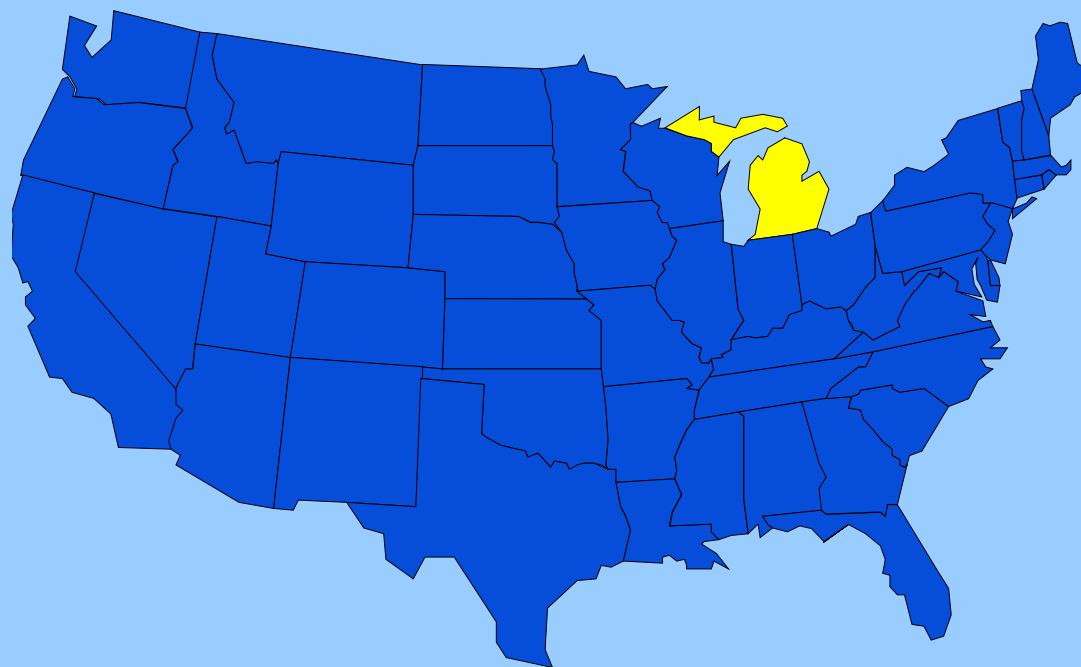


The U.S. and Michigan Outlook for 2016-2018



Consensus Revenue Estimating Conference
Lansing, Michigan
January 14, 2016

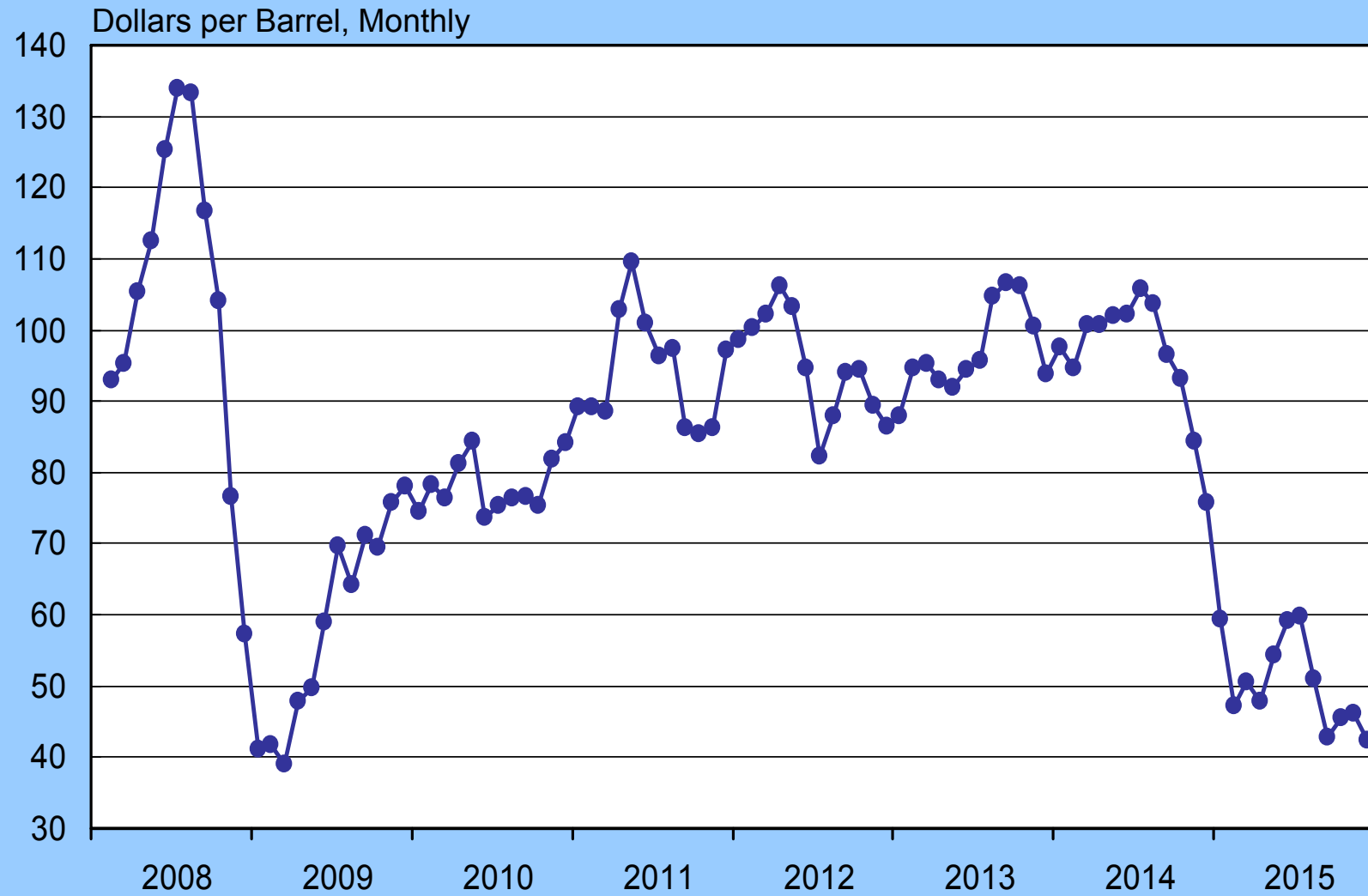
The Current State of the Economy

International Headwinds

- Board-based declines in commodity prices
 - The price of oil keeps sliding lower
 - Many other key commodity prices are down sharply
 - Domestic oil-related activity contracting
- Slowing growth in developing economies
- Sharp increase in the value of the dollar
 - Hurts domestic exports, industrial activity

Price of Oil

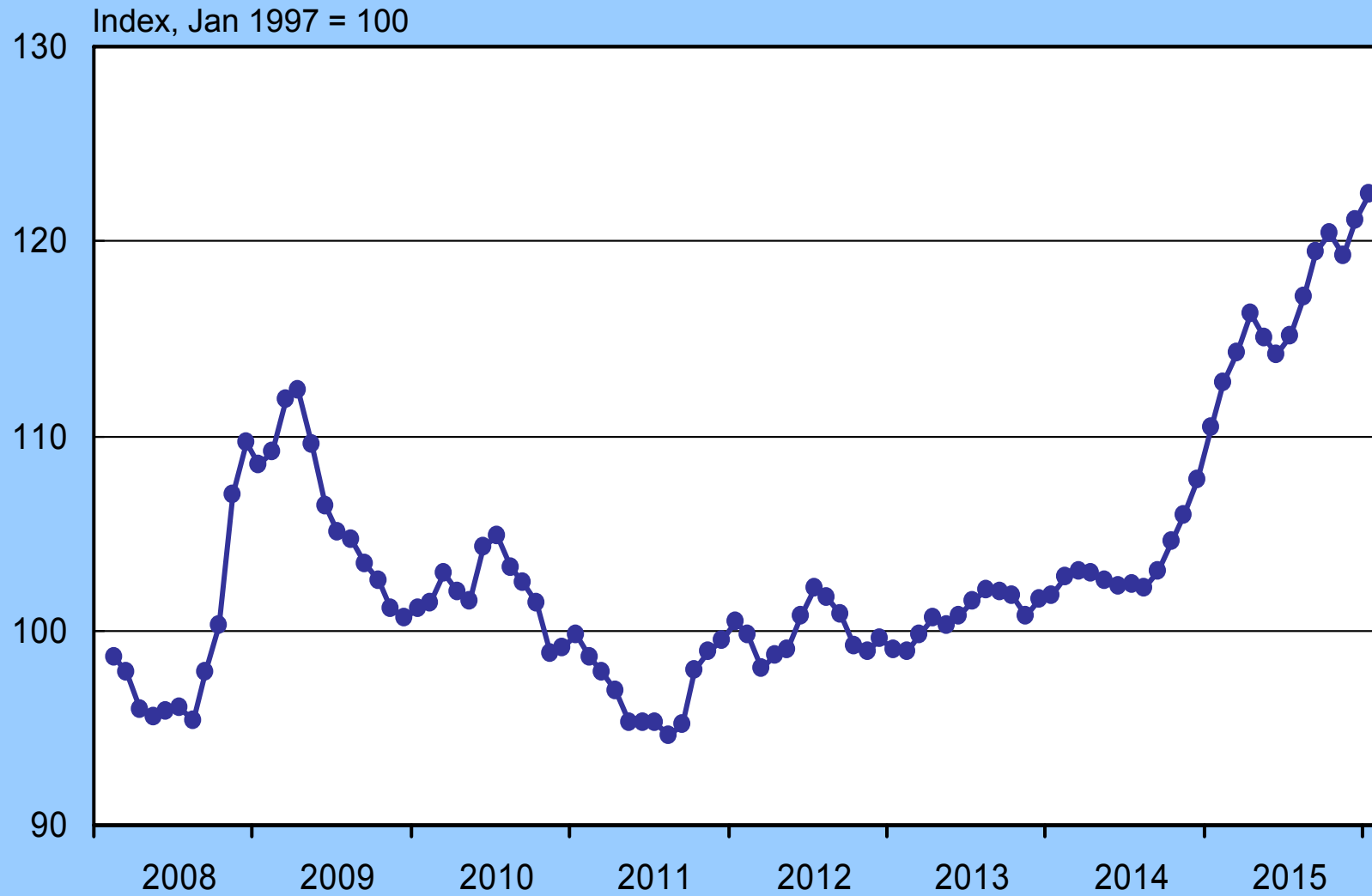
(West Texas Intermediate Crude)



