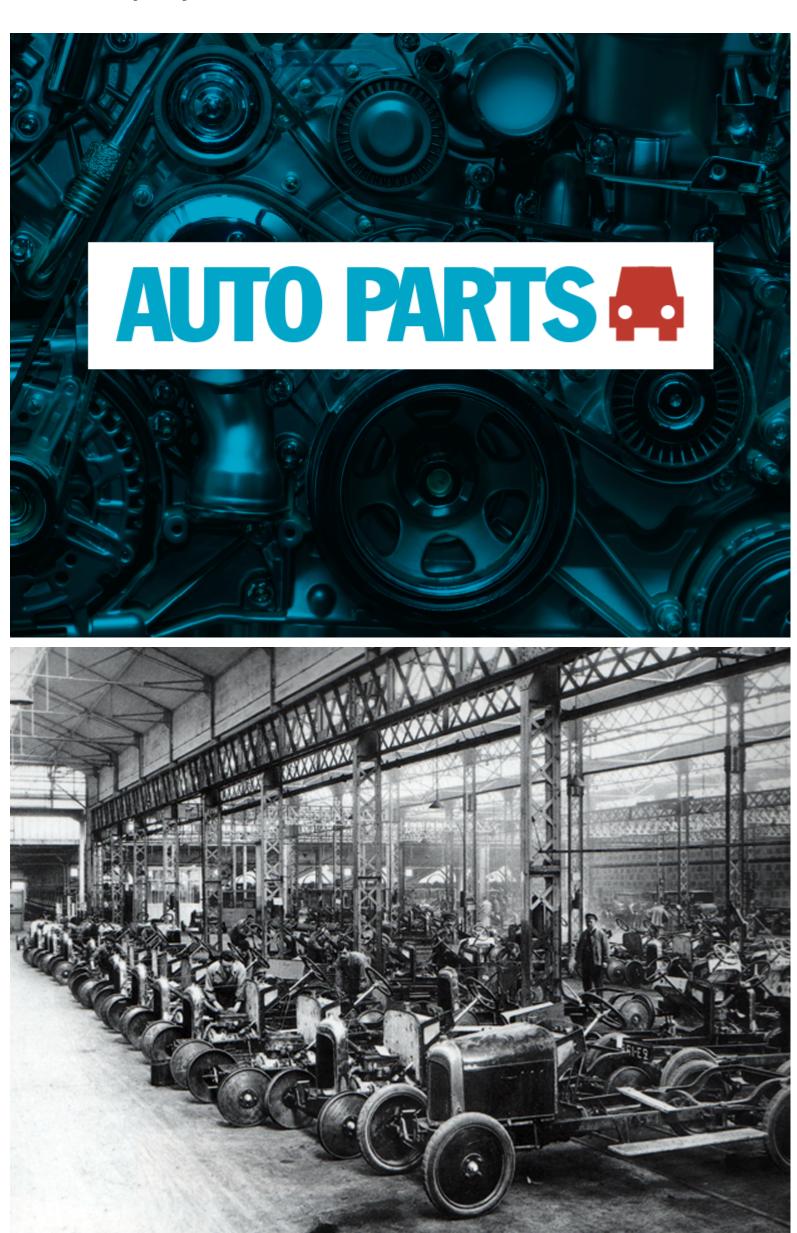
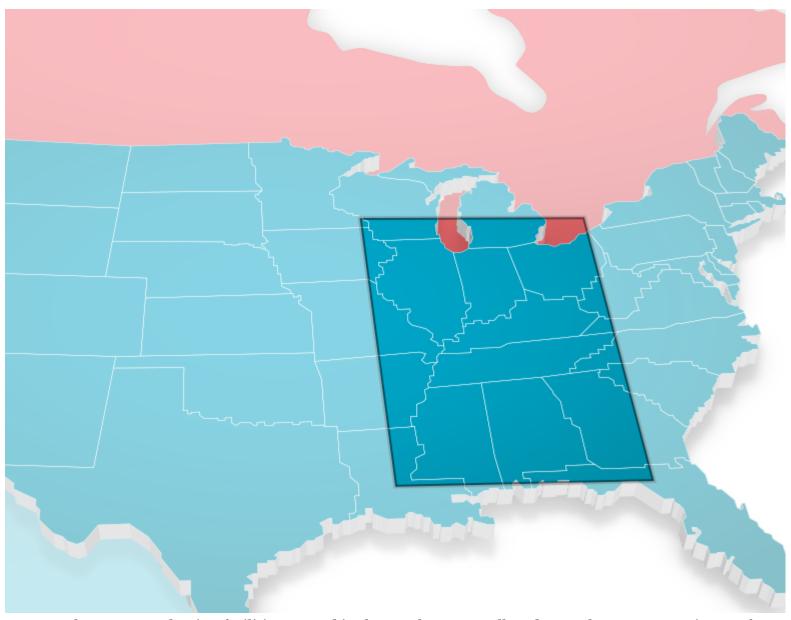
The Sum of the Parts: A Look at Auto Parts Manufacturing Employment in the Southeast

