
Business

AN EIGHTH DISTRICT PERSPECTIVE

WINTER 1986/87

Eighth District Shares in Defense Industry Spending

Federal spending on virtually all types of defense has increased from the levels of the late 1970s. For example, the value of Department of Defense prime contracts, adjusted for inflation, expanded by 38.9 percent between 1980 and 1985. These expenditures tend to be concentrated within regions, as six states, including Missouri, received half of 1985 prime contracts. This article describes how the Eighth District economy shared in this expansion of defense spending and focuses specifically on Missouri, which dominates the contract defense industry in the region.¹

Growth in the 1980s

The recent military buildup resulted in prime defense contracts awarded nationally to grow from \$91.6 billion in FY 1980 to \$127.4 billion in FY 1985, measured in 1982 dollars. This gain represented a 6.8 percent annual growth rate, more than double the 3.3 percent rate recorded in the last half of the '70s. Federal nondefense purchases grew more slowly in the '80s, expanding at a 3 percent rate, thus increasing the share of the total budget allocated to defense.

The real value of prime defense contracts received by the District industry during the '80s grew even more dramatically than in the nation, expanding at an 11.6 percent annual rate, from \$8.3 billion in FY 1980 to \$14.5 billion in FY 1985.² This swift growth allowed the District's share of prime contracts to grow from 9.1 to 11.3 percent of the national total during the 1980-85 period. This District expansion is particularly impressive considering the sluggish 1.9 percent rate of growth of District contracts between FY 1975 and FY 1980.

The steady growth of defense-related activity in the District in the early '80s helped offset general employment declines during

that period. While District manufacturing employment dropped at a 5.9 percent annual rate between 1980 and 1982, employment in defense-oriented manufacturing actually climbed at a 15.5 percent rate. This countercyclical growth was particularly evident in the St. Louis metropolitan area where employment in aircraft and parts manufacturing, almost entirely dependent on defense contracts, grew at a 2.8 percent rate between 1980 and 1982, while the rest of the manufacturing sector lost jobs at a 5.7 percent rate. The table on the next page shows that all District states, except Illinois and Tennessee, experienced prime contract growth faster than the national average between 1980 and 1985. Contracts in Arkansas expanded most rapidly, at a 38.1 percent pace, largely due to increased production of guided missile systems and related components in the Camden area.

Although the steady growth of defense spending apparently helped mitigate the impacts of the 1982 recession in the District, the economic contribution of defense contracts does not necessarily act as a countercyclical stabilizer. That is to say, defense expenditures typically are not made with the primary intention of economic stabilization and it is probably coincidental that they help offset economic downturns. At other times, the completion of defense contracts or cancellation of projects has resulted in dramatic fluctuations in employment levels and exacerbated a decline in economic activity. The 4.5 percent downturn in real federal defense expenditures during the recession year of 1974, for instance, is an example of procyclical defense spending.

Missouri Dominates District Defense Production

Missouri received almost half of District prime contracts in the '80s, so changes in that state are most influential in determining the District's growth of contracts. Missouri's 12.6 growth rate was due primarily to growth in the St. Louis area where over 90 percent of the state's defense-related production took

¹The Eighth Federal Reserve District includes all of Arkansas and parts of Illinois, Indiana, Kentucky, Mississippi, Missouri and Tennessee. This article refers to all seven states.

²The value of prime contracts received in District states may not measure the actual volume of work performed in the region because a portion may be subcontracted to firms in other areas.



Value of Prime Defense Contracts

	Fiscal Year 1985 (millions of current dollars)	Real annual rate of growth: 1980-85
United States	\$140,096	6.8%
Eighth District	15,901	11.6
Arkansas	810	38.1
Illinois	1,693	6.3
Indiana	3,177	13.3
Kentucky	506	9.4
Mississippi	1,310	9.3
Missouri	7,613	12.6
Tennessee	793	3.0

Note: Prime contracts over \$25,000

Source: U.S. Department of Defense

place in FY 1985. The \$7 billion in prime defense contracts received by the St. Louis area was greater than the amount awarded to any other city in the nation in FY 1985, representing 5 percent of the national total.

Most of the city's contracts in FY 1985 were received by McDonnell-Douglas Corporation (MDC), the nation's largest defense contractor that year. This corporation's growth in the St. Louis area reflects expanded production of combat aircraft and missile systems. In October 1986, MDC, in conjunction with Northrop Corporation, was awarded a \$691 million contract to develop prototypes of the Air Force's next generation of fighter planes.

General Dynamics, the second largest of the nation's defense contractors in FY 1985, also is based in St. Louis, but produces its defense-related goods elsewhere. General Dynamics, for example, is responsible for much of the missile production in Arkansas.

The \$7.6 billion in prime defense contracts awarded to Missouri firms in FY 1985 represents a substantial share of the state's economy. According to a survey by the U.S. Census Bureau, the defense industry accounted for about 8 percent of the state's manufacturing jobs in 1983. The total effects of the industry, however, go beyond this direct impact. As an industry's output expands, its payments for local inputs and disbursement of payroll stimulates employment and income in other sectors of the regional economy.

It should be emphasized, however, that these are not net

impacts. Funds for defense expenditures must come from taxation, government borrowing or money creation. To the extent the source is tax payments from Missouri, private purchasing power is reduced and transferred from expenditures on private sector goods and services to defense items. Deficit spending also has indirect costs (investment crowding out) that make it difficult to determine the net change from defense spending. The primary result of a rise in government spending in a region may be a change in the composition of economic activity, with a small, if any, change in the level of output and employment.

