatively sluggish expansion of employment.

Nonfarm payroll employment rose 2.2 percent last year, the state's slowest job growth since 1983. Employment growth in all service-producing sectors slowed in 1989 from 1988. Nevertheless, the services sector, with a 4.1 percent employment increase, continued to grow rapidly with large job gains by firms providing health, business, engineering and management services.

State manufacturing employment rose 1.2 percent in 1989; as a result of severe losses in the early years of the decade, however, it was 5.5 percent below its 1979 level. Employment in the transportation equipment sector, the state's largest manufacturing industry, rose by 3 percent in 1989. Several temporary layoffs of auto workers dampened the sector's expansion, but rapid employment growth in aircraft manufacturing enabled it to grow moderately. Producers of nonelectrical machinery and fabricated metal products also expanded their workforces moderately, while makers of electrical equipment and textile mill and apparel products experienced employment declines in 1989.

Building activity trended upward in Missouri from the trough of the last recession in 1982 until 1987. In recent years, the real value of contracts for both residential and nonresidential sectors declined. In 1989, the real value of building contracts fell 9.2 percent in Missouri. The St. Louis area posted a drop in building contracting last year, but healthy gains were reported in Springfield and Columbia.

Tennessee's Job Growth Moderates

Tennessee's economy grew moderately during the 1980s, with annual nonfarm income and employment gains near the national average. Between 1979 and 1989, the state's real nonfarm income and nonfarm payroll employment rose at 2.5 percent and 1.9 percent annual rates compared with 2.4 percent and 1.9 percent nationally.

In 1989, Tennessee payroll employment growth slowed from the approximate 4 percent rate over the previous two years to its lowest rate since 1983. Despite this deceleration, Tennessee payroll employment rose by 61,700 last year, a moderate 3 percent gain. More than 25,000 of the new jobs were in the services sector, while the wholesale/retail trade sector contributed another 12,000. Employment in Tennessee's transportation and public utilities sector grew rapidly, largely due to an expansion in Memphis. Government employment slowed to a 1.8 percent gain in 1989, partially because of federal job reductions by the Tennessee Valley Authority.

Manufacturing employment rose 1.9 percent in 1989. Several of the state's largest durables sectors, including nonelectrical machinery, electrical equipment and transportation equipment, experienced moderate to strong job growth. Employment declines were reported, however, in the food processing and textile mill and apparel industries. The decline in the latter sector was partly due to continued technological improvements that, while enhancing the industry's global competitiveness, have eliminated some jobs.

Tennessee's 2.9 percent growth of real nonfarm income in 1989 exceeded the nation's rate. Nonfarm earnings grew at the national pace, but income from transfer payments and dividends, interest and rent rose somewhat faster.

Construction activity in Tennessee has declined since 1987 because of slowing growth in Tennessee's metropolitan areas. The 7.4 percent decline in the real value of building contracts in 1989 stemmed from moderate contractions in both residential and nonresidential building.

OUTLOOK FOR 1990: ANOTHER YEAR OF SLOWING GROWTH

Projections from various sources shown in table 4 suggest that the state economies of the District will continue to expand in 1990. Although the forecasts are based on different methodologies, they do provide a look at the likely future of the states' economies as viewed by economists aware of local conditions and possibilities. Projections for the national economy are provided for comparison.

The growth of personal income in 1990 in Arkansas, Kentucky, Missouri and Tennessee is expected to slow from 1989's pace, following an expected national deceleration. The slower projected growth also reflects an anticipated slowdown in inflation in 1990.

Payroll employment growth is expected to slow from the 1989 rate in all District states but Arkansas. To some extent, the weak employment growth projected for Kentucky, Missouri and Tennessee probably reflects the fact that the projections were based on state employment data before it was recently rebenchmarked. The revised data, reflecting 1989 benchmarks and used in this article, show substantially more rapid employment growth than was originally reported in the three states.

