

# The Good, the Bad, and the Unknown: Economic Conditions in the U.S. and Michigan

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July 29, 2016

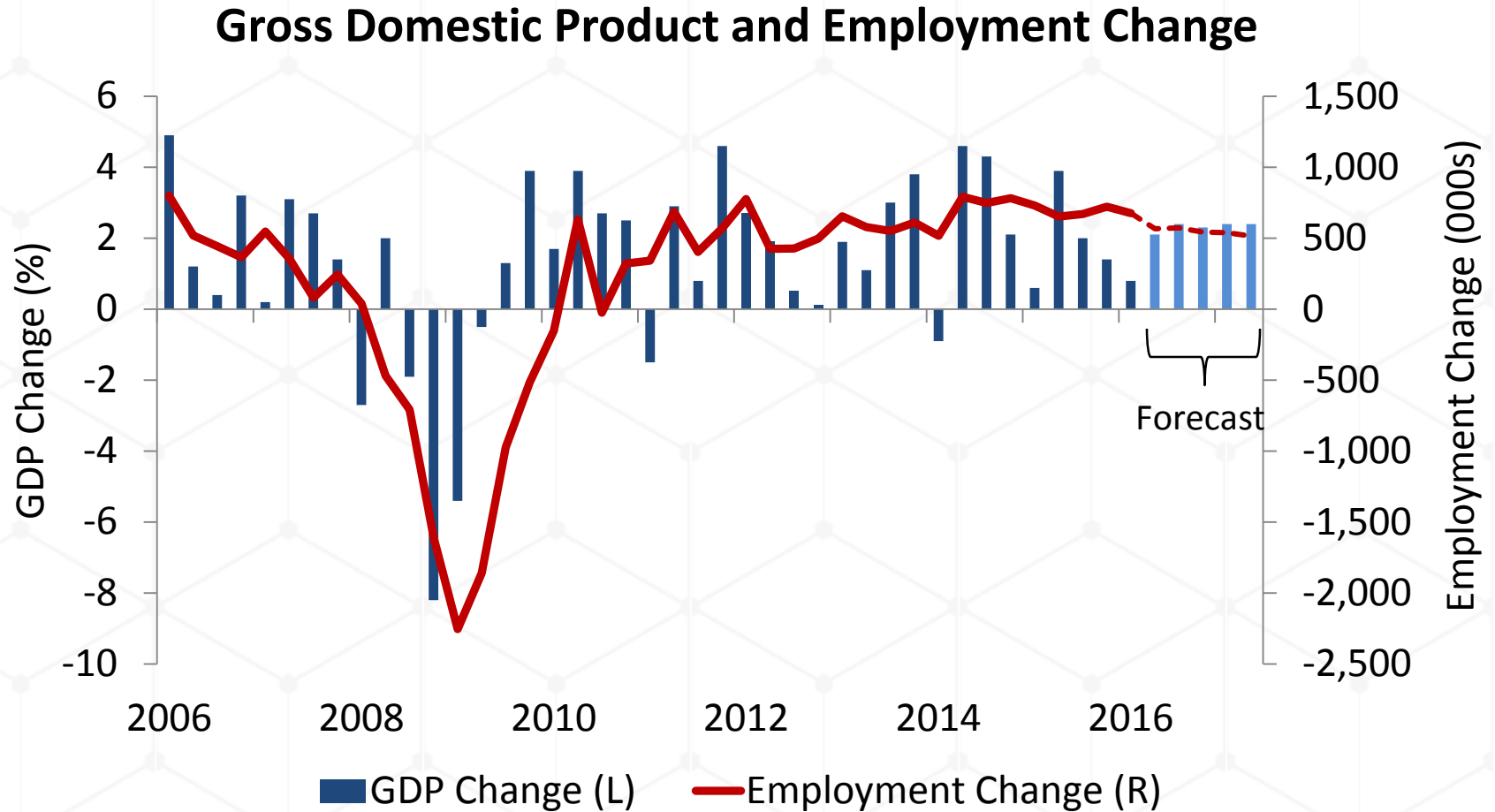
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# Regional and Economic Planning Services

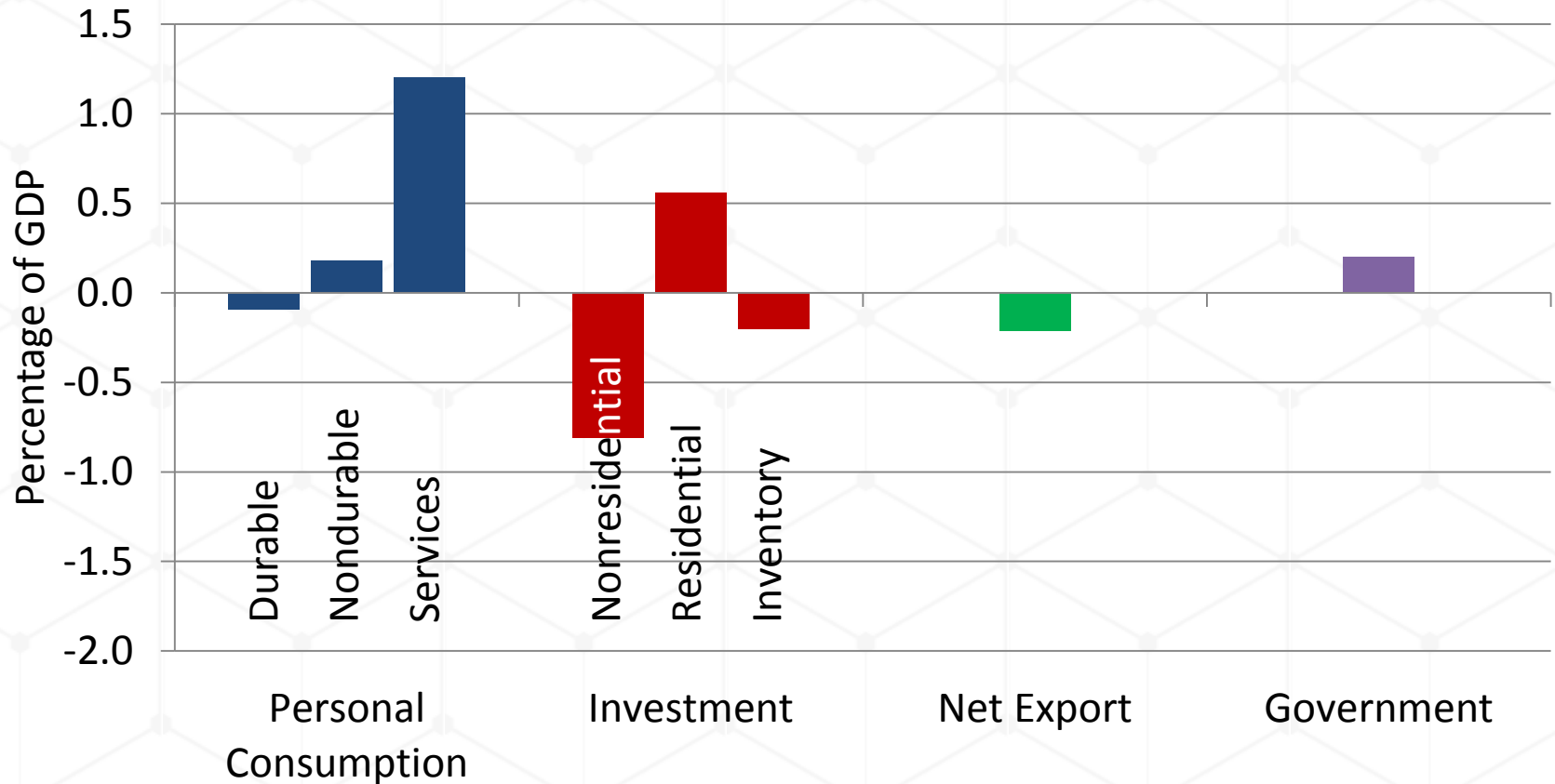
- Data Dissemination & Analysis
- Economic Impact Studies
- Economic & Workforce Development Strategy
- Talent Assessment
- Urban & Regional Planning

# Are forecasts too optimistic for 2016?



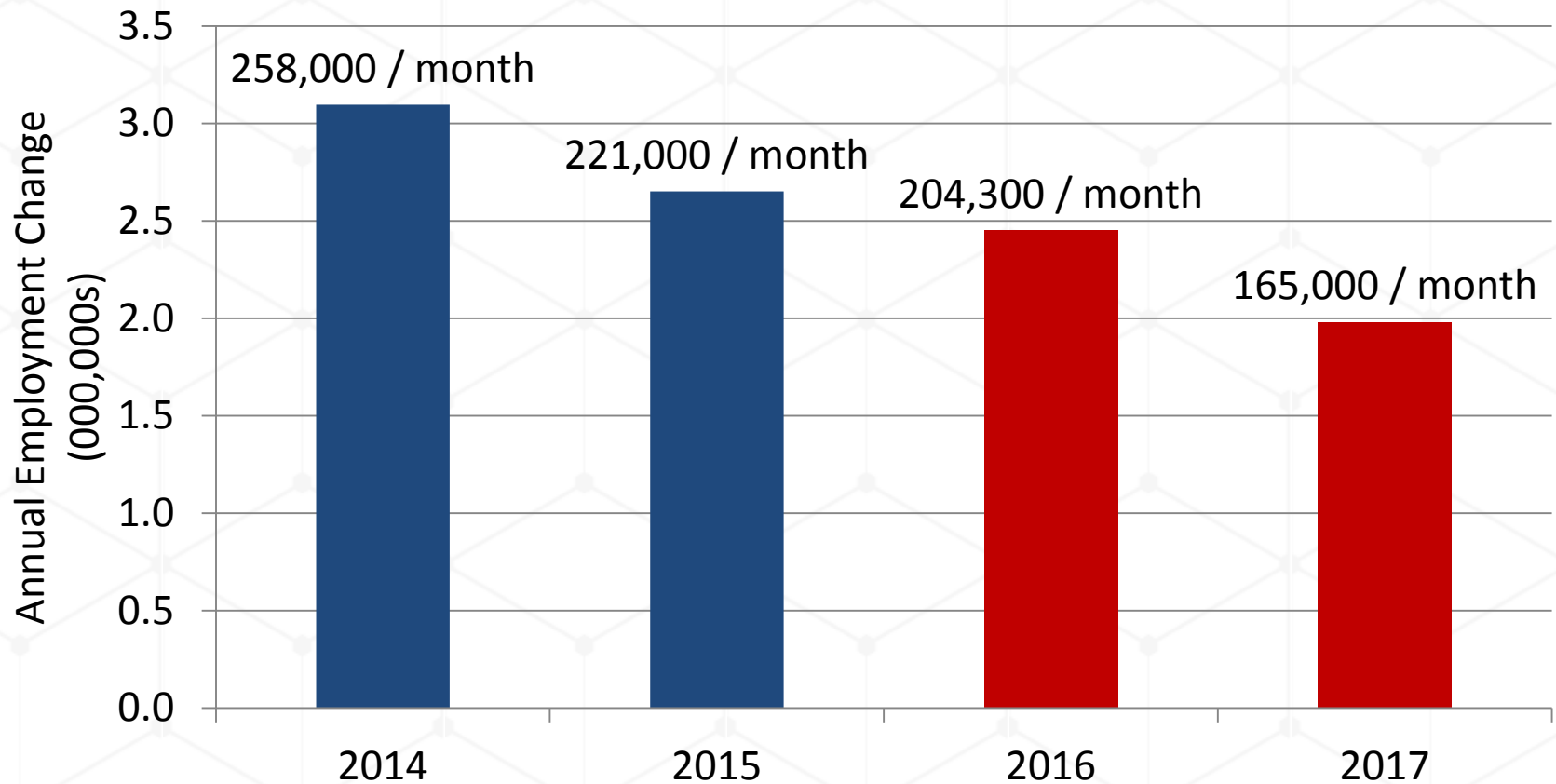
# What's impacting the economy?

