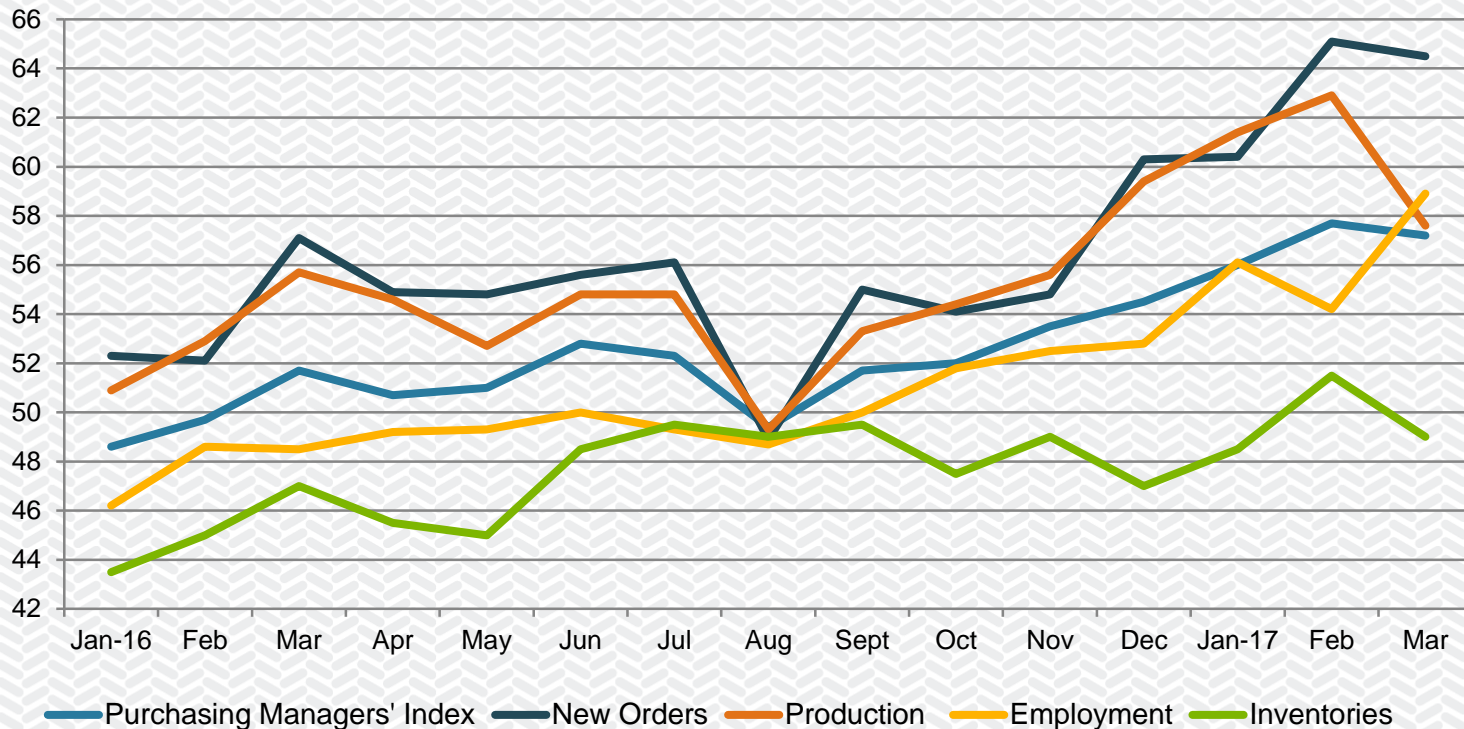MANUFACTURING OVERVIEW

MANUFACTURING MAKES AMERICA STRONG

ISM Manufacturing Purchasing Managers' Index
(January 2016 – March 2017)

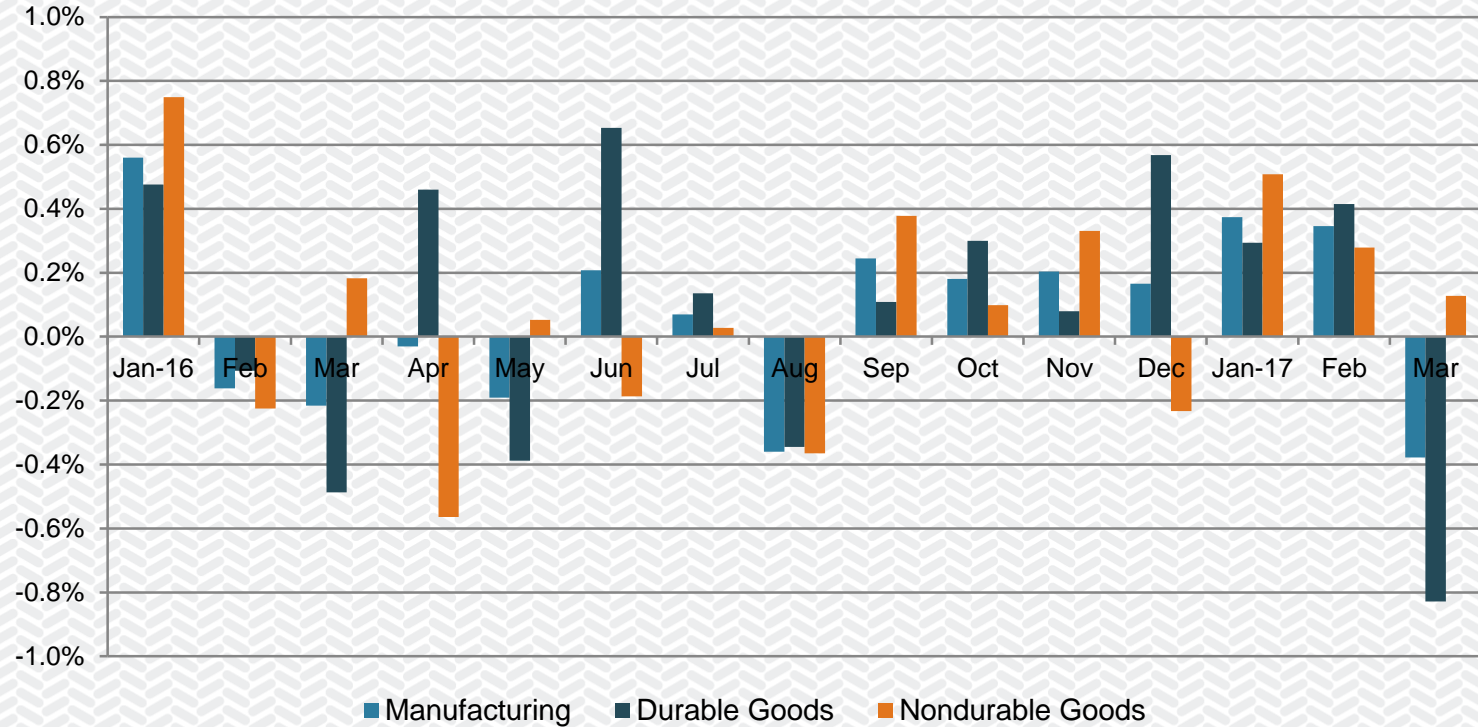Legend: Purchasing Managers' Index — New Orders — Production — Employment — Inventories

