

MICHIGAN ECONOMIC UPDATE

Office of Revenue and Tax Analysis
Michigan Department of Treasury

<http://www.michigan.gov/treasury>

November 2016 Summary

U.S. Economy: The annual rate of real U.S. GDP growth estimate for 2016Q3 was revised up from 3.2 percent to 3.5 percent -- substantially faster than in recent quarters. New durable goods orders fell 1.9 percent from last November. Housing starts were down 6.9 percent from last November but existing home sales were up 15.4 percent. Retail sales increased 3.8 percent from last November. The Institute for Supply Management (ISM) reported the current expansion has now lasted 90 months. The ISM Production Management Index (PMI) rose 4.8 points from last November. At 53.2, the November 2016 PMI signaled an expanding manufacturing sector for the eighth month out of the last nine months. The ISM non-manufacturing index (NMI) signaled service sector expansion for the 82nd straight month and the pace of growth was up 0.6 of a point last November. Consumer sentiment was up 2.5 points from November 2015 and was up 6.6 points from a month ago. In November 2016, industrial production declined 0.6 percent from the year-ago level -- the 15th straight monthly y-o-y decline. The capacity utilization rate fell 0.7 of a point from November 2015 -- the 21st consecutive y-o-y rate drop.

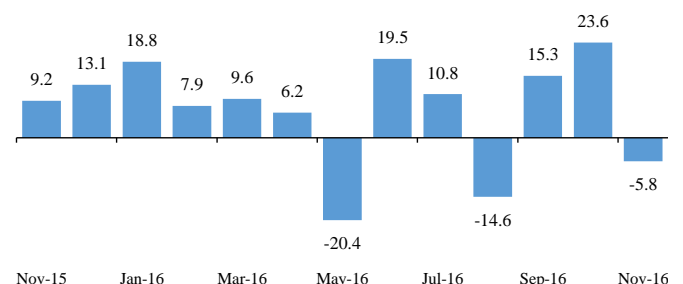
Employment: In November 2016, the Michigan unemployment rate rose 0.2 of a percentage point from October to 4.9 percent. The November 2016 Michigan rate was down 0.2 of a percentage point from November 2015. The U.S. rate was down 0.3 of a percentage point from October at 4.6 percent. Between November 2015 and November 2016, Michigan payroll employment gained a net 84,000 jobs (2.0 percent). Michigan payroll employment in November 2016 fell 5,800 jobs compared to October 2016. U.S. payroll employment was up 2.3 million jobs (1.6 percent) in November 2016 compared to a year ago. National payroll employment was up 178,000 jobs from October to November.

Auto Industry: In November 2016, U.S. light vehicle sales fell 2.1 percent from last November but totaled a very strong annualized 17.8 million units. Between November 2015 and November 2016, the three-month average of Michigan vehicle production was unchanged while the three-month U.S. average was up 3.3 percent. Between November 2015 and November 2016, Michigan's share of U.S. vehicle production fell 0.7 of a percentage point to 18.8 percent.

Inflation: In November 2016, the overall U.S. consumer price index (CPI) rose 1.7 percent from a year ago. The U.S. core (excluding food and energy) CPI was up 2.1 percent from last November. The U.S. producer price index was up 1.3 percent from last year. At \$45.71, the November 2016 price of oil per barrel was up \$3.27 (7.7 percent) from November 2015.

Michigan Metro Areas: Compared to a year ago, November 2016 unemployment rates rose in 16 of Michigan's 17 major labor markets. However, household employment rose in 11 of Michigan's 17 major labor market areas.