## Components of GDP Change: Q1 '16



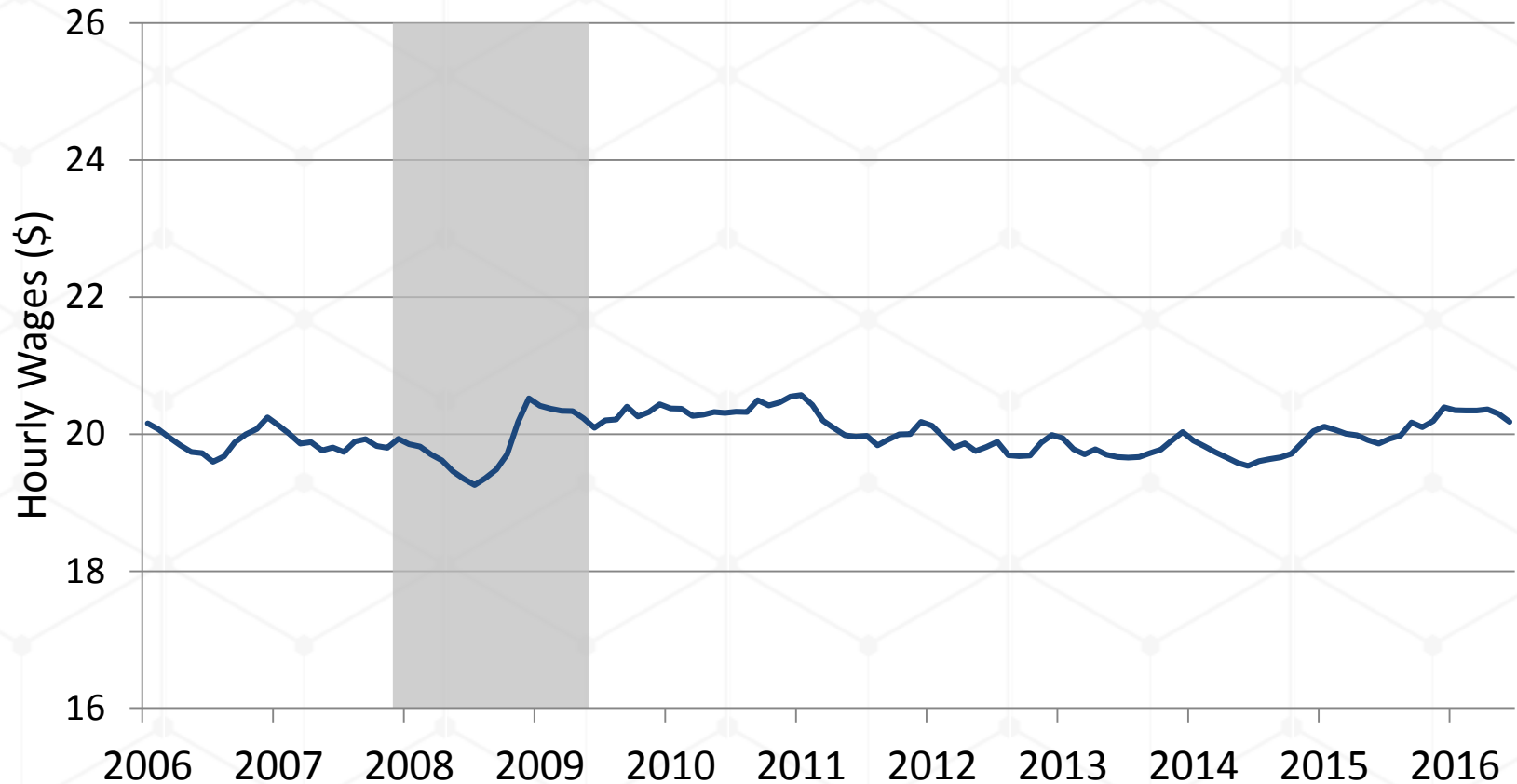
# Slower Job Growth into the Future

## Consensus Forecast



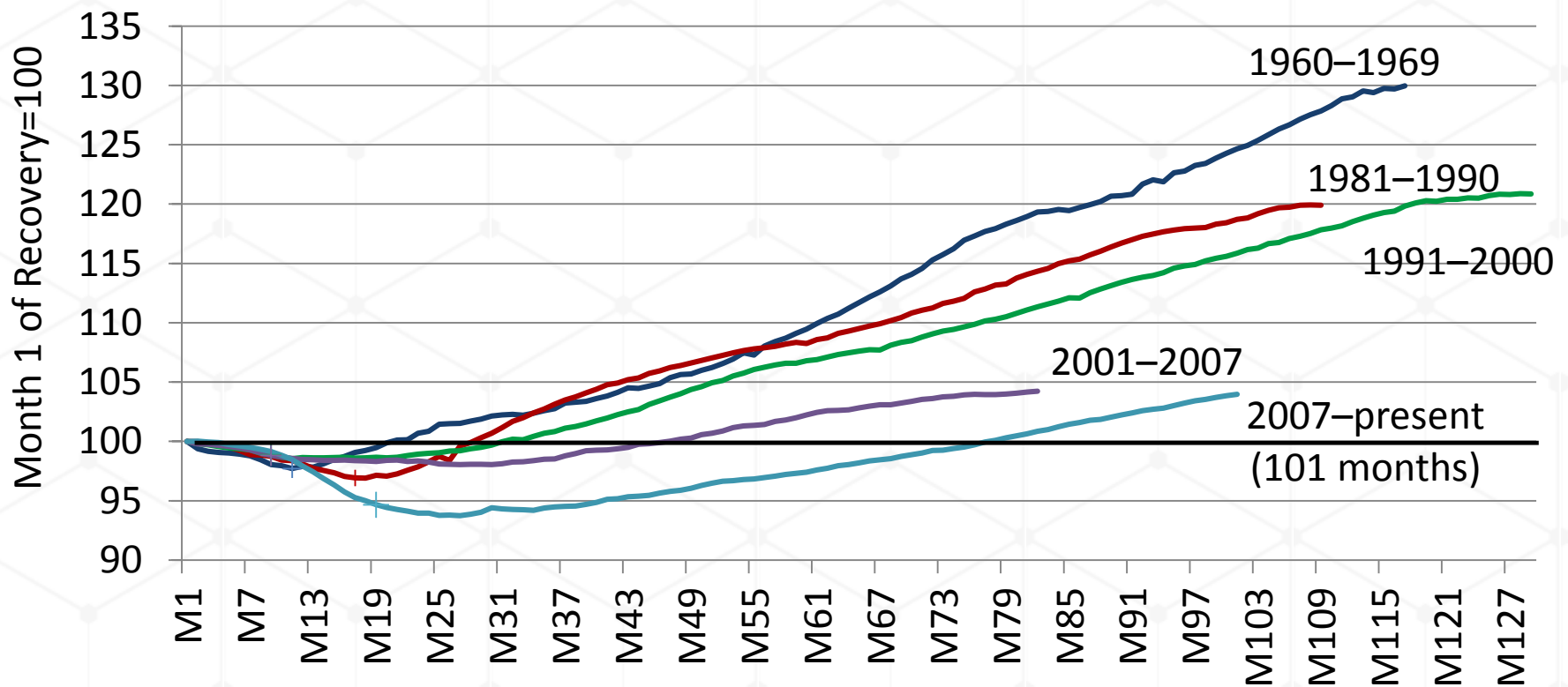
# Real wages for production workers are flat, but may be on the rise

## Average Hourly Wage for Production Workers (2016\$)



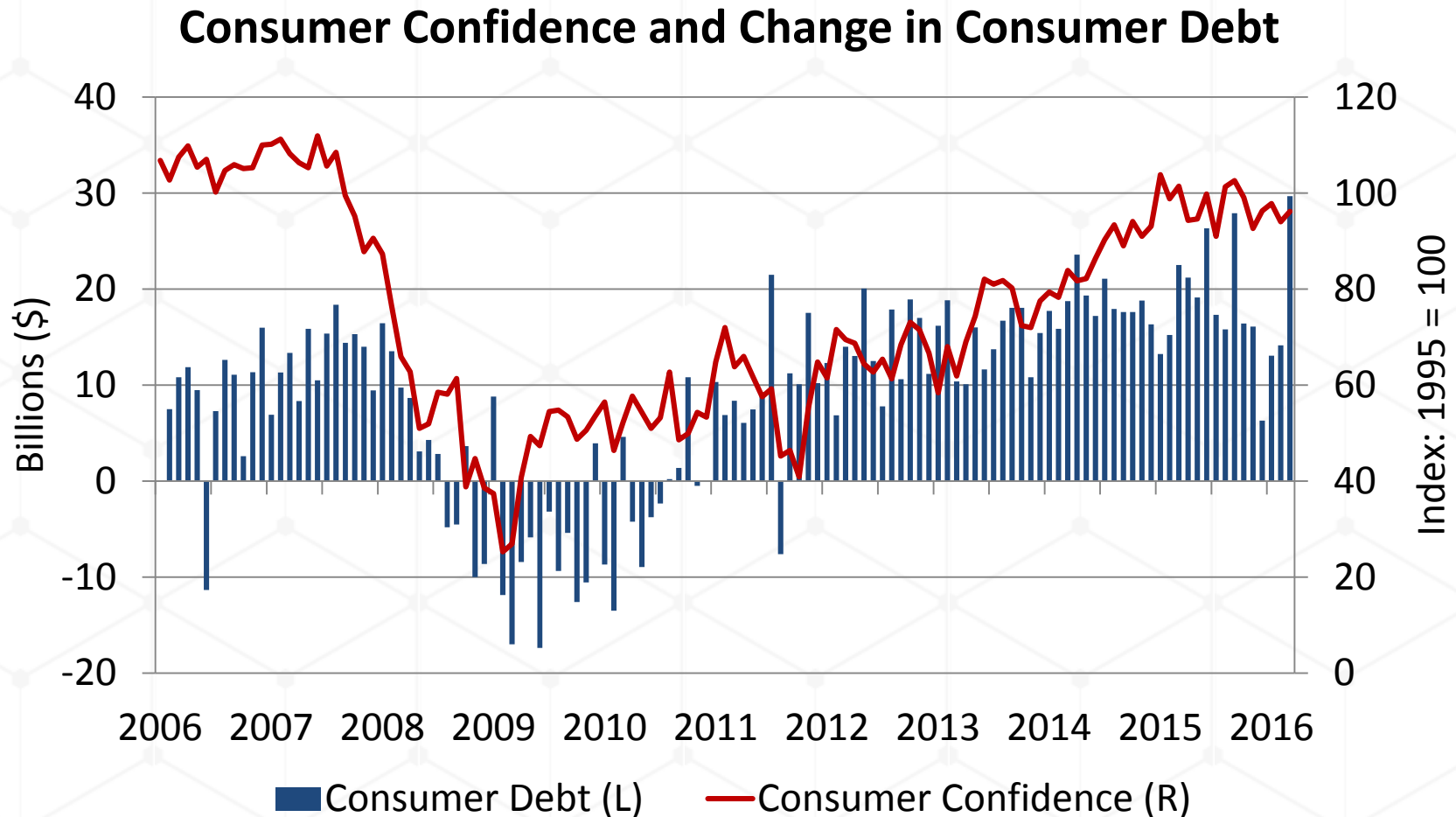
# The calendar isn't calling yet for a recession—if you trust history