International Headwinds

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- Slowing growth in developing economies
- Sharp increase in the value of the dollar
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Trade-Weighted Value of the Dollar



Latest Data

- 2015q3 real GDP growth at 2.0 percent
 - 0.7pp drag from inventory correction
- Real GDP up 2.1 percent y-o-y in 2015q3
 - Net exports reduced y-o-y growth by 0.7pp
- Domestic Final Sales up 2.8 percent y-o-y
- Labor Market keeps improving
 - October-December payroll job gains averaged over 280,000
 - Unemployment rate down to 5.0 percent
 - Initial Unemployment Insurance claims very low

Latest Data

- Light Vehicle Sales booming
 - October-December averaged 17.8-million pace
 - Annual sales averaged 17.3 million
 - Just shy of a new record year
- Industrial Activity weak
 - Stronger dollar slowed manufacturing growth
 - Mining-related activity down sharply, still falling
- Service Sector expanding at a solid pace

Light Vehicle Sales



Latest Data

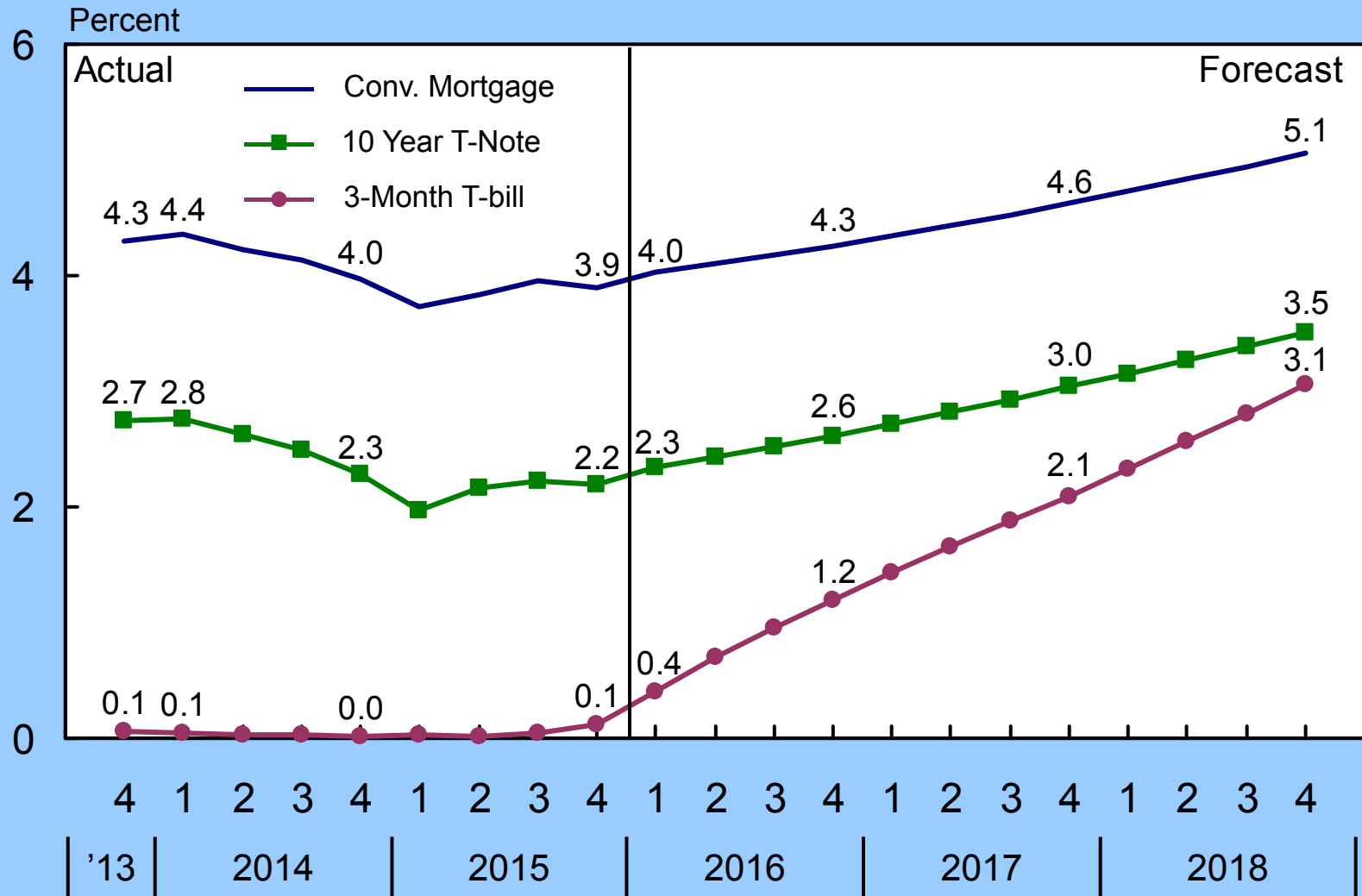
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Key Inputs

Monetary Policy

- New federal funds target range: 25-50bps
- Weak inflation did not delay the rate increase
 - FOMC thinks temporary factors are to blame
- Pace of future tightening is data-dependent
 - Most consistent with our outlook:
25bps increase every other FOMC meeting
 - Largely reflecting slow inflation

Market Interest Rates



Fiscal Policy:

- Bipartisan Budget Act of 2015
 - Suspended debt ceiling through March 2017
 - Sequestration partially fixed through FY 2017
 - Increased Overseas Contingency Funding
- Fiscal 2016 spending bill
 - Several ACA-related taxes delayed
 - Lifted oil export ban
- No tax reform on the horizon