Conclusion

During the next few years, uncompleted contracts and federal defense appropriations not yet spent suggest continued high levels of defense activity. In the longer run, however, most analysts foresee a slowing of the swift growth of defense spending. The Congressional Budget Office, for instance, recently projected defense outlays to grow through FY 1991 at a real annual rate of less than 1 percent, compared with the 6.6 percent growth rate of defense purchases between 1980 and 1985. During the first half of the '80s, however, the defense industry's rapid growth allowed employment increases that partially offset job losses in the nondefense manufacturing sector of the Eighth District economy.

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EIGHTH DISTRICT BUSINESS DATA

	Rates of Change ¹			
	Current Quarter	1985	1984	1983
General Business Indexes²	III/1986			
Arkansas	4.9%	0.8%	2.6%	11.8%
Kentucky	1.7	1.4	4.4	4.7
Missouri	7.0	2.4	4.4	9.7
Tennessee	0.7	2.6	5.1	4.6
Payroll Employment	III/1986			
United States	1.9%	2.9%	4.5%	3.5%
District	4.3	2.6	4.6	3.5
Arkansas	3.0	2.9	3.8	5.5
Little Rock	0.4	2.9	3.7	5.1
Kentucky	3.4	1.7	5.3	1.6
Louisville	5.4	2.9	4.1	6.8
Missouri	5.3	2.7	4.7	3.3
St. Louis	-1.7	1.4	4.4	3.5
Tennessee	4.5	2.8	4.3	4.1
Memphis	1.3	1.1	5.2	4.3
Manufacturing Employment	III/1986			
United States	-2.1%	-1.0%	3.2%	4.4%
District	-1.2	-1.9	3.4	6.5
Arkansas	0.6	-0.9	2.7	8.3
Kentucky	0.0	-2.4	4.9	5.8
Missouri	-2.6	-1.3	3.5	6.1
Tennessee	-1.2	-2.5	2.7	6.5
Personal Income	II/1986			
United States	5.9%	6.2%	8.4%	8.0%
District	3.0	5.7	8.7	6.6
Arkansas	-5.3	4.8	8.2	7.1
Kentucky	4.3	4.2	8.1	4.6
Missouri	5.1	6.2	8.9	7.1
Tennessee	3.3	6.6	9.2	7.3
Retail Sales³	III/1986			
United States	17.1%	5.6%	7.3%	11.4%
Arkansas	10.4	2.2	2.4	11.2
Kentucky	6.0	12.6	0.2	8.3
Missouri	12.2	1.9	9.1	9.8
Tennessee	0.0	7.8	10.9	14.2

	District Employment ¹		Prices ¹	
	Current Quarter	Current Year	Current Quarter	Current Year
Key Industries	III/1986	III/1985 - III/1986	III/1986	III/1985 - III/1986
Fabricated Metal Products	-2.0%	-1.8%	2.0%	0.6%
Electrical and Electronic Equipment	8.7	-1.5	2.8	1.8
Nonelectrical Machinery	-7.0	-3.5	1.5	1.5
Transportation Equipment	-16.8	-1.2	-2.0	2.8
Food and Kindred Products	12.3	4.4	10.5	4.4
Textile and Apparel	-2.9	-1.2	0.0	0.4
Printing and Publishing	-2.4	1.5	2.5	3.6
Chemicals and Allied Products	0.0	-3.5	-1.2	-2.2
Construction	30.3	7.0	-0.1	-0.4

EIGHTH DISTRICT BUSINESS DATA

	Current Quarter	Previous Quarter	Average 1985	Average 1984
Unemployment Rate	III/1986	II/1986		
United States	6.9%	7.2%	7.2%	7.5%
District	7.8	7.6	7.9	8.3
Arkansas	9.3	8.5	8.6	8.9
Little Rock	7.6	6.5	6.4	7.0
Kentucky	8.6	9.4	9.5	9.3
Louisville	6.5	7.3	7.9	8.2
Missouri	6.5	5.8	6.4	7.2
St. Louis	7.5	6.5	7.4	8.1
Tennessee	7.9	7.8	8.0	8.6
Memphis	6.7	6.6	6.6	7.3
	Current Quarter	Previous Quarter	Same Period 1985	Same Period 1984
Construction Contracts⁴ (millions of dollars)	III/1986	II/1986	III/1985	III/1984
Residential Construction				
District	\$534.7	\$482.1	\$469.2	\$470.5
Arkansas	63.6	54.1	58.4	77.1
Kentucky	107.4	105.8	86.6	106.8
Missouri	154.9	145.5	145.5	117.6
Tennessee	208.9	176.7	178.7	169.0
Nonresidential Construction				
District	\$404.8	\$350.7	\$348.1	\$292.2
Arkansas	60.6	31.9	39.2	39.5
Kentucky	115.8	69.5	88.0	46.8
Missouri	129.4	124.3	112.0	94.3
Tennessee	99.0	125.1	108.9	111.6

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.

¹ All growth rates are compounded annual rates of change. The 1983, 1984 and 1985 growth rates compare the fourth quarter of the year listed with the fourth quarter of the previous year.

² 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.

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

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