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Percentage Changes in Manufacturing Production
(January 2016 – March 2017)

Legend: ■ Manufacturing ■ Durable Goods ■ Nondurable Goods

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Year-Over-Year Industrial Production Growth
(January 2016 – March 2017)

Legend: Industrial Production, Manufacturing, Durable Goods, Nondurable Goods

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Manufacturing Production and Capacity Utilization, January 2016 – March 2017

Manufacturing Production (2012=100)
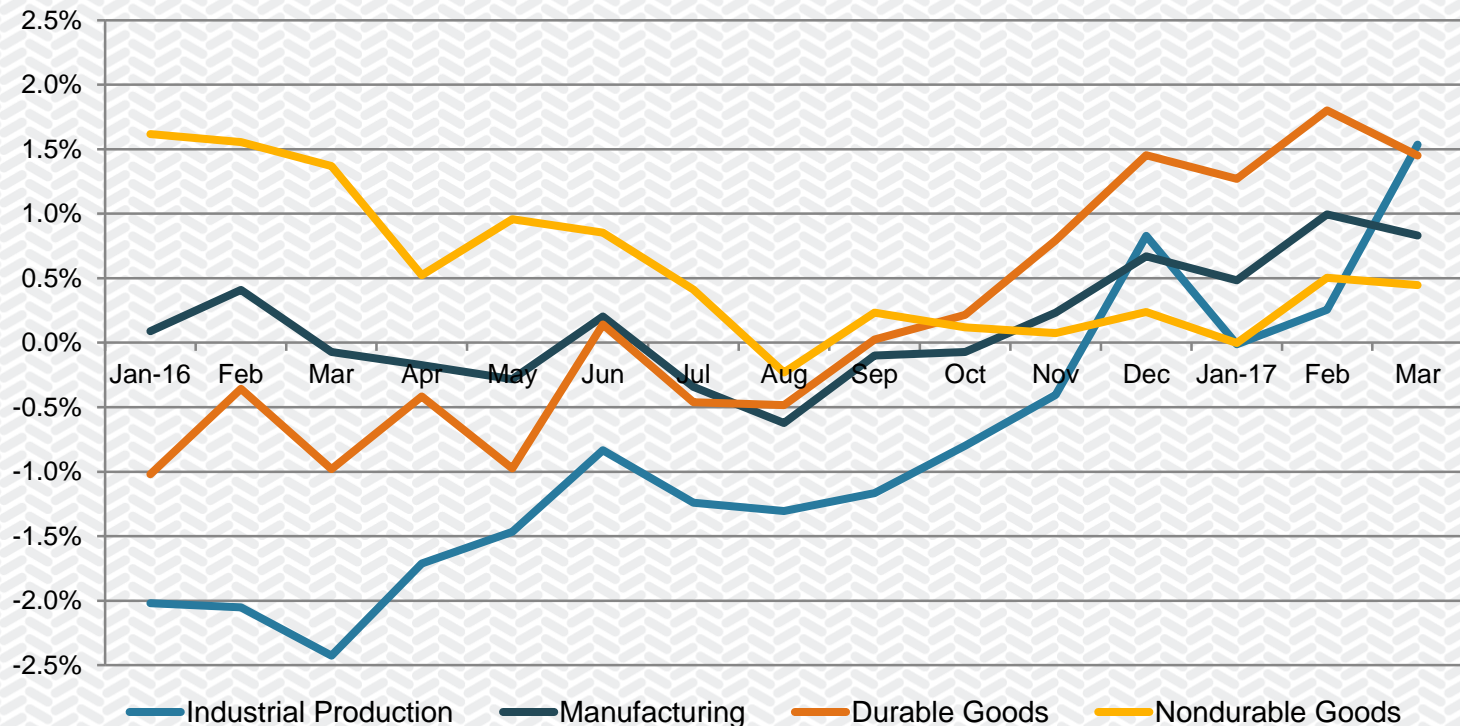
Manufacturing Capacity Utilization (SIC)