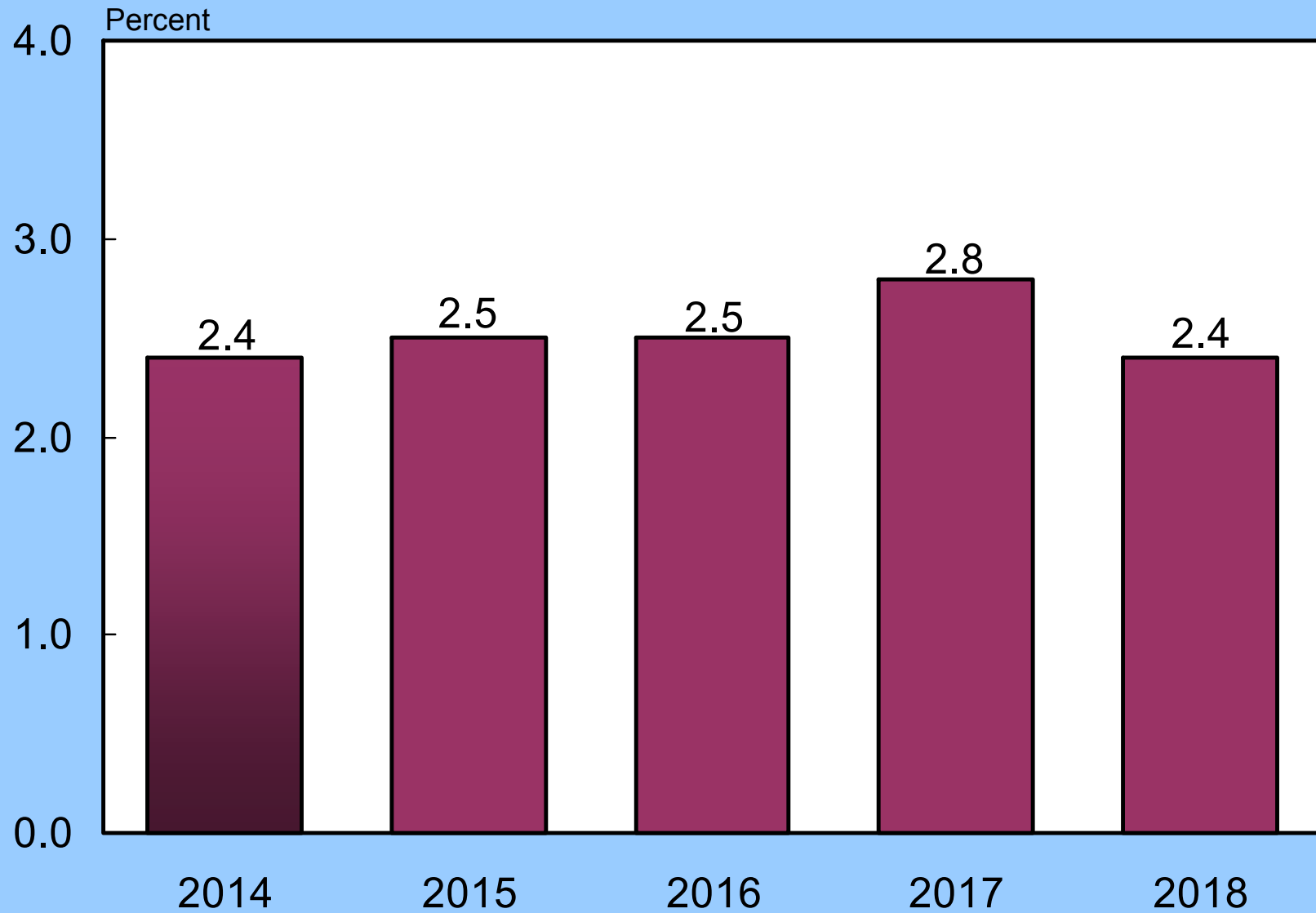
Federal Budget, NIPA Basis

(Billions of Dollars)

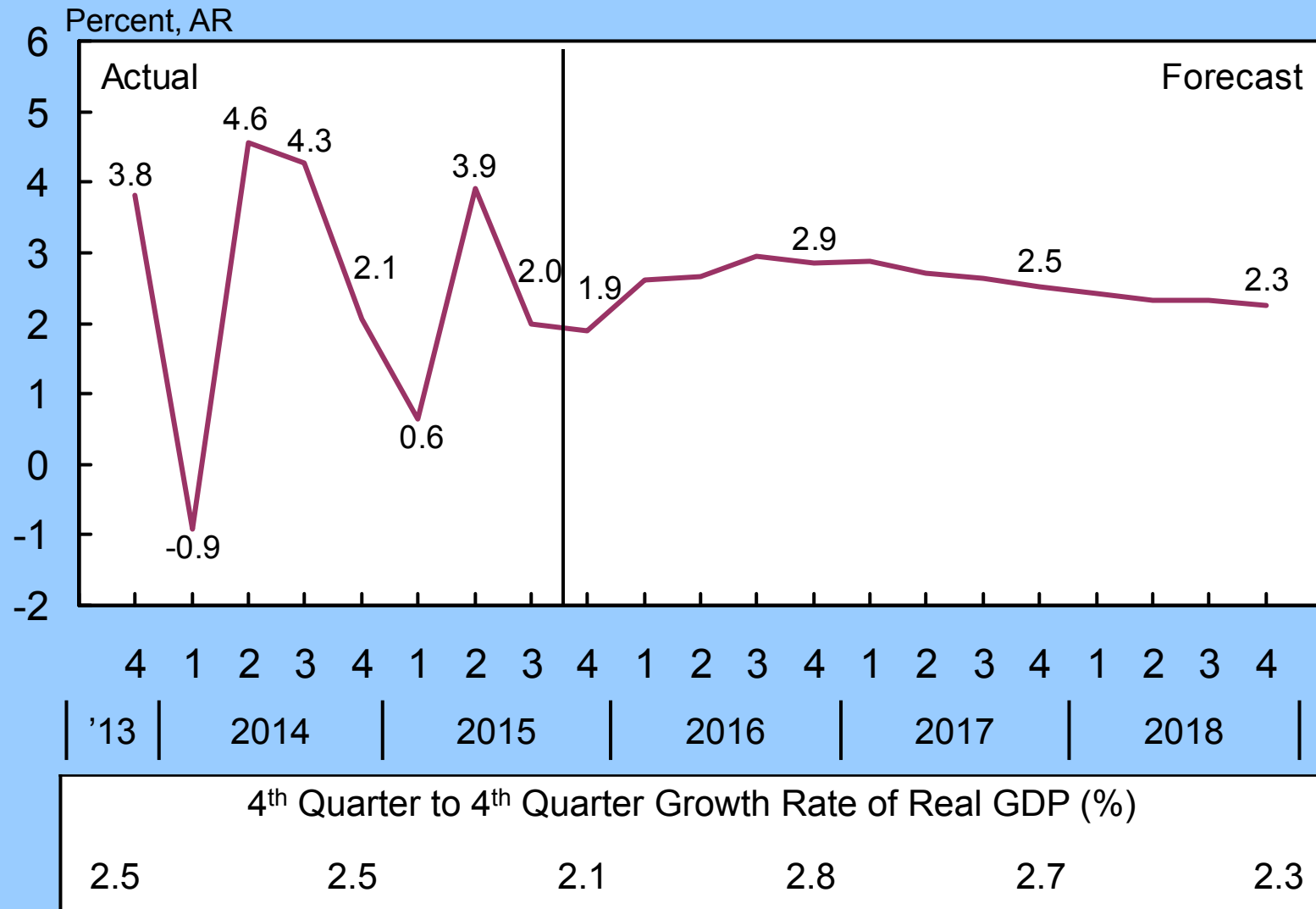
			Forecast		
	<u>FY'14</u>	<u>FY'15</u>	<u>FY'16</u>	<u>FY'17</u>	<u>FY'18</u>
Current receipts	3253.4	3392.0	3565.0	3755.4	3972.0
% change	7.7	4.3	5.1	5.3	5.8
Current expenditures	3863.1	3988.2	4169.7	4341.0	4536.3
% change	1.8	3.2	4.6	4.1	4.5
Consumption	955.2	956.1	981.4	1016.4	1052.9
% change	-2.0	0.1	2.7	3.6	3.6
Transfer payments	2411.8	2537.0	2644.1	2751.8	2880.7
% change	3.2	5.2	4.2	4.1	4.7
Surplus (+) or deficit (-)	-609.7	-596.2	-604.7	-585.6	-564.3
Percent of GDP	-3.5	-3.3	-3.3	-3.0	-2.8