## Employment Index From Business Cycle Peak



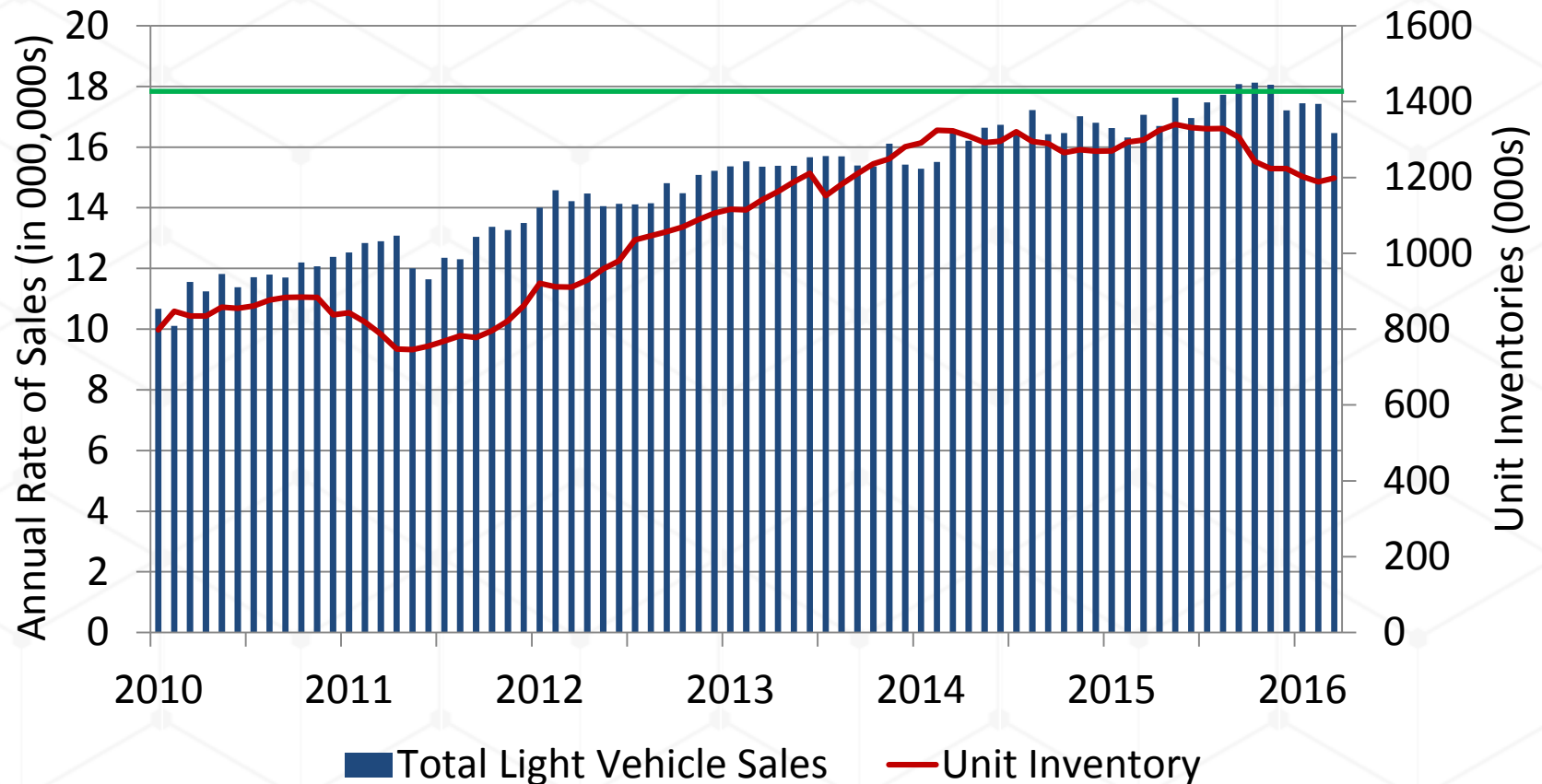


# Mixed Signals from Consumers



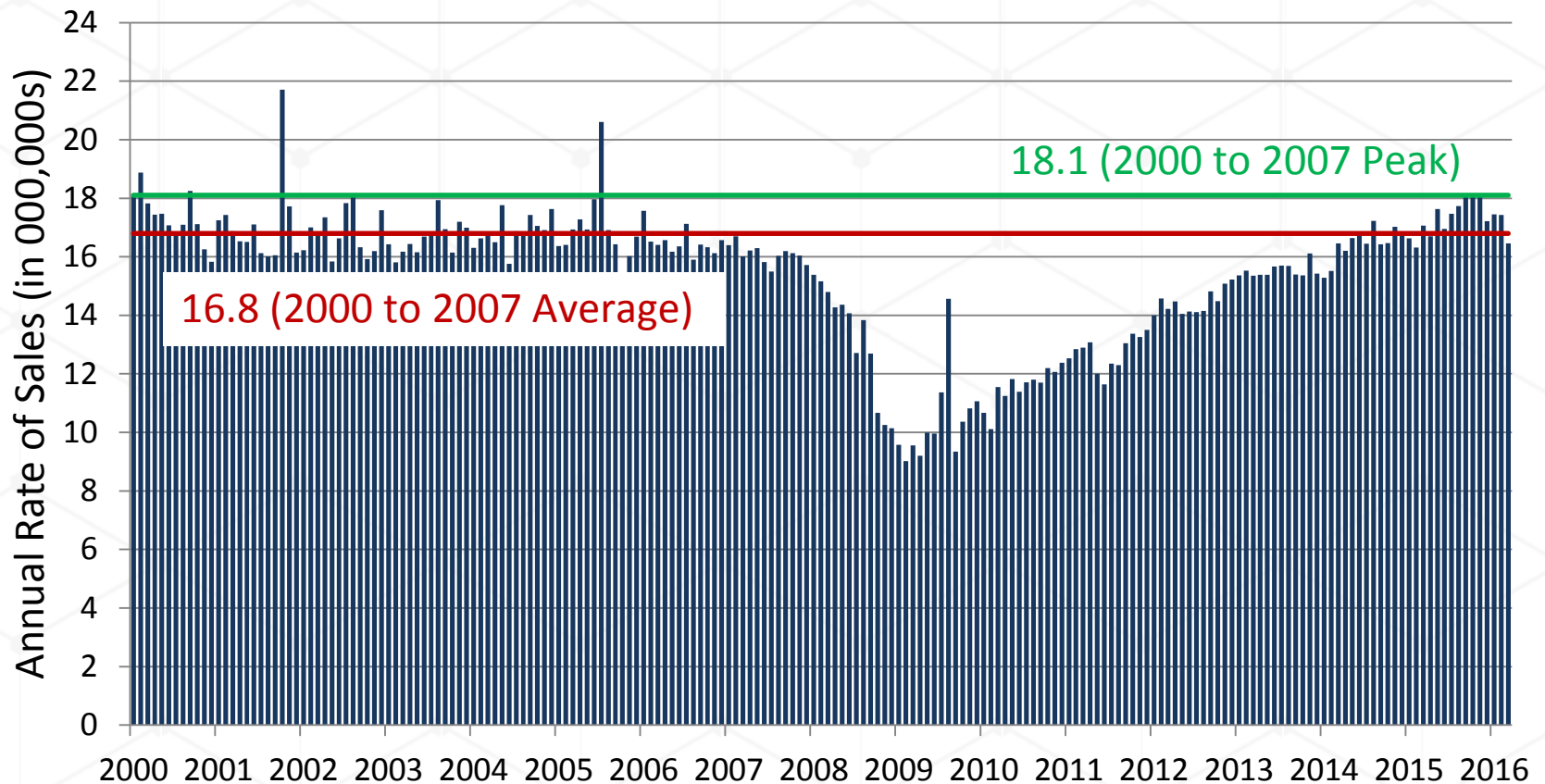
# Are vehicle buyers getting cold feet?

## U.S. Light Vehicle Sales and Inventories



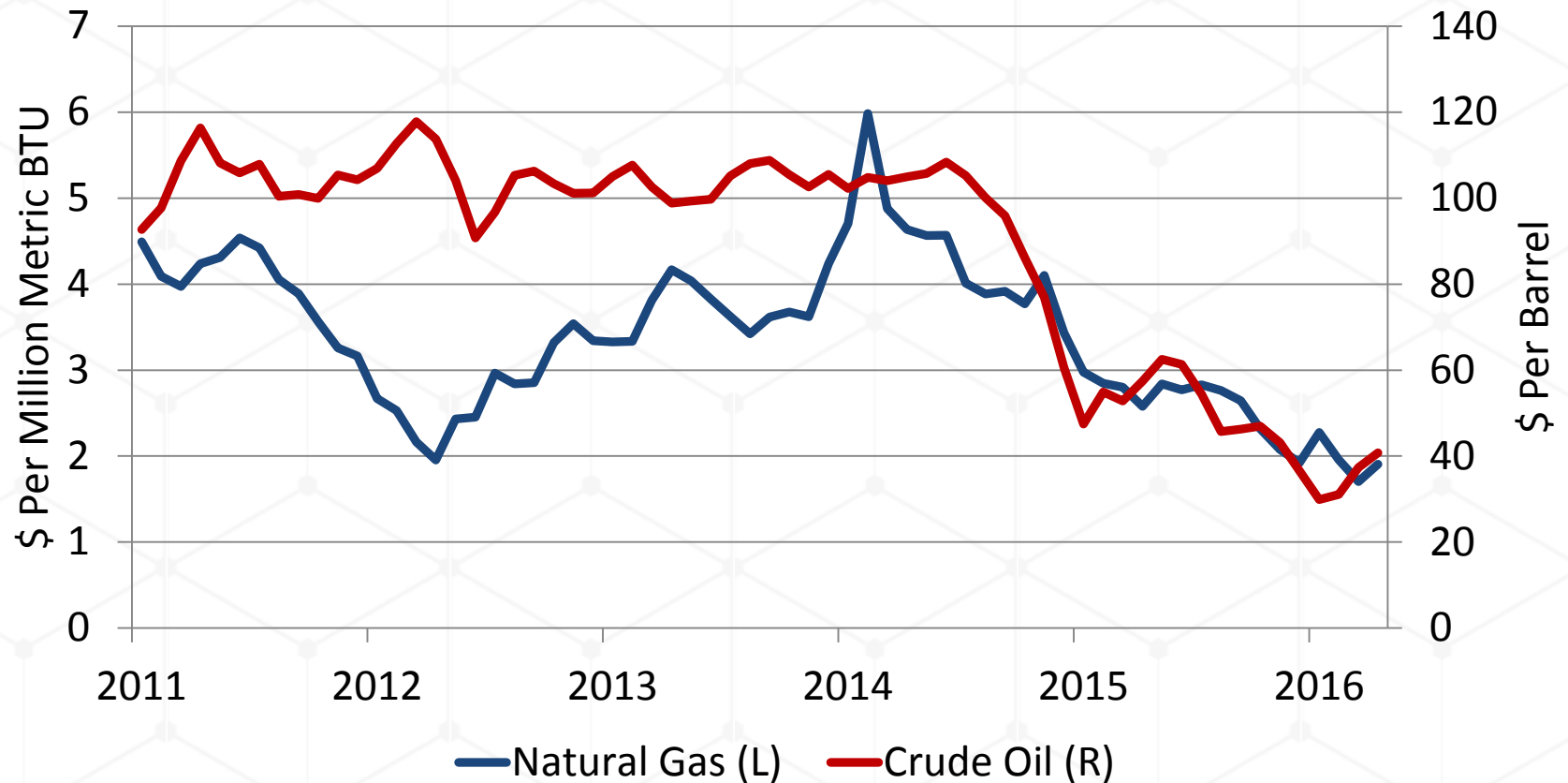
# Are sales at a natural peak?