**Michigan Payroll Employment
Down in November**
(change from previous month, thousands of jobs) ^(a)



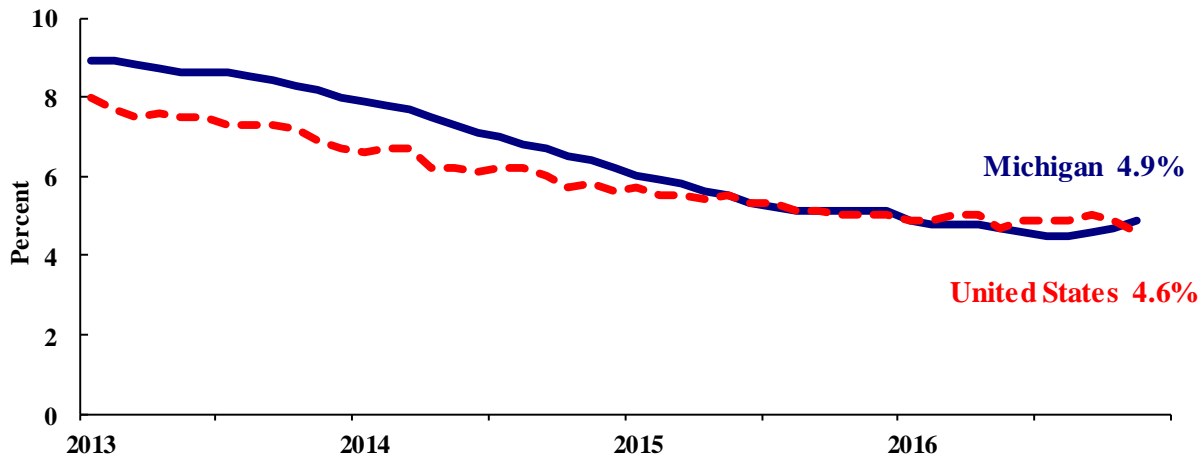
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- In November 2016, the Michigan unemployment rate increased 0.2 of a percentage point to 4.9 percent. The national unemployment rate decreased 0.3 of a percentage point from October to November to 4.6 percent.
- In November 2016, Michigan’s unemployment rate was down 0.2 of a percentage point from a year ago. The November U.S. unemployment rate decreased 0.4 of a percentage point from a year ago. Monthly unemployment rates fluctuate in part due to statistical sampling errors and data revisions.

**Michigan and U.S. Monthly Unemployment Rates
January 2013 to November 2016**



Source: Michigan Dept. of Technology, Management & Budget and Bureau of Labor Statistics, U.S. Dept. of Labor

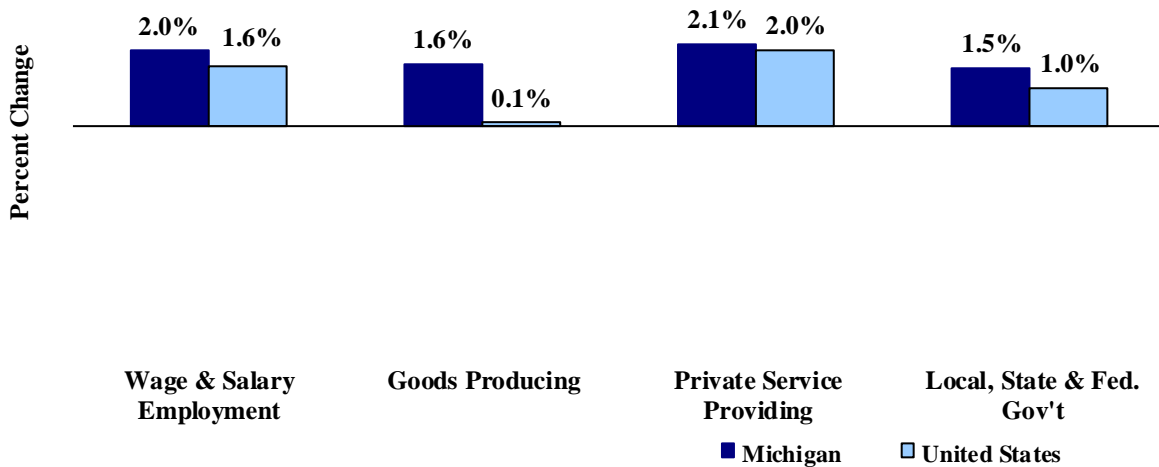
- In November, the total number of people employed in Michigan increased 16,000 to 4,632,000 persons while the labor force rose by 28,000. The statewide total number of unemployed workers rose by 12,000 to 240,000.
- United States employment totaled 152.1 million persons in November 2016. The labor force totaled 159.5 million and there were 7.4 million unemployed in November.

