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FOR EMPLOYMENT RESEARCH

Presentation Notes

for the

Chicago Federal Reserve Midwest Roundtable Discussion

December 1, 2011

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The two questions I would like to address in my 10 minutes are:

1. Did Michigan's industrial structure and, in particular, its concentration in the auto industry change as a result of the Great Recession?
2. How much of the current job gains in Michigan can be attributed to the auto industry?

During the Great Recession, from December 2007 to June 2009, Michigan employment fell by 410,000 workers, or by 9.7 percent. From June 2009 to September 2011, employment in the state rose by 85,200 workers. While the increase was highly welcomed and was the first increase in employment for the state since 2000, it accounted for only 21 percent of the jobs that were lost during the recession.

Was the job loss the result of a significant restructuring of the state, relative to the nation as whole? Was it the result of the state losing a substantial share of the nation's auto industry, health sector, or any other major economic sector? Comparing the state's current location quotients for its major industries to what they were at the the start of the recession, the clear answer is no. There was not a major shift in the concentration of the state's industries, relative to the nation during the period.

Location Quotients

	Peak	Current
Construction	0.71	0.79
Manufacturing	1.43	1.42
Wholesale	0.91	0.93
Retail	1.02	1.02
Transportation and distribution	0.91	0.90
Information	0.66	0.68

Financial	0.82	0.82
Professional & business services	1.05	1.04
Education and health	1.06	1.06
Leisure and hospitality	0.98	0.93
Other	1.04	1.04
Government	0.94	0.95

But what about motor vehicles and auto parts production? While the industrial location quotients for the state are impressively large; they did not change significantly from the fourth quarter of 2007 and the third quarter of 2011.

Q4 2007	
Auto assembly	8.2
Auto parts	6.9

Q3 2011	
Auto assembly	8.0
Auto parts	6.8

So based on this simple analysis, Michigan has not changed its spots. The next question I want to address is: Of the job gains recorded in the state from Q3 09 to Q3 11—the approximate expansion period—what percent can be attributed to the rebound in motor vehicles? I used the third-quarter to third-quarter change to control for seasonal variation as the available employment statistics are not seasonally adjusted.

During this time period, total employment in the state increased by 96,800 workers. The number of workers in auto assembly grew by 730, and the number of workers in the state's larger auto parts suppliers sectors increased by 8,530 workers.

Using the Institute's REMI model (Regional Economic Models Incorporated), I

1. Estimated the impact of the increase of 730 assembly workers, alone, and subtracted the resulting number of indirect workers generated in the state's auto parts sector from the total increase in that sector. This was done to avoid double counting.
2. Used the adjusted auto parts supplier estimates and reran the model.

The REMI model estimates that the increase in employment in auto assembly and auto parts manufacturing generated a total of 37,100 jobs in the state (a multiplier of 4) accounting for 39 percent of the job growth during the period.