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Where Have All the Michigan Auto Jobs Gone?

In May 2009, General Motors, the icon of corporate America and the historic backbone of this country's industrial might, filed for bankruptcy. After years of losing ground to foreign automakers and suffering severe losses during the current recession, General Motors found itself with no other recourse but to undergo a drastic restructuring and downsizing. Its two Detroit-based companions, Ford and Chrysler, also have been hit hard by foreign competition and the economic downturn. Chrysler joined GM in

recession to hit the U.S. and global economies in 70 years. As the recession appears to be bottoming out, it is perhaps a good time to begin to assess the damage to Michigan's auto industry and to look for signs of what the future might hold. This article examines the change during the past decade in employment in Michigan's auto industry and traces how and why the landscape has changed both statewide and regionally.

Michigan's Share of Auto Jobs

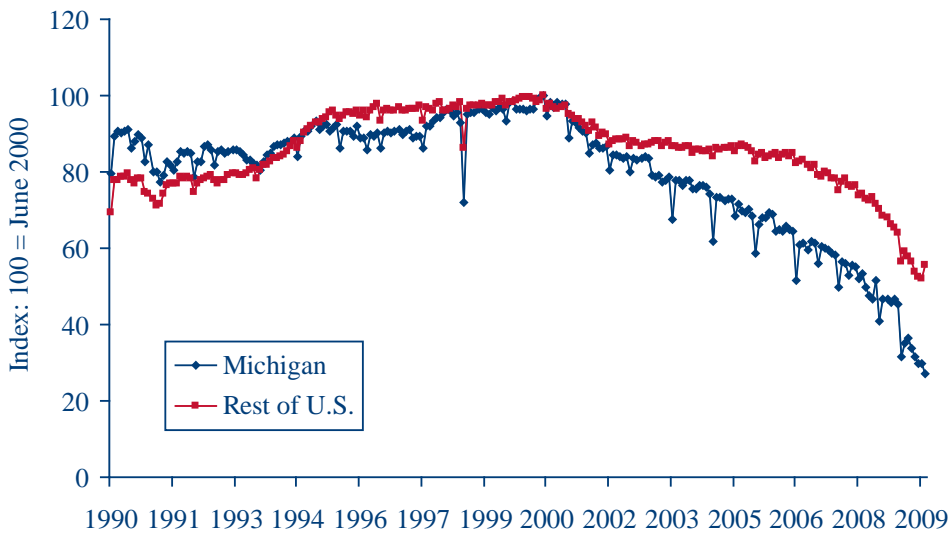
While the recession has taken its toll on Michigan's auto industry, the results of the cyclical downturn pale in comparison to the structural changes that have taken place during the past several decades. During the 1990s, Michigan's and the nation's auto industry experienced healthy growth.¹ Michigan's auto employment peaked in June 2000 at 333,000, claiming 29 percent of the nation's 1.2 million auto jobs. But even then, Michigan was on its way to relinquishing its dominance in the auto industry. Just 10 years earlier Michigan boasted 32 percent of the nation's auto jobs, with a 38 percent share of the nation's auto assembly workers. Even before the recession, Michigan lost 211,000 auto jobs from 2000 to December 2007—nearly three times the number of auto jobs lost to date during the recession. Figure 1 shows the steady decline in Michigan auto employment since the peak of June 2000 (at which

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declaring bankruptcy, while Ford has managed to stay out of court. Since the operations of these three companies and their suppliers are heavily concentrated in Michigan, the state has suffered a larger than proportionate share of auto job losses. As a result, Michigan has lost more auto jobs during the past decade than remain today.

Michigan's auto industry has gone through cycles before, but this time it is different. Michigan's dominance has steadily eroded over the past decade, even before it was jolted by the worst

Figure 1 Total Motor Vehicle Employment for Michigan and the Rest of the U.S. Indexed to June 2000, the Peak of Employment over the Past Two Decades



SOURCE: Bureau of Labor Statistics.

time the index is equal to 100), while the industry in the rest of the United States experienced relatively steady employment after the 2001 recession up until mid-2006. By August 2009, Michigan retained only 27 percent of the jobs it started with in 2000, while the rest of the United States, which peaked at the same time as Michigan in 2000, was left with 56 percent of its peak employment. Prior to 2000, Michigan's employment trends tracked that of the rest of the country fairly closely.