## Annualized Rate of U.S. Light Vehicle Sales (in millions)



# Good for the consumer, but...

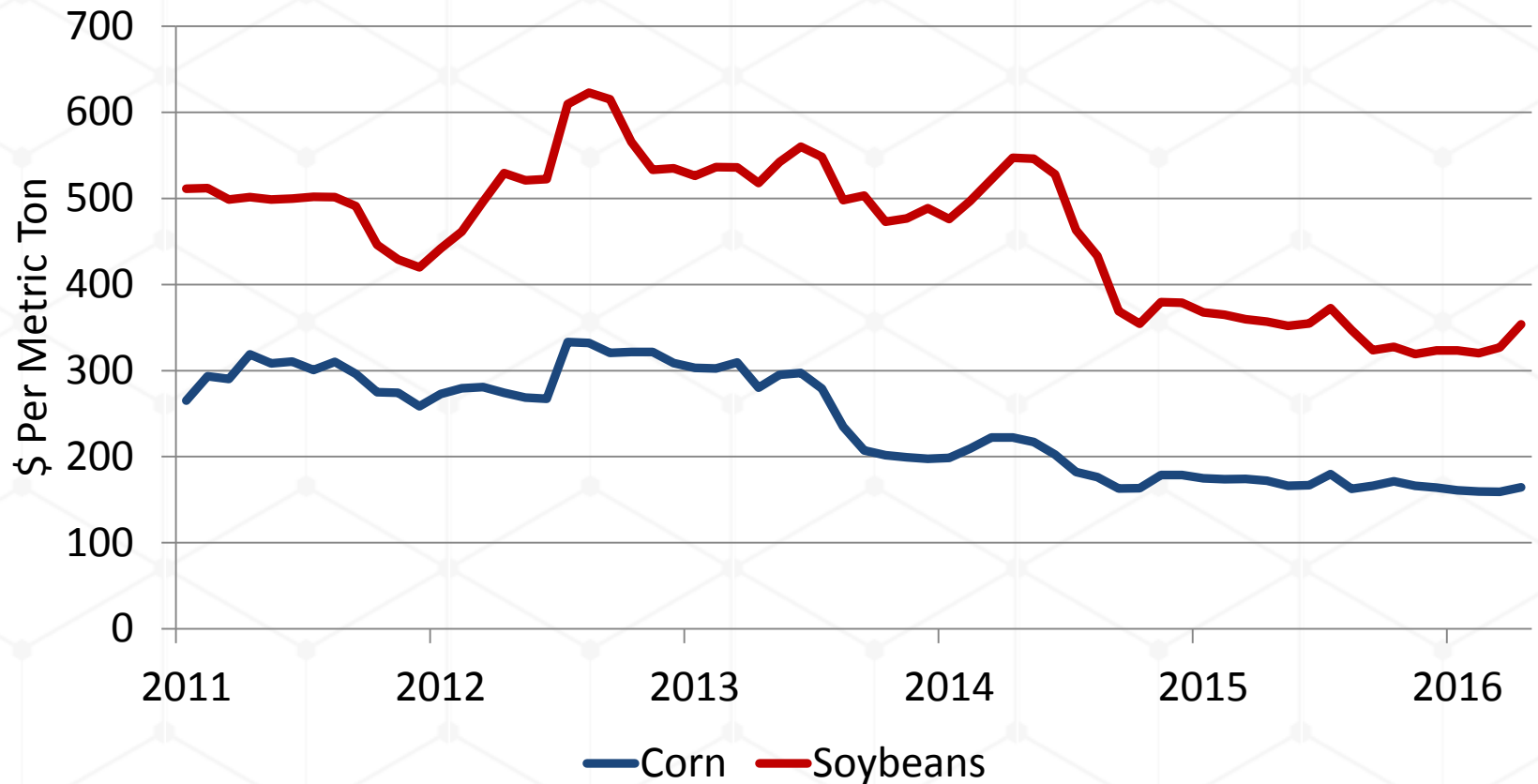
## Energy Commodity Prices



Natural Gas, Natural Gas spot price at the Henry Hub terminal in Louisiana, US\$ per Million Metric BTU  
Crude Oil (petroleum), simple average of Dated Brent, West Texas Intermediate, and the Dubai Fateh

# Corn off 50% and soybeans off 33% since 2012 peak

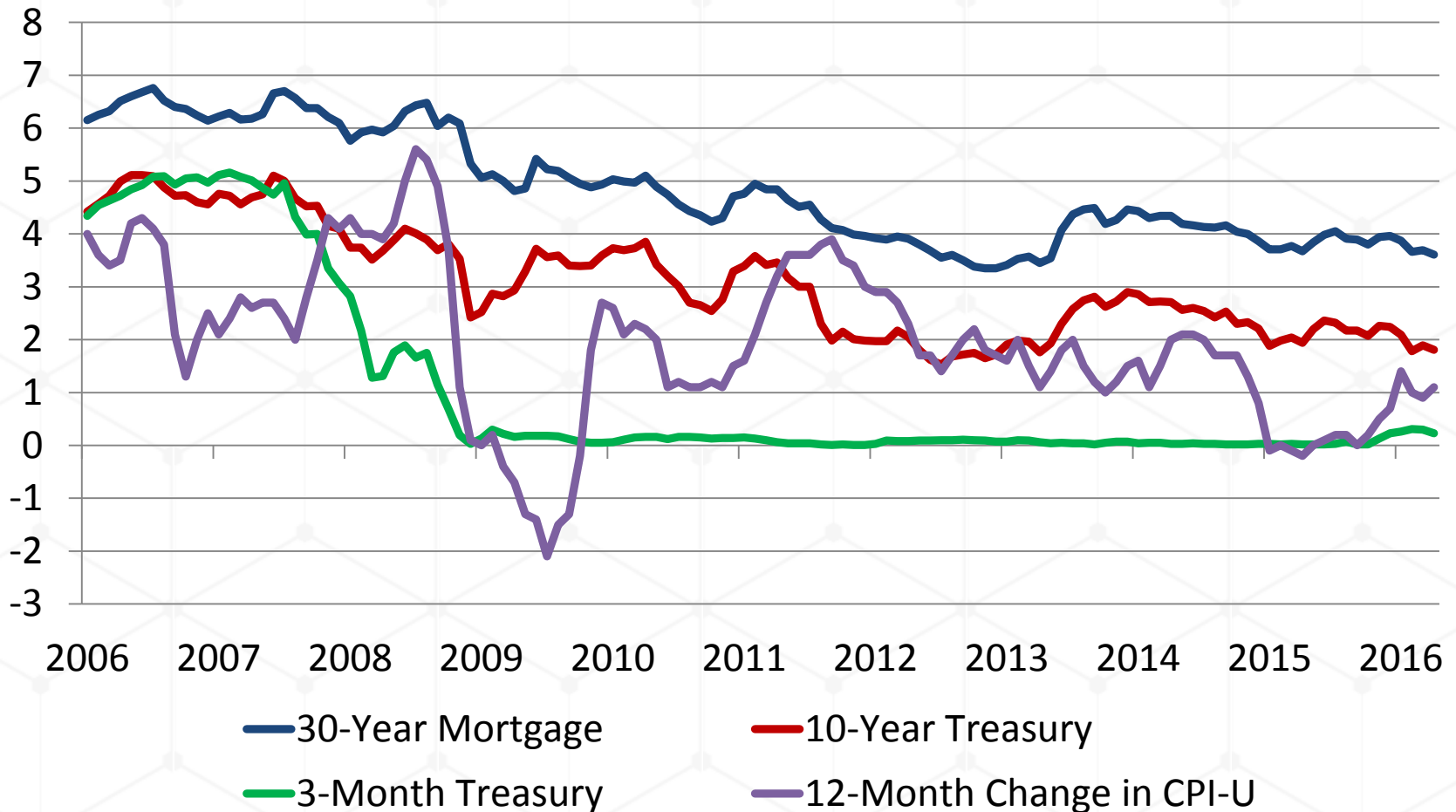
## Agricultural Commodity Prices



Maize (corn), U.S. No.2 Yellow, FOB Gulf of Mexico

Soybeans, U.S. soybeans, Chicago Soybean futures contract (first contract forward) No. 2 yellow and par

# Mixed signals from credit markets?



# Mixed national business conditions for 2016

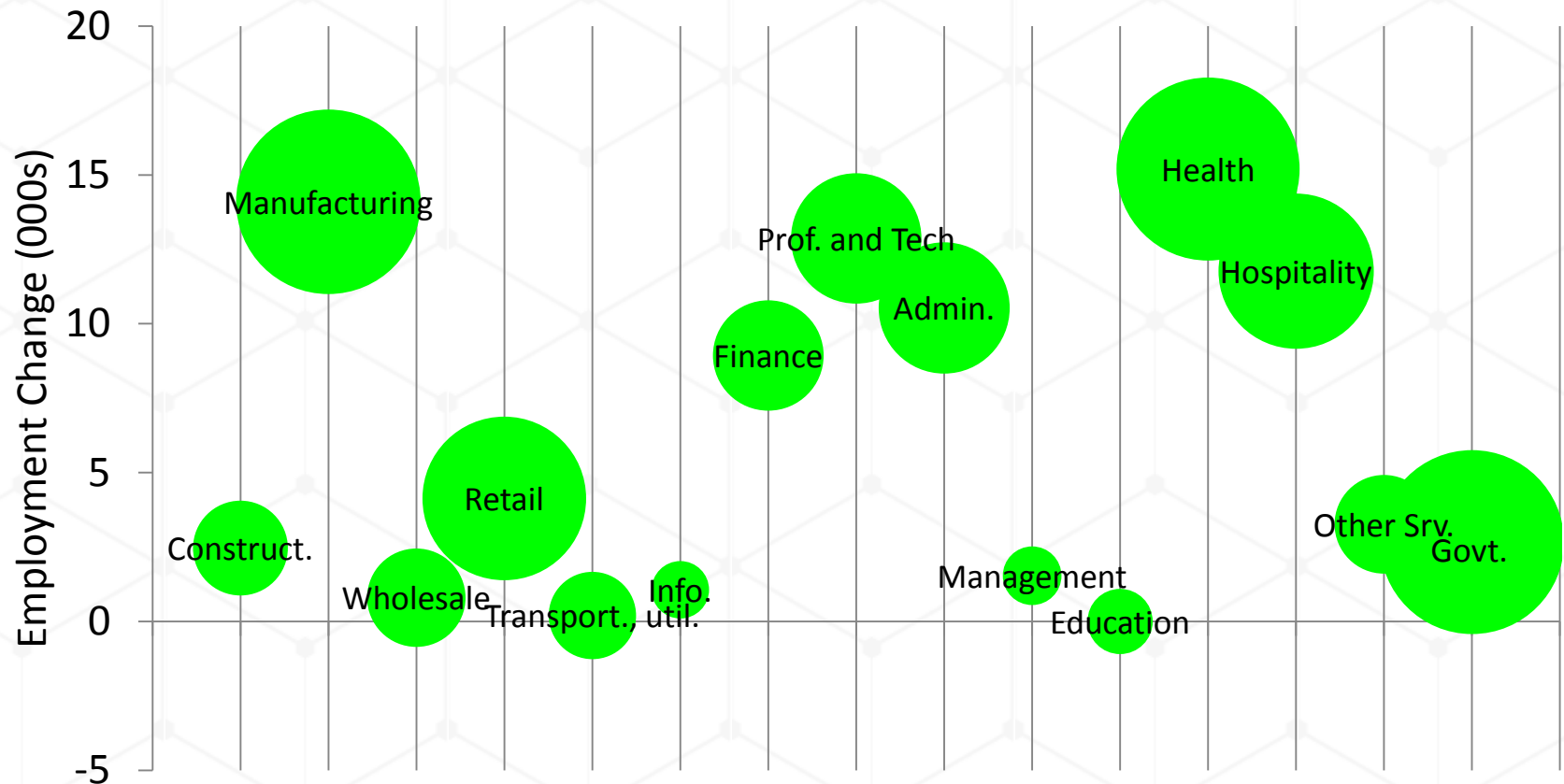
- + Interest rates remain low, BUT expect 1 to 2 rate increases (1.5?)
- +/- Fuel prices are expected to remain low, BUT oil was trending up– but end of day Monday \$42.42
- Sluggish international markets (Brexit?)
- +/- High value of the dollar
- Labor and skills shortages
- +/- Commodity prices are low