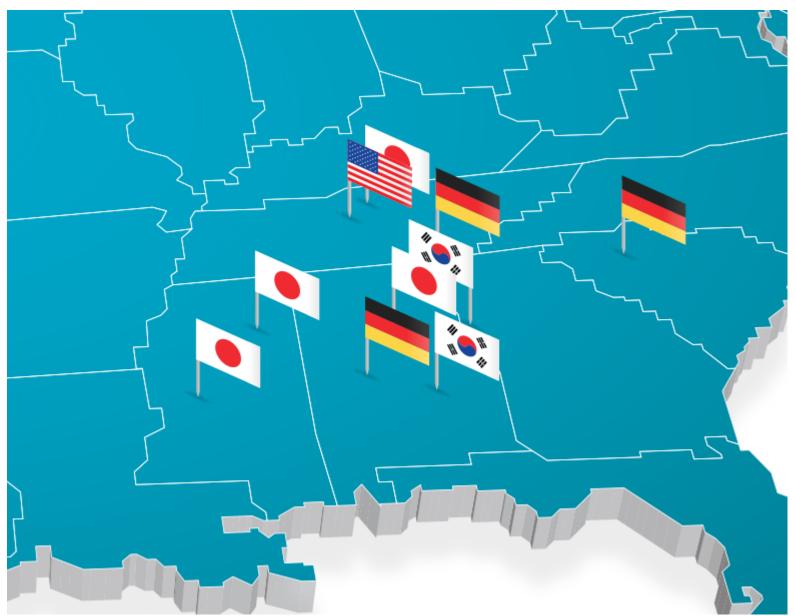
John Robertson,Ellyn Terry



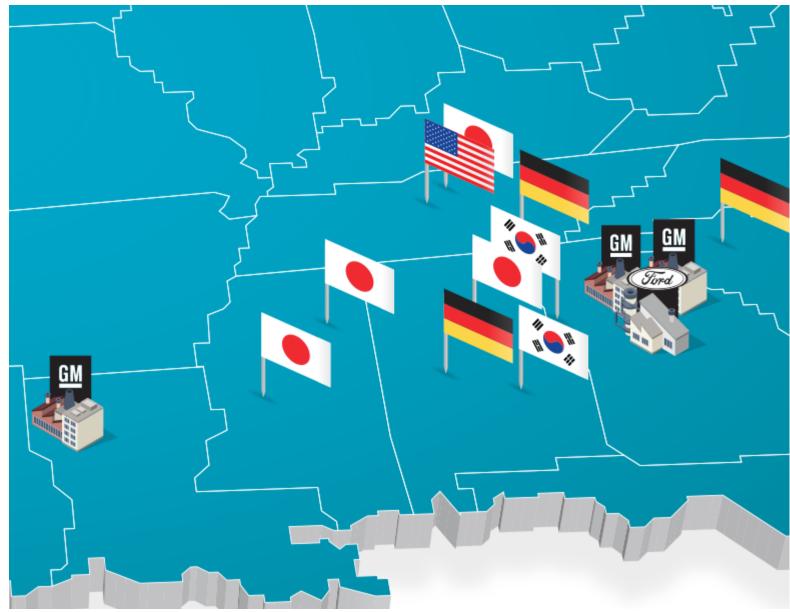
In the automotive industry's formative years, assembly plants were clustered primarily in the Upper Midwest, and that area remains the nation's dominant auto-producing region.



