

Michigan Economic Update

Federal Reserve Bank of Chicago
Detroit Branch
August 3, 2015

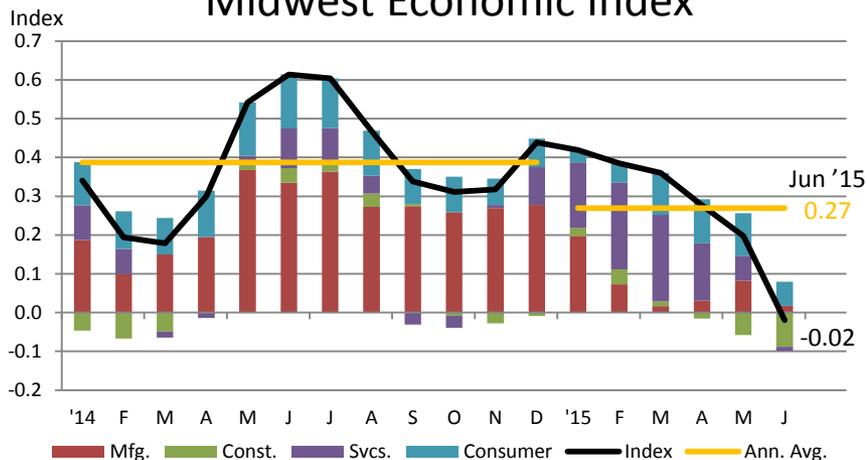
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Senior Business Economist



The Midwest Economy Index decline sharply in June to -0.02 from 0.20 in May, while Michigan's contribution to the MEI fell only slightly to 0.19

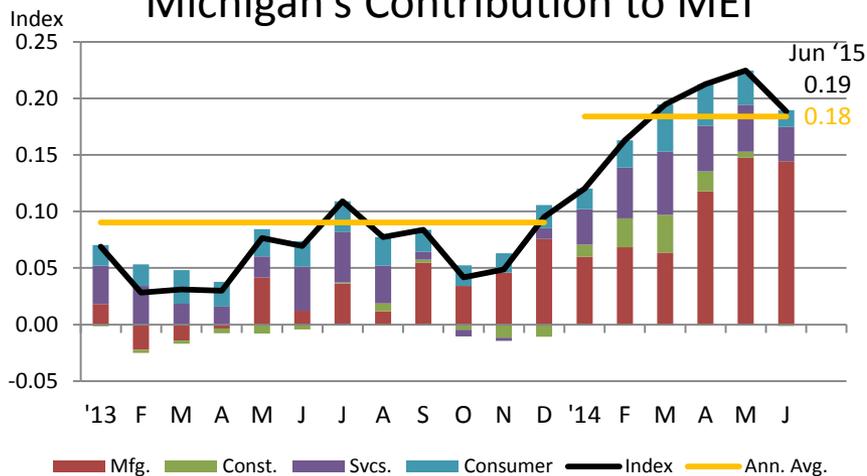


Midwest Economic Index



Economic growth for the Seventh District showed signs of slowing in June as the Federal Reserve Bank of Chicago's MEI fell into negative territory for the first time since November 2012. While the year-to-date average remained positive (at 0.27), the pace in every sector seems to have slowed. A zero value for an indicator indicates that the sector is expanding at its historical trend rate of growth; positive values indicate above-average growth; and negative values indicate below-average growth.

Michigan's Contribution to MEI



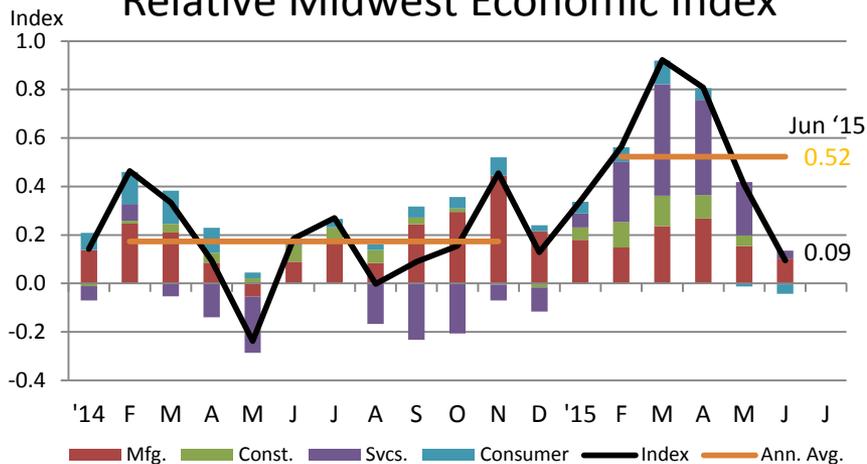
Michigan's contribution to the Seventh District's economic growth fell in June for the first time this year as the contribution from all of the industry sectors declined somewhat. Leading the decline was consumer spending (which fell from 0.03 in May to 0.1 in June). Manufacturing remained the strongest contributor (adding 0.14 to the index). The service sector added 0.3, while construction's contribution fell to zero. Michigan's June YTD annual average of 0.18 is the highest annual average since 1994.