While the current recession further exacerbated the problems facing Michigan's auto industry, the causes started long before the recession began. One could argue that Michigan's problems are rooted in its past success. For years, GM, Ford, and Chrysler dominated the auto industry, and Michigan benefited from their ability to set prices and dictate trends for the auto industry. However, factors such as inflexibility in responding to changing consumer preferences, rising oil prices, the accumulation of large legacy costs from generous health care and pension benefits to retired auto workers, and the higher production costs associated with an increasingly older, higher-paid incumbent workforce eroded their competitive position.

As foreign companies—such as Toyota, Honda, Nissan, and Mercedes-Benz—gained a stronger foothold in the U.S. auto market and began to establish domestic production facilities, they looked outside of Michigan to build their assembly plants. While Honda set up facilities in Ohio and Indiana, other companies built plants in Kentucky, Tennessee, and Alabama. Parts suppliers moved with them to be within a day's

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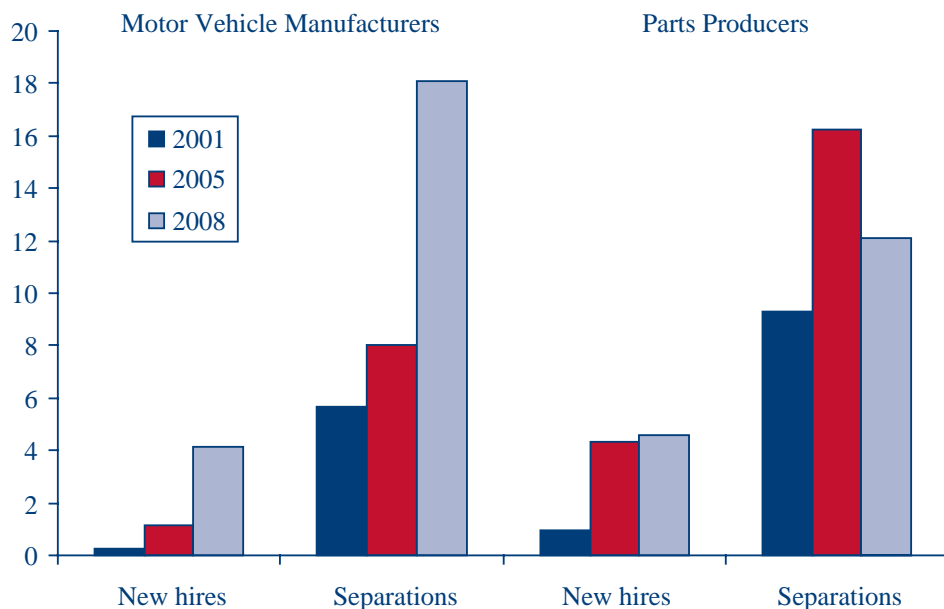
drive of their assembly plants, creating a shift in the epicenter of auto production from Michigan and the Midwest to the South. States south of the Ohio River and east of the Mississippi River gained employment share at the expense of Michigan and the Midwest states.² Within this broad geographical area, which claims 75 percent of U.S. auto jobs, Michigan's share has dropped from 23 percent in 2000 to 19.4 percent in 2006 (the most recent data available at the county level), while the share of auto jobs in the South has grown from 21.3 percent to 26.4 percent.

Within Michigan, the auto employment landscape has also shifted, but in this case from a more geographically dispersed industry to one that is consolidating back, ironically, to Detroit, where it began a century ago. The Detroit metropolitan area's share of Michigan's auto jobs grew from 53 percent in 2000 to 60 percent in 2006, and by July 2009 its share had grown to 66 percent. This is not to say that Detroit gained jobs. On the contrary, it lost 60 percent of its auto jobs between 2000 and July 2009. However, it lost at a slower rate than the rest of the state: a 60 percent decline for the Detroit metro area versus a 77 percent decline outside the metro area. Detroit's share of auto assembly workers grew the most, as the Detroit Three consolidated operations during this period. But Detroit also became home to a larger share of auto parts producers. In July 2009, the Detroit metro area accounted for 77 percent of Michigan's auto assembly jobs—up from 67 percent in 2000—and it comprised 62 percent of the state's parts manufacturing jobs—an increase of 47 percent in 2000.