Employment by Place of Residence (in thousands)^(a)

	2015 Average	Sep 2016	Oct 2016	Nov 2016	Change From				
					Prior Month		Last Year		
					Level	%	Level	%	
Michigan									
Labor Force	4,751	4,821	4,844	4,872	28	0.6%	109	2.3%	
Employed	4,493	4,601	4,616	4,632	16	0.3%	111	2.5%	
Unemployed	258	220	228	240	12	5.3%	-2	-0.8%	
Unemployment Rate	5.4%	4.6%	4.7%	4.9%	n.a.	0.2% pts	n.a.	-0.2% pts	
United States									
Labor Force	157,130	159,907	159,712	159,486	-226	-0.1%	2,119	1.3%	
Employed	148,834	151,968	151,925	152,085	160	0.1%	2,641	1.8%	
Unemployed	8,296	7,939	7,787	7,400	-387	-5.0%	-524	-6.6%	
Unemployment Rate	5.3%	5.0%	4.9%	4.6%	n.a.	-0.3% pts	n.a.	-0.4% pts	

- From November 2015 to November 2016, Michigan payroll employment increased 84,000 jobs (2.0 percent). State payroll employment fell by 5,800 jobs in November from October. Nationally, November 2016 payroll employment rose 2,253,000 (1.6 percent) from a year ago and was up 178,000 from October.

**Payroll Employment Growth
November 2015 to November 2016**



Source: Bureau of Labor Statistics, Michigan Department of Technology, Management & Budget

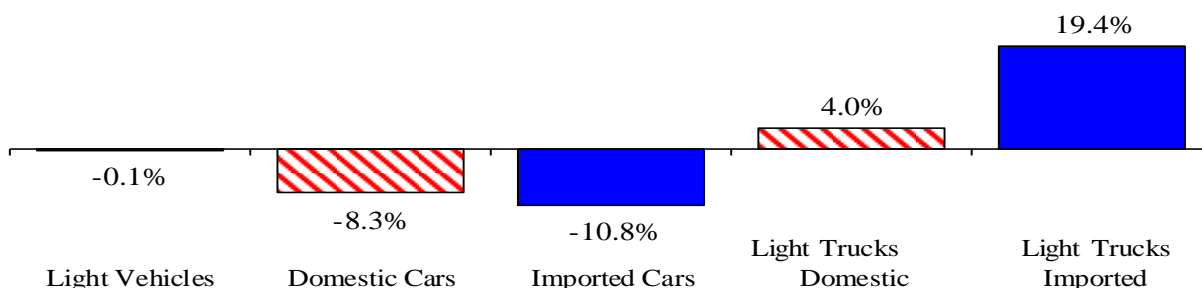
- In the goods-producing sector, Michigan payroll employment increased 1.6 percent in November from a year ago while employment in the private service-providing sector increased 2.1 percent. From a year ago, November national payroll employment rose 0.1 percent in the goods-producing sector and increased 2.0 percent in the private service-providing sector. Government employment was up 1.5 percent from a year ago in Michigan. Nationwide, government employment was up 1.0 percent.
- Manufacturing weekly hours in Michigan were down 2.3 hours in November compared to last year.

Wage and Salary (Payroll) Employment (in thousands)^(b)

	Michigan				United States			
	2015 Average	Nov 2015	Nov 2016	Percent Change	2015 Average	Nov 2015	Nov 2016	Percent Change
Wage & Salary Employment	4,243.7	4,275.5	4,359.5	2.0%	141,865	142,875	145,128	1.6%
Goods Producing	742.9	750.5	762.7	1.6%	19,584	19,634	19,646	0.1%
Manufacturing	587.3	593.2	596.6	0.6%	12,318	12,314	12,260	-0.4%
Private Service Providing	2,906.5	2,927.8	2,990.5	2.1%	100,275	101,213	103,237	2.0%
Trade, Trans. & Utilities	770.7	771.7	769.8	-0.2%	26,920	27,087	27,424	1.2%
Services	1,872.0	1,889.3	1,944.9	2.9%	62,480	63,191	64,710	2.4%
Local, State & Fed. Gov't	594.3	597.2	606.3	1.5%	22,007	22,028	22,245	1.0%
Manufacturing Weekly Hours	44.2	44.2	41.9	-2.3 hrs	41.8	41.7	41.8	0.1 hrs