RSQE Forecast

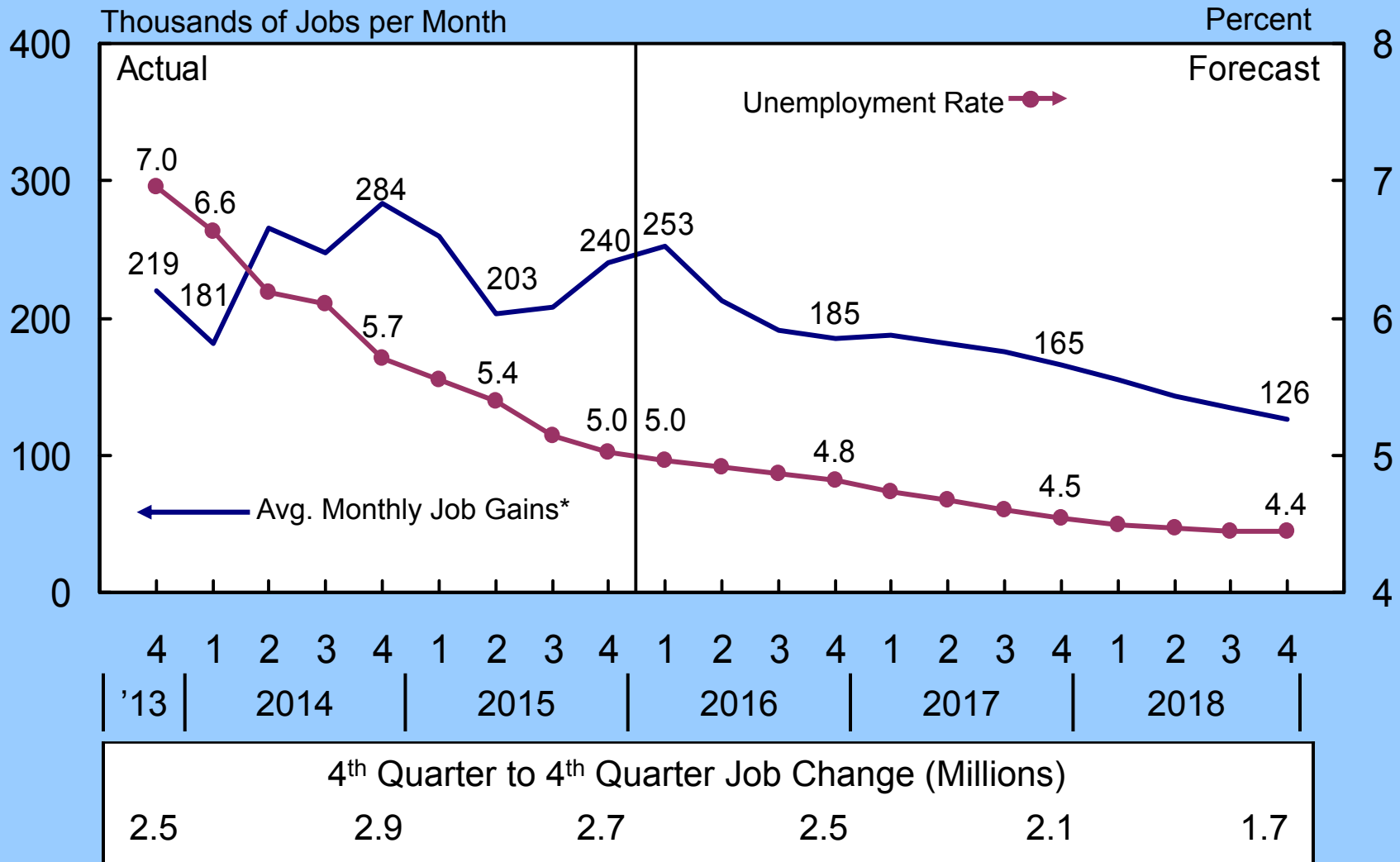
Real GDP Growth



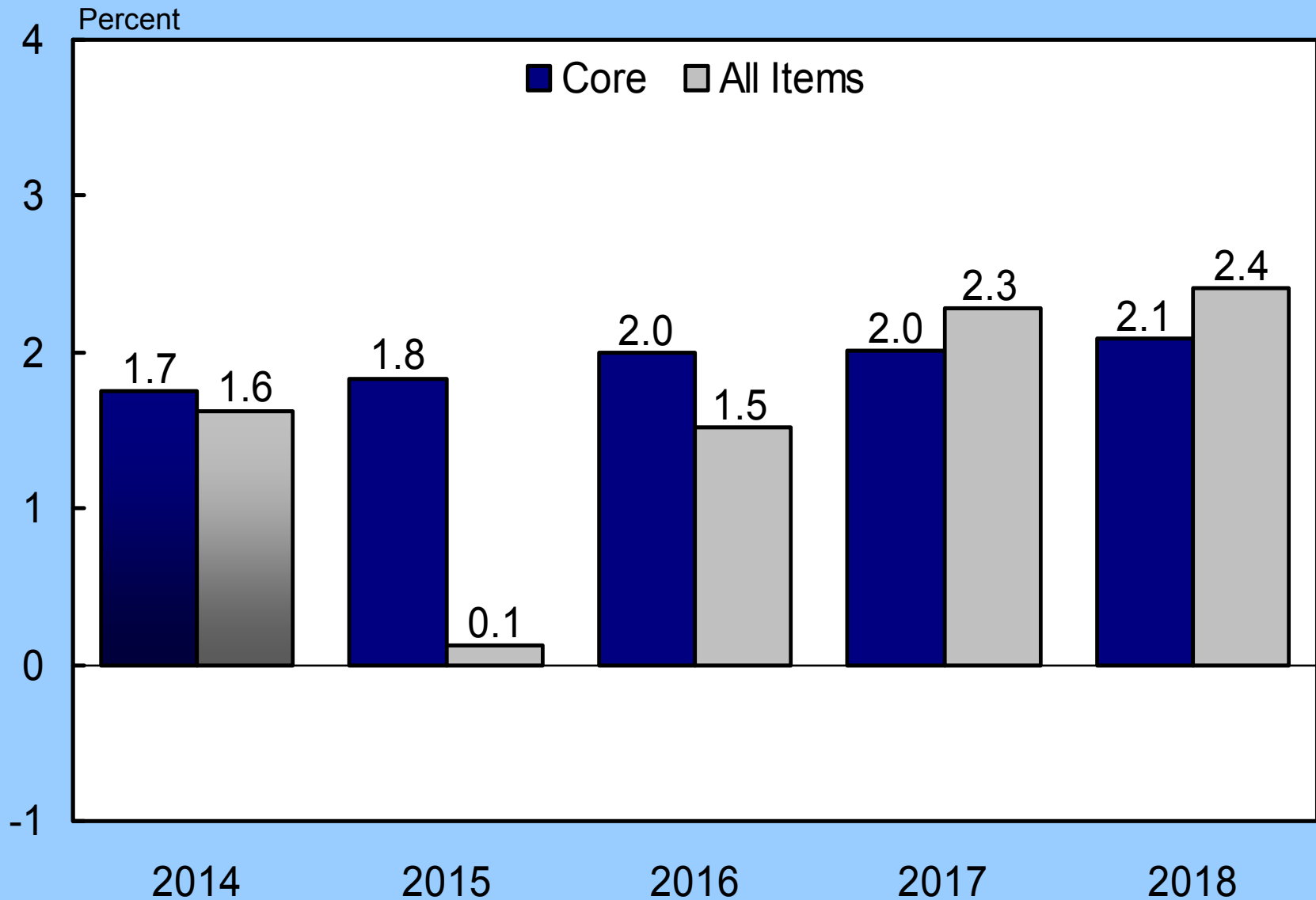
Growth Rate of Real GDP



Nonfarm Payroll Employment Gains and Unemployment Rate



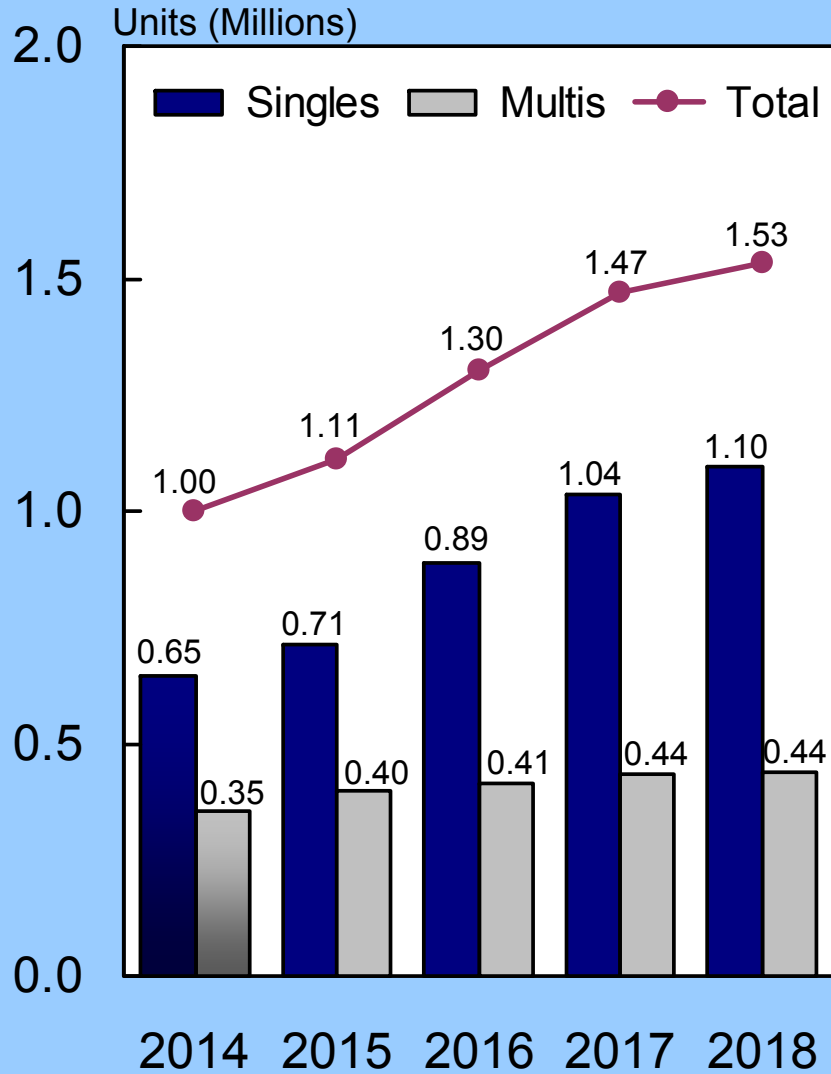
Consumer Price Inflation (CPI-U)