Source: FRB of Chicago

The decline in the relative MEI in June was led by a drop in the service sector, while Michigan's contribution was bolstered by strength in manufacturing

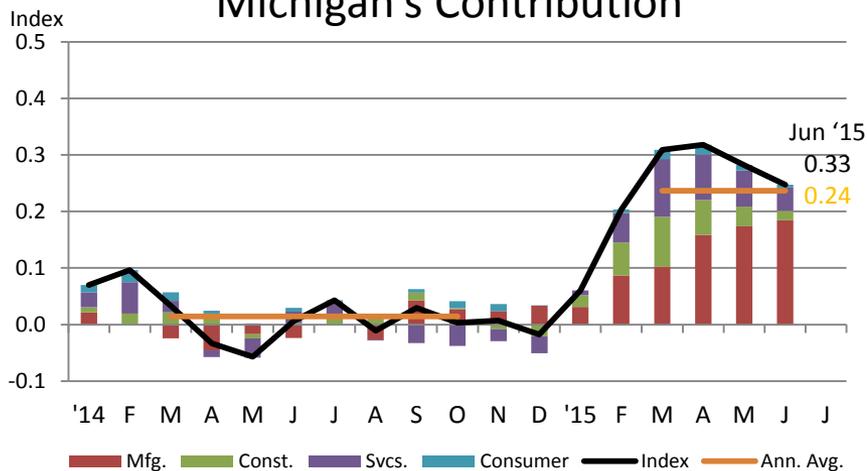


Relative Midwest Economic Index



Relative to the nation, economic activity in the District slowed in June but remained above zero suggesting that the region is still growing somewhat faster than that of the nation (aided by the manufacturing sector). A zero value for the relative MEI indicates that the Midwest economy is growing at a rate consistent with the growth rate of the national economy; positive values indicate above-average, relative growth, and negative values indicate below-average relative growth.

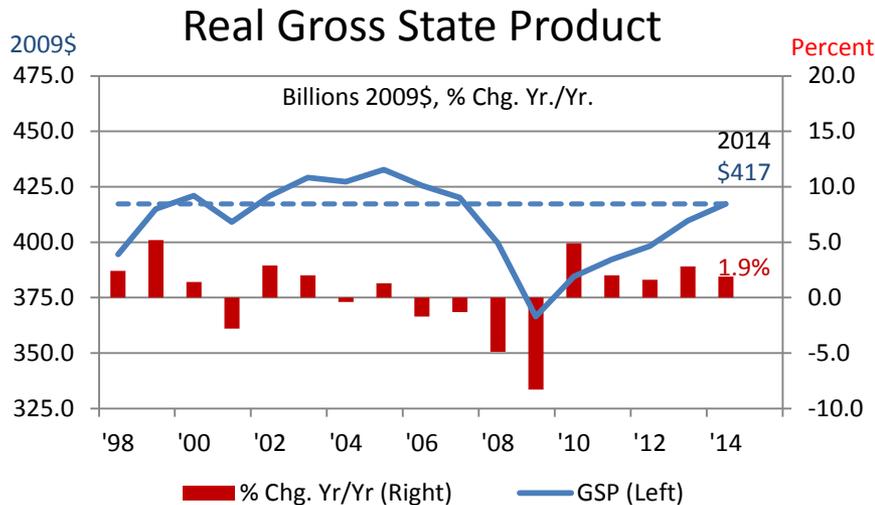
Michigan's Contribution



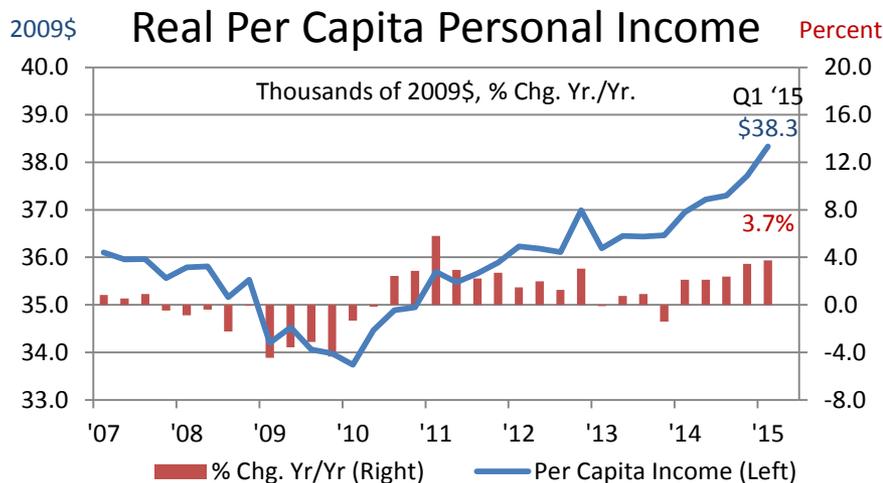
Down slightly from an earlier peak, Michigan's contribution to the Seventh District's relative economic performance remained strong in June. Michigan's manufacturing contribution to the June relative MEI of 0.18 is the highest since June 2011. Even after falling for two months, Michigan's YTD average contribution of 0.24 remains at its highest level since 1988. Michigan also holds the distinction of exceeding or equaling the contributions of every state in the Seventh District for every sector.