- November 2016 U.S. light vehicle sales were down 0.9 percent from October and were down 2.1 percent from November 2015. However, at 17.8 million units, November 2016 marks the 33rd straight month that the light vehicle annualized sales rate exceeded 16.0 million units and the 17th month out of the most recent 21 months that the sales rate exceeded 17.0 million units.
- U.S. sales of domestic light vehicles decreased 2.1 percent between November 2015 and November 2016. Foreign sales were also down 2.1 percent over the same period. As a result, the foreign share of U.S. light vehicle sales was unchanged at 22.0 percent in November 2016.
- Auto sales decreased 8.6 percent compared to last November, while light truck sales were up 2.6 percent from November 2015. As a result, November 2016 marked the eighth straight month in which the light truck share of total sales exceeded 60.0 percent. Prior to the last seven months, the light truck sales share exceeded 60.0 percent only once (July 2005). Year-over-year, heavy truck sales declined 19.6 percent in November 2016.

**Year-to-Date Total Light Vehicle Sales (Jan-Nov 2016)
Down Very Slightly from Year Ago (Jan-Nov 2015)
(percent change)**



Motor Vehicle Sales Statistics

(Millions, unless otherwise specified)

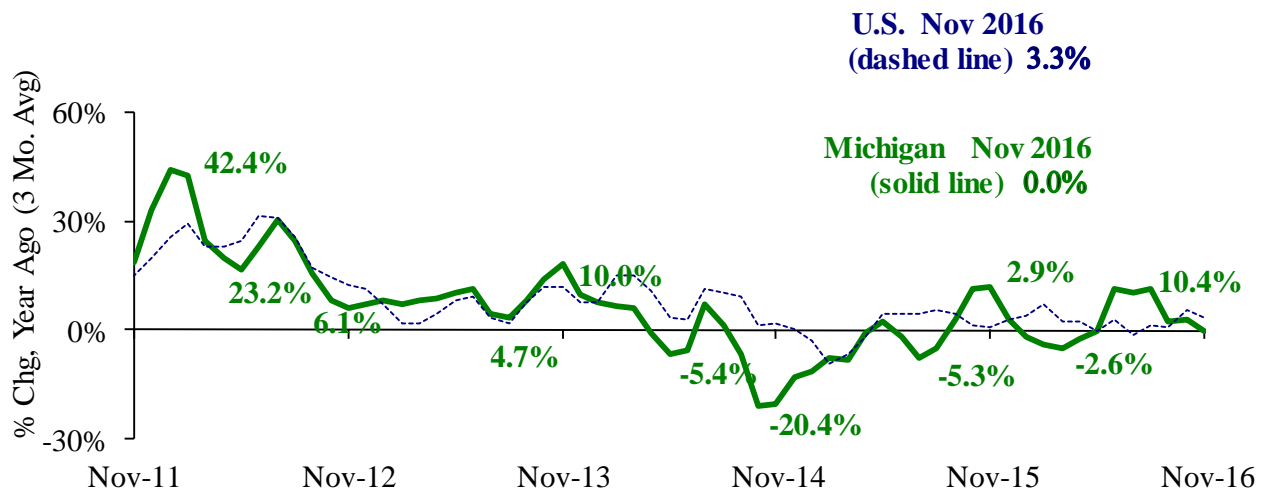
Motor Vehicle Sales ^(c)	2015 Total	Sep 2016	Oct 2016	Nov 2016	3 Month Average	November Change from Year Ago	
						Level	%
Autos	7.5	7.0	6.8	6.9	6.9	(0.6)	-8.6%
Domestics	5.6	5.3	5.1	5.2	5.2	(0.4)	-7.7%
Imports	1.9	1.7	1.7	1.7	1.7	(0.2)	-11.4%
Import Share	25.6%	24.4%	25.4%	24.5%	24.8%	-0.8% pts	
Light Trucks	9.9	10.7	11.1	10.9	10.9	0.3	2.6%
Domestics	8.1	8.6	9.0	8.7	8.7	0.1	1.6%
Imports	1.8	2.1	2.1	2.2	2.1	0.1	6.5%
Import Share	18.0%	19.5%	19.2%	20.3%	19.7%	0.7% pts	
Total Light Vehicles	17.4	17.7	17.9	17.8	17.8	(0.4)	-2.1%
Heavy Trucks	0.4	0.4	0.4	0.4	0.4	(0.1)	-19.6%
Total Vehicles	17.8	18.1	18.3	18.1	18.2	(0.5)	-2.5%

