

District Automotive Sector Flourishing

by Kevin L. Kliesen

In many ways, the automobile—broadly defined as passenger cars, trucks and other commercial vehicles—is the linchpin of a modern industrial economy. For this reason, many economists and policymakers follow it closely. But these analysts follow the automotive sector for other reasons, as well. Among the most important is that it is often a useful cyclical indicator of economic activity.

These days, analysts who track the automotive sector are paying closer attention to the seven states of the Eighth Federal Reserve District.¹ Although Michigan and Ohio are still the dominant U.S. automotive manufacturing states, with Missouri not far behind, an increasing share of the country's cars and trucks are being produced in Illinois, Indiana, Kentucky and Tennessee. Combined with a burgeoning parts industry that has cropped up to serve these new plants, the automotive sector is influencing a larger slice of this region's economy than ever before.

Why Here?

On Dec. 1 of last year, Toyota announced that it would build a \$700 million plant just north of Evansville, Ind., to produce its full-



size pickup. It will be Toyota's second plant in the United States, marking the sixteenth automotive manufacturing facility in the District states. The rise of foreign transplants in the United States has occurred for several reasons, including the budding protectionist sentiments that took hold in the early and mid-1980s. Seeking a way to sell more cars and trucks to American consumers, Japanese manufacturers decided to set up shop in the United States as a way to circumvent newly imposed import restrictions. A second reason stemmed from the sustained rise in the value of yen against the dollar beginning in late 1985, which substantially boosted the dollar price of imported Japanese automobiles.

These factors, however, do not explain why many of these Japanese manufacturers decided to locate outside of the Great Lakes region, an area rich in automotive plants, existing parts suppliers and workers steeped in the knowledge of how to build cars. Moreover, they do not explain why domestic producers have also shifted a large amount of production over the past 20 years from Michigan, Wisconsin, California, and, to a lesser extent, Missouri.

The domestic automotive manufacturing industry and foreign transplants have spread beyond their traditional boundaries for sev-

eral reasons. First, some manufacturers have chosen to locate in states where labor laws tend to favor employers and unionization rates are lower. However, of the five District states with automotive manufacturing facilities, only Tennessee is a right-to-work state.² On the other hand, this may have influenced BMW and Mercedes Benz to locate recently in South Carolina and Alabama, respectively, since these states have right-to-work laws.

Second, the average manufacturing wage rates in Kentucky and Tennessee—the two District states that have seen the largest increase in automotive production over time—have usually been considerably lower than in Midwestern manufacturing states. Since 1980, the average hourly manufacturing wage rate in Kentucky has been about 25 percent lower than that in Michigan, while it has been about a third less in Tennessee.

Finally, Illinois, Indiana, Kentucky and Tennessee have all offered lucrative financial incentives to attract manufacturers—both domestic and foreign. These have included tax credits, capital improvements and worker training programs. For example, to land the Toyota truck plant, the state of Indiana and Gibson County together offered the company an incentive package worth \$72 million, including a \$15 million state tax credit.³ Scheduled to open in 1998, the plant is expected to employ about 1,300 people, producing about 100,000 vehicles a year. Crudely put, the state and county bought each job for about \$55,500.

Facts and Figures

Although the jury is still out as to whether this constitutes a wise use of state resources, there is no denying the impressive surge in motor vehicle production in the District over time. In fact, over the past 20 years, motor vehicle production in Tennessee has increased from a little less than 3,000 units to more than 780,000 units in 1995 (see chart). Likewise, in 1975, truck and auto production in Kentucky totaled about 240,000 units, or a little more than 2.5 percent of U.S. production. By 1995, however, bolstered by the addition of Toyota and a significant amount of added capacity at Ford's Louisville facility, the number of trucks and autos produced totaled nearly one million, equaling about 8.25 percent of total U.S. production.

Kentucky and Tennessee are not the only District states that have seen increases in automotive production

over the past 20 years or so, though Indiana and Illinois have also increased their share of total U.S. production. Since 1976, Illinois' share has increased from about 2.5 percent to a little more than 6 percent, while Indiana's has increased from a little less than 1 percent to about 3.5 percent. In 1995, Illinois plants produced a little more than 725,000 vehicles, while the two facilities in Indiana produced a little more than 400,000 vehicles (see chart at right).