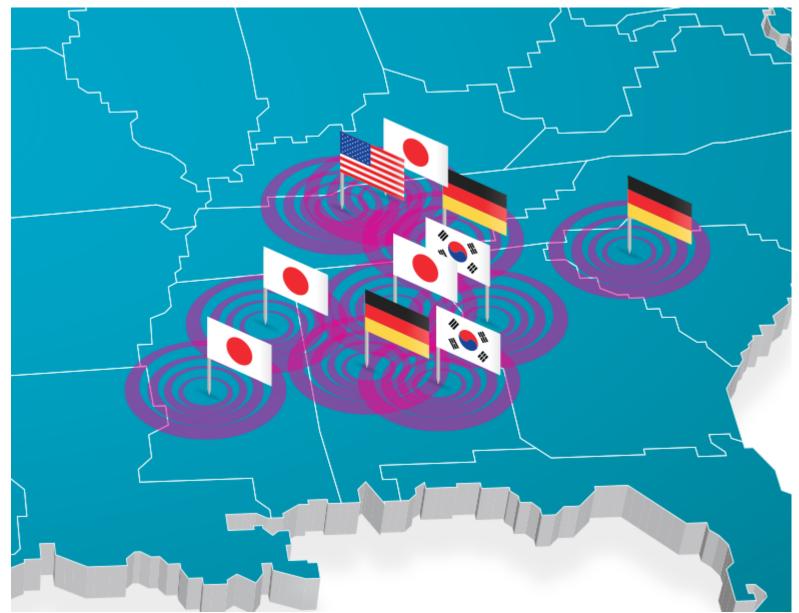
But over the years, production facilities opened in the Southeast as well. Industry observers sometimes refer to this swath of the country as "auto alley."



Currently, with the exception of GM's assembly plant in Spring Hill, Tennessee, all of the auto assembly plants in the Southeast are foreignowned (often called "transplants" in the automaking industry).



Since 1990, four southeastern auto assembly plants have closed, all of them domestically owned.



An auto assembly plant employs many people, but each plant also produces a halo effect of development, spurring the establishment of numerous parts suppliers located close by. The economic impact of parts suppliers is significant, often crossing state borders and affecting employment broadly.

Let's look at changes in the average annual number of establishments in motor vehicle parts manufacturing industry in the region since 1990. (Let's also look at South Carolina. Although it's not in the Atlanta Fed's district, it's a neighboring state within the auto alley.) Overall, the region had 150 more auto parts manufacturing facilities in 2014 than in 1990.

