# **Business**

## AN EIGHTH DISTRICT PERSPECTIVE

## **FALL 1987**

## Federal Expenditures Exceed Payments in Eighth District States

Federal government expenditures play an important role in state economies. In the four District states discussed in this article—Arkansas, Kentucky, Missouri and Tennessee the federal government spent \$56.5 billion in fiscal year 1986, or \$3,538 on a per capita basis.

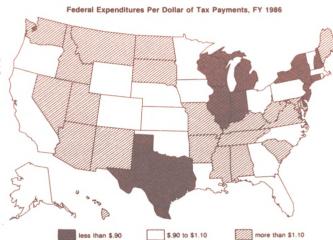
Since federal expenditures are largely financed through taxation of individuals and businesses in states, it is necessary to consider each state's federal tax payments to generate its net measure of federal inflows. This article describes the flows of federal funds in District states in fiscal year 1986.

## **Overview**

More than four-fifths of federal revenues were derived from personal income taxes or from social insurance contributions (primarily Social Security). Both sources depend directly on personal income earned within the state. Consequently, differences in state payments to the federal government per capita reflect per capita income differences.

On the expenditures side, 45 percent of domestic federal spending in FY 1986 was for direct payments to individuals—primarily Social Security and Medicare. Procurement contracts, mainly awarded by the Department of Defense, accounted for 23 percent of the total. Most of the remainder was spent for salaries and wages (15 percent) and grants to state and local governments (14 percent). Farm subsidy payments represented less than 2 percent of total federal expenditures.

Due to the difficulty of attributing all federal expenditures and revenues to specific states, the summary measure of a state's federal funds flow is computed by comparing the federal expenditures in a given state as a percentage of the nation's total domestic expenditures with the state's percentage share of total federal tax receipts. For example, Arkansas received 0.894 percent of total



federal expenditures in FY 1986 while paying 0.677 percent of the nation's total revenues. The ratio of the percentages, 1.32, summarizes the net federal funds flow in the state, indicating that Arkansas received \$1.32 in federal expenditures per dollar of federal payments.

## **Differences Among States**

In FY 1986, the federal funds flow ranged from \$1.89 of expenditures received for every dollar of payments in New Mexico to \$.65 in New Jersey. The map above shows that many states in the mid-South and Rocky Mountains received more than \$1.10 per dollar of payments, while several Midwest states received less than \$.90 per dollar of payments. Each of the four District states received a positive

> federal funds flow. The table on the following page shows that Kentucky enjoyed the highest net gain, \$1.38 for each dollar sent to the federal government, eighth among the 50 states. Tennessee ranked the lowest among the District states, but still ranked 13th among all states with \$1.23 received in federal expenditures per dollar of payments.

Although all four District states enjoyed



	U.S.	Arkansas	Kentucky	Missouri	Tennessee
Expenditures/Payments	1.00	1.32	1.38	1.31	1.23
Population (thousands)	241,078	2,372	3,728	5,066	4,803
Income Per Capita	\$14,641	\$11,073	\$11,238	\$13,789	\$12,002
Payments Per Capita	3,108	2,137	2,266	2,947	2,511
Expenditures Per Capita	3,331	3,026	3,357	4,124	3,314
Direct Payments	1,497	1,669	1,496	1,606	1,451
Procurement Contracts	775	431	885	1,309	947
Defense	563	374	144	1,095	237
Non-defense	212	57	. 741	214	710

### Federal Tax Payments and Expenditures in Fiscal Year 1986<sup>1</sup>

<sup>1</sup>Expenditures and population exclude U.S. territories and those not distributed by state.

SOURCES: Congressional Research Service, The Library of Congress, 1987 and U.S. Department of Commerce, 1987.

a positive net inflow, the reasons differed from state to state. To understand these differences, it is helpful to compare payments and expenditures separately for each state.

#### Arkansas

Arkansas paid \$5.1 billion in federal taxes in FY 1986 and received \$7.2 billion. On a per capita basis, both federal expenditures and payments were considerably less than the national average (see table). The state's positive federal funds flow—indicated by the 1.32 summary measure—resulted as payments were relatively lower than expenditures. The below-average federal tax payments per person mirrored the state's low per capita income.