Only Missouri has seen its share of U.S. automotive production decline over time. Its share fell from a high of about 12.5 percent in 1986, when it was the nation's second largest automotive producing state, to a little under 7.5 percent in 1994—just behind Michigan and Ohio. In 1995, however, Missouri was supplanted by Kentucky as the District's largest automotive producer: Total production dropped a little more than 4 percent in that year, as efforts to expand capacity at existing plants temporarily curtailed production. Missouri's slip behind Kentucky may be short-lived, however, once GM's Wentzville plant and Chrysler's Fenton facility reach full production this year.

All told, motor vehicle production in these five states in 1995 totaled about 3.8 million units—an all-time record and more than triple the 1.1 million vehicles produced during the recession year of 1982. Moreover, motor vehicle output in the District states as a share of total U.S. production has more than doubled since 1981—rising to just under a third in 1995. The figure also shows that as of the end of 1995, these 15 District facilities employed a little more than 63,000 workers, which represents a more than 10 percent jump from two years earlier.

Focusing solely on the manufacturing plants leaves out several important auxiliary effects, however. Among the most important is the increase in the number of automotive supplier plants that have been built to serve the foreign transplants and the Big Three automakers. As a recent study (Klier, 1995) shows, between 1980 and 1993, a large number of these plants cropped up along the I-65/I-75 corridor, which runs south along these two interstate highways from Michigan to the Gulf Coast. Not surprisingly, while nearly 40 percent of the plants are still located in Michigan and Ohio, about a quarter of the nation's main supplier plants are now in Indiana, Illinois, Tennessee and Kentucky.

A Thriving Industry

In the early 1980s, many of those who followed the automotive manufacturing industry said it was in the throes of a long-term decline. Although productivity gains have resulted in the loss of several hundred thousand automotive manufacturing jobs since that time, the industry has rebounded impressively. Despite a slight drop in 1995, primarily because of moderating U.S. economic growth, total U.S. production was still near the all-time high set in 1978. As the Eighth District's automotive industry surges forward, it is

ENDNOTES

¹ The seven-state area comprises Arkansas, Illinois, Indiana, Kentucky, Mississippi, Missouri and Tennessee. See back cover.

² A right-to-work state is one that does not require an employee to join a union and/or pay union dues or fees. Generally speaking, unionization rates tend to be significantly lower in right-to-work states, as do average manufacturing wage rates.

³ Published report from the Louisville Courier-Journal, Dec. 1, 1995.

Truck and Passenger Car Production in Eighth District States, 1995

State/Facility	Manufacturer	No. of Employees	Production
ILLINOIS			
Belvidere	Chrysler	3,890	247,569
Chicago	Ford	2,966	266,443
Normal	Diamond-Star	3,200	216,590
	Total	10,056	730,602
INDIANA			
Fort Wayne	GM	2,869	230,014
Lafayette	Subaru-Isuzu	2,784	180,174
	Total	5,653	410,188
KENTUCKY			
Bowling Green	GM	783	19,478
Georgetown	Toyota	6,500	381,445
Louisville	Ford	7,873	590,357
	Total	15,156	991,280
MISSOURI			
Kansas City	Ford	4,520	389,835
St. Louis	Chrysler	6,079	272,303
St. Louis	Ford	2,700	217,912
Wentzville	GM	2,668	411
	Total	15,967	880,461
TENNESSEE			
Madison	Peterbilt	1,470	12,600
Smyrna	Nissan	6,020	465,786
Spring Hill	Saturn	8,801	302,008
	Total	16,291	780,394
District Total		63,123	3,787,925

SOURCE: Individual Manufacturers

contributing an increasingly larger share of this output, providing a strong boost to the District's economy.

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REFERENCES

American Automobile Manufacturers Association. Motor Vehicle Facts and Figures (1995).

Klier, Thomas R. "The Geography of Lean Manufacturing: Recent Evidence from the U.S. Auto Industry." Federal Reserve Bank of Chicago Economic Perspectives (November/December, 1995), pp. 2-16.