Retail Inventories, Motor Vehicle and Parts Dealers^(d)

(billions of dollars)	2015 Average	Aug-16	Sep-16	Oct-16	3 Month Average	Change from Year Ago	
						Level	%
Inventories	\$190.4	\$212.6	\$213.1	\$211.6	\$212.4	\$15.1	7.7%
Inventory/Sales Ratio	2.10	2.26	2.23	2.20	2.23	0.07	

- At 184,769 units, November 2016 Michigan motor vehicle production was up 1.4 percent from November 2015. National production increased 5.2 percent from last November. The three-month average of vehicle production (September 2016-November 2016) was essentially unchanged in Michigan and up 3.3 percent nationally, compared to a year ago.
- In November 2016, Michigan car production was up 21.3 percent from a year ago while State truck production declined 8.3 percent. Nationally, car production increased 6.8 percent while U.S. truck production was up 4.5 percent.
- Michigan’s share of national vehicle production fell 0.7 of a percentage point from the year-ago level to 18.8 percent in November 2016. Michigan’s share of U.S. car production was up 2.6 percentage points to 21.4 percent. Michigan’s share of U.S truck production decreased 2.4 percentage points to 17.4 percent.

Michigan Motor Vehicle Production Trends Steady (e,f)



Motor Vehicle Production Statistics

(Thousands, unless otherwise specified)

	2015					Change from Year Ago for November	
	Monthly Average	Sep 2016	Oct 2016	Nov 2016	3 Month Average	Level	%
U.S. Production (e)							
Autos	355.8	360.8	355.3	336.4	350.8	21.3	6.8%
Trucks	644.1	730.7	725.0	647.7	701.1	27.7	4.5%
Total	1,000.0	1,091.5	1,080.3	984.2	1,052.0	49.0	5.2%
Michigan Production (f)							
Autos	68.3	69.5	65.8	72.1	69.2	12.7	21.3%
Trucks	125.6	139.4	132.0	112.6	128.0	(10.2)	-8.3%
Total	193.9	209.0	197.8	184.8	197.2	2.5	1.4%
Michigan as % of U.S.	19.4%	19.1%	18.3%	18.8%	18.7%	-0.7%	pts

In November 2016, the unemployment rates in Michigan’s 17 labor market areas ranged from a low of 3.0 percent in the Ann Arbor Metropolitan Statistical Area (MSA) to a high of 6.8 percent in the Northeast Lower Michigan region. The November 2016 median unemployment rate was 4.4 percent, which is up 0.6 of a percentage point from last November’s 3.8 percent median rate.

Compared to a year ago, the November 2016 unemployment rate rose in 16 of Michigan’s 17 labor market areas. The median rate increase was 0.4 of a percentage point. The Detroit-Warren-Dearborn MSA reported no change in its unemployment rate from last November. The Northeast Lower Michigan region reported the largest rate increase of 0.8 of a percentage point, followed by two areas (Midland MSA and Niles-Benton Harbor MSA) that each reported a 0.6 of a percentage point increase.