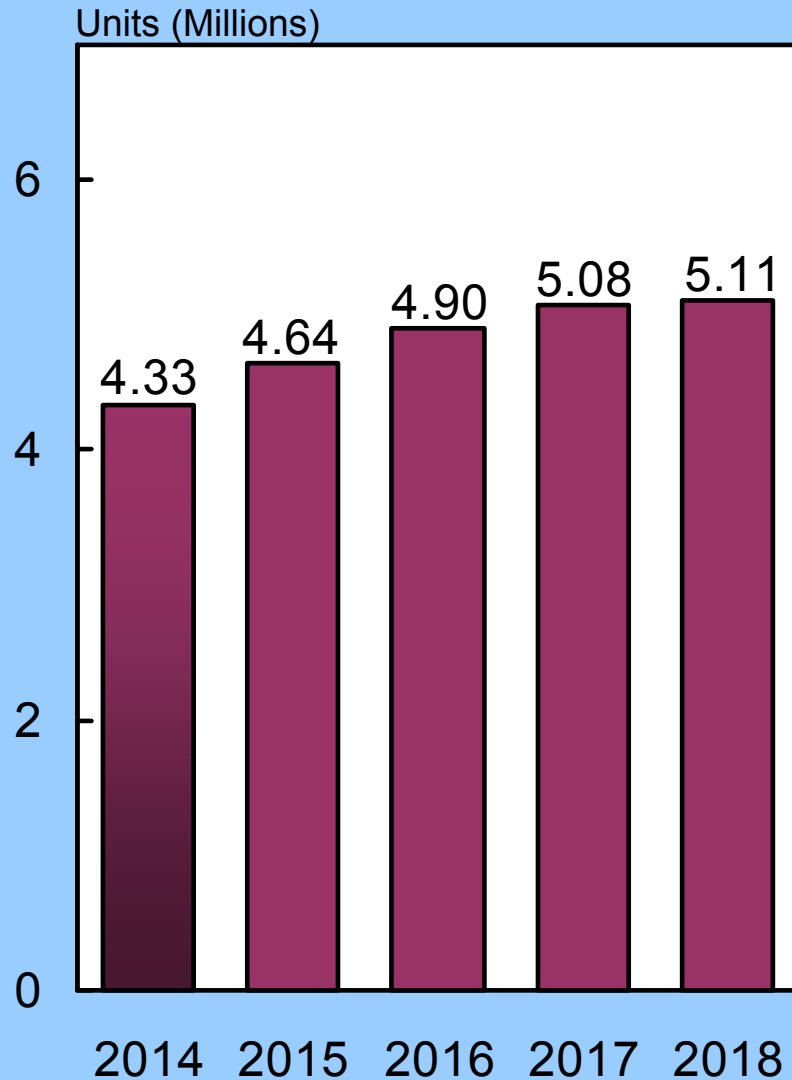
RSQE: January 2016

Housing Market

A. Housing Starts



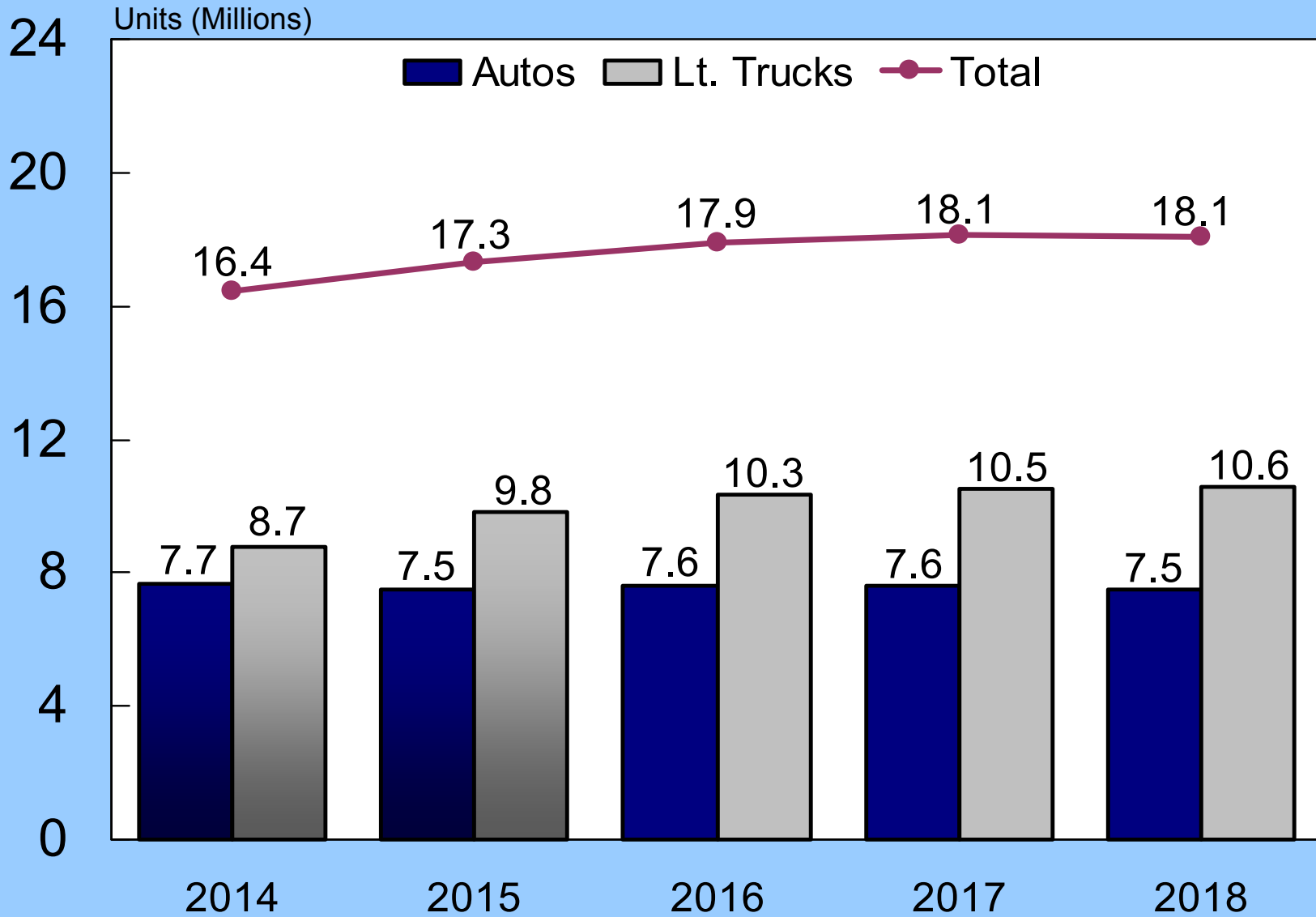
B. Existing Home Sales*



RSQE: January 2016

*Single-family homes

Light Vehicle Sales

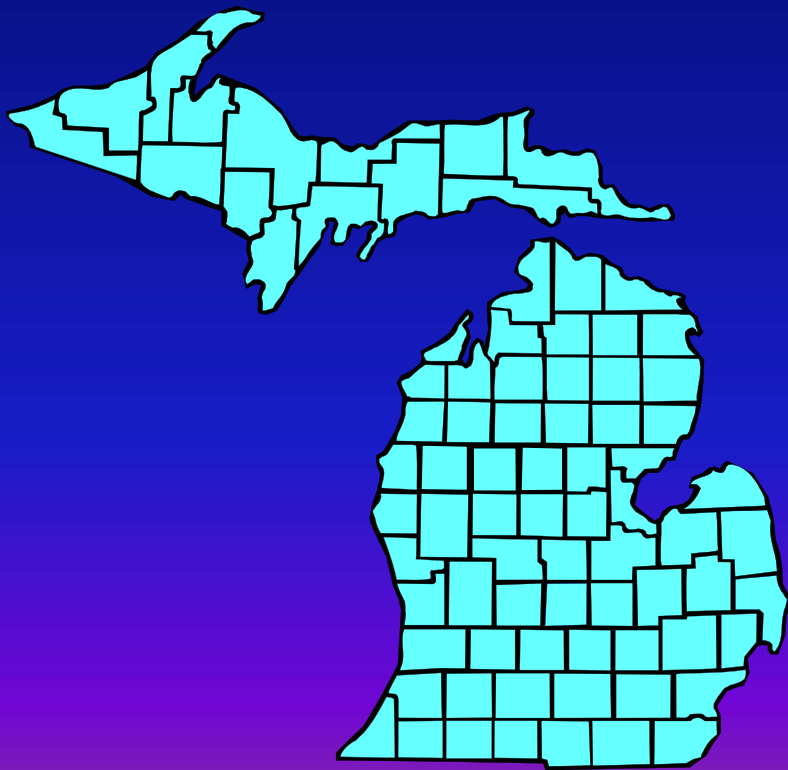


Risks to the Outlook:

- World Economic Growth
- Commodity prices
- Financial market volatility
- Monetary policy
 - Policy over-reaction to noisy data
 - Our assessment of Fed's policy stance
- Abnormal Weather