Federal expenditures per person in Arkansas were \$3,026. Relatively high Social Security and Medicare payments boosted direct payments to individuals in the state, but spending for procurement and for most other functions was below the national average.

#### Kentucky

Kentucky paid \$8.4 billion to the federal government in FY 1986 and received \$12.5 billion. The state received \$1.38 for every dollar sent to Washington. The positive inflow was due to relatively low per capita tax payments—reflecting Kentucky's low per capita income—combined with federal expenditures near the national average. The state's greatest strength in attracting federal funds was in non-defense procurement contracting, which totaled \$2.8 billion, a substantial increase from previous years. Coal purchases by the Tennessee Valley Authority for electrical generation were

largely responsible for the increase.

#### Missouri

Missouri received more in federal expenditures (\$20.9 billion) and paid more (\$14.9 billion) than the other District states in FY 1986. As Missouri's per capita payments to the federal government were similar to the national average, Missouri's positive federal funds flow (1.31) was largely due to higher-than-average inflows. Direct payments to individuals and farm subsidy payments were above the national average. The state's primary strength, however, was in defense contracting, which was concentrated in aircraft production in the St. Louis area. The \$5.5 billion awarded to Missouri defense contractors ranked sixth among all states.

#### Tennessee

Tennessee paid \$12.1 billion to the federal government in FY 1986 while receiving \$15.9 billion. The state received \$1.23 in federal expenditures per dollar of payments. As was true in Kentucky, the positive inflow was due to relatively low tax payments per capita combined with federal expenditures near the national average. Per capita tax payments were \$2,511, well below the national average.

The composition of federal spending in Tennessee also was similar to that in Kentucky. Direct payments per person approached the U.S. average while strong non-defense contracting boosted procurement well above the national level. Tennessee's \$3.4 billion received in non-defense contracts was exceeded only by California.

-Thomas B. Mandelbaum

**Business—An Eighth District Perspective** is a quarterly summary of business conditions in the area served by the Federal Reserve Bank of St. Louis. Single subscriptions are available free of charge by writing: Research and Public Information Department, Federal Reserve Bank of St. Louis, P.O. Box 442, St. Louis, Missouri 63166. Views expressed are not necessarily official positions of the Federal Reserve System.

## **EIGHTH DISTRICT BUSINESS DATA**

	Rates of Change <sup>1</sup>				
	Current Quarter	1986	1985	1984	
General Business Indexes <sup>2</sup>	II/1987				
Arkansas	3.5%	0.2%	1.0%	2.9%	
Kentucky	0.0	0.6	0.6	4.4	
Missouri	- 2.9	1.8	3.0	4.8	
Tennessee	3.1	3.9	2.9	5.4	
Payroll Employment	II/1987				
United States	2.3%	2.0%	2.7%	4.5%	
District	-0.1	2.5	2.5	4.5	
Arkansas	0.0	2.5	1.7	3.8	
Little Rock	- 1.9	0.7	2.9	3.6	
Kentucky	- 1.0	2.3	2.3	5.3	
Louisville	2.0	2.9	2.4	4.0	
Missouri	- 2.0	1.5	2.1	4.7	
St. Louis	- 2.5	1.2	2.3	4.3	
Tennessee	- 0.3	3.6	3.2	4.2	
Memphis	-2.9	4.2	3.1	5.1	
Manufacturing Employment	II/1987				
United States	0.8%	-0.9%	- 1.8%	3.2%	
District	- 3.5	-0.2	- 1.6	3.3	
Arkansas	-2.4	2.4	- 1.6	2.6	
Kentucky	-0.5	-0.4	-2.0	4.7	
Missouri	- 5.8	- 3.0	- 1.4	3.5	
Tennessee	-3.6	1.1	- 1.6	2.6	
Retail Sales <sup>3</sup>	II/1986				
United States	10.2%	6.3%	6.4%	7.3%	
Arkansas	16.0	2.2	2.2	2.4	
Kentucky	1.2	-2.4	12.6	0.1	
Missouri	8.3	2.6	3.3	9.6	
Tennessee	38.2	6.5	9.4	10.5	
Personal Income	l/1986				
United States	7.0%	4.4%	6.2%	8.4%	
District	9.1	3.6	5.7	8.7	
Arkansas	18.5	3.2	4.8	8.2	
Kentucky	5.4	2.2	4.2	8.1	
Missouri	6.4	3.0	6.2	8.9	
Tennessee	11.0	5.6	6.6	9.2	

