

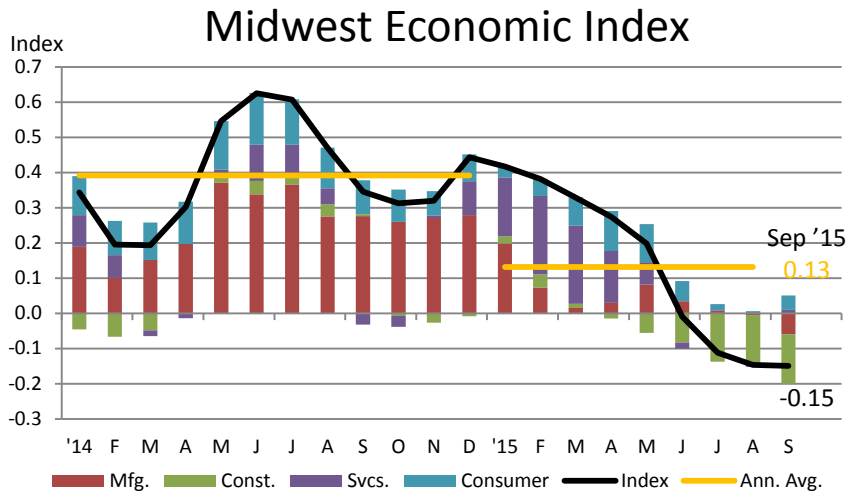
Michigan Economic Update

Federal Reserve Bank of Chicago
Detroit Branch
October 30, 2015

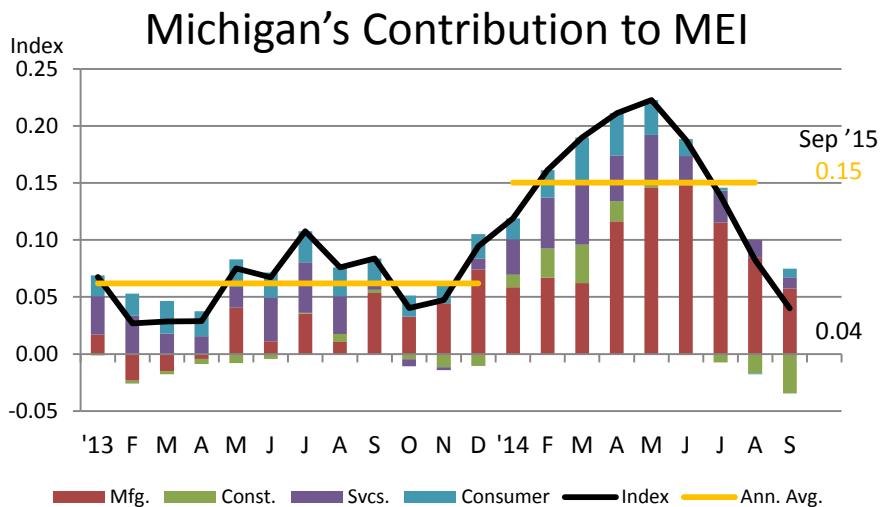
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The Midwest Economy Index declined to -0.15 in September while Michigan's contribution to the MEI remained positive at 0.04



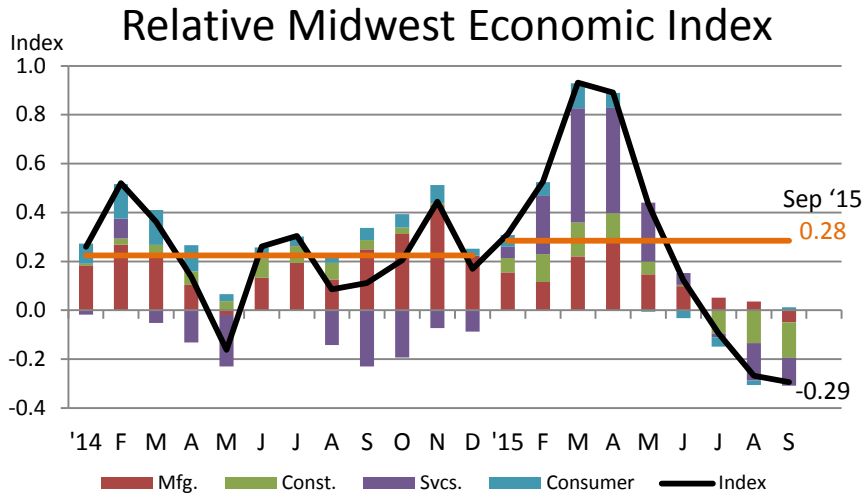
According to the September Midwest Economy Index (MEI), the pace of economic growth in the five Seventh District states (Illinois, Indiana, Iowa, Michigan, and Wisconsin) as a whole remained below its long-run average. The MEI remained unchanged in September at -0.15. A zero value for an indicator indicates 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.