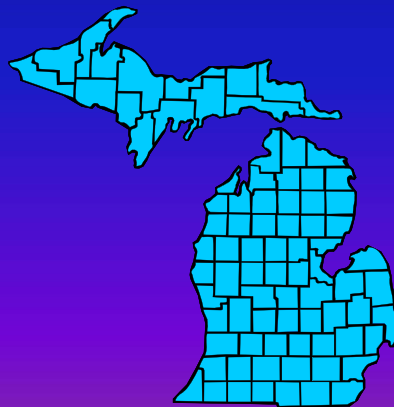


THE MICHIGAN ECONOMIC OUTLOOK FOR 2016–2018



JANUARY 14, 2016

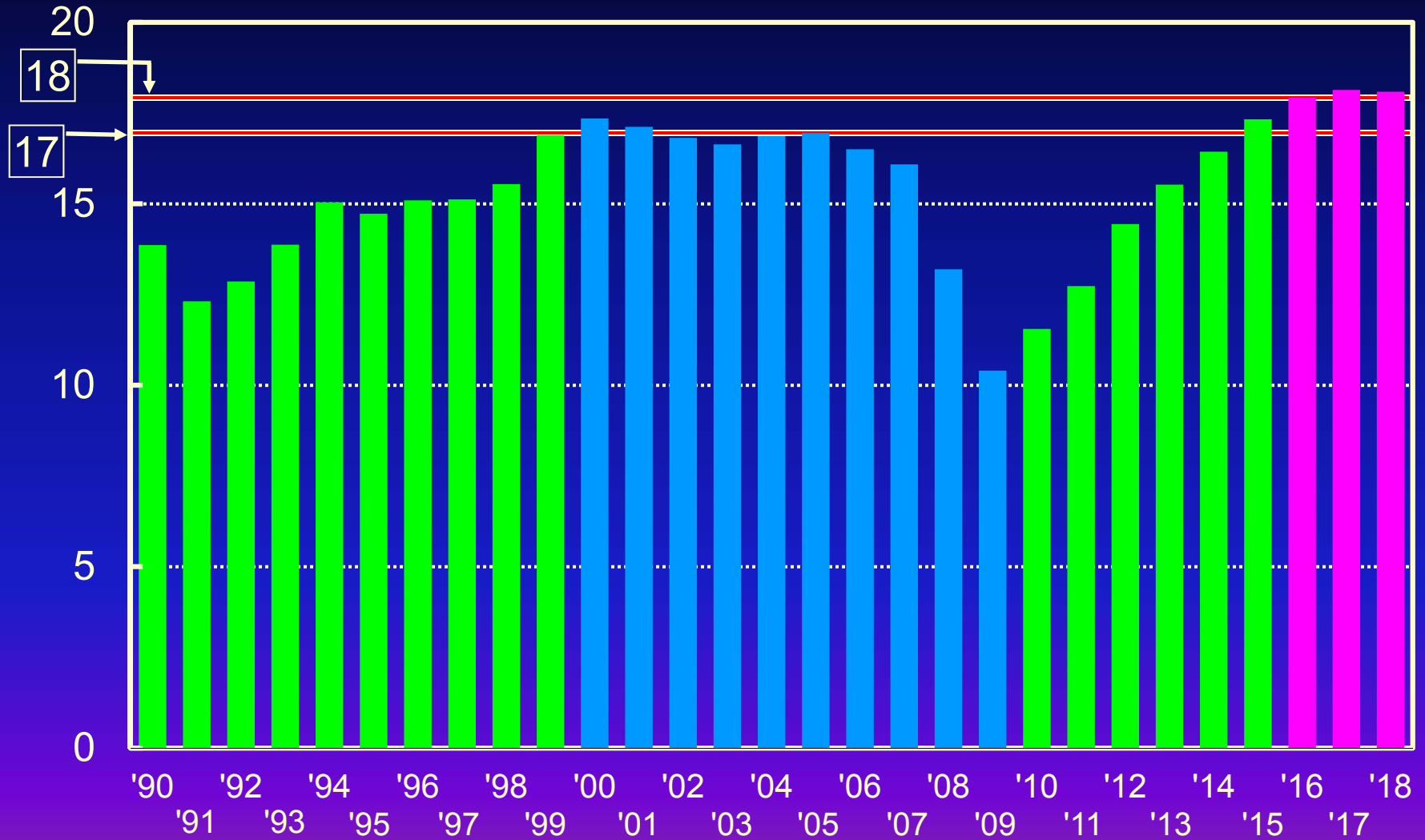
Motor Vehicle Industry Revisited



With data

U.S. Light Vehicle Sales, 1990–2018

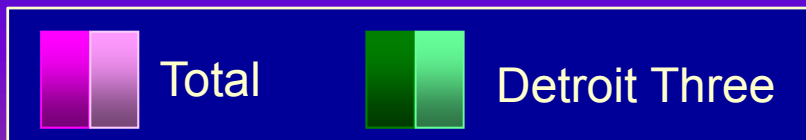
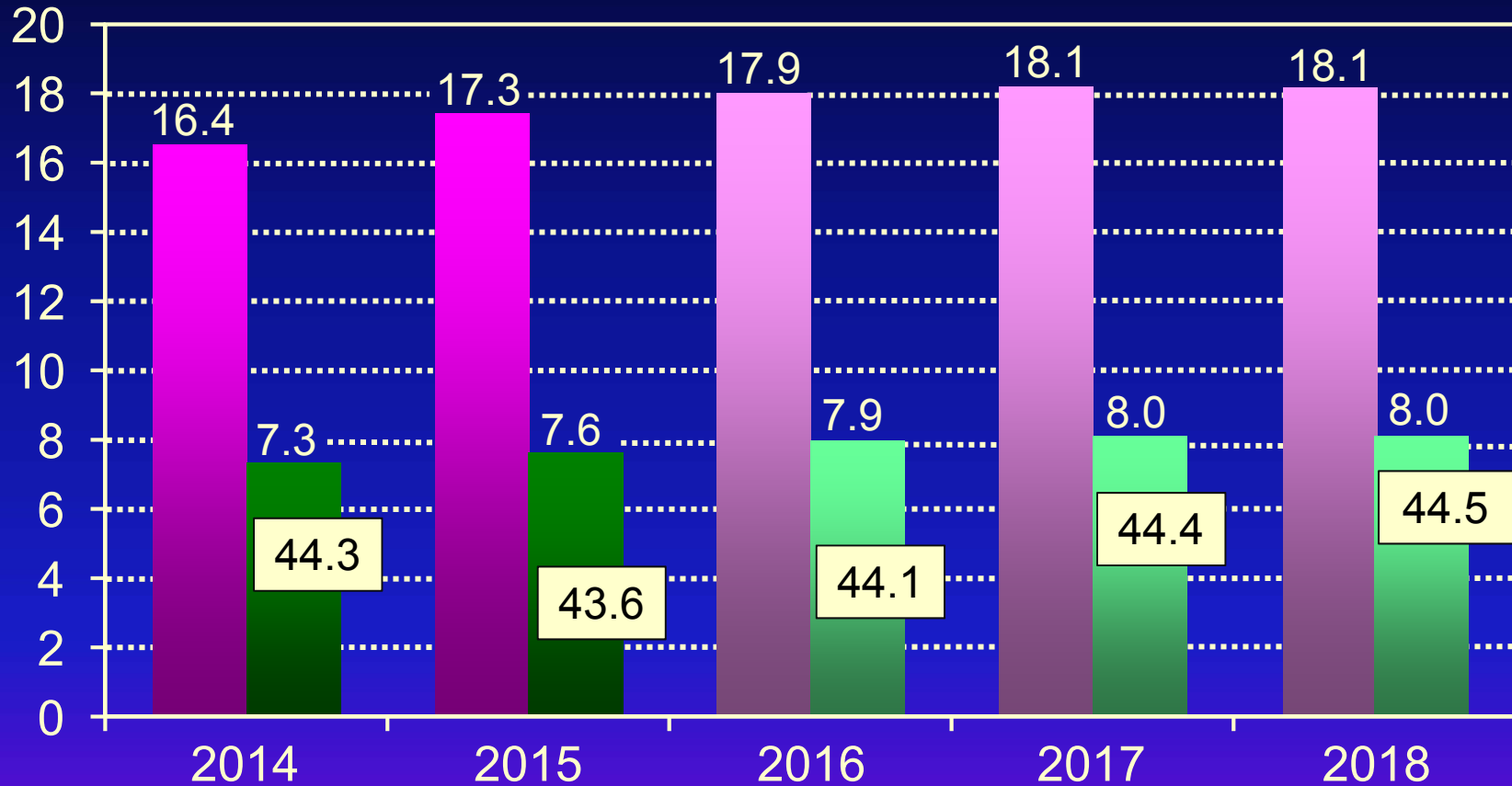
Millions



With data

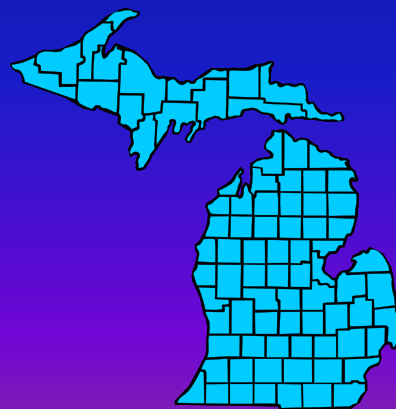
U.S. Light Vehicle Sales Total vs. Detroit Three, 2014–18