# Moving on to Michigan



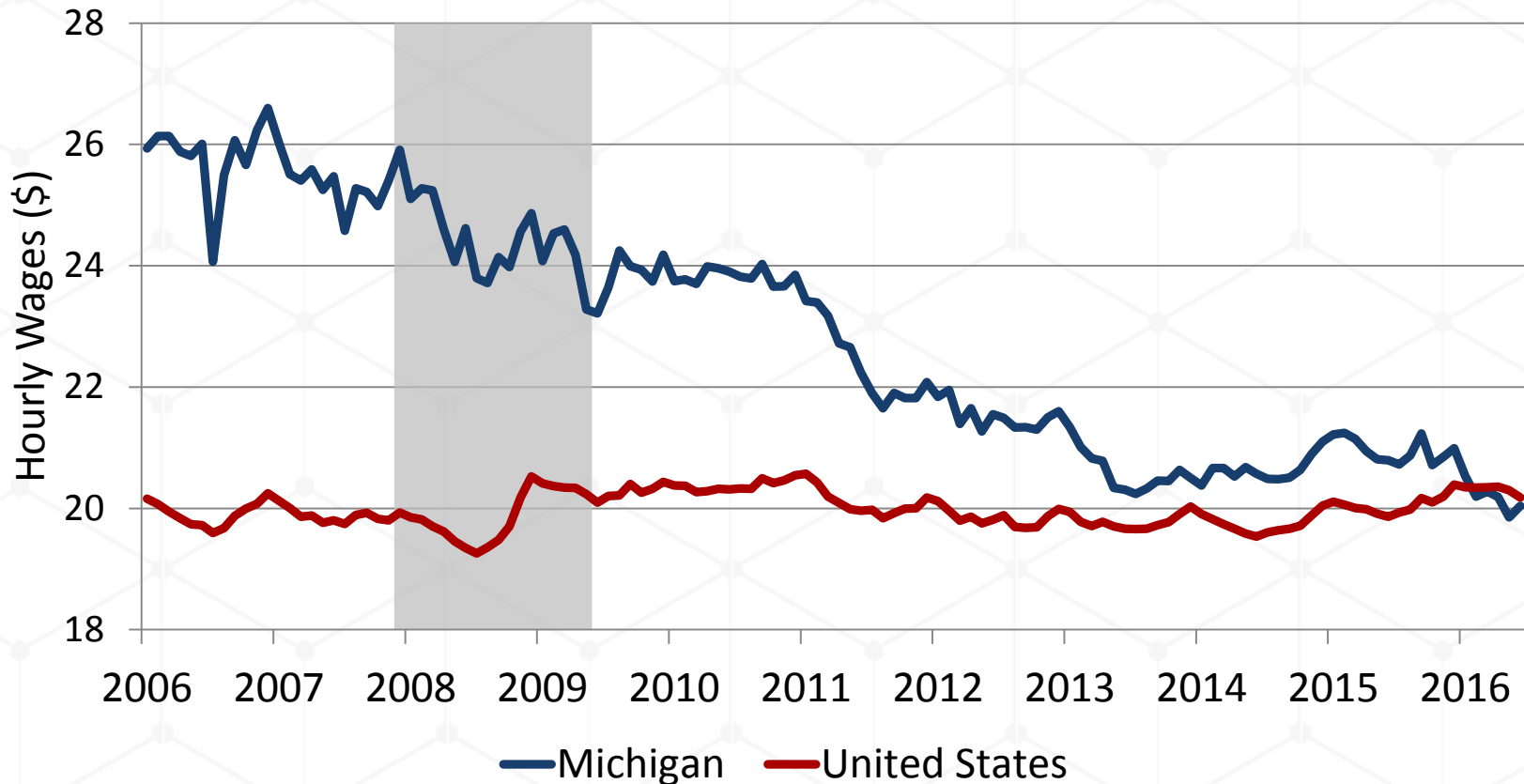
# All industry sectors grew year over year