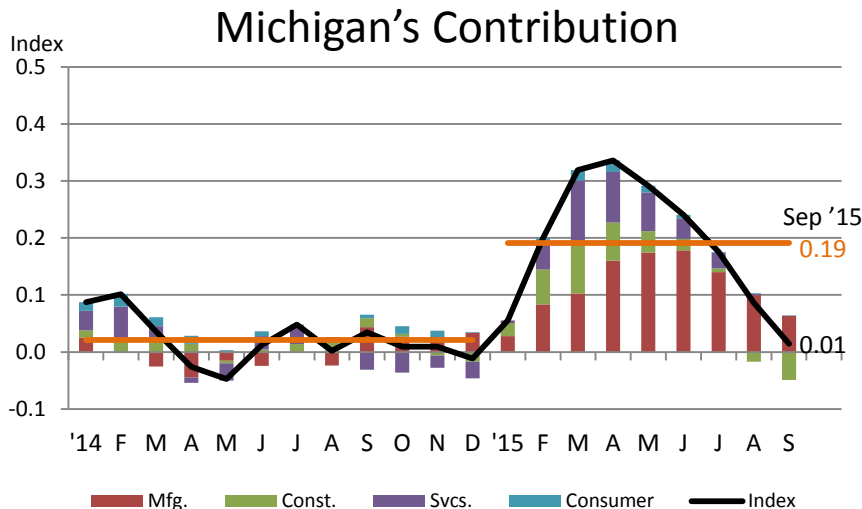
In addition, at +0.04, Michigan's contribution to the MEI in September fell to its lowest level since October 2014. According to the index, the strongest contributor to the MEI from Michigan in September was its manufacturing sector followed by its service sector (0.01) and consumer sector (0.01). The contribution its construction sector continued its 6 month decline dropping further into negative territory (-0.03). However in total, Michigan's September YTD contribution remained positive and above the average for 2014 at 0.15.

Source: FRB of Chicago

The Relative MEI declined in September while Michigan's contribution was helped by strength in manufacturing



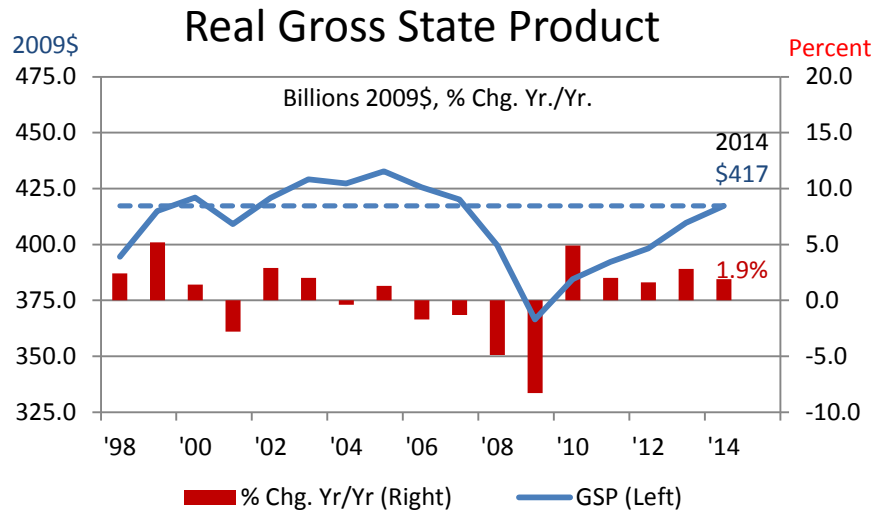
The relative Midwest Economy Index fell to -0.29 in September, which was its lowest level since June 2010. (A zero value for the relative MEI indicates that the Midwest economy is growing at a rate consistent with the growth rate of the national economy; positive values indicate above-average relative growth; and negative values indicate below-average relative growth.) Only the consumer sector managed to make a positive contribution to the relative MEI in September.