Legend:
— Manufacturing Production
— Manufacturing Capacity Utilization

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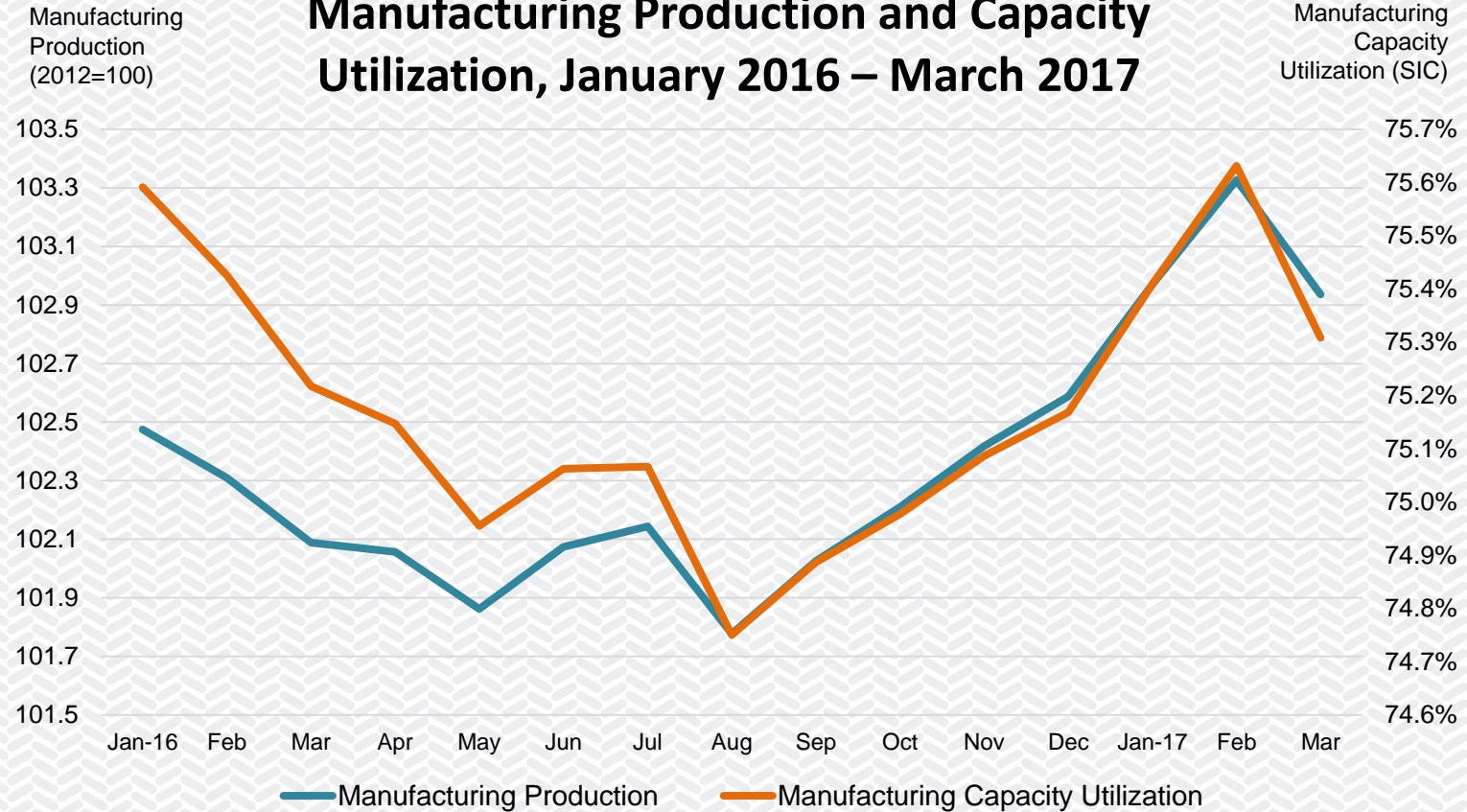
Source: Federal Reserve Board

NAM Manufacturers' Outlook Survey by Quarter
(First Quarter 2015 – First Quarter 2017)

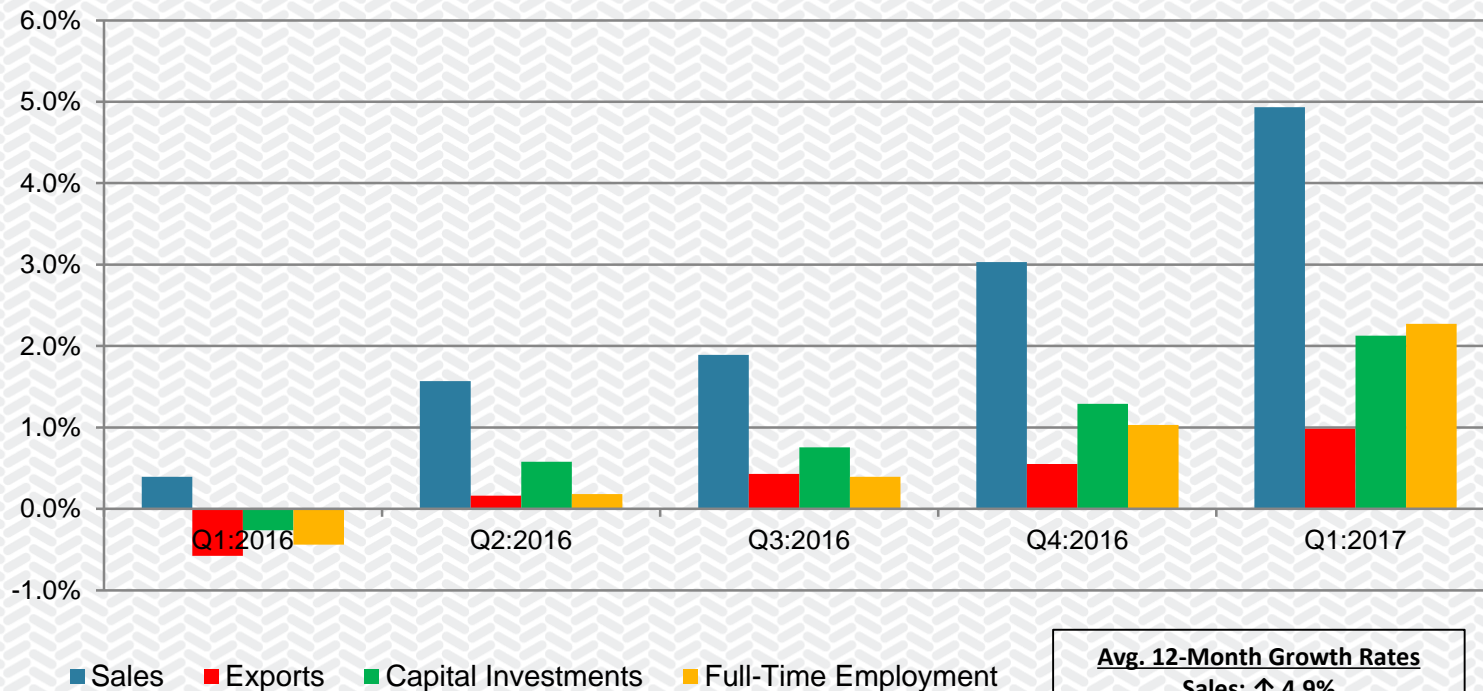| Quarter	Percentage
2015:1	88.5%
2015:2	76.3%
2015:3	67.3%
2015:4	59.6%
2016:1	56.6%
2016:2	61.7%
2016:3	61.0%
2016:4	77.8%
2017:1	93.3%

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Expected Manufacturing Growth Over Next 12 Months
(First Quarter 2016 – First Quarter 2017)

Legend: Sales | Exports | Capital Investments | Full-Time Employment

Avg. 12-Month Growth Rates
Sales: ↑ 4.9%
Exports: ↑ 1.0%
Capital Investments: ↑ 2.1%
Full-Time Employment: ↑ 2.3%

Source: NAM Manufacturers' Outlook Survey
Note: Expected growth rates are annual averages.