## Employment Change, Q2 2015 to Q2 2016

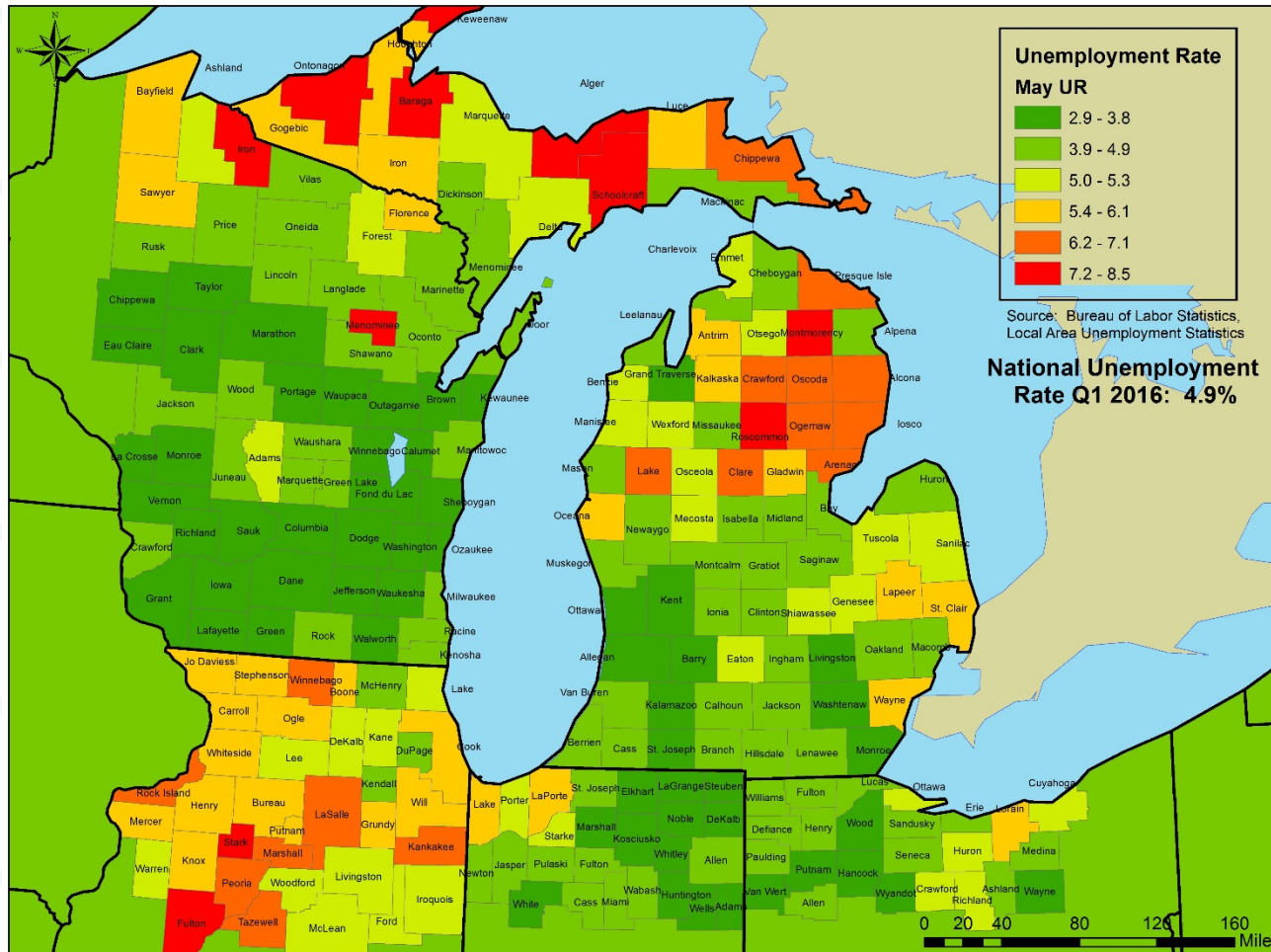


# Not the expected trend? Lower paid entrants?

## Average Hourly Wage for Production Workers (2016\$)

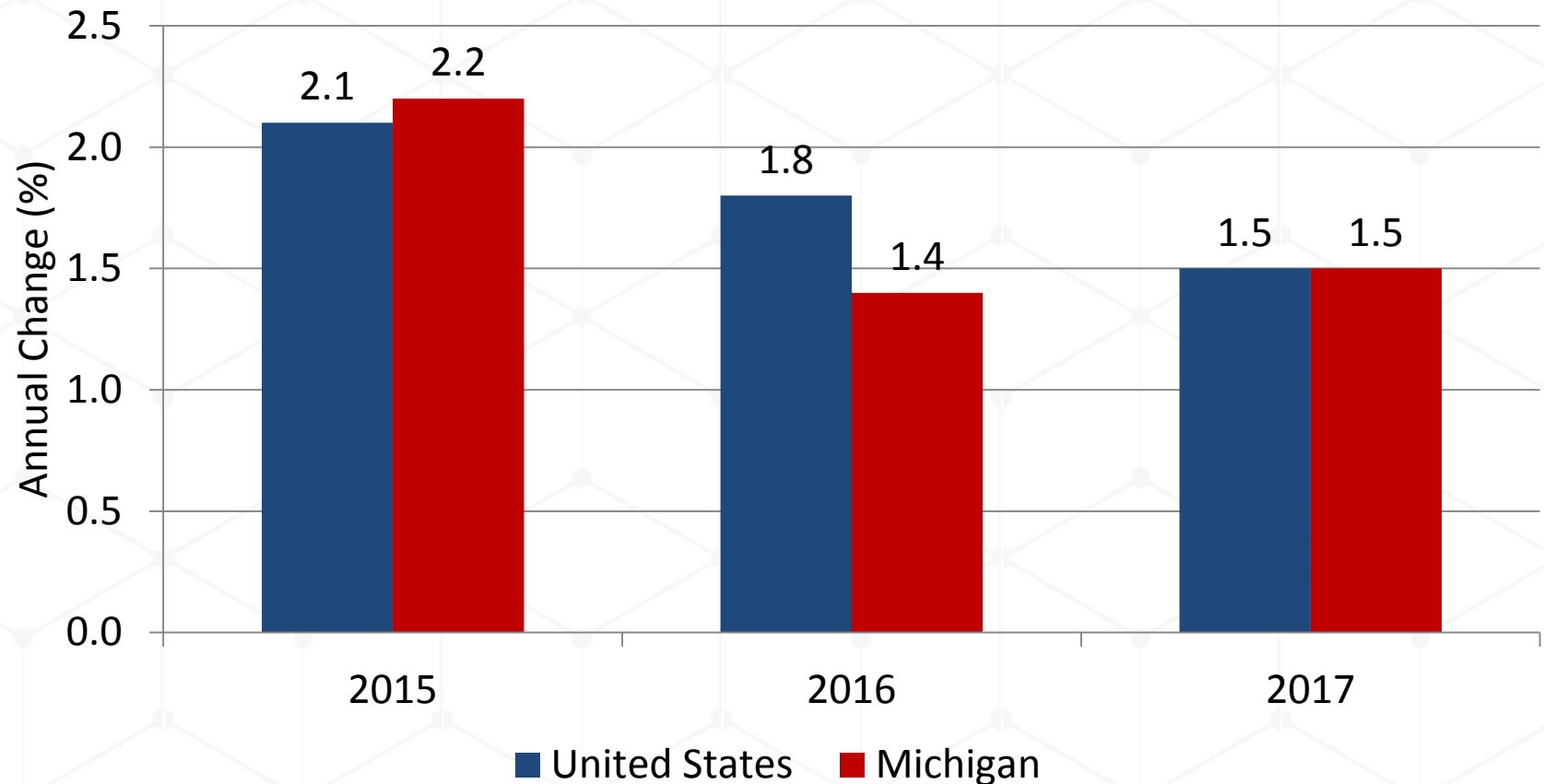


# Labor Markets are Tight in Q1



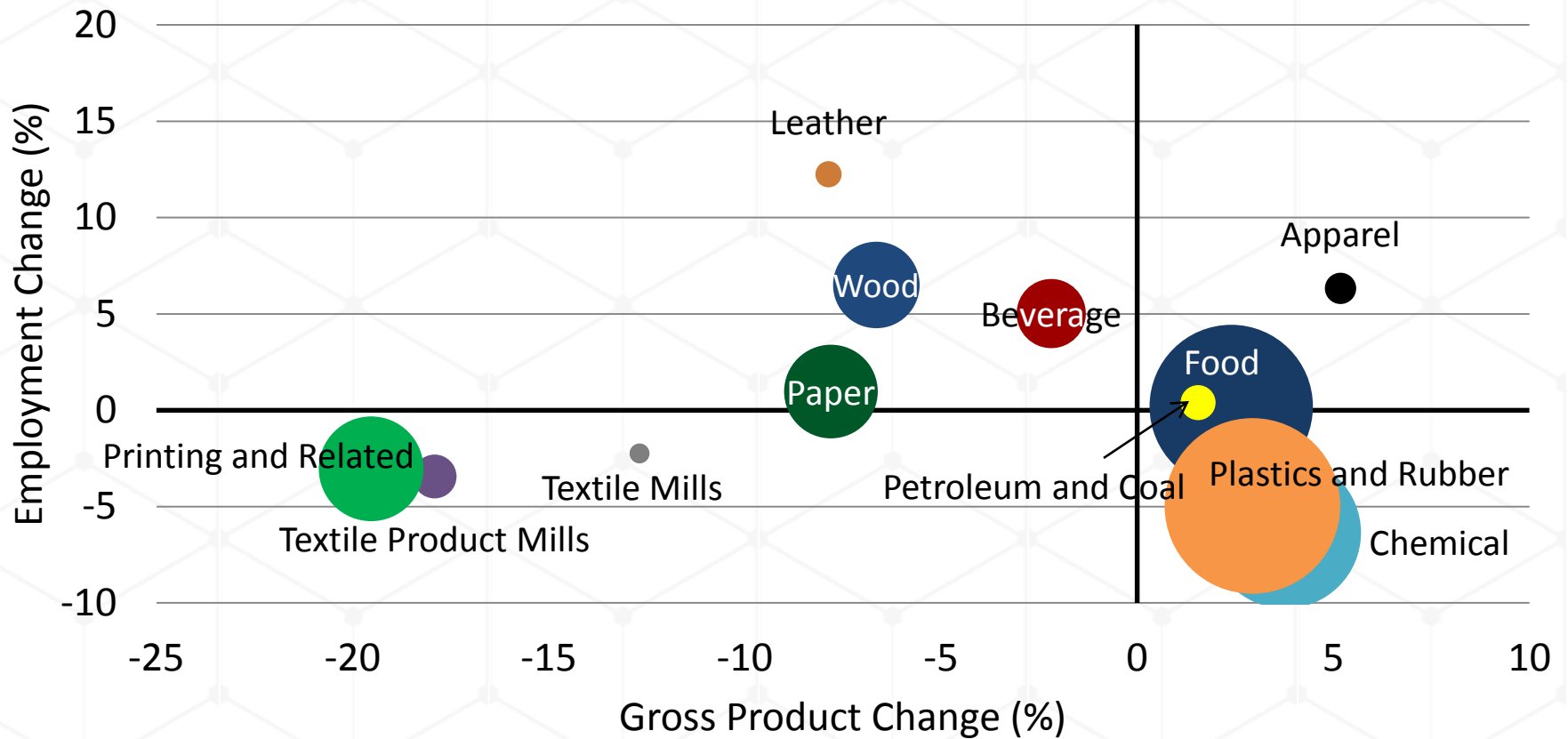
# Michigan Looking Forward

## Employment Forecast



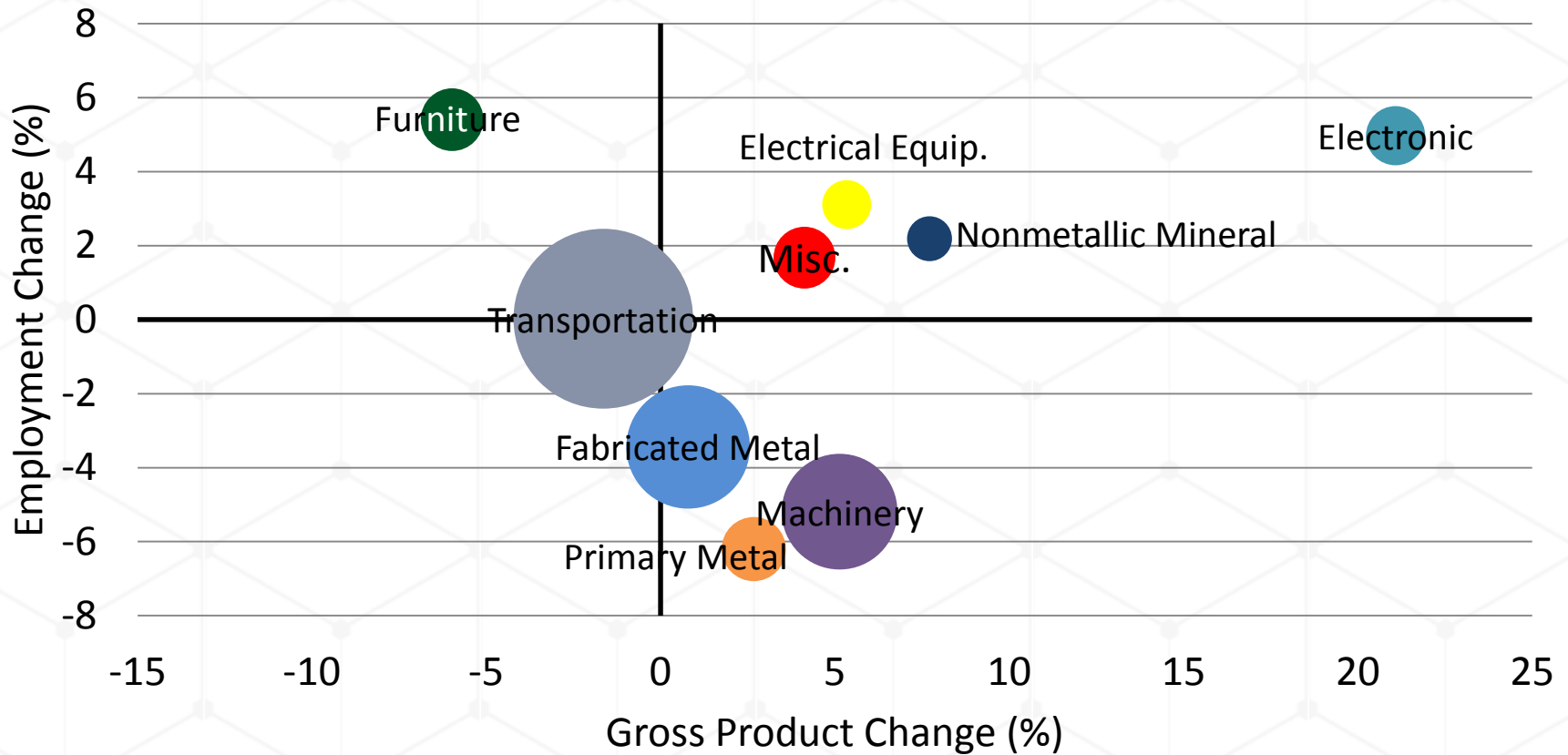
# Statewide Nondurables

## 2015–2020 Projection



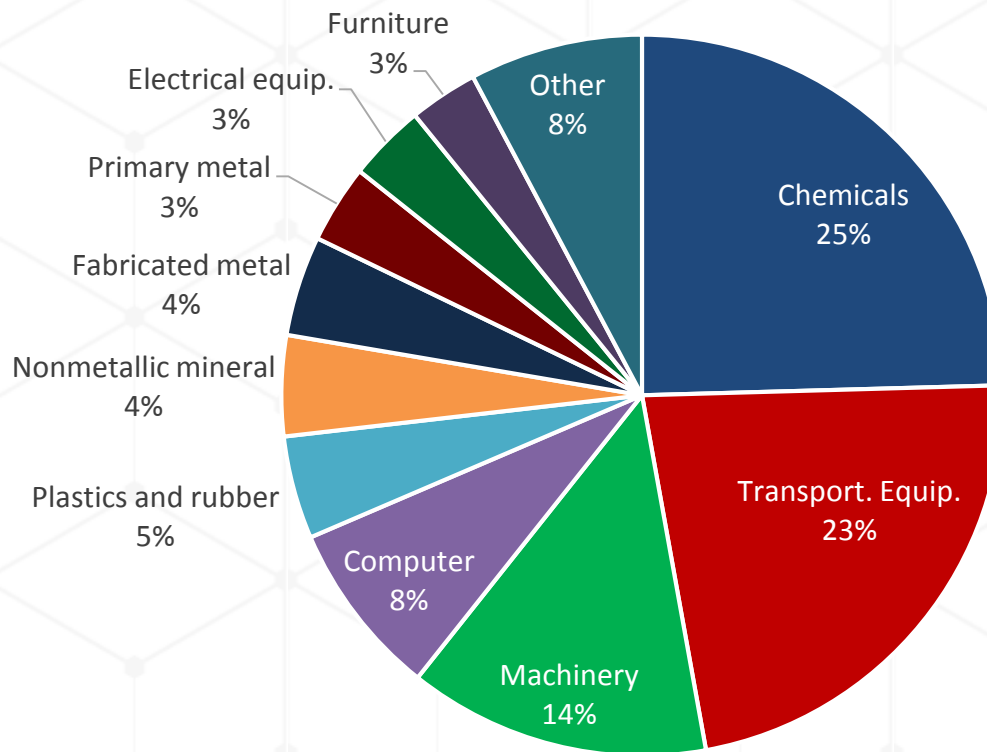
# Statewide Durables

## 2015–2020 Projection



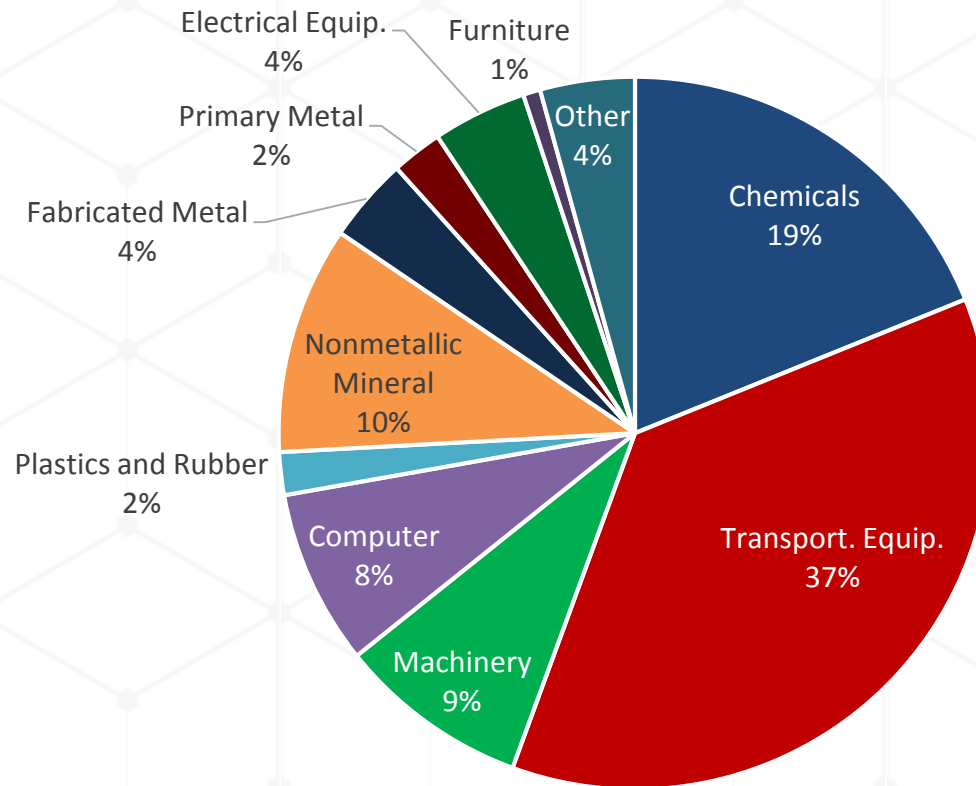
# Exports, \$778 Million in 2015

## Exports to the United Kingdom



# Exports to the rest of European Union: \$5.5 Billion in 2015

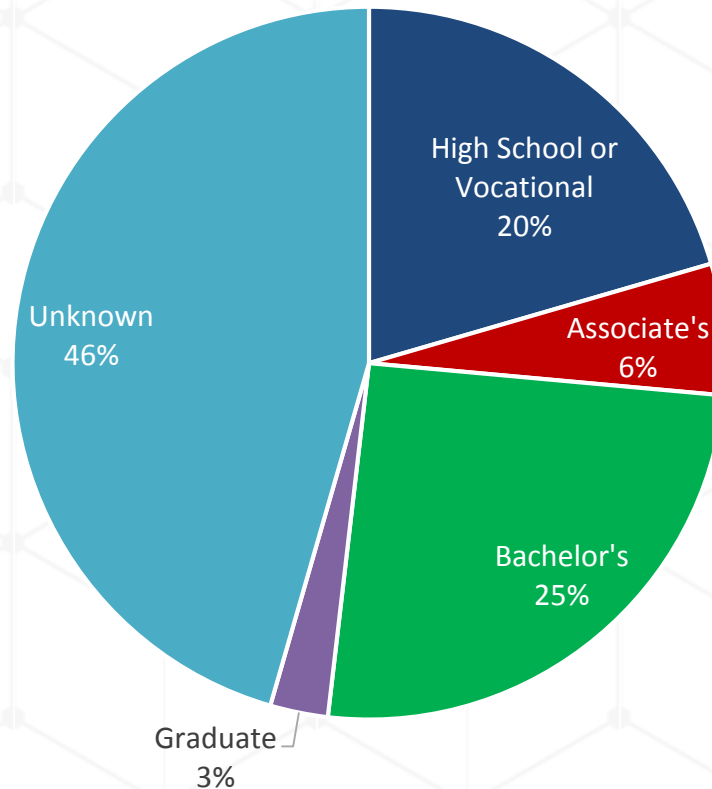
## Exports to the rest of the European Union





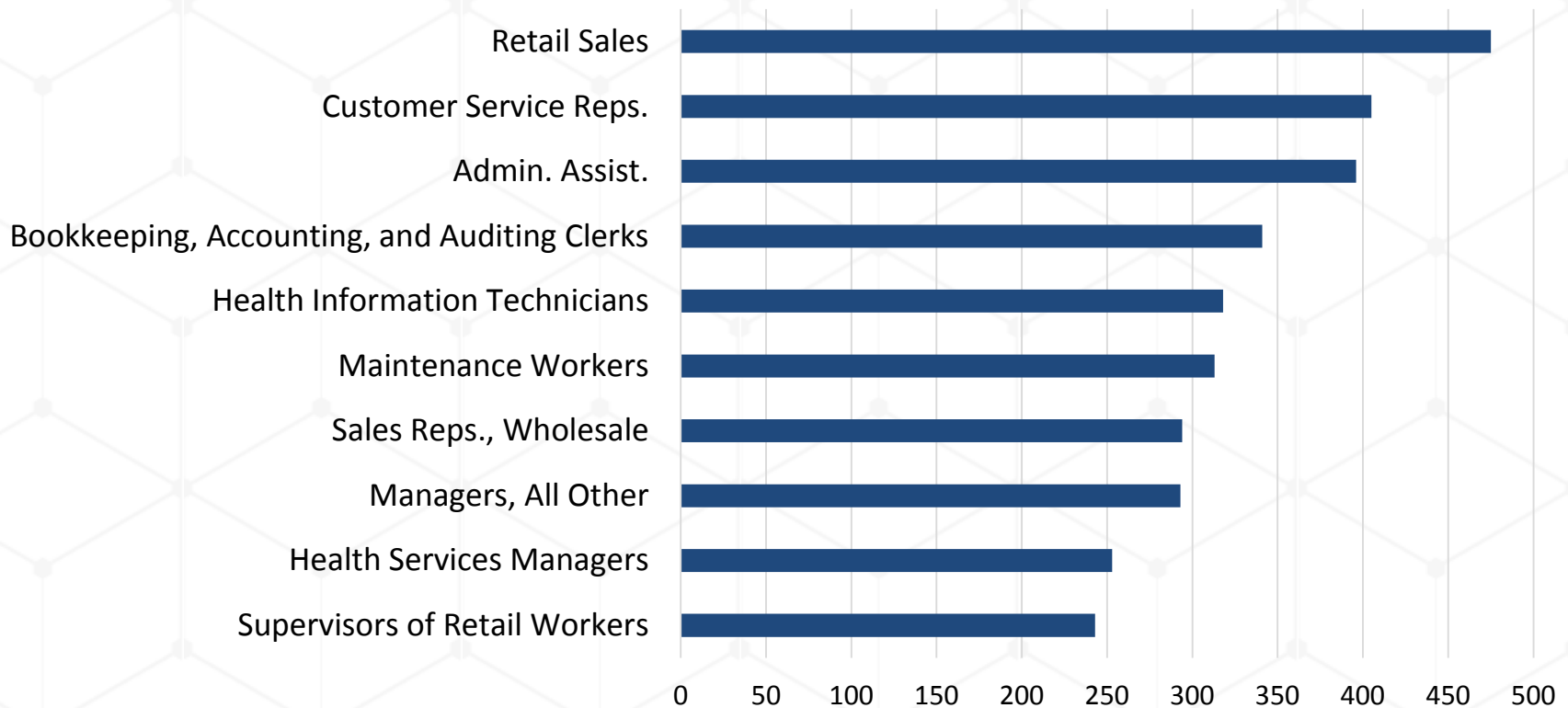
# We're not sure what is hiding in "unknown"

## Minimum Educational Requirements, Past 90 Days



# We left out nursing intentionally

## Top Occupations Requiring an Associate's Degree, Past 90 Days



# Statewide Conditions

- + Auto sales are expected to remain solid through 2016 and 2017
- +/- Other manufacturing sectors, including furniture and aerospace, are flat
- Labor and skills shortages
- +/- Commodity prices are low—improving energy?
- +/- Low unemployment rates
- Availability of commercial/industrial real estate

# Targeted Research: Middle-Skill Jobs

# What are middle-skill jobs?

- Jobs that require more than a high school diploma and at least six months of formal on-the-job training, but less than a Bachelor's degree