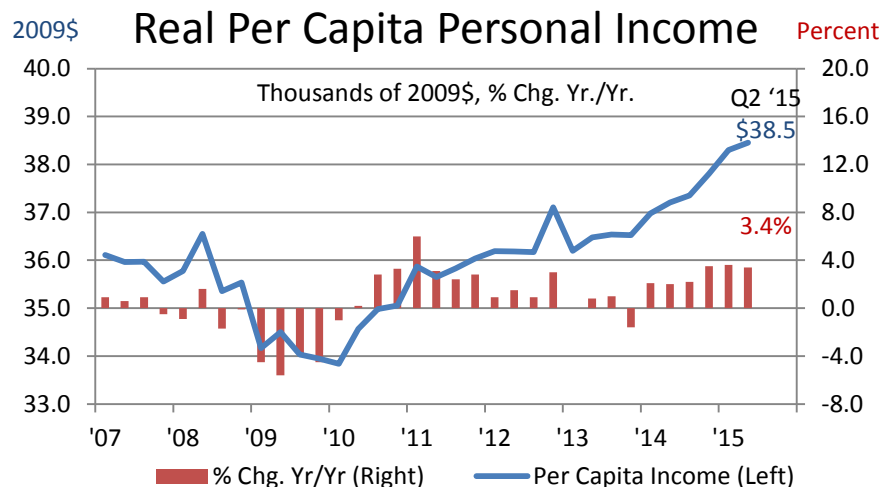
At $+0.02$, Michigan's contribution to the relative MEI remained positive in September almost entirely because of its contribution from manufacturing. Even after falling for three consecutive months, Michigan's year-to-date average monthly contribution to the relative MEI (of $+0.19$) remained well above that for 2014. Michigan is the only state in the Seventh District that has positively contributed to the relative index throughout 2015.

Source: FRB of Chicago

Michigan's total economy grew by 1.9% in 2014 and it is estimated that per capita Income rose by 3.4% in the 2015:Q2



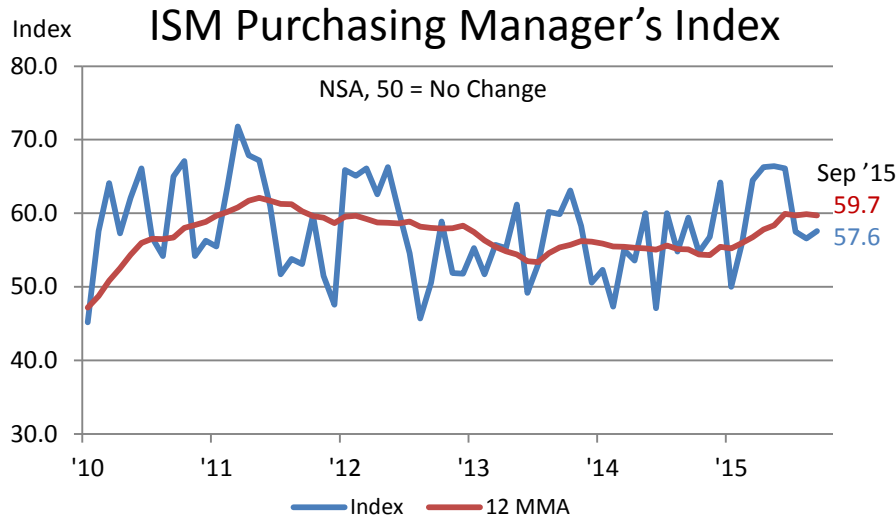
Michigan's real GSP is estimated to have grown by 1.9% in calendar year 2014 (versus 2.4% for the nation as a whole). Contributors to Michigan's growth in 2014 in order of industry size were manufacturing (0.47%), professional business services (0.54%), trade & utilities (0.42%), finance services (0.15%), 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).