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Primary Current Business Challenges

(First Quarter 2017)

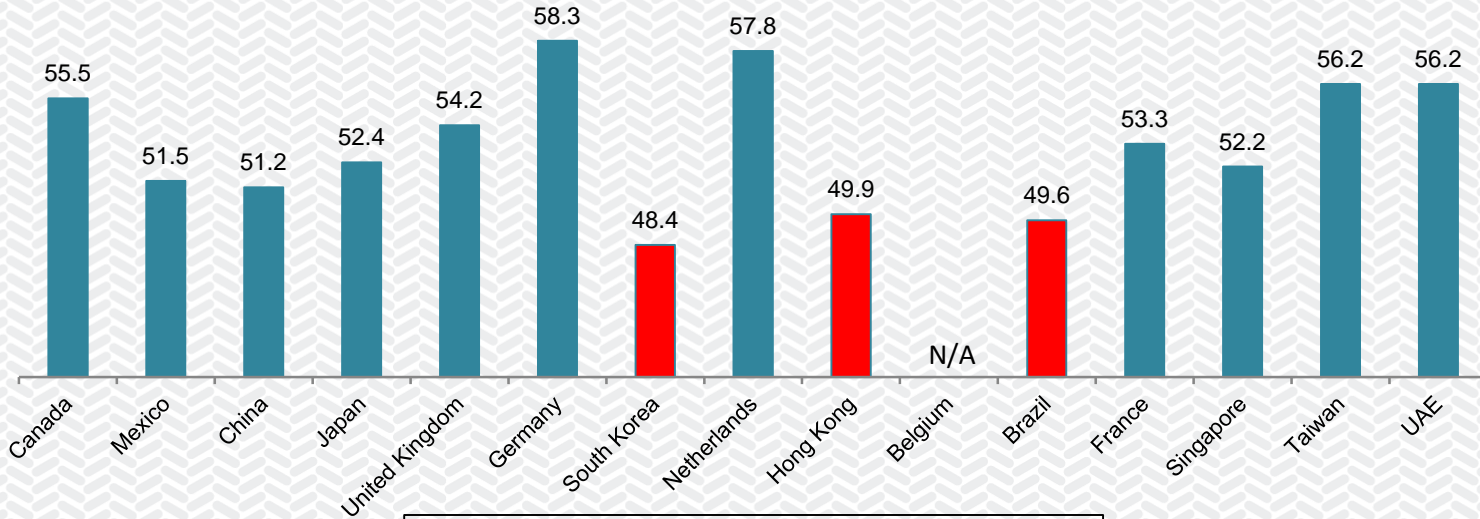| Challenge	Percentage
Rising health care/insurance costs	65.1%
Attracting and retaining a quality workforce	63.5%
Unfavorable business climate (e.g., taxes, regulations)	58.2%
Strengthened U.S. dollar relative to other currencies	35.8%
Rising raw material costs for our products	34.6%
Weaker domestic economy and sales for our products	32.5%
Weaker global growth and slower export sales	23.6%
Challenges with access to capital	8.2%

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INTERNATIONAL ECONOMIC UPDATE, INCLUDING EXPORTS

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Markit Purchasing Managers' Indices for the Top 15 Export Markets for U.S. Manufactured Goods
(March 2017)

Country	PMI
Canada	55.5
Mexico	51.5
China	51.2
Japan	52.4
United Kingdom	54.2
Germany	58.3
South Korea	48.4
Netherlands	57.8
Hong Kong	49.9
Belgium	N/A
Brazil	49.6
France	53.3
Singapore	52.2
Taiwan	56.2
UAE	56.2

Emerging Markets Manufacturing PMI: 51.6
Eurozone Manufacturing PMI: 56.2
Global Manufacturing PMI: 53.0
U.S. Manufacturing PMI (Markit): 53.3

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Source: IHS Markit

Trade-Weighted U.S. Dollar Index
Against Major Currencies, 2014–2017
(Currency Units per U.S. Dollar, 1973=100)