As job growth slows, unemployment rates are expected to rise in Kentucky, Missouri and Tennessee, while Arkansas' more rapid expansion is expected to allow the state jobless rate to fall. The more optimistic outlook for Arkansas partially reflects its closer relationship with the recovering economies in Texas, Oklahoma and Louisiana, where many Arkansas businesses sell goods and services. Manufacturing job growth in Arkansas also is expected to accelerate because of continued strength in nondurables and a pick-up in durables industries, stimulated by anticipated lower interest rates. Wood products industries, currently restrained by the construction slowdown, are expected to rebound this year.

Manufacturing employment in Kentucky is expected to decline slightly in 1990, mirroring the national contraction projected by DRI/McGraw-Hill. This decline, in conjunction with weakness in mining, is expected to hinder growth in other sectors, resulting in sluggish payroll employment growth.

Missouri's economic growth in 1990 is expected to start slowly and, like the national economy, strengthen as the year progresses. The state's auto sector is expected to improve after the first quarter, although the planned closing of an auto assembly plant in St. Louis will restrain growth. An improvement of the state's construction industry is also anticipated later this year, although the number of residential building permits for the year is expected to be fewer than last year. Much of the state's defense industry is accounted for by military aircraft production by McDonnell Douglas Corporation in the St. Louis area. McDonnell Douglas announced a shift to the St. Louis area of some aircraft and aircraft parts production currently taking place in California, but also plans

Table 4

Economic Projections for District States

	Actual 1989	Projected 1990
Civilian unemployment rate		
United States	5.3%	5.4%
Arkansas	7.2	6.7
Kentucky	6.2	7.2
Missouri	5.5	5.9
Tennessee	5.1	5.6
	Percent change[1]	
	Actual 1989	Projected 1990
Payroll employment		
United States	2.8%	1.9%
Arkansas	3.0	3.4
Kentucky	3.8	0.8
Missouri	2.2	0.7
Tennessee	3.0	0.9
Manufacturing employment		
United States	1.0	−1.0
Arkansas	1.6	2.8
Kentucky	3.6	−1.2
Missouri	1.2	N.A.
Tennessee	1.9	0.7
Personal income (current dollars)		
United States	7.6	6.7
Arkansas	6.8	5.8
Kentucky	7.4	5.9
Missouri	6.7	5.6
Tennessee	7.5	5.8

[1]Percent changes compare entire year with previous year.

SOURCES: United States: DRI/McGraw-Hill, *Review of the U.S. Economy*, March 1990; Arkansas: University of Arkansas at Little Rock, *Arkansas Economic Outlook*, January 1990; Kentucky: Office of Financial Management and Economic Analysis, Kentucky Finance and Administration Cabinet, March 1990; Missouri: College of Business and Public Administration, University of Missouri-Columbia, *Missouri Economic Indicators*; December 1989; Tennessee: Center for Business and Economic Research, University of Tennessee, Knoxville, *An Economic Report to the Governor of the State of Tennessee On the State's Economic Outlook*, January 1990.

to cut several thousand St. Louis workers in the second half of 1990.

Tennessee's nonfarm employment is projected to rise just 0.9 percent in 1990. Some of the weakest sectors of the state economy, nondurables manufacturing and construction, are expected to remain weak in 1990, and further employment declines are anticipated in federal government and mining. One positive development is the planned completion of General Motor's Saturn plant in Spring Hill, Tennessee. The plant is expected to provide approximately 1,000 new jobs in 1990, raising the plant's total workforce to 3,000 workers.

CONCLUSION

In many ways, 1989 was just a continuation of earlier trends for the Eighth District economy. District nonfarm employment and income grew near the national rate in 1989 as they have for the decade. District employment growth slowed last year, but was sufficient to allow unemployment rates to fall to near their 1979 levels.

The long-run future of the District's economic performance is uncertain because of a number of recent developments. These include the prospects for substantial cuts in federal defense spending, the possibility of further restructuring of the automobile industry and the potential impact of proposed federal clean-air legislation on regional coal production. To the extent projections of economic growth are accurate, however, 1990 will be another year of growth for the District economy.

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