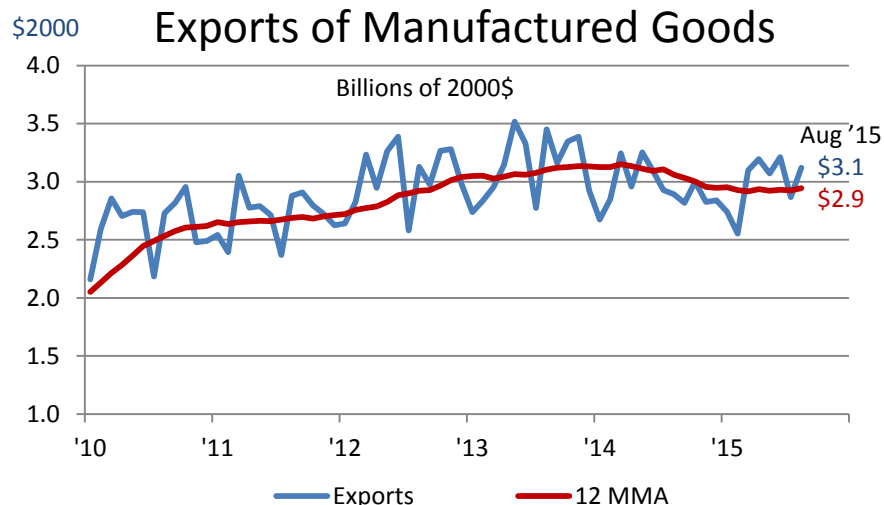
Real per capita income in Michigan continued to improve to \$38,454 in 2015:Q2, up 3.4% on a year-over-year basis. Michigan's real per capita income lagged the nation's—which was \$43,303 in 2015:Q2, up 3.1% on a year-over-year basis. However, Michigan has seen its real per capita income growth exceed that of the nation for the past six consecutive quarters; and since 2010:Q1, real per capita growth for Michigan has averaged about 2.0%, compared with 1.6% for the nation.

Source: Haver Analytics / FRB of Chicago

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



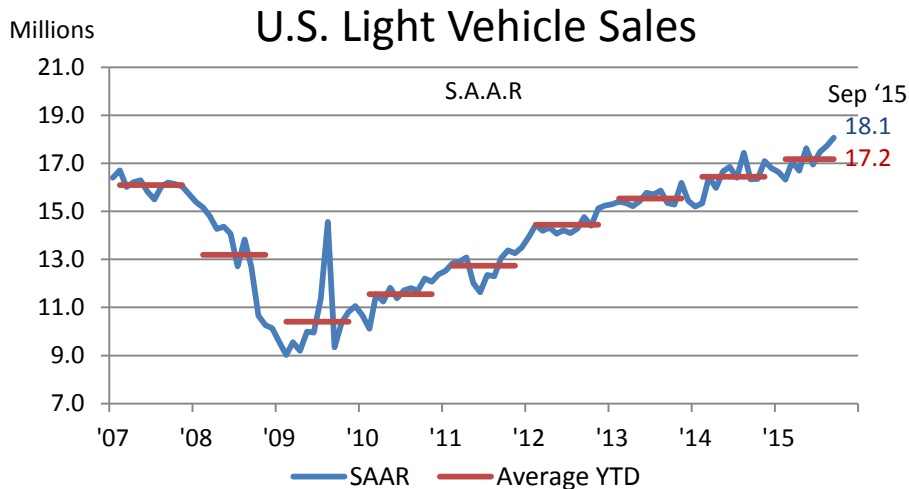
The ISM Purchasing Managers' Index increased slightly in September to 59.7, the 15th consecutive month above 50. A reading above 50.0 signifies expansion in manufacturing and the 12-month MMA has been above 50.0 consistently since March 2010. The PMI supports the GSP data which shows the manufacturing sector, aided by the recovery of the auto industry, as one of the state's strongest contributors to overall economic performance for the past several years.