**The majority of individuals employed in these professions\* are considered middle-skilled:**

94.6%	Installation, Maintenance, and Repair Occupations
84.4%	Production Occupations
77.5%	Construction and Extraction Occupations
69.7%	Healthcare Support Occupations
55.4%	Protective Service Occupations

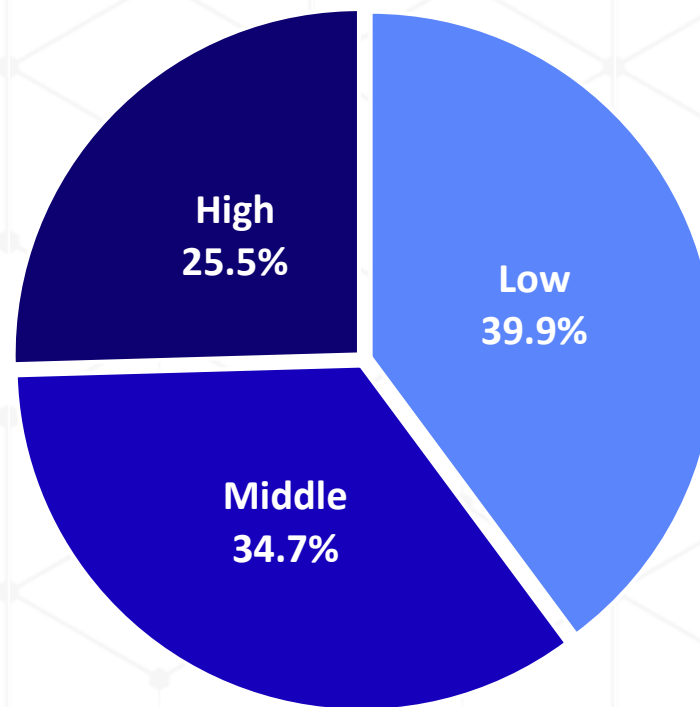
\* At the 2-digit SOC level

# Notable Middle-Skill Jobs

Title	Total Employment (in thousands)		Hourly Median Wage (\$)	
	2015	2015	2015	2015
Heavy and Tractor-Trailer Truck Drivers	1,678		19.36	
Bookkeeping, Accounting, and Auditing Clerks	1,580		17.91	
First-Line Supervisors of Office and Administrative Support Workers	1,424		25.30	
Nursing Assistants	1,420		12.36	
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	1,409		26.79	
Maintenance and Repair Workers, General	1,314		17.61	
Teacher Assistants	1,228		*	
First-Line Supervisors of Retail Sales Workers	1,193		18.42	
Cooks, Restaurant	1,150		11.11	
Team Assemblers	1,115		13.98	
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific	886		24.86	
First-Line Supervisors of Food Preparation and Serving Workers	884		14.59	
Licensed Practical and Licensed Vocational Nurses	697		20.76	
Executive Secretaries and Executive Administrative Assistants	666		25.66	
Police and Sheriff's Patrol Officers	653		28.04	
Carpenters	639		20.24	
Automotive Service Technicians and Mechanics	638		18.20	
First-Line Supervisors of Production and Operating Workers	603		27.09	
Medical Assistants	601		14.71	
Electricians	592		24.94	
Computer Support Specialists	585		23.38	