Source: FRB of Chicago

Michigan's total economy grew by 1.9% in 2014 and it is estimated that per capita Income rose by 3.7% in the 2015:Q1



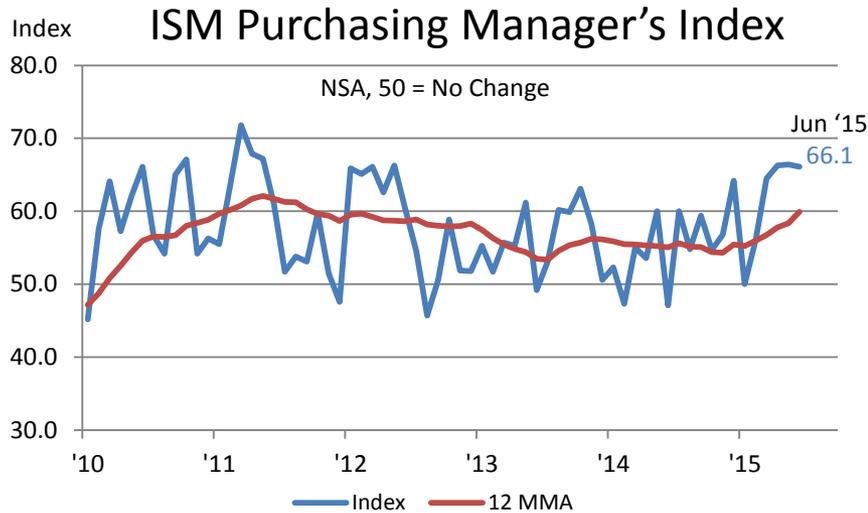
Michigan's real GSP is estimated to have grown by 1.9% in calendar year 2014 (versus 2.4% for the nation as a whole). Contributors to Michigan's growth in 2014 in order of industry size were manufacturing (0.47%), professional business services (0.54%), trade & utilities (0.42%), finance services (0.15%), and education and health care services (0.18%). Total government consumption and investment declined for the fourth consecutive year (by an estimated 0.6% compared with 2013).



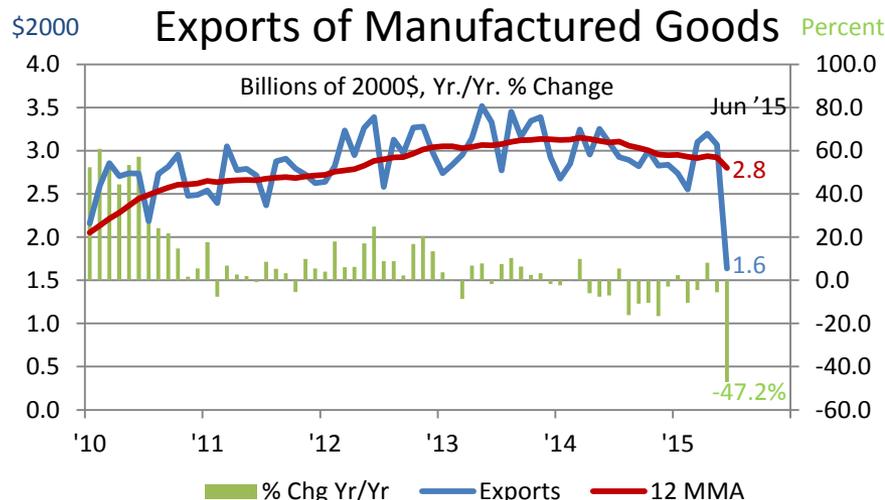
Real per capita income in Michigan continued to improve in 2015:Q1, up 3.7% on a year-over-year basis versus 3.4% for the nation. However, like the nation, income growth in Michigan since the 2008-09 recession has been sluggish, with quarterly real per capita income growth averaging just 0.7% on a year-over-year basis (versus 0.8% for the nation). Michigan's 2013 median household income of \$48,801 places it 35th among the nation (the national median household income was \$51,939.)