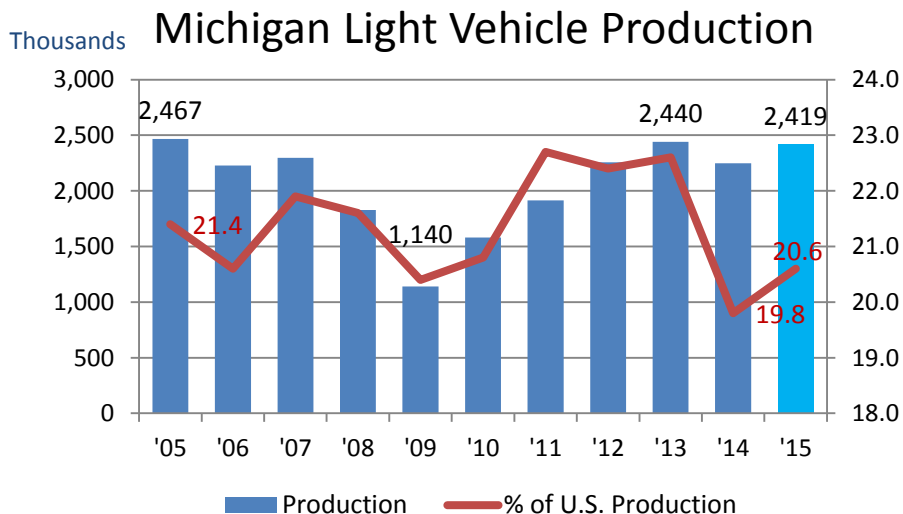
Adjusted for inflation, exports of Michigan manufactured goods grew slightly in August to \$3.12 billion. Although Michigan's manufacturing exports look to be down slightly from earlier levels, they seemed to have leveled off in recent months even in the face a stronger U.S. dollar which makes U.S. goods more expensive to foreigner customers. On a year-over-year basis Michigan exports are up 7.9% compared to the total U.S. which saw a 2.5% decline in goods exports in August.

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

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



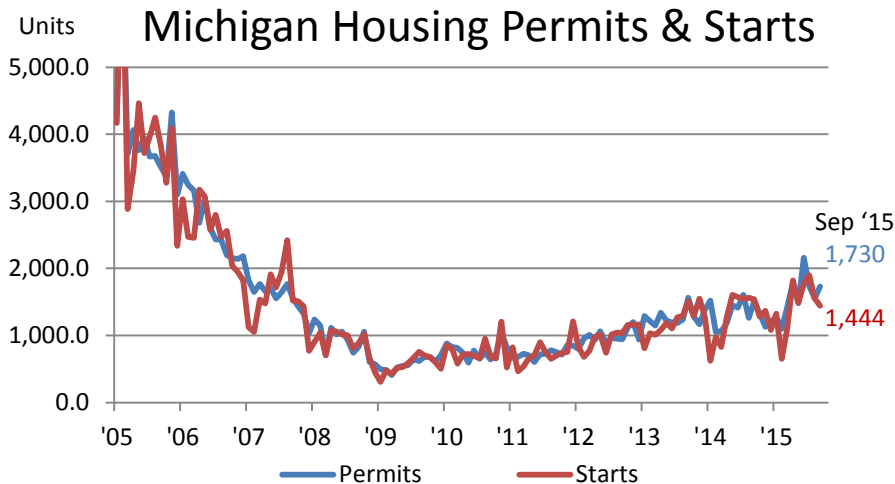
U.S. light vehicle (car and light truck) sales for September 2015 were reported to be 18.1 million units at a seasonally adjusted annual rate (SAAR). This was the highest month of LV sales since July 2005 when the U.S. LV SAAR reached 20.6. Year-to-date sales have averaged 17.2 million units on a SAAR Basis. According to the October 2015 *Blue Chip* forecast, light vehicle sales for the U.S. are expected to reach 17.2 million in 2015, with an additional increase in 2016 to 17.3 million units.



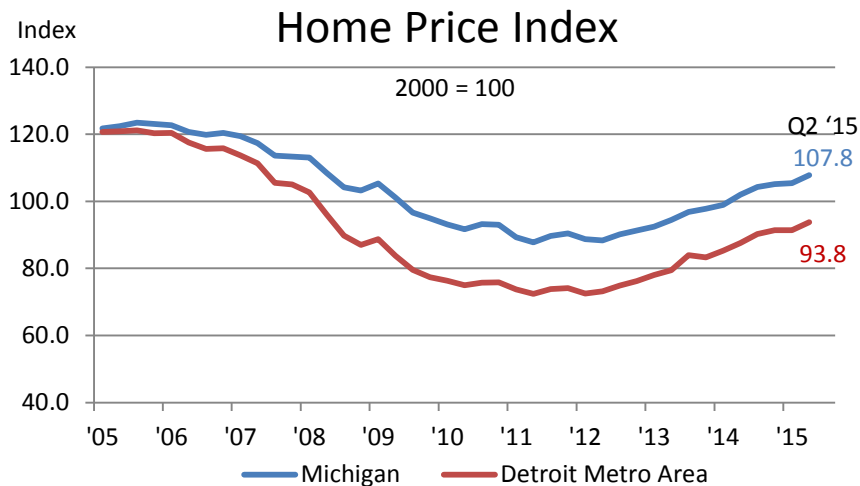
According to data from Ward's Automotive, Michigan's light vehicle production for 2015 is expected to reach slightly over 2.4 million units—which would be an increase of 8.5% from 2014. However LV production fell in 2014 from 2013 partially because of some difficult new vehicle launches and falling demand for small vehicles produced in Michigan due to lower gasoline prices. Michigan's share of LV production is expected to improve but remain below earlier levels.