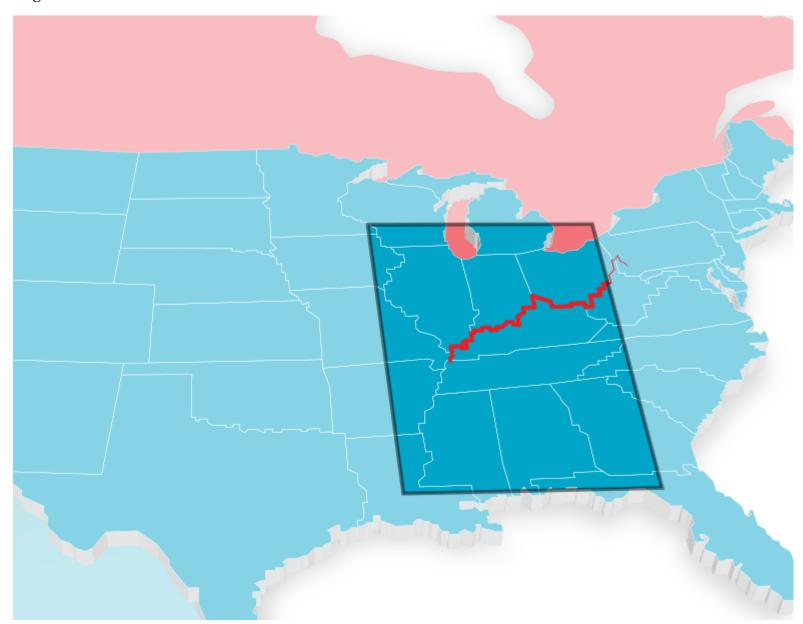
Regional employment in auto parts manufacturing has fluctuated considerably in recent years, but some southeastern states have seen notable increases in this industry. (Note that the U.S. Bureau of Labor Statistics also occasionally reclassifies some workers' employment category,

explaining some of the "noise" within the data, but the overall trends are clear.) And recessions have an impact on auto sales and thus related employment. The region had about 23,000 more jobs in auto parts manufacturing in 2014 than in 1990.

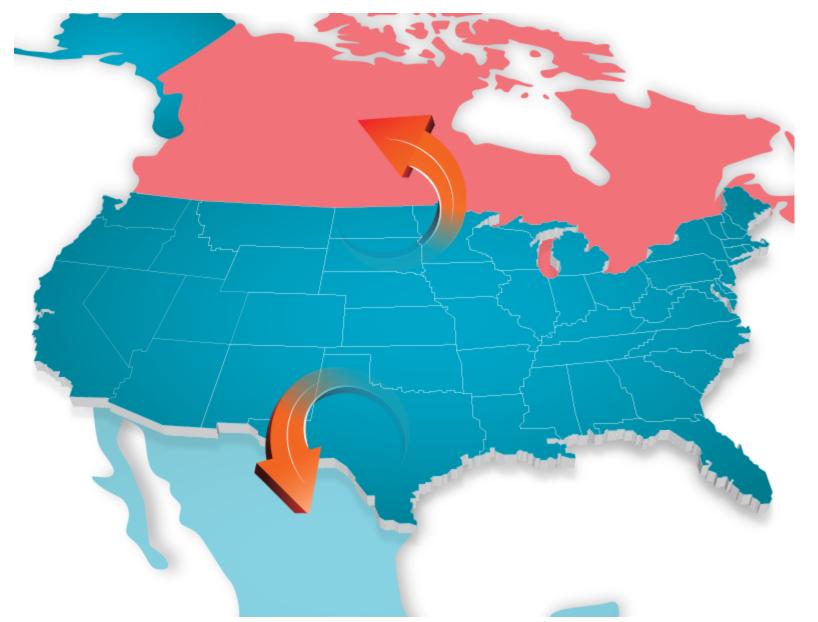
States covet manufacturing jobs because they offer relatively high wages. Let's consider states in the Atlanta Fed's region and what those states' workers in the auto parts manufacturing industry earn annually compared with all employees in those states. (Again, we'll also consider South Carolina.) Note: Throughout this essay, wage figures (all from the U.S. Bureau of Labor Statistics) are not adjusted for inflation. Here are data showing state-by-state average annual incomes for all southeastern workers...