Source: Haver Analytics / FRB of Chicago

Michigan's ISM Purchasing Managers Index and Exports of Manufactured Goods provided continued evidence of slowing economic activity



The ISM Purchasing Managers' Index fell slightly in June but remained well above 50.0 at 66.1. A reading above 50.0 signifies expansion in manufacturing and the 12-month MMA has been above 50.0 consistently since March 2010. This is consistent with the GSP data, which showed the manufacturing sector, aided by the recovery of the auto industry, as one of the state's strongest contributors to overall economic performance for the past few years.



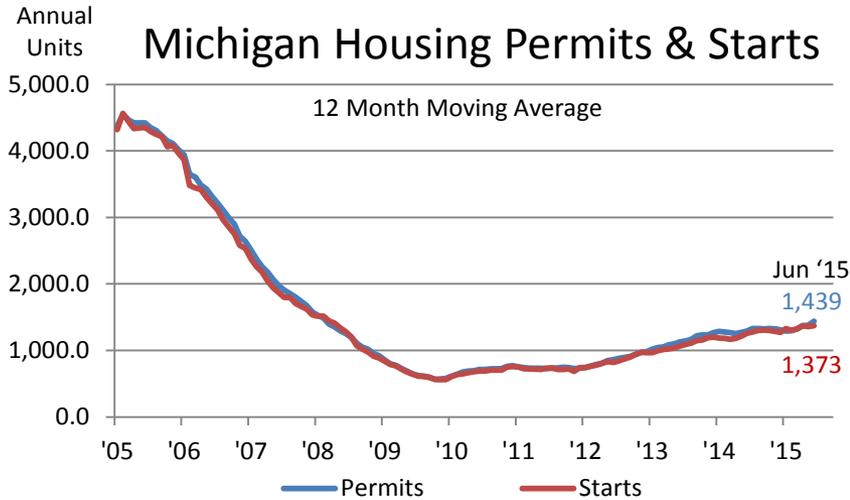
Adjusted for inflation, exports of Michigan manufactured goods fell to just \$1.64 billion in June 2015. Although Michigan's manufacturing exports looked to be improving from earlier declines, this latest collapse is one of the greatest on record. However, the 12-month moving average, which reached a new historical high in March 2014, has remained above \$2.8 billion since September 2010.

Source: ISM / U.S. Census Bureau & Haver Analytics

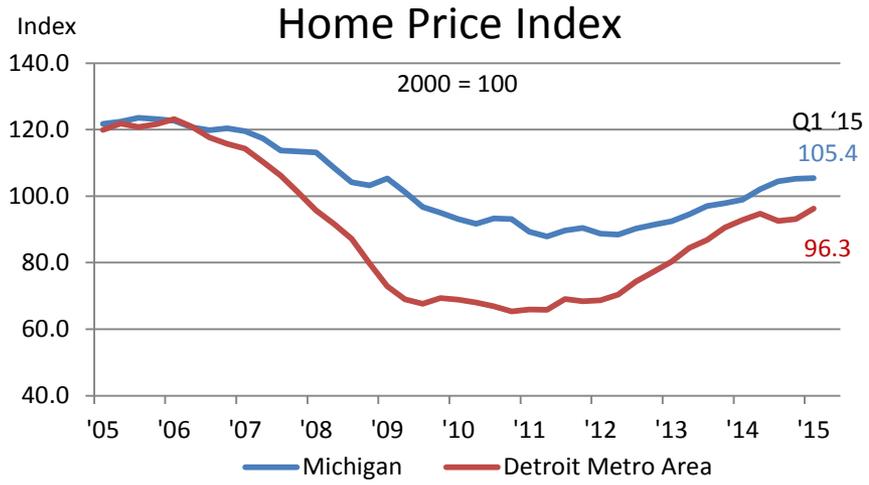
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Michigan's housing market is showing some minor improvement, but the housing recovery remains sluggish