Source: Ward's Automotive / FRB Chicago

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



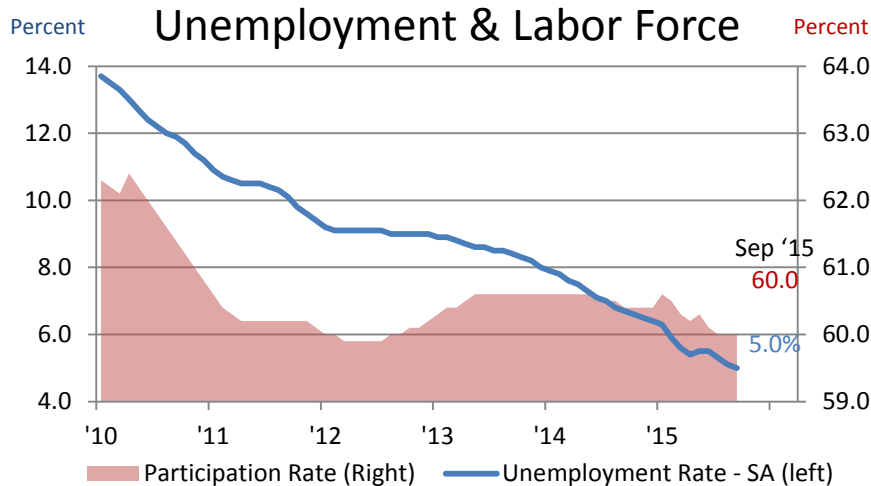
Although construction of privately owned homes in Michigan was negatively affected by the past two winters, housing permits and starts have continued to modestly improve since bottoming out in 2009. Housing starts through September averaged 1,448 per month—a 13.1% improvement compared with the same period last year. However, even with that improvement, privately owned housing starts are still only about 40.0% of what they were at their peak in 2005.



Home prices in Michigan were reported to be up 3.4% on a year-over-year basis in 2015:Q2. 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 3.9% in 2015:Q2 compared with a year ago. While some areas within the Detroit metro region have seen significant improvements in home prices, prices for residential homes in the region remain 22.1% below their 2006:Q1 peak.

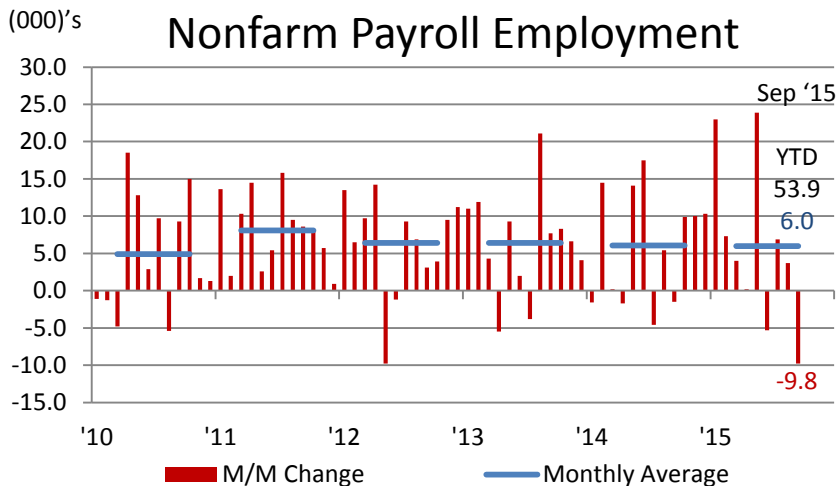
Source: FHFA & S&P Case Shiller/ Haver Analytics

Michigan's unemployment rate falls to 5.0% in in September and is now slightly lower than that of the U.S.