	District En	nployment <sup>1</sup>	Prices <sup>1</sup>	
	Current Quarter	Current Year	<b>Current Quarter</b>	Current Year
Key Industries	II/1987	II/1986 - II/1987	II/1987	II/1986 - II/1987
Fabricated Metal Products	2.1%	- 1.1%	2.3%	1.0%
Electrical and Electronic Equipment	0.6	0.6	-0.3	1.2
Nonelectrical Machinery	-0.3	- 2.0	0.7	1.3
Transportation Equipment	- 9.8	-8.3	1.3	2.4
Food and Kindred Products	8.4	3.6	9.6	4.3
Textile and Apparel	5.7	1.9	2.5	1.1
Printing and Publishing	2.9	-0.7	2.1	3.9
Chemicals and Allied Products	1.9	-0.2	9.3	3.6
Construction	39.3	5.1	1.8	0.7

#### EIGHTH DISTRICT BUSINESS DATA Current **Previous** Average Average Quarter Quarter 1986 1985 **Unemployment Rate** II/1987 1/1987 6.7% 7.2% **United States** 6.2% 7.0% District 7.4 7.7 7.9 7.4 Arkansas 8.2 8.1 8.8 8.7 Little Rock 7.2 7.1 6.9 6.4 Kentucky 9.5 9.7 9.2 9.5 Louisville 7.4 7.5 7.0 8.0 Missouri 6.2 5.8 6.1 6.4 St. Louis 7.3 6.7 7.0 7.5 Tennessee 6.9 7.2 8.0 8.0 Memphis 5.9 6.0 6.8 6.6 **Previous** Same Period Same Period Current Quarter Quarter 1986 1985 **Construction Contracts<sup>4</sup>** II/1987 I/1987 II/1986 II/1985 (millions of dollars) **Residential Construction** District \$526.2 \$584.4 \$409.3 \$463.5 52.1 55.9 65.9 Arkansas 53.4 Kentucky 114.4 113.8 105.6 97.9 161.1 213.6 145.6 115.7 Missouri Tennessee 197.2 204.9 183.3 184.0 **Nonresidential Construction** \$388.7 \$338.3 \$346.9 District \$468.8 Arkansas 60.1 30.7 35.3 41.7 100.6 120.7 70.7 87.8 Kentucky 122.4 Missouri 167.3 108.0 115.8 Tennessee 140.8 129.3 116.5 95.0

NOTE: With the exception of employment and prices in key industries, all data are seasonally adjusted. Data for Arkansas, Kentucky, Missouri and Tennessee are used to represent the District.

<sup>1</sup> All growth rates are compounded annual rates of change. The 1984 through 1986 growth rates compare the fourth quarter of the year listed with the fourth quarter of the previous year.

<sup>2</sup>Although each index is a comprehensive measure of economic activity, the Arkansas and Missouri indexes, computed by Southwestern Bell, are not strictly comparable to the Kentucky and Tennessee indexes, which are computed by South Central Bell.

<sup>3</sup>Sources: Arkansas from Southwestern Bell, Kentucky from the Kentucky Revenue Department, Missouri and Tennessee from the U.S. Department of Commerce.

4Excludes nonbuilding construction. Source: F. W. Dodge Construction Potentials, proprietary data provided by special permission. Digitized for FRASER

http://fraser.stlouisfed.org/ Federal Reserve Bank of St. Louis