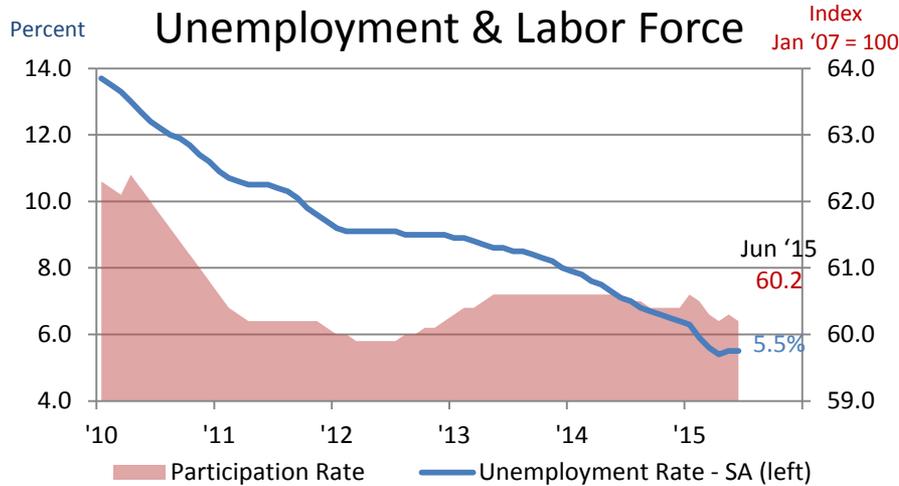
Construction of privately owned homes in Michigan has seen only modest improvement since bottoming in 2009. The 12-month moving average for housing starts in June was estimated to be 1,373 units, which is a XX.X% improvement on a year-over-year basis. However, even with that improvement, privately owned housing starts are still only about XX.X% of what they were at their peak in 2005, when housing starts averaged over 4,560 per month.



On average, home prices in Michigan were up 6.4% on a year-over-year basis in 2015:Q1. While home prices for the state are above their 2000 level, they are still well below their 2005 peak. In addition, home prices for the Detroit metropolitan area, which was harder hit than the state as a whole, were up just 3.8% in 2015:Q1 compared with a year ago. While some areas of the metro region have seen significant improvements in home prices, the region remains 21.8% below its 2006:Q1 peak.

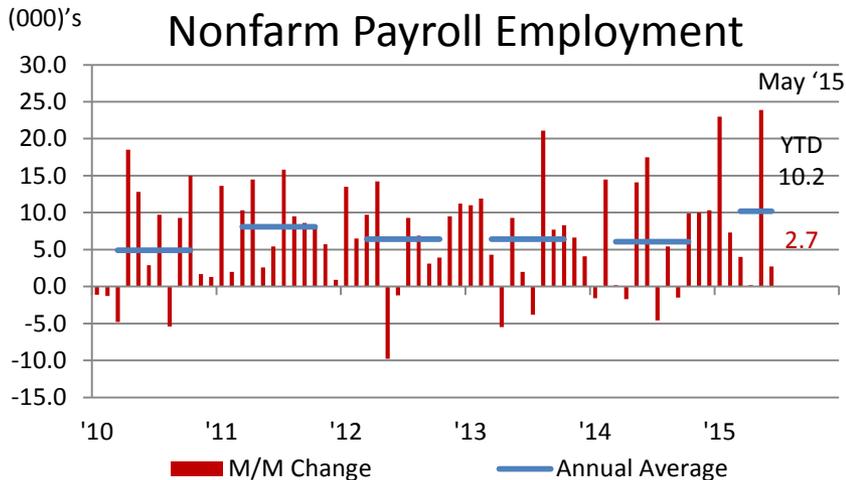
Source: FHFA & S&P Case Shiller/ Haver Analytics

Michigan's unemployment rate remained at 5.5% in June (after having ticked up in May from 5.4% in April)



Michigan's unemployment rate remained unchanged in June at 5.5% as the labor force fell by 10,234, lowering the participation rate to 60.2%. Michigan's June unemployment rate is only slightly higher than the national unemployment rate of 5.3% (near its lowest level since August 2001). June's unemployment rate reflects an increase in civilian employment of 37,272 from January through June of this year, while the labor force has fallen by 7,702 over the same period.

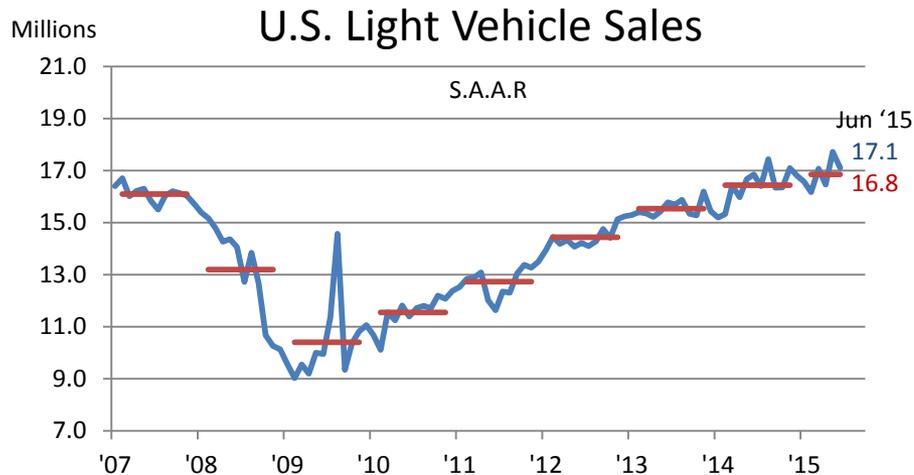
Nonfarm payroll employment, which is based on a survey of businesses, grew by 2,700 jobs in June following an increase of 23,900 in May, the largest increase since January 2000. So far in 2015, nonfarm employment has increased by 61,100, which is equal to average monthly job growth of 10,200 per month. The majority of the jobs added in 2015 have been in education and health services (14,300), manufacturing (11,800), construction (11,700) and professional business services (11,300).