...and here are average annual incomes for southeastern workers employed in auto parts manufacturing. Within the motor vehicle parts manufacturing industry, there is considerable variation in the types of jobs, amount of skill and training required, as the well union status of workers. These differences are reflected in the differences in relative earnings seen across states. For example, the General Motors plant in Shreveport, which closed in 2012, had a motor vehicle metal stamping facility whose workers were unionized (and paid accordingly), just as other employees at the assembly plant were. Were employees in motor vehicle metal stamping classified as auto parts manufacturing workers for the purposes of the BLS's employment survey? The BLS doesn't divulge that sort of information, but it's one theory held by some industry observers.

Taking a moment to look at employment levels of auto parts workers in Michigan and Ohio--the cradle of the automaking industry and still an automaking powerhouse--it becomes obvious that despite growth in the Southeast, overall employment in auto parts manufacturing has declined. Nonetheless, (as the previous chart showed) wages for employees in that industry remain significantly higher than their southeastern peers' wages.



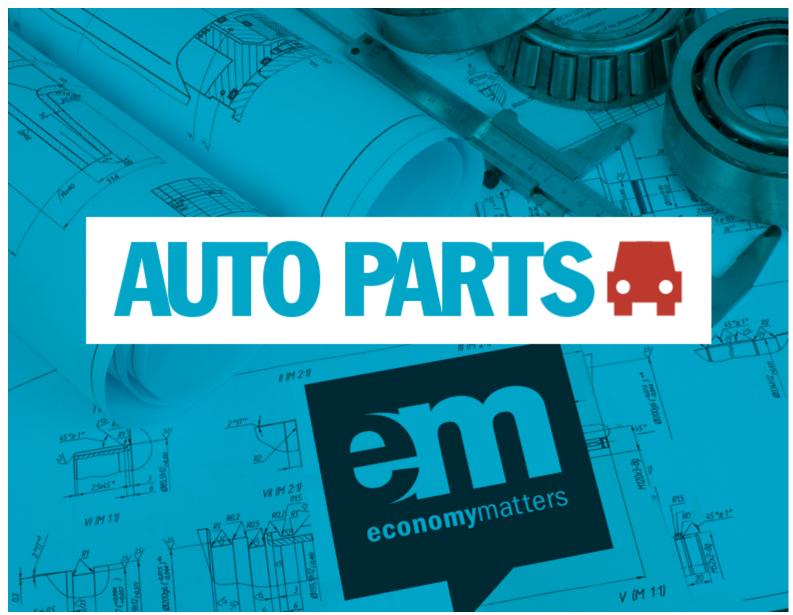
Relative labor costs are one of the factors that has driven the southward migration of auto assembly plants as well as the parts makers who supply them. According to data from the book Who Really Made Your Car? by Thomas Klier and James Rubenstein, 20.4 percent of Michigan's workforce was unionized in 2006. In the portion of auto alley south of the Ohio River, only 6.6 percent of the workforce belonged to a union. The book's data indicate that parts once made by union members at Big Three factories in the Midwest for \$70 an hour in wages and benefits are increasingly made by nonunion workers in the South making around \$20 an hour in wages and benefits.



Growing domestic demand for auto parts is fueling growth in this industry, but it's not the only factor fueling its growth. The U.S. automaking industry is deeply connected to the global economy. According to data from the U.S. Census Bureau, the United States exported more than \$77 billion in auto parts in 2013. Data from the Automotive Aftermarket Industry Association indicate that an increasing share of U.S.-made auto parts is exported to other countries, especially Canada and Mexico.



So although any car you purchase could have a lineage that includes numerous states (and even countries), there's a good chance that an employee in the Southeast played a part in its parts.



This article was written by Tom Heintjes, managing editor of *Economy Matters*. John Robertson and Ellyn Terry of the Atlanta Fed's research department also contributed. Data visualization was by Mike Zavarello and Eric Blanks, and graphic design was by Odie Swanegan and Peter Hamilton, all of the Atlanta Fed's public affairs department.

For more analysis and discussion of employment in the Southeast, please visit the Atlanta Fed's Center for Human Capital Studies