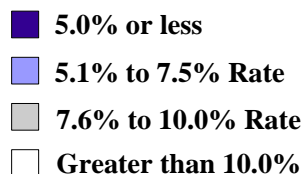
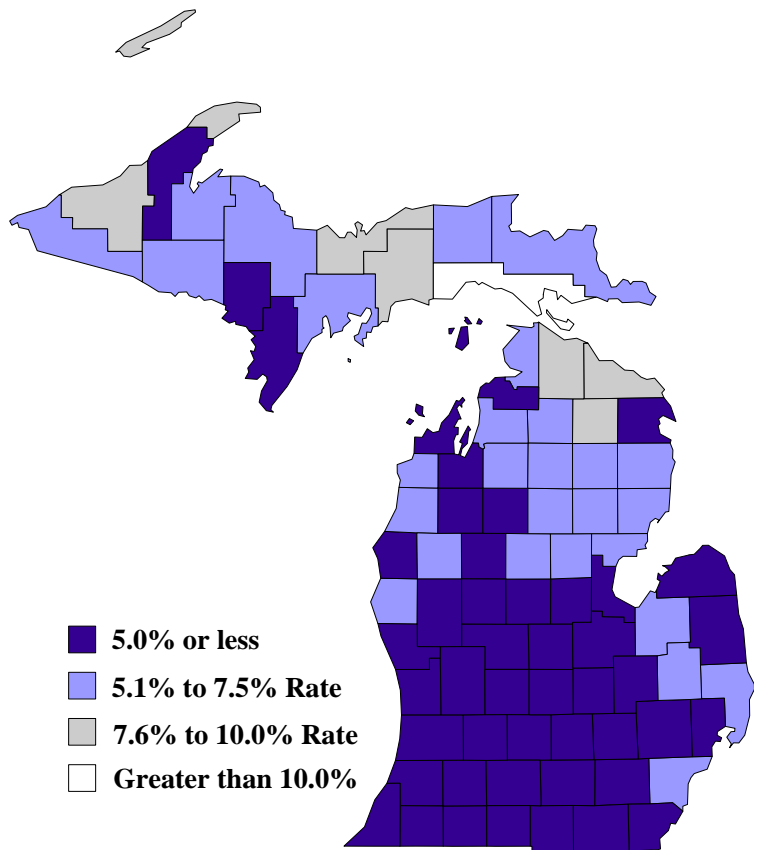
Between November 2015 and November 2016, household employment rose in 11 of Michigan’s 17 labor market areas, declined in four areas and was unchanged in two areas. The median employment increase was 1.3 percent. The Ann Arbor MSA reported the largest year-over-year employment increase at 4.1 percent, followed by the Detroit-Warren-Dearborn MSA with a 4.0 percent increase. The Bay City MSA reported the largest year-over-year employment decrease of 0.8 percent. The labor force rose in 15 labor market areas and fell in two areas. The Ann Arbor MSA reported the largest percent increase in labor force at 4.6 percent, followed by the Detroit-Warren-Dearborn MSA at 4.0 percent. The Bay City MSA recorded the largest percent decline in labor force at 0.4 percent.

Between November 2015 and November 2016, the unemployment rate rose in 73 of Michigan’s 83 counties, fell in six counties and was unchanged in four counties. The median November 2016 rate increase was 0.4 of a percentage point. Montmorency County reported the largest unemployment rate increase at 1.7 percentage points, followed by Alger County with a 1.4 percentage points increase. In November 2016, the unemployment rate was below 5.0 percent in 44 of Michigan’s 83 counties compared with 51 counties with rates below 5.0 percent in November 2015.

Local Area Unemployment Rates^(g)

<u>Local Area</u>	<u>Nov 2015 Rate</u>	<u>Oct 2016 Rate</u>	<u>Nov 2016 Rate</u>
Michigan	4.2%	4.6%	4.5%
Ann Arbor	2.7%	3.5%	3.0%
Battle Creek	3.7%	4.2%	4.1%
Bay City	4.0%	4.4%	4.4%
Detroit-Warren-Dearborn	5.1%	5.4%	5.1%
Flint	4.4%	4.9%	4.7%
Grand Rapids-Wyoming	2.8%	3.2%	3.1%
Jackson	3.8%	4.4%	4.3%
Kalamazoo-Portage	3.4%	3.8%	3.8%
Lansing-East Lansing	3.1%	3.6%	3.4%
Midland	3.5%	4.0%	4.1%
Monroe	3.2%	4.6%	3.6%
Muskegon	4.3%	4.7%	4.6%
Niles-Benton Harbor	3.8%	4.3%	4.4%
Saginaw	4.1%	4.4%	4.4%
Upper Peninsula	5.1%	5.1%	5.6%
Northeast Lower Mich	6.0%	5.6%	6.8%
Northwest Lower Mich.	4.3%	4.2%	4.7%