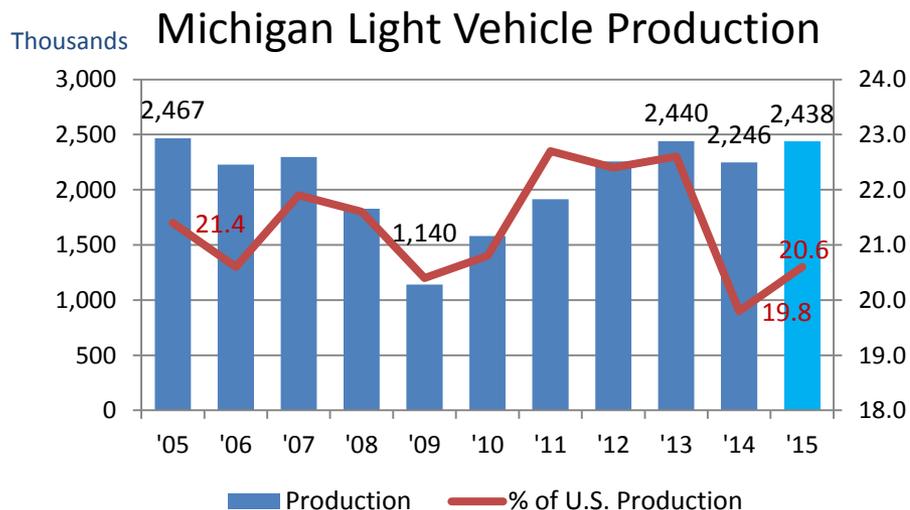
Source: BLS / Haver Analytics



Michigan's light vehicle production increases as sales (at SAAR) for June exceeded 17.0 million for the second consecutive month



U.S. light vehicle sales for June 2015 were reported to be 17.1 million units at a seasonally adjusted annual rate (SAAR). This was the second consecutive month of light vehicle sales above 17.0 million units, bringing the June year-to-date average to 16.8 million units. According to the July 2015 Blue Chip consensus forecast, light vehicle sales for the U.S. are expected to reach 16.9 million units in 2015, with an additional increase to 17.1 million units in 2016.



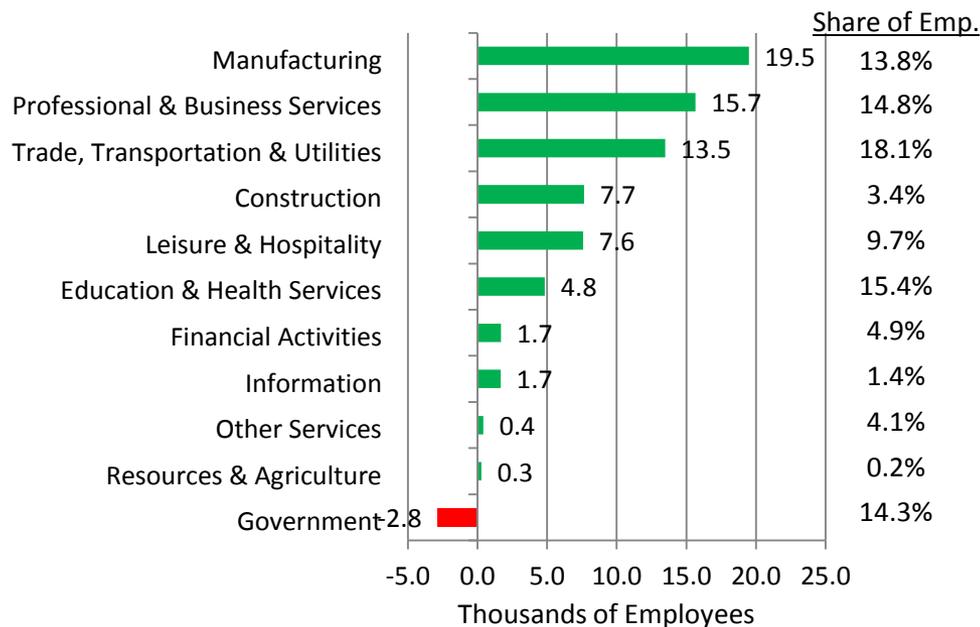
According to data from Ward's Automotive, Michigan's light vehicle (LV) production for 2015 is expected to reach slightly over 2.4 million units. This would be an increase of 8.5% from 2014. However LV production fell in 2014 from 2013 partially because of the launch of the all new Ford F-150 aluminum pickup and falling demand for smaller vehicles due to lower gasoline prices. Michigan's share of LV production is expected to improve but remains below earlier levels.