Operational Structure

Michigan's auto industry has restructured in two distinct ways. The auto assembly sector reduced the number of workers in their facilities, without reducing the number of facilities in the state. Parts producers, on the other hand, cut workers and shut down plants. As of 2008, Michigan and the United States as a whole had slightly more auto assembly plants than they started with in 2001. However, in Michigan the average staffing levels of these facilities were cut in half during that period, while for the rest of the nation the levels were reduced by 27 percent. Michigan still has the largest facilities, with an average of 525 workers per establishment compared with 368 per plant in the rest of the country. At the beginning of the decade, however, Michigan's plants were twice as large as those located elsewhere, averaging 1,026 workers compared to 502 in the rest of the country. Michigan's assembly plants were also more productive in 2000 than they are now. Value-added per production

Figure 2 New Hires and Separations for Motor Vehicle Manufacturers and Parts Producers as a Percentage of Total Employment



SOURCE: Quarterly Workforce Indicators, U.S. Census Bureau.

worker hours was 17 percent higher than the rest of the nation in 2000, but there was no difference in 2006.

Auto parts manufacturers, on the other hand, shuttered hundreds of facilities throughout the country, with Michigan accounting for half the net closures. Michigan had 300 fewer establishments in 2008 than in 2001—a 25 percent reduction of the 2001 total of 1,234. Establishment size was also reduced. Michigan’s auto parts makers shrunk by 28 percent to an average of 120 workers per establishment, while parts producers in the rest of the country downsized by 19 percent to an average plant size of 80 workers.

Yet, while jobs have been drastically cut from Michigan’s auto industry, the industry is not totally lifeless. At the same time workers are being laid off, others are being hired. According to the U.S. Census Bureau’s Quarterly Workforce Indicators, new hires as a percentage of total employment were higher in the four-quarter period at the beginning of the recession than the same four-quarter period in 2000, as shown in Figure 2. In 2008, new hires by auto assembly plants were 4.11 percent of total employment

compared with only 0.28 percent in 2001. New hires were up during the more recent period for parts manufacturers as well. Of course, separations were also much higher—18 percent versus 6 percent for auto assembly workers and 12 percent versus 9 percent for parts producers, which accounts for the decline

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What’s Next?

Significant restructuring within the auto industry, particularly in Michigan, has accounted for the bulk of the job losses over the past decade. The prospect of the state reclaiming a large proportion of these jobs as the recovery gains

momentum or even in the more distant future is highly unlikely. Competitive issues facing the Detroit Three auto producers and the relentless increase in productivity of the industry in general mean fewer auto jobs for Michigan and for the nation. Nonetheless, Michigan’s auto legacy may also hold its future. As of 2007, the state housed more than 330 auto-related research and development facilities, which includes facilities for nine of the world’s largest auto manufacturers, including Honda, Nissan and Toyota (Michigan Economic Development Corporation 2007). In addition, Michigan’s preeminent research universities and the state’s emphasis on alternative energy sources offer additional potential for path-breaking research for ways to power the next generation of motor vehicles. However, even with this potential, it seems unlikely that the auto industry will be in the position to support Michigan’s economy in the future as it has done in the past.

Notes

1. We define the auto industry as tier one motor vehicle manufacturers or auto assembly plants (NAICS 3361) and tier two motor vehicle parts manufacturers (NAICS 3363).

2. Midwest states included Wisconsin, Illinois, Michigan, Ohio, and Indiana. The South were states below the Ohio River and east of the Mississippi, which included Mississippi, Alabama, Georgia, Florida, Tennessee, Kentucky, Maryland, West Virginia, Virginia, South Carolina, and North Carolina.

Reference

Michigan Economic Development Corporation. 2007. *Michigan Automotive Research and Development Facilities Directory*. MEDC: Lansing, MI.

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➔ For more information on the auto industry, see the Upjohn Institute’s recently published book, *Who Really Made Your Car? Restructuring and Geographic Change in the Auto Industry*, by Thomas Klier and James Rubenstein.