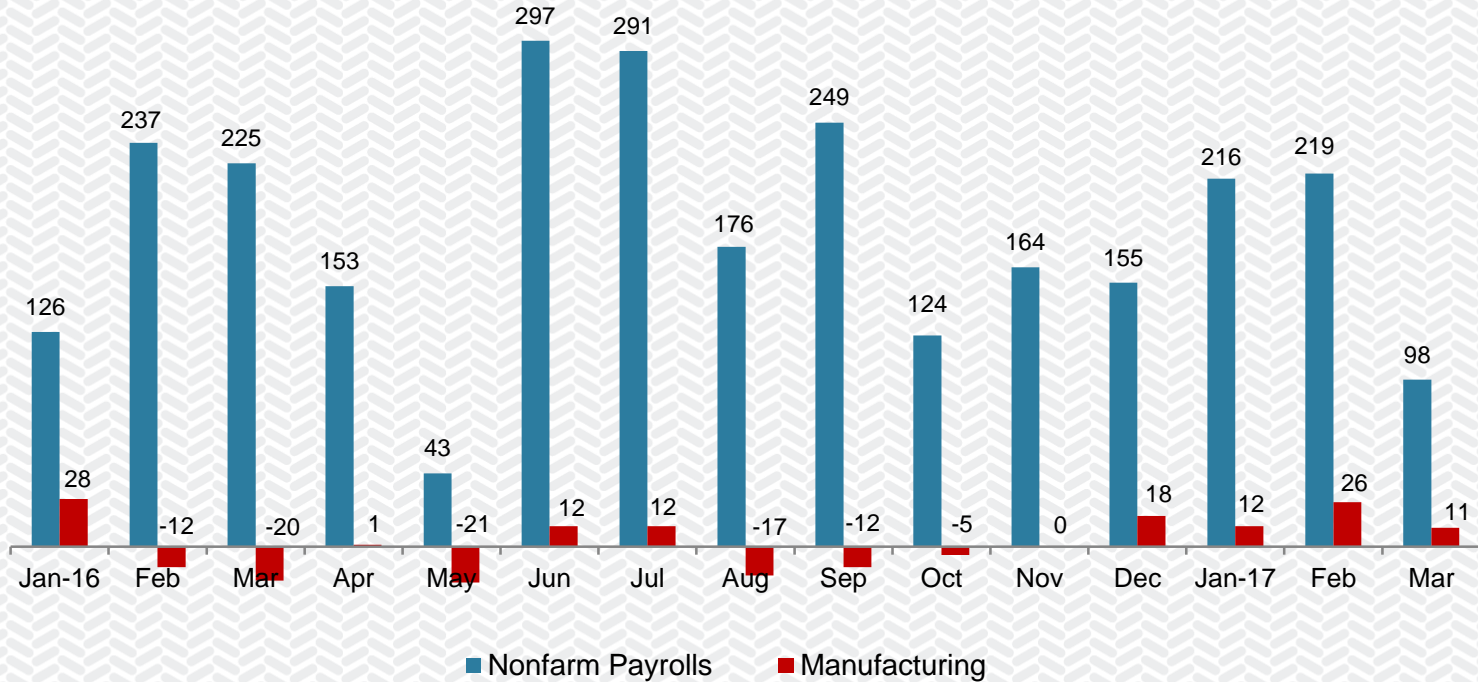*Source:* Federal Reserve Board

MANUFACTURING EMPLOYMENT

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Monthly Changes in Employment
(January 2016 – March 2017, in Thousands of Employees)

| Month	Nonfarm Payrolls	Manufacturing
Jan-16	126	28
Feb	237	-12
Mar	225	-20
Apr	153	1
May	43	-21
Jun	297	12
Jul	291	12
Aug	176	-17
Sep	249	-12
Oct	124	-5
Nov	164	0
Dec	155	18
Jan-17	216	12
Feb	219	26
Mar	98	11

■ Nonfarm Payrolls ■ Manufacturing

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Employment Situation, 2016–2017

Manufacturing Employment ▪ Unemployment Rate

Source: Bureau of Labor Statistics
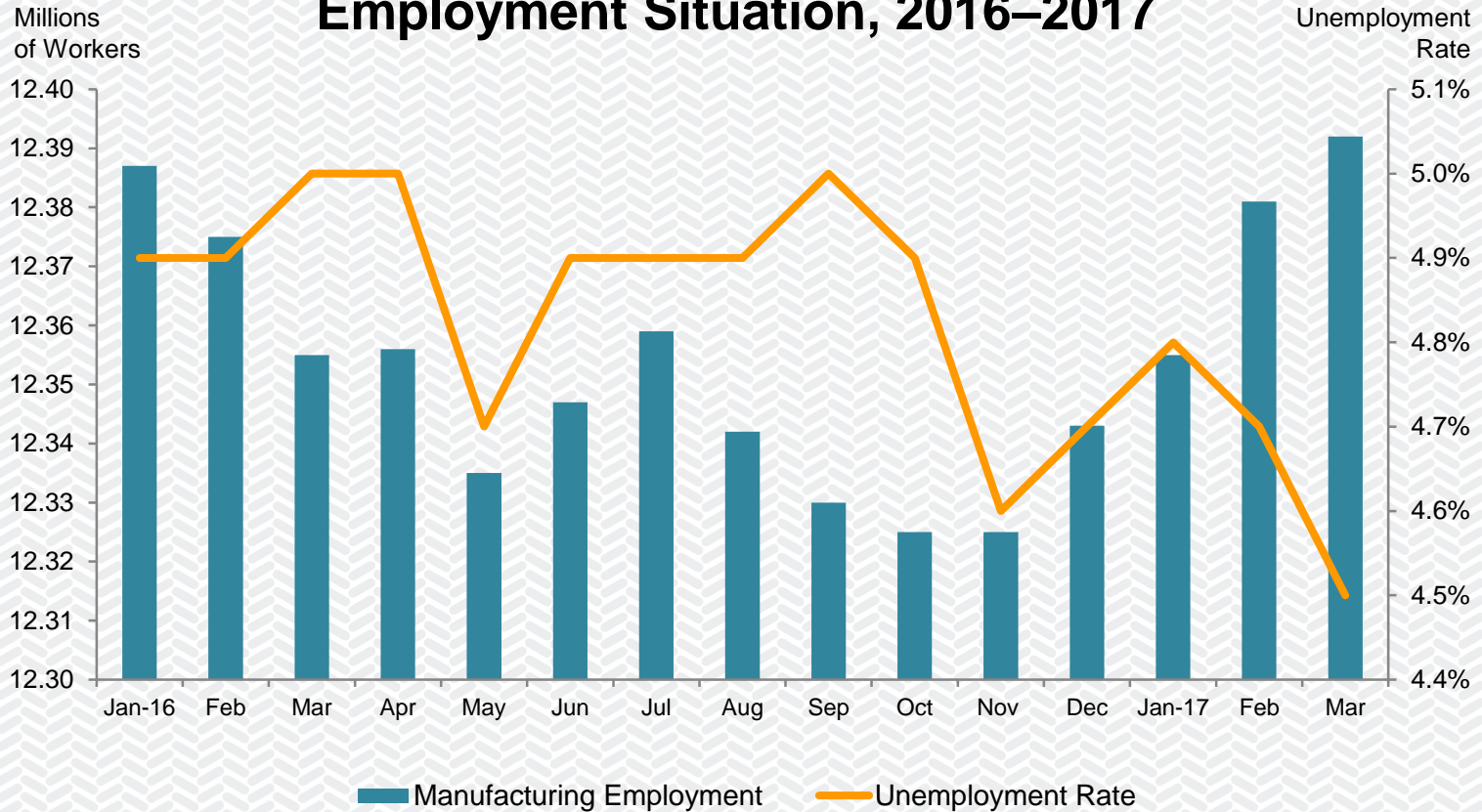
Manufacturing Job Openings, Hires and Separations
(January 2016 – February 2017, in thousands of workers)