Source: Ward's Automotive / FRB Chicago

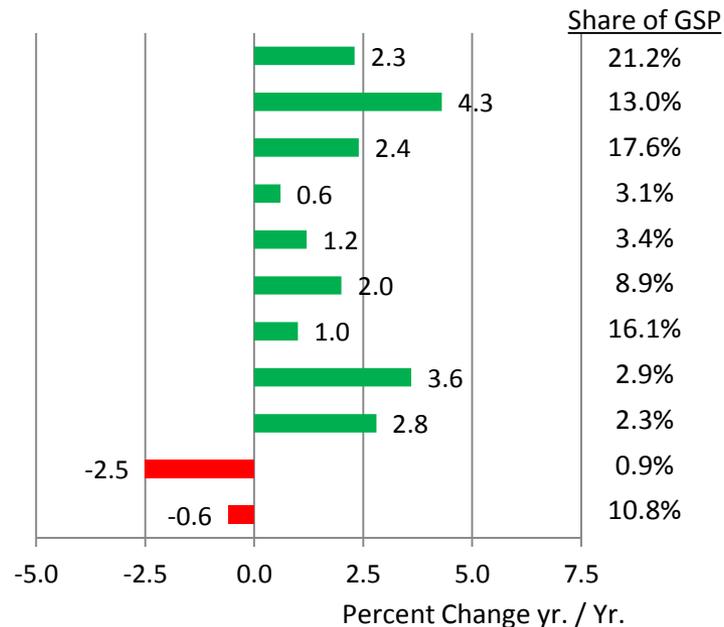
Michigan's total nonfarm employment grew by 69,900 jobs, or 1.7%, in 2014, while the economy grew by 1.9% compared with 2013



2014 Nonfarm Employment Change



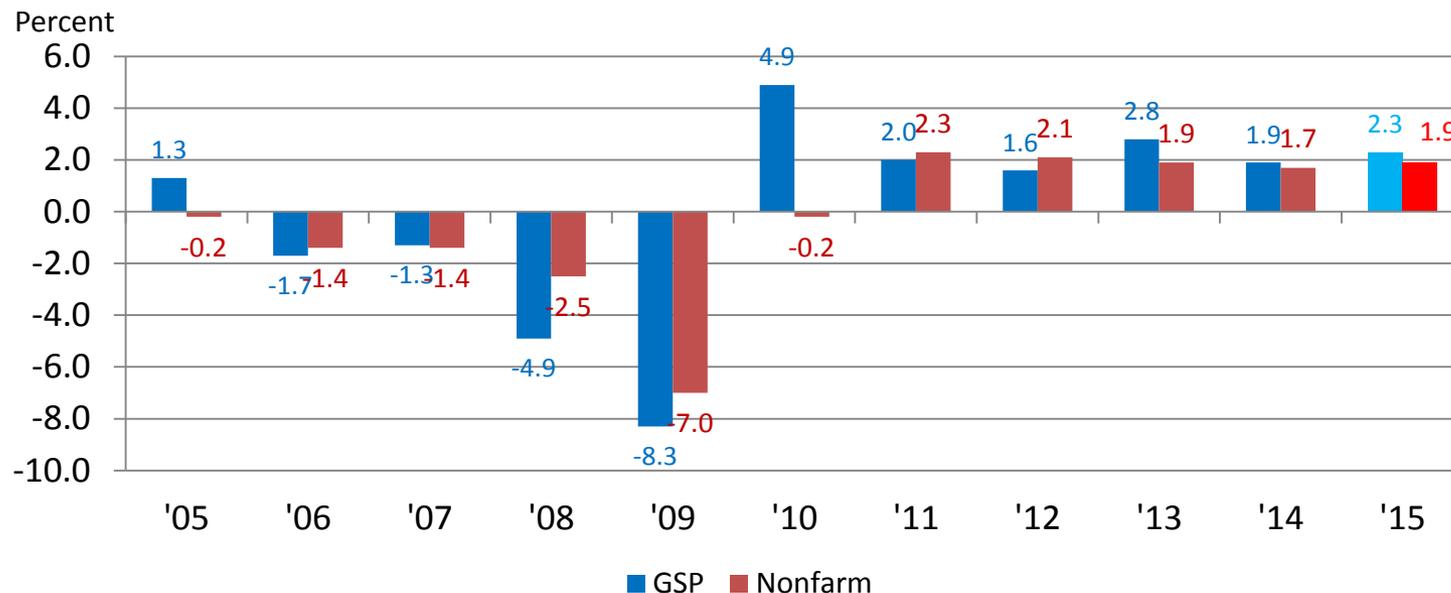
2014 Real Gross State Product % Chg.