Michigan's unemployment rate declined to 5.0% in September, while the labor force participation rate of 60.0% was unchanged for the third consecutive month. Michigan unemployment rate of 5.0% compares favorably to the national rate of 5.1%. While September's unemployment rate reflects an increase in civilian employment of 54,583 for January through September of this year, it was also aided by a declining labor force (down by 16,172) over the same period.

Nonfarm payroll employment, which is based on a survey of businesses, fell by 9,800 jobs in September following an increase of 3,700 in August. So far in 2015, nonfarm employment has increased by 53,900, which is equal to average monthly job growth of about 6,000 per month. Michigan has added 443,000 jobs since its recessionary trough in March 2010, but total nonfarm employment is still about 400,000 jobs below its peak, which was reached in 2000.

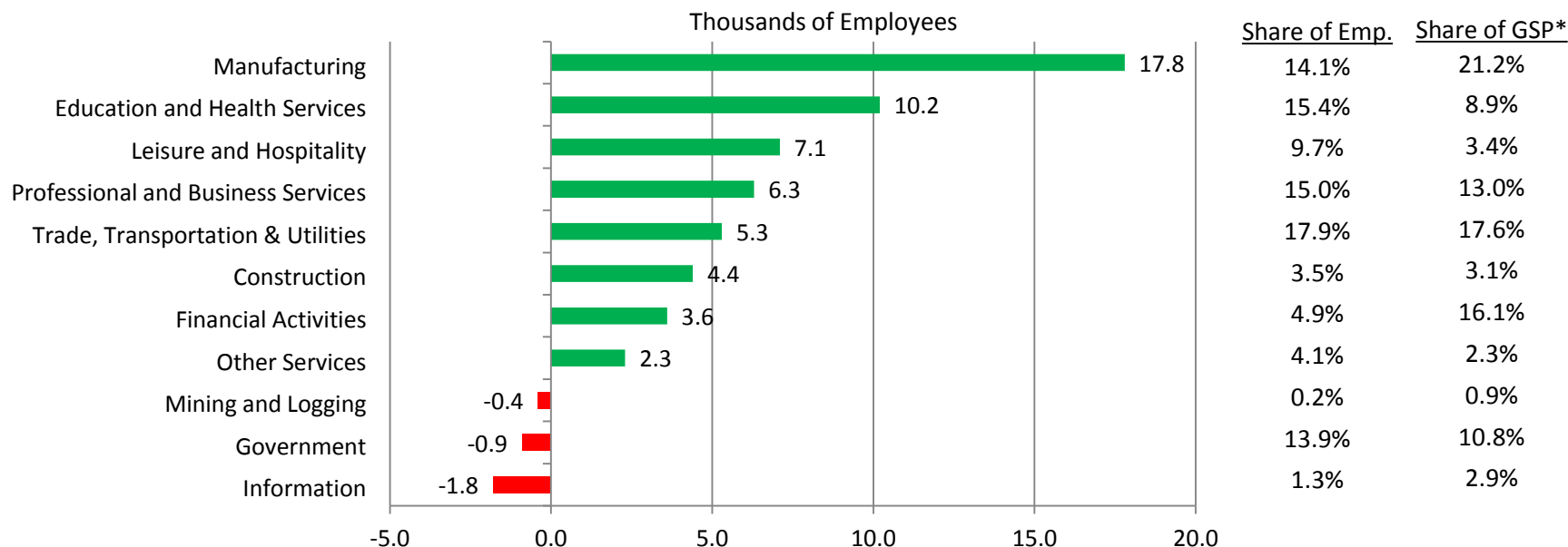


Source: BLS / Haver Analytics

Michigan's total nonfarm employment grew by 53,900 jobs in the first nine months of 2015, led by manufacturing which added 17,800 jobs