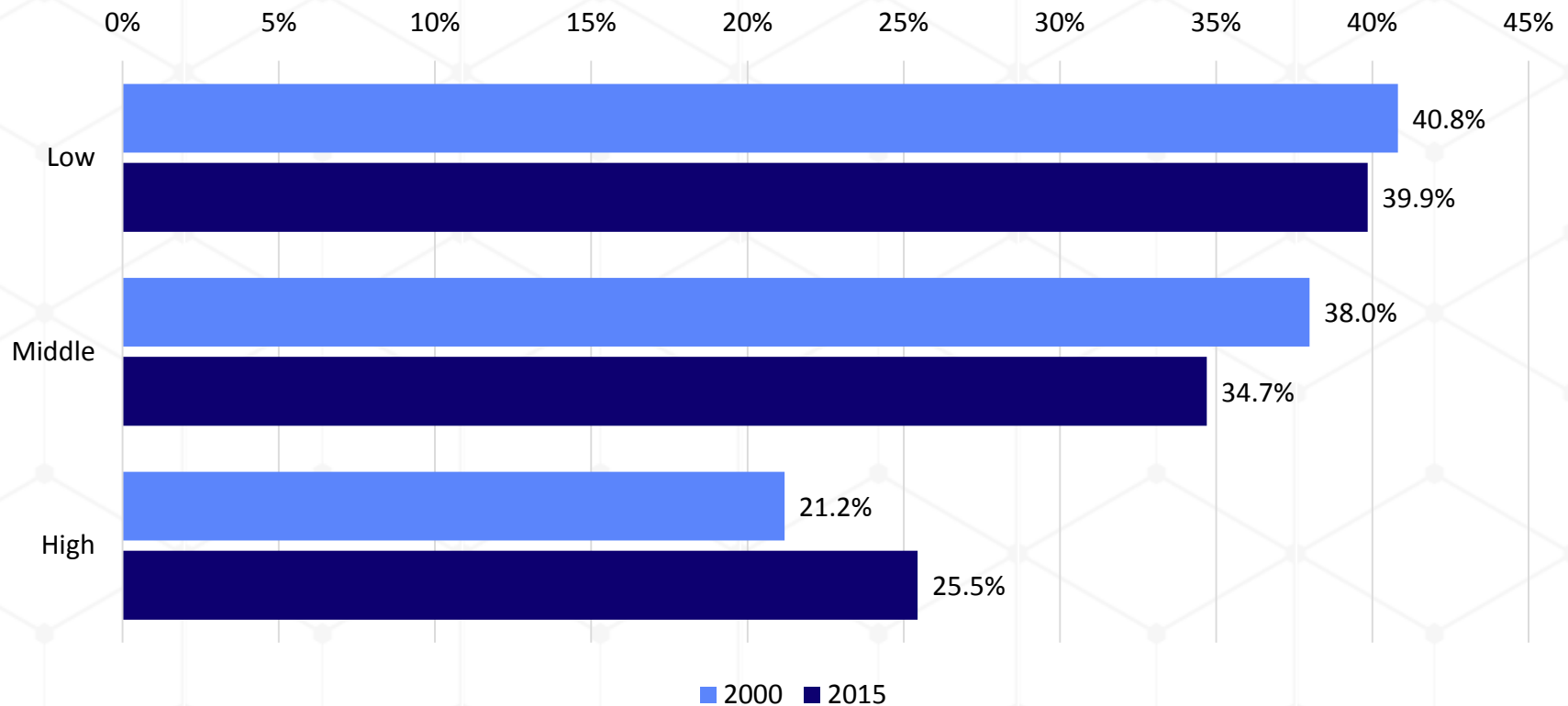
# Middle-Skill Employment

Employment by Skill Level  
(2015)



# Middle-Skill Employment

## Total Employment Share by Skill Level (2000–2015)





# Routine Employment

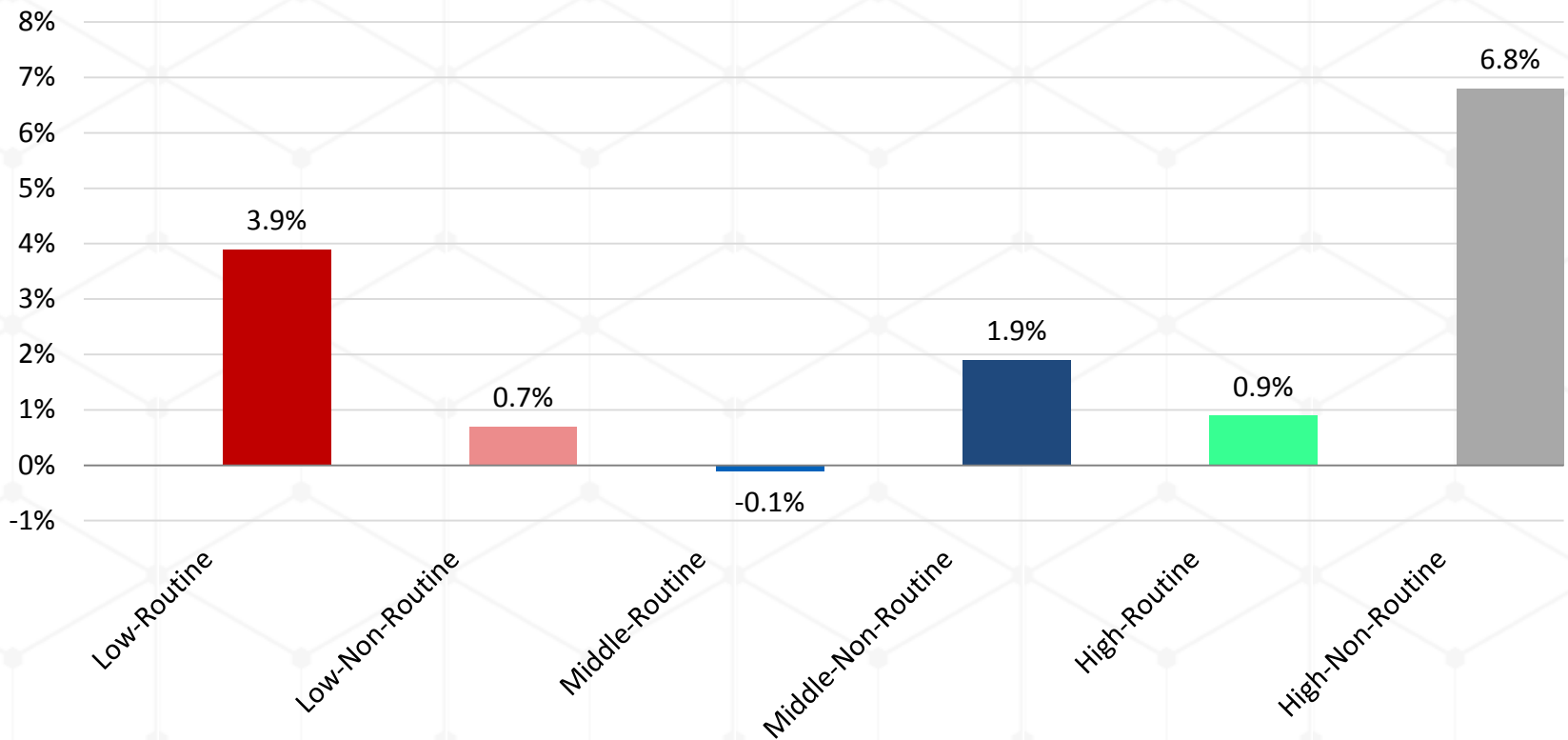
- Routine tasks are those that can be accomplished by following explicit rules\*
- More likely to be automated

Title	Notable Middle-skill Routine Jobs (in thousands)	Projected Growth (%)
	2015	2024
Heavy and Tractor-Trailer Truck Drivers	1,678	5.5
Bookkeeping, Accounting, and Auditing Clerks	1,580	-8.4
Maintenance and Repair Workers, General	1,314	6.1
Team Assemblers	1,115	-0.6
Executive Secretaries and Executive Administrative Assistants	667	-5.7
Automotive Service Technicians and Mechanics	638	5.3
Inspectors, Testers, Sorters, Samplers, and Weighers	508	-0.2

\*Autor, 2003

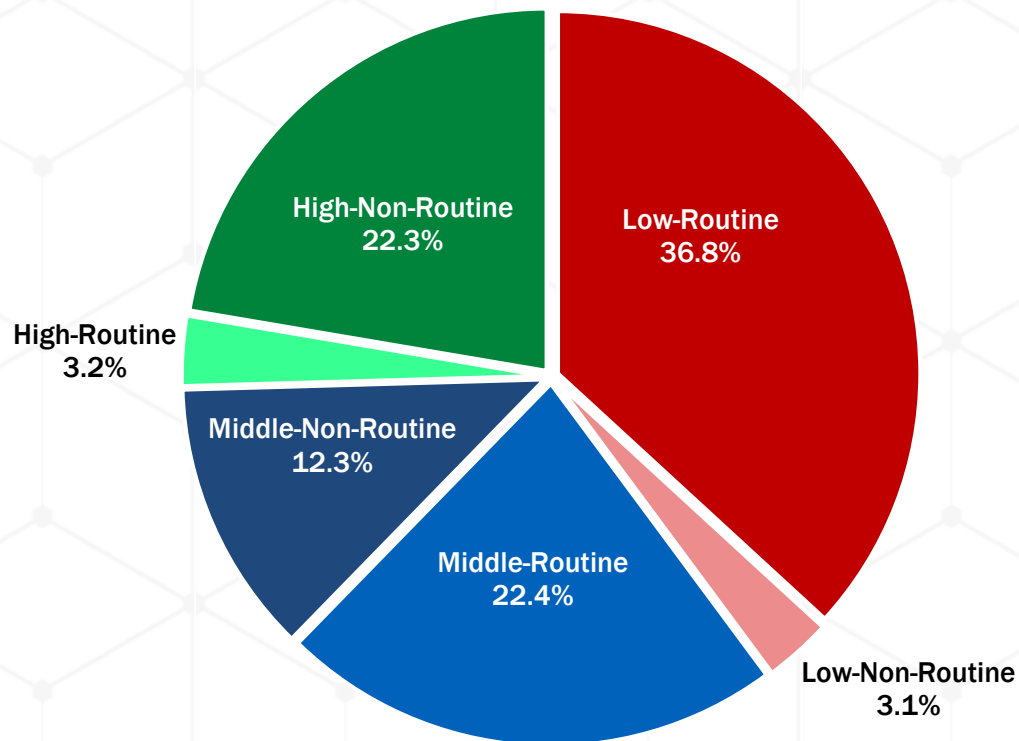
# Middle-Skill Employment

## Employment Change 2000–2015 (by Skill Level)



# Middle-Skill Employment

## Employment by Skill Level (2015)



# Middle-Skill Employment: 2000–2015

## Occupations Increasing as a Share of Middle-skill Jobs:



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Sales and Related Occupations	1.93%
Food Preparation and Serving-related Occupations	1.73%
Healthcare Support Occupations	1.55%
Health Diagnosing and Treating Practitioners	1.45%
Installation, Maintenance, and Repair Occupations	0.77%

## Occupations Decreasing as a Share of Middle-skill Jobs:



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Production Occupations	-2.53%
Office and Administrative Support Occupations	-2.52%
Construction and Extraction Occupations	-0.81%
Architecture and Engineering Occupations	-0.20%
Management Occupations	-0.19%

# Questions and comments?

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