Millions
of Units



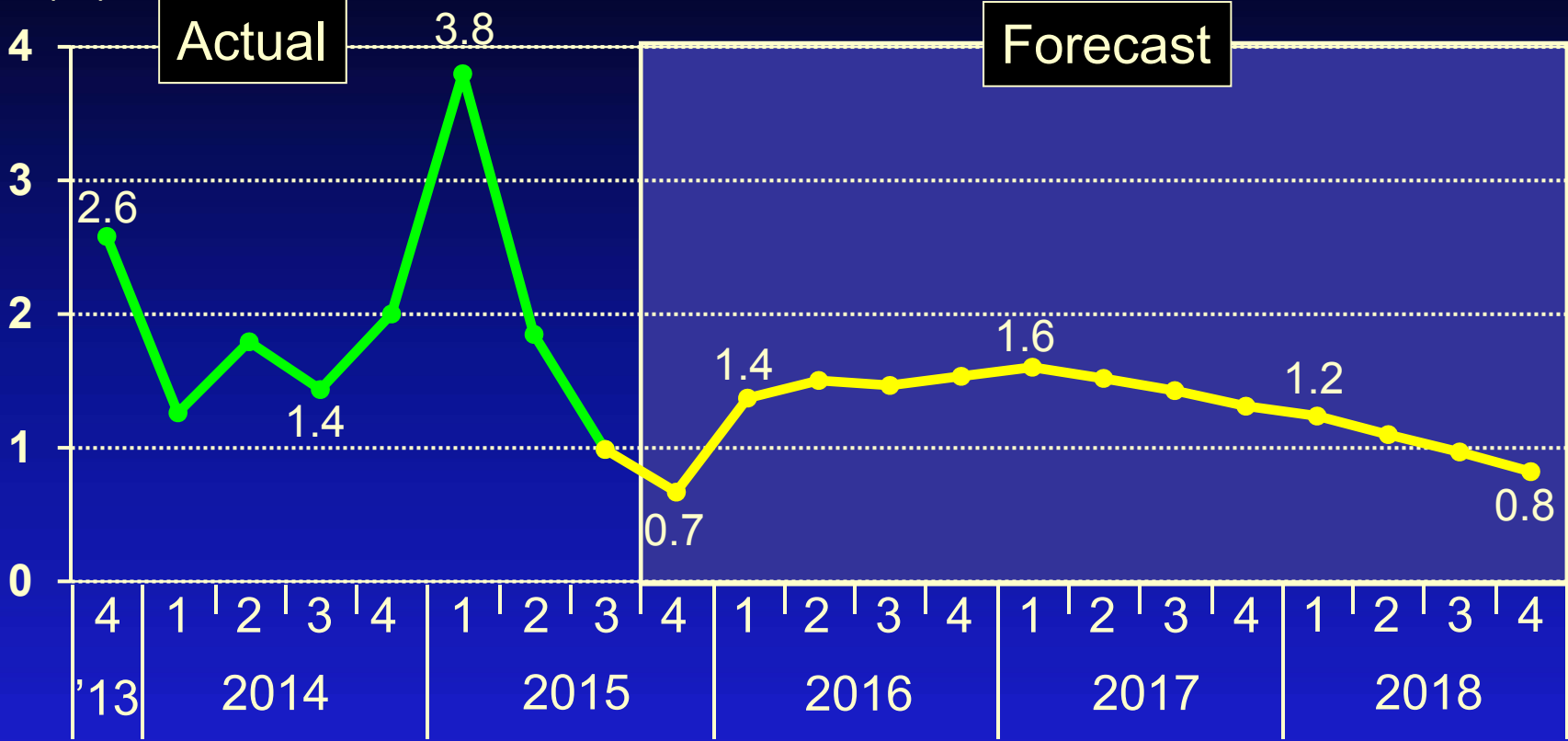
Annual % Detroit Three
market share

Michigan Outlook



Michigan Job Growth

Annual Rate (%)



4th Quarter to 4th Quarter Growth Rate (%)					
2.0	1.6	1.8	1.5	1.5	1.0
4th Quarter to 4th Quarter Change (Thousands)					
82.7	67.2	76.5	63.0	63.7	45.5

Change in Jobs by Industry Sector (Thousands of jobs)

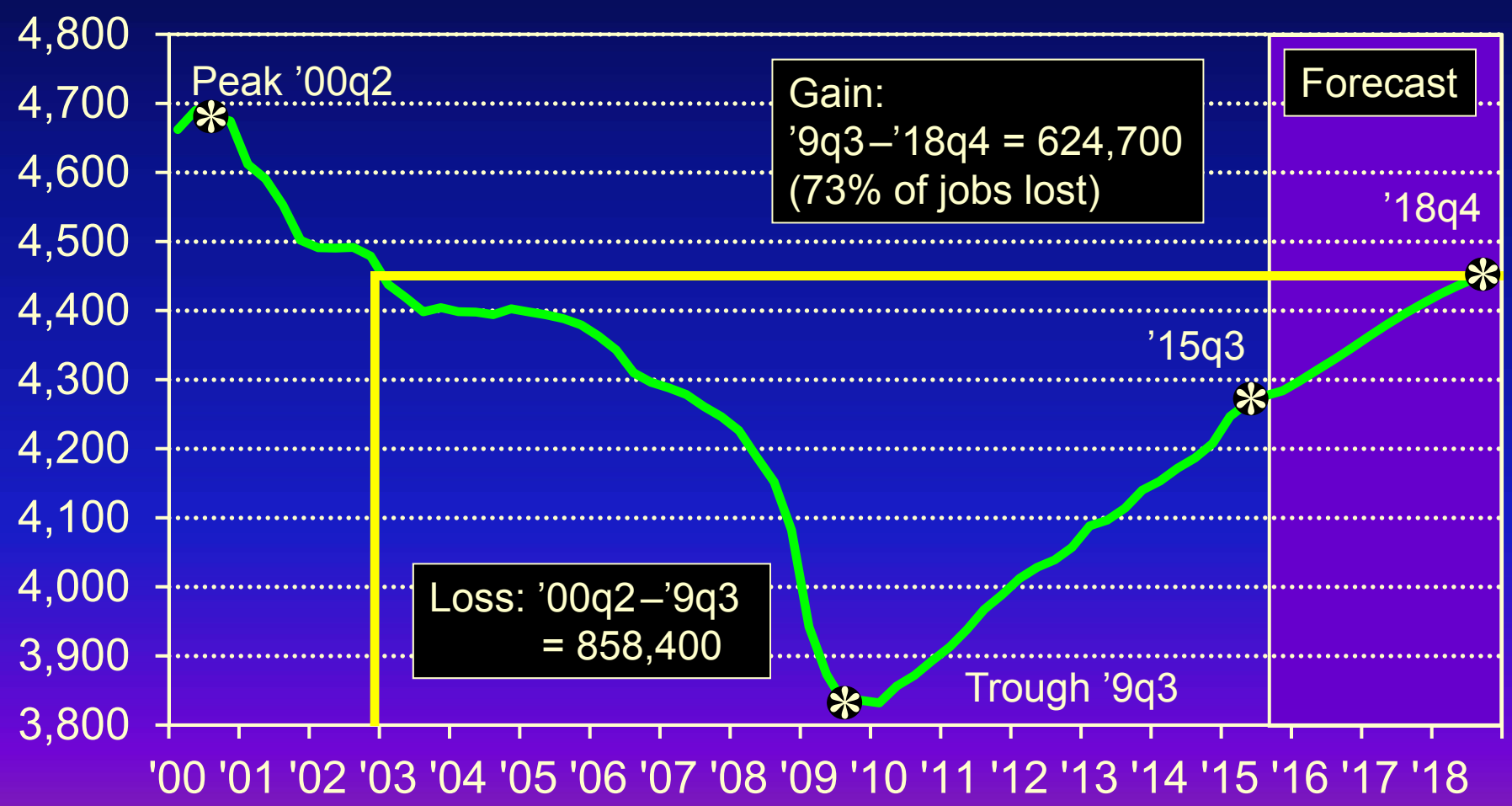
	2013q4 to <u>2014q4</u>	2014q4 to <u>2015q4</u>	2015q4 to <u>2016q4</u>	2016q4 to <u>2017q4</u>	2017q4 to <u>2018q4</u>
Total jobs	67	77	63	64	46
Manufacturing	18	21	7	4	-2
Construction	7	9	9	12	8
Prof. & bus. svcs.	17	15	15	17	13
Private educ. & health svcs.	6	18	6	4	5
Trade, trans., util.	12	5	11	12	9
Government	-2	-7	1	0	1