Legend: Job Openings, Hires, Separations

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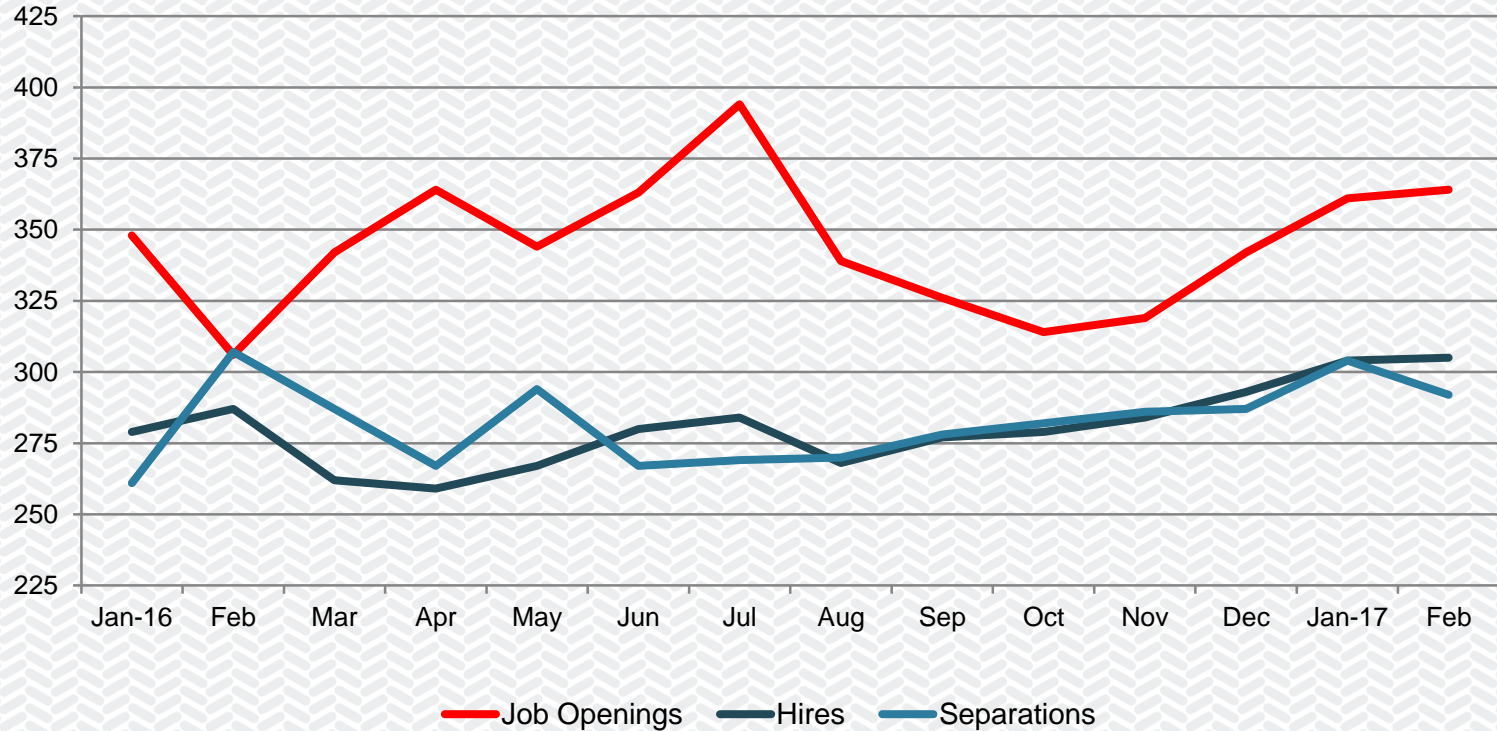
ECONOMIC OUTLOOK

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Real Gross Domestic Product
(Chained 2009 Dollars)
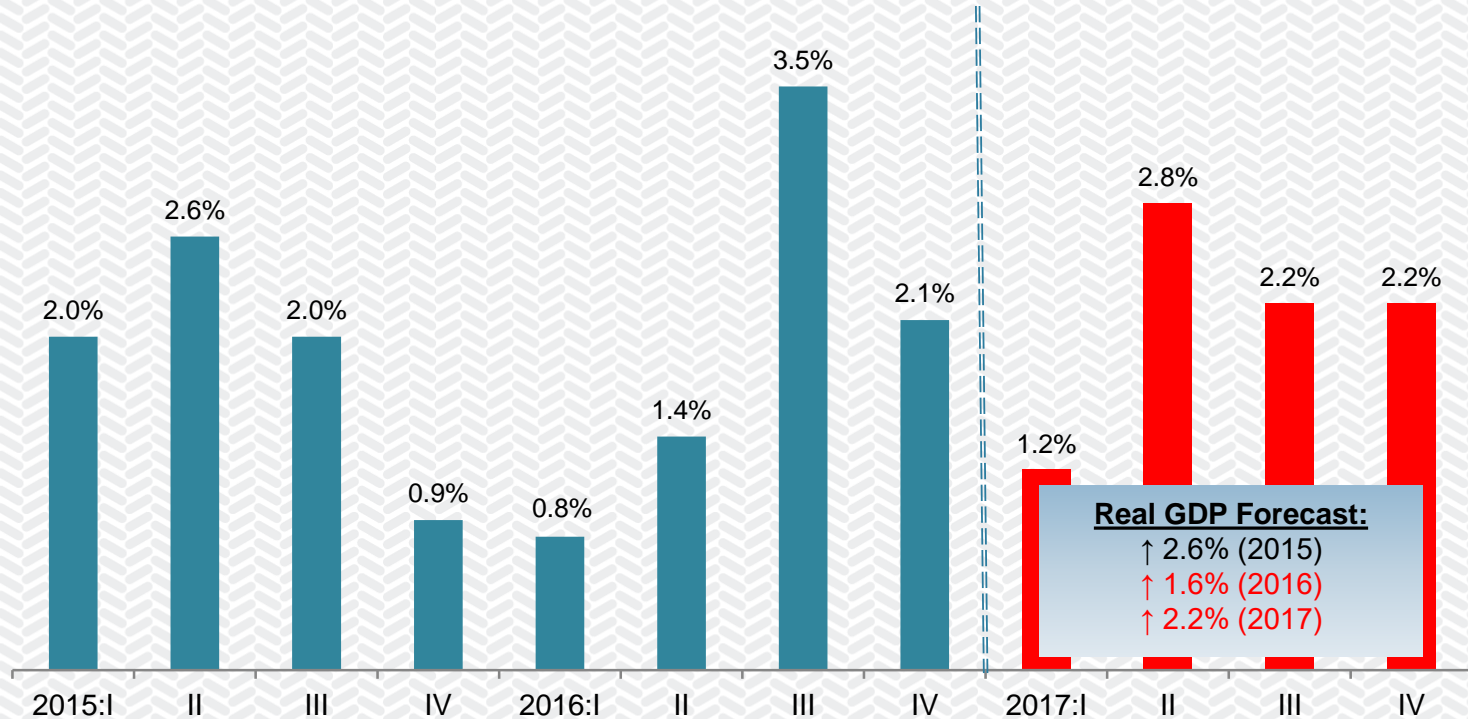
Chart showing Real GDP quarterly percentages:

- 2015:I — 2.0%
- II — 2.6%
- III — 2.0%
- IV — 0.9%
- 2016:I — 0.8%
- II — 1.4%
- III — 3.5%
- IV — 2.1%
- 2017:I — 1.2%
- II — 2.8%
- III — 2.2%
- IV — 2.2%

Real GDP Forecast:
↑ 2.6% (2015)
↑ 1.6% (2016)
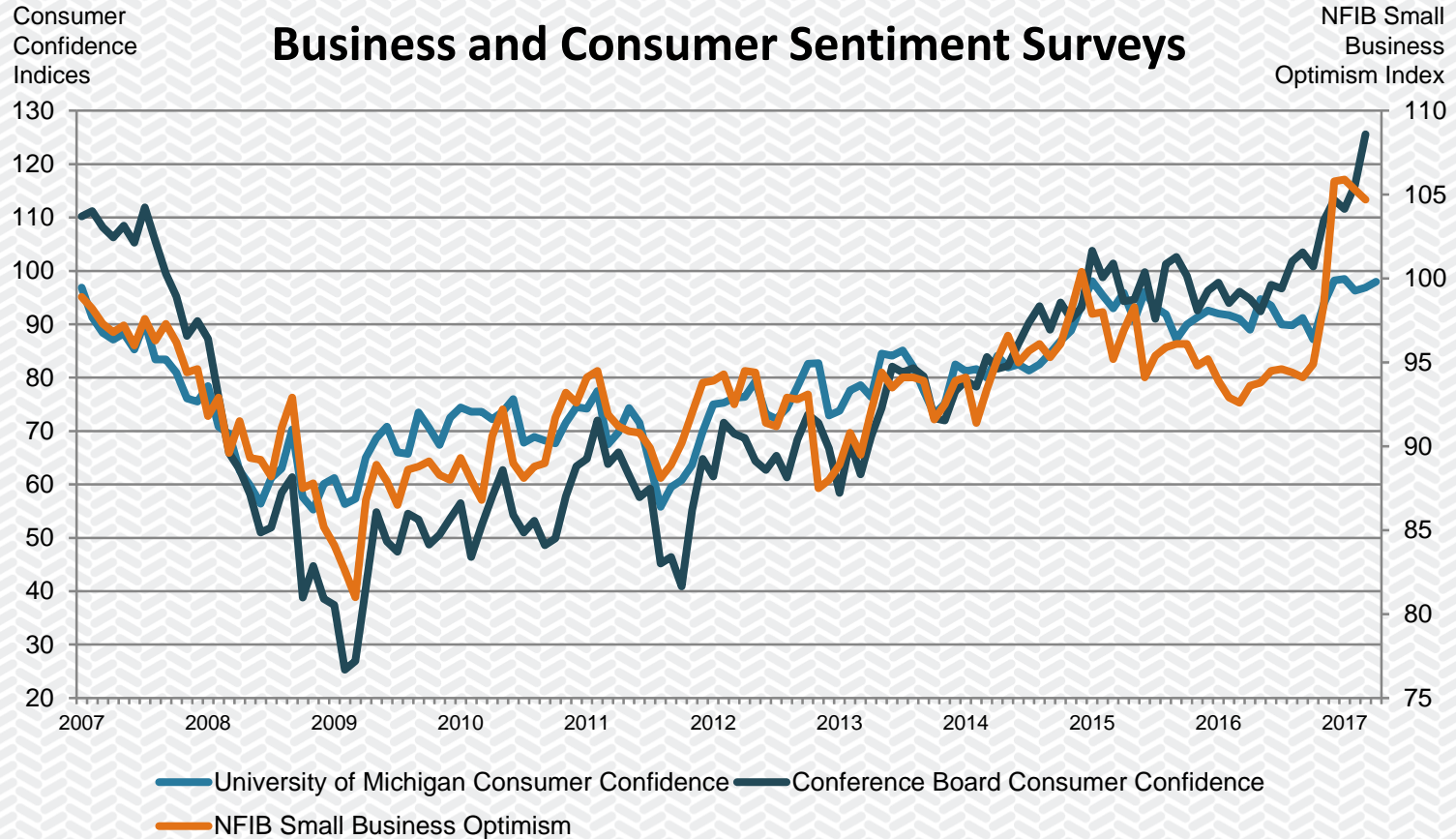↑ 2.2% (2017)

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OTHER TOPICS:
CONSUMER SPENDING, HOUSING AND PRICING PRESSURES

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Business and Consumer Sentiment Surveys

Consumer Confidence Indices (left axis): 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130

NFIB Small Business Optimism Index (right axis): 75, 80, 85, 90, 95, 100, 105, 110

Years: 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017

Legend:
— University of Michigan Consumer Confidence
— Conference Board Consumer Confidence
— NFIB Small Business Optimism

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Source: University of Michigan/Thomson Reuters, Conference Board, National Federation of Independent Business