Michigan's nonfarm employment grew by 69,900 jobs in 2014. Manufacturing added the most jobs, increasing by 19,500, or 3.5% (driven by improvements in U.S. light vehicle sales). The government sector shed 2,800 jobs in 2014, marking the seventh consecutive year of decline.

Michigan's economy grew by 1.9% to \$417.3B in 2014, with the biggest gains in dollar value occurring in professional & business services (\$2.3B), manufacturing (\$2.0B), and trade, transportation, & utilities (\$1.8B). The largest decline was in government expenditures (-\$269M).

Michigan's economy is estimated to have grown at 2.3% for the first six months of 2015 on the strength of employment growth of 1.9%



Based on the first six months of available data, Michigan's economy has grown an estimated 2.3% on an annualized basis. This estimate is supported by the fact that total nonfarm employment is up 1.9% compared with 2014; and as the chart above indicates, there is a strong relationship between economic activity and changes in employment. Michigan's economy also remains highly dependent on the manufacturing sector, which accounted for 21.2% of Michigan's gross state product in 2014. Because almost half of Michigan's manufacturing output is related to the auto industry, the projected (continued) growth in Michigan's auto production for 2015 should help the economy sustain its positive momentum through the rest of the year.

The Midwest Economic Indicator

The MEI is a weighted average of 129 state and regional indicators measuring growth in nonfarm business activity from four broad sectors of the Midwest economy: 1) manufacturing, 2) construction and mining, 3) services, and 4) consumer spending. It encompasses the entirety of the five states in the Seventh Federal Reserve District (Illinois, Indiana, Iowa, Michigan, and Wisconsin).

The index is constructed to have an average value of zero and a standard deviation of one. Since Midwest economic activity tends toward trend growth rate over time, a positive index reading corresponds to growth in Midwest economic activity above trend, while a negative reading corresponds to growth below trend.

Over long periods, growth in Midwest economic activity has tended to coincide with growth in national economic activity. To highlight periods where differences arise, we construct two separate index values. The MEI captures both national and regional factors driving Midwest growth, and the relative MEI provides a picture of Midwest growth conditions relative to those of the nation.

Michigan MEI Data

<u>Description</u>	<u>Source</u>	<u>Sector</u>
All Employees: Construction, Michigan (SA, Thous)	BLS	Construction
All Employees: Mining & Logging, Michigan (SA, Thous)	BLS	Construction
Permits: New Pvt Housing Units, Michigan (SA, Units)	Census	Construction
Housing Starts: Michigan (SAAR, Thous.Units)	Commerce	Construction
Number Employed, Michigan (SA, Thous)	BLS	Consumer
Unemployment Rate, Michigan (SA, %)	BLS	Consumer
Per Capita Personal Income, Michigan (Chained.2005\$)	BEA	Consumer
Unemployment Insurance: Initial Claims Applications: Michigan (SA, Number)	DOL	Consumer
All Employees: Manufacturing, Michigan (SA, Thous)	BLS	Manufacturing
Origin of Movement: Exports of Manufactured Goods, Michigan (Mil. 2000\$)	Census	Manufacturing
ISM-Southeast Michigan: New Orders Index (NSA, 50=No Chg)	NAPM-D	Manufacturing
ISM-Southeast Michigan: Production Index (NSA, 50=No Chg)	NAPM-D	Manufacturing
ISM-Southeast Michigan: PMI (NSA, 50=No Chg)	NAPM-D	Manufacturing
ISM-Southeast Michigan: Employment Index (NSA, 50=No Chg)	NAPM-D	Manufacturing
ISM-Southeast Michigan: Vendor Deliveries Index (NSA, 50=No Chg)	NAPM-D	Manufacturing
ISM-Southeast Michigan: Finished Goods Inventory Index (NSA, 50=No Chg)	NAPM-D	Manufacturing
All Empl: Trade/Transportation/Utilities, Michigan (SA, Thous)	BLS	Services
All Employees: Finance, Insurance & Real Estate, Michigan (SA, Thous)	BLS	Services
All Employees: Total Government, Michigan (SA, Thous)	BLS	Services
All Employees: Information, Michigan (SA, Thous)	BLS	Services
All Empl: Professional & Business Svcs, Michigan (SA, Thous)	BLS	Services
All Employees: Educational & Health Svcs, Michigan (SA, Thous)	BLS	Services
All Employees: Leisure & Hospitality, Michigan (SA, Thous)	BLS	Services
All Employees: Other Services, Michigan (SA, Thous)	BLS	Services