With data

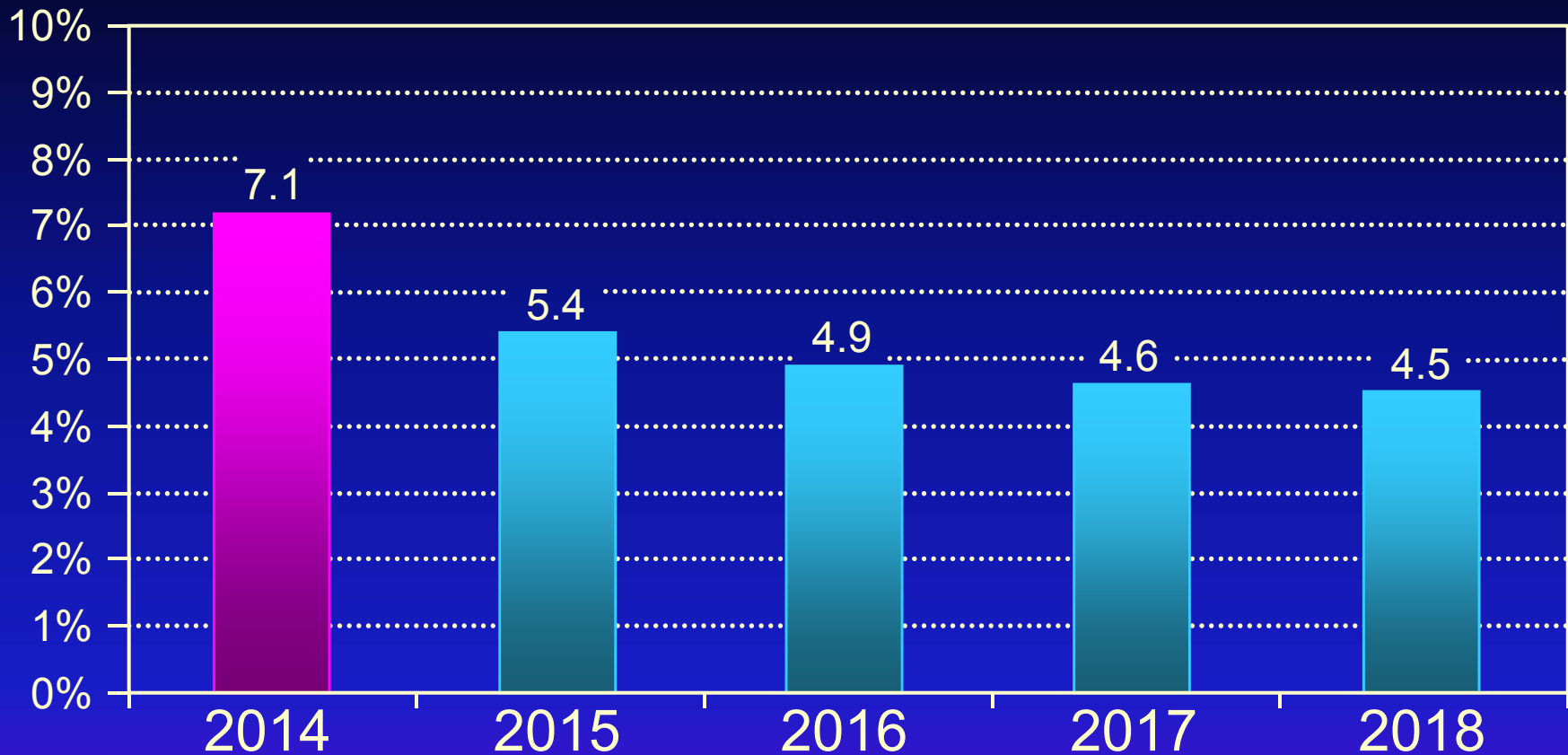
Michigan Wage and Salary Employment

First Quarter of 2000 to Fourth Quarter of 2018

Thousands of jobs



Michigan Unemployment Rate 2014–18



4th Quarter Unemployment Rate

6.5

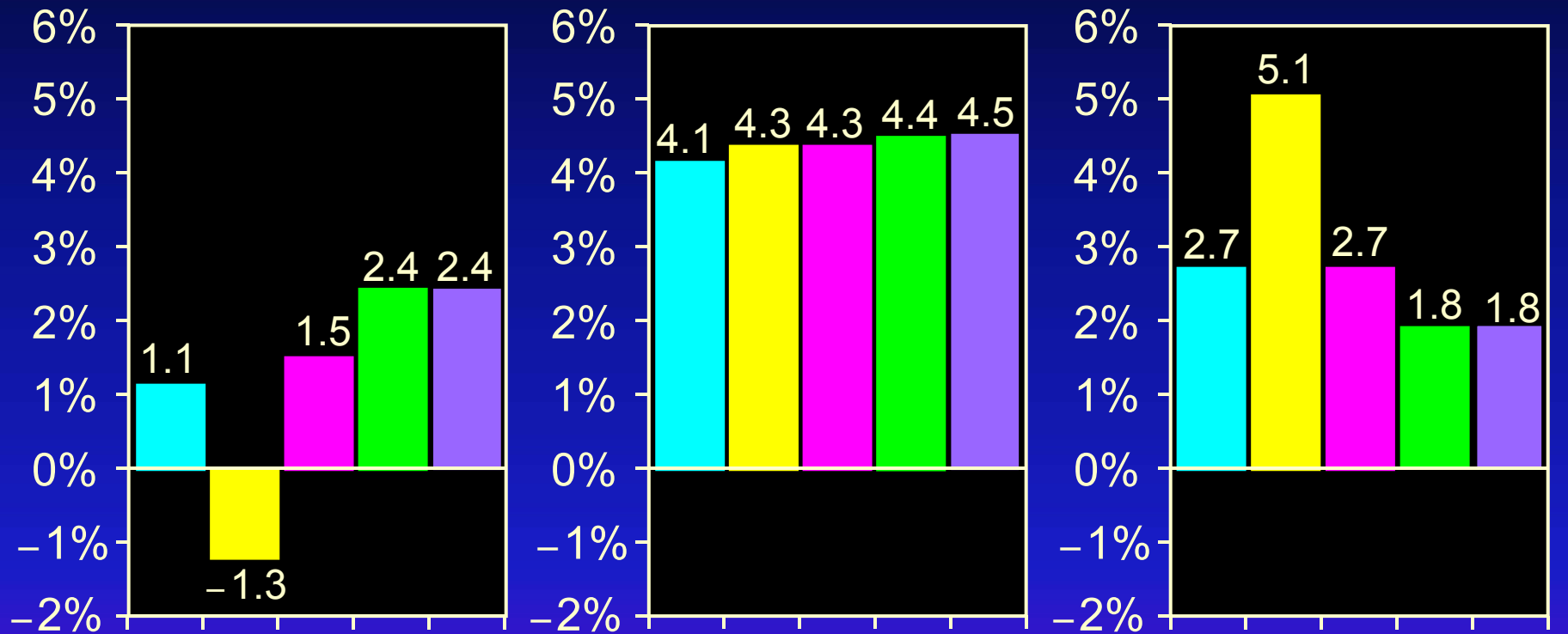
5.0

4.8

4.5

4.5

Michigan Inflation and Income Growth



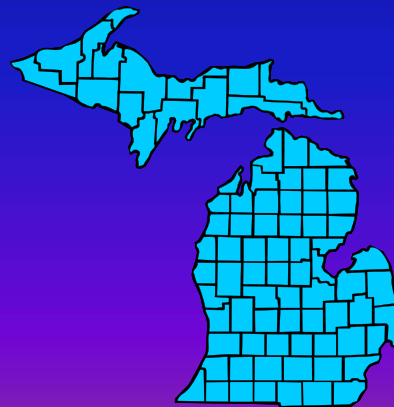
Detroit CPI

Personal Income

Real Disposable Income



State Revenue Outlook



RSQE Forecast – State Revenues by Fiscal Year (Millions of dollars)

	<u>Actual</u> 2015 ^P	<u>Forecast</u>		
		2016	2017	2018
GFGP revenue	9,928	10,035	10,345	10,837
(% change)	(10.1)	(1.1)	(3.1)	(4.7)

^PPreliminary

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		2016	2017	2018
GFGP revenue	9,928	10,035	10,345	10,837
(% change)	(10.1)	(1.1)	(3.1)	(4.7)
Earmarked state SAF revenue	11,766	12,175	12,610	13,059
(% change)	(2.1)	(3.5)	(3.6)	(3.6)

^PPreliminary

Michigan Outlook Summary

- The job recovery enters its seventh year, and adds 172,200 jobs from yearend 2015 to yearend 2018.
- Job gains average 57,400 per year over that time span, a bit slower than the pace in recent years.
- The continuing recovery is consistent with an expanding U.S. economy, strong vehicle sales, and continued improvement in the housing sector.
- The top three job producers over the forecast period are the professional and business services sector, the trade-transportation-utilities sector, and construction.

Michigan Outlook Summary

- Unemployment continues to decline, but more slowly as slack in the labor market continues to dissipate.
- Local prices begin to increase again as energy prices stop falling and national inflation rises.
- The 9-year recovery through 2018 replenishes 73 percent of the jobs lost from mid-2000 to summer 2009 . . .
 - ▶ returning the state to the same job level posted at the beginning of 2003.
- A key challenge will be diversifying sources of jobs growth as the manufacturing expansion matures.



www.rsqe.econ.lsa.umich.edu