**County Unemployment Rates
November 2016^(g)**



	<u>Aug-16</u>	<u>Sep-16</u>	<u>Oct-16</u>	<u>Nov-16</u>	<u>Change from Year Ago</u>
KEY ECONOMIC INDICATORS					
Consumer Sentiment ^(h)	89.8	91.2	87.2	93.8	2.5 points
ISM Manufacturing Index ⁽ⁱ⁾	49.4	51.5	51.9	53.2	4.8 points
ISM Non Manufacturing Index ⁽ⁱ⁾	51.4	57.1	54.8	57.2	0.6 points
	<u>2015.4</u>	<u>2016.1</u>	<u>2016.2</u>	<u>2016.3</u>	
Business Executives' Confidence ^(j)	45.0	47.0	52.0	50.0	2.0 points
INFLATION ^(k)					
1982-84 = 100 (CPI)	<u>Aug-16</u>	<u>Sep-16</u>	<u>Oct-16</u>	<u>Nov-16</u>	<u>Change from Year Ago</u>
Nov 2009 = 100 (PPI)					
U.S. Consumer Price Index	240.8	241.4	241.7	241.4	1.7%
Detroit CPI	223.9	NA	224.3	NA	1.7%
U.S. Producer Price Index	110.5	110.7	110.7	110.8	1.3%
INTEREST RATES					
90 Day T-Bill ^(l)	0.30%	0.29%	0.33%	0.45%	0.33% points
10 Year Treasury Securities ^(l)	1.56%	1.63%	1.76%	2.14%	-0.12% points
INDUSTRIAL PRODUCTION ^(l)					
	104.5	104.2	104.3	103.9	-0.6%
CAPACITY UTILIZATION ^(l)					
	75.6%	75.4%	75.4%	75.0%	-0.7% points
RETAIL SALES ^(d)					
	\$457.7	\$462.3	\$465.1	\$465.5	3.8%
HOUSING STARTS and SALES					
(Millions Annual Rate)	<u>Aug-16</u>	<u>Sep-16</u>	<u>Oct-16</u>	<u>Nov-16</u>	<u>% Change From Year Ago</u>
Housing Starts ^(d)	1.164	1.052	1.340	1.090	-6.9%
Existing Home Sales ^(m)	5.300	5.490	5.570	5.610	15.4%
DURABLE GOODS ORDERS ^(p)					
	\$227.5	\$228.2	\$239.2	\$228.2	-1.9%
PERSONAL INCOME ^(c)					
(Billions of Dollars)	<u>2015.4</u>	<u>2016.1</u>	<u>2016.2</u>	<u>2016.3</u>	<u>% Change From Year Ago</u>
Michigan	\$433.1	\$433.1	\$438.2	\$443.4	3.9%
U.S.	\$15,694.3	\$15,742.4	\$15,931.6	\$16,109.2	3.5%
GROSS DOMESTIC PRODUCT					
(Billions of Chained 2009 Dollars) ^(c)	<u>2015.4</u>	<u>2016.1</u>	<u>2016.2</u>	<u>2016.3</u>	<u>Annualized % Chg From Last Qtr</u>
	\$16,490.7	\$16,525.0	\$16,583.1	\$16,727.0	3.5%

- (a) Seasonally adjusted. Sources: Bureau of Labor Statistics, U.S. Department of Labor and Michigan Department of Technology, Management and Budget.
- (b) Bureau of Labor Statistics, U.S. Department of Labor (BLS 790).
- (c) Seasonally adjusted annual rates. Source: Bureau of Economic Analysis, U.S. Department of Commerce.
- (d) Bureau of the Census, U.S. Department of Commerce
- (e) Automotive News.
- (f) Michigan Department of Treasury.
- (g) Michigan Department of Technology, Management and Budget.
- (h) University of Michigan Survey of Consumers.
- (i) Institute for Supply Management (ISM), formerly NAPM.
- (j) The Conference Board.
- (k) Bureau of Labor Statistics, U.S. Department of Labor.
- (l) Seasonally adjusted rates (except interest rates). Federal Reserve System Board of Governors. 2007 equals 100. Treasury bill rate (secondary market).
- (m) National Association of Realtors.