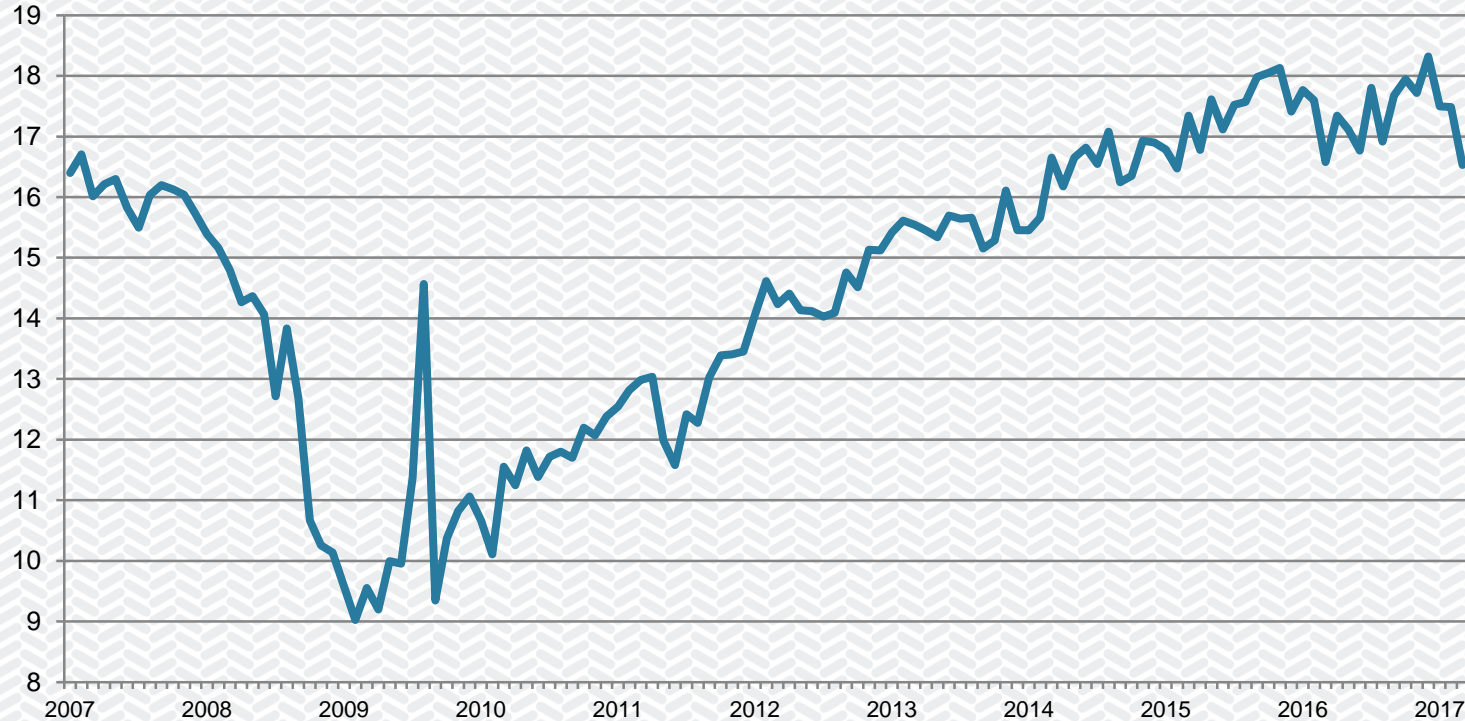# Year-Over-Year Growth in Retail Sales
(January 2016 – March 2017)

Retail Sales   Excluding Autos

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Source: Census Bureau
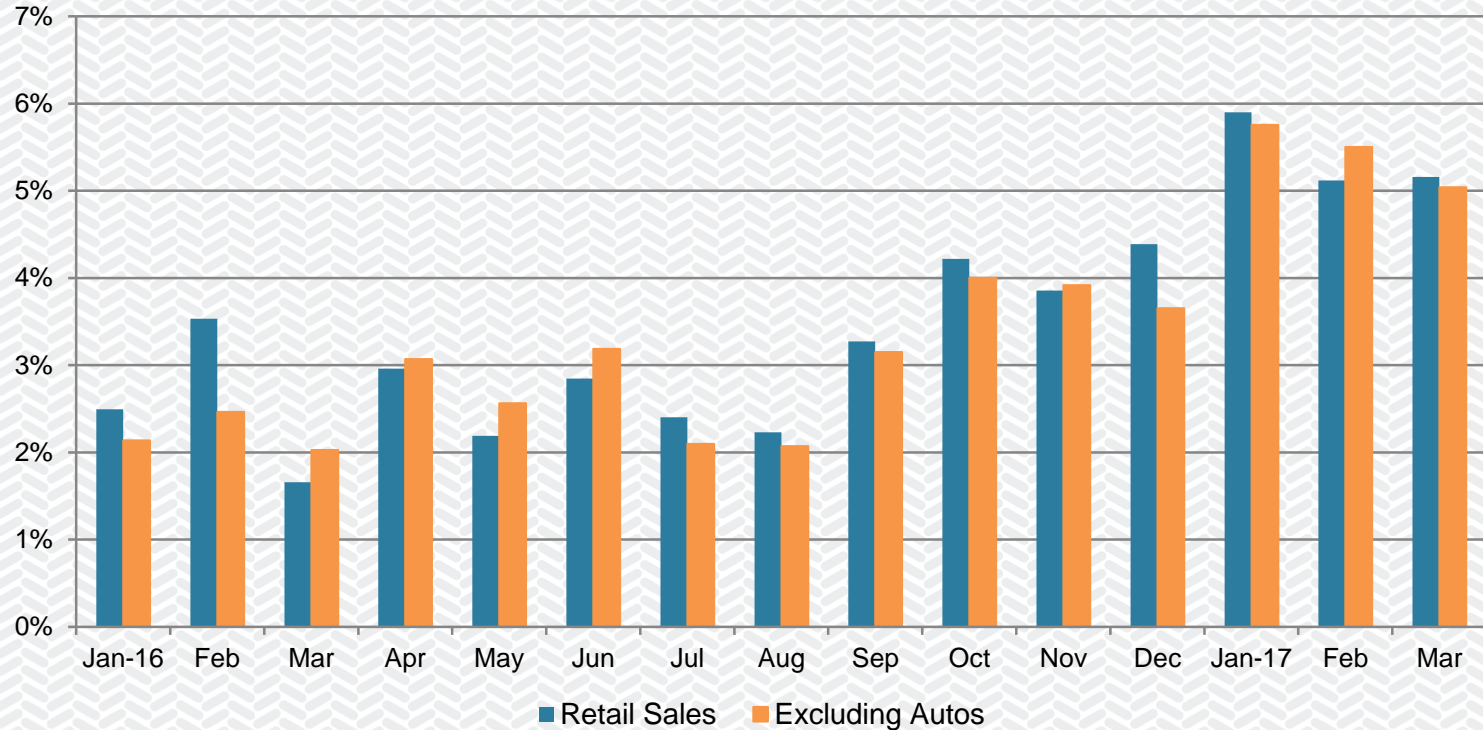
Auto and Light Truck Vehicle Sales, 2007–2017

(in Millions of Units)

Housing Starts, January 2016 – March 2017
(Seasonally Adjusted, at the Annual Rate)

Single-Family Starts   Multifamily Starts

Source: U.S. Census Bureau

QUESTIONS?

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