Nonfarm Employment Change by Sector – September, 2015 YTD

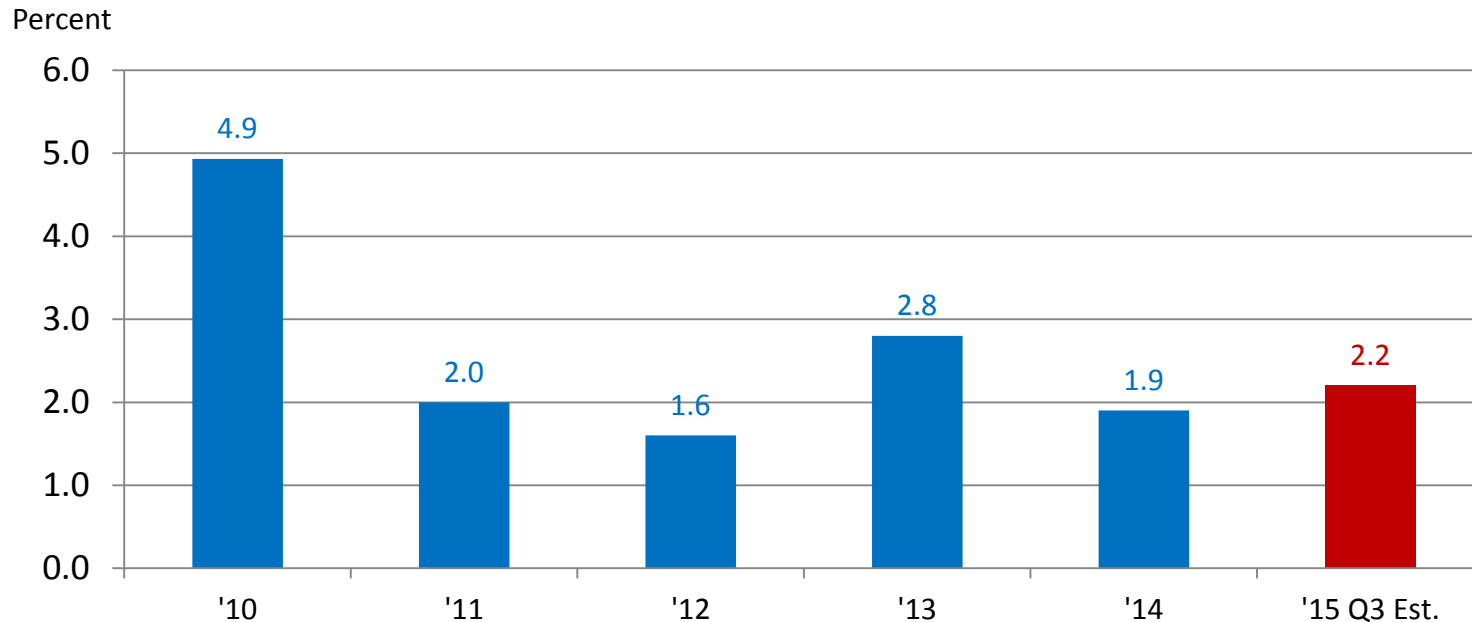


So far in 2015 (through September), Michigan is reported to have added 53,900 nonfarm payroll jobs. The majority of those jobs were in manufacturing, education and health services, leisure and hospitality, and professional services. Michigan's dependence on manufacturing remains strong, as approximately 21.2% of the Michigan's gross state product and 14.1% of its payroll jobs are directly associated with the manufacturing sector. Sectors that experienced losses in jobs this year include information, mining and logging, and government. The government subsector that experienced the biggest decline in employment was local government: 4,200 local government jobs were lost in Michigan this year. However, these losses were offset by gains of 200 federal and 3,100 state government jobs.

Source: Author's calculation using BEA and BLS data.

* Shares are based on Michigan's 2014 Gross State Product.

Michigan's economy is estimated to be growing at a 2.2% annual rate for 2015, with slightly softer employment growth in recent months



Based on the first nine months of available data, Michigan's economy is estimated to be growing at 2.2% on an annualized basis. This estimate is down slightly from the Q2 forecast mostly because of slower employment growth in recent months. However, total nonfarm employment is still on a path to grow by 2.0% on an annualized basis if the current monthly average pace of employment growth continues. Because Michigan's economy remains highly dependent on the manufacturing sector and 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 this year and into 2016.

Source: Author's calculation using BEA and BLS data.

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

<http://michiganeconomy.chicagofedblogs.org/>

