

Virginia Council of CEO's

**Ready for
Growth**



Connor Lokar
Economist

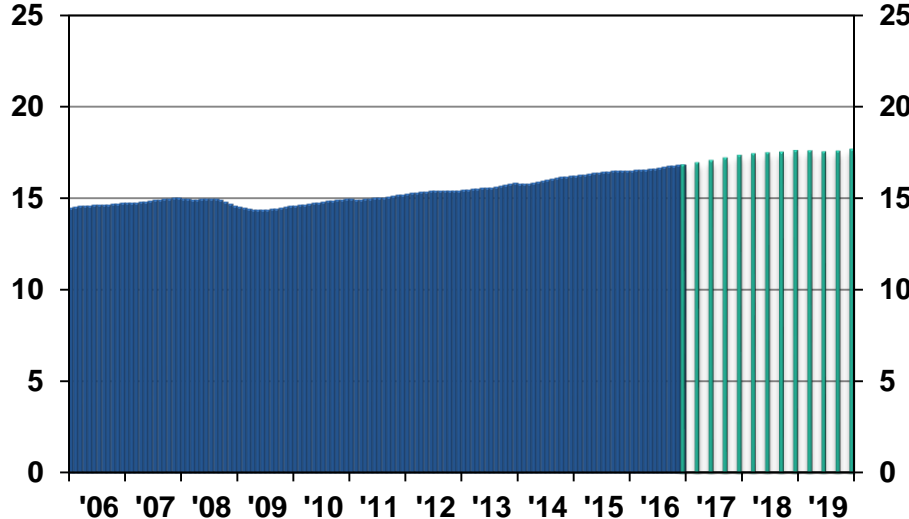
2016 Forecast Results

	Duration	Accuracy
US GDP	15	99.1%
US Ind. Prod.	10	99.9%
Eur Ind. Prod.	15	99.2%
Canada Ind Prod	15	99.6%
China Ind Prod	18	99.3%
Retail Sales	18	99.8%
Housing	15	95.6%
Employment	14	99.7%

ITR Economics provides the best economic intelligence to reduce risk and drive practical and profitable business decisions.

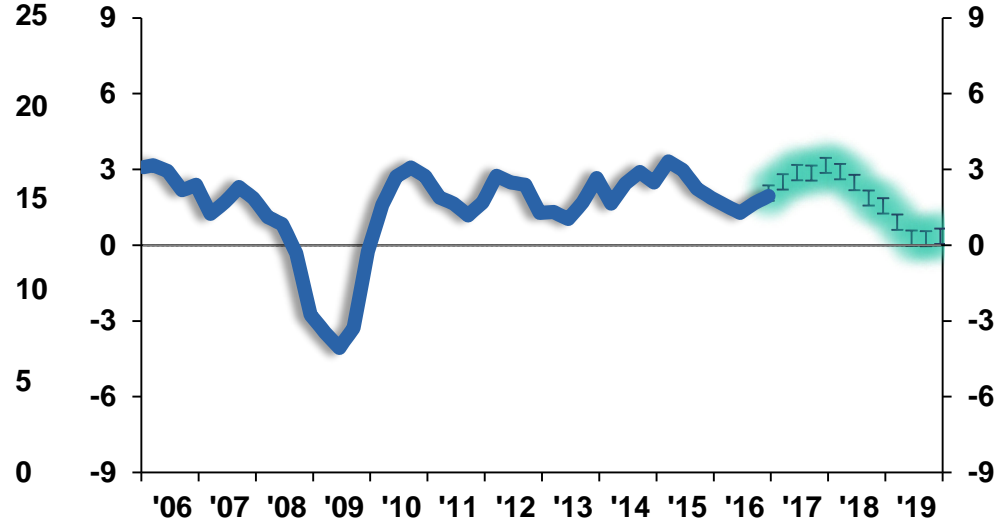
US Gross Domestic Product


US Gross Domestic Product
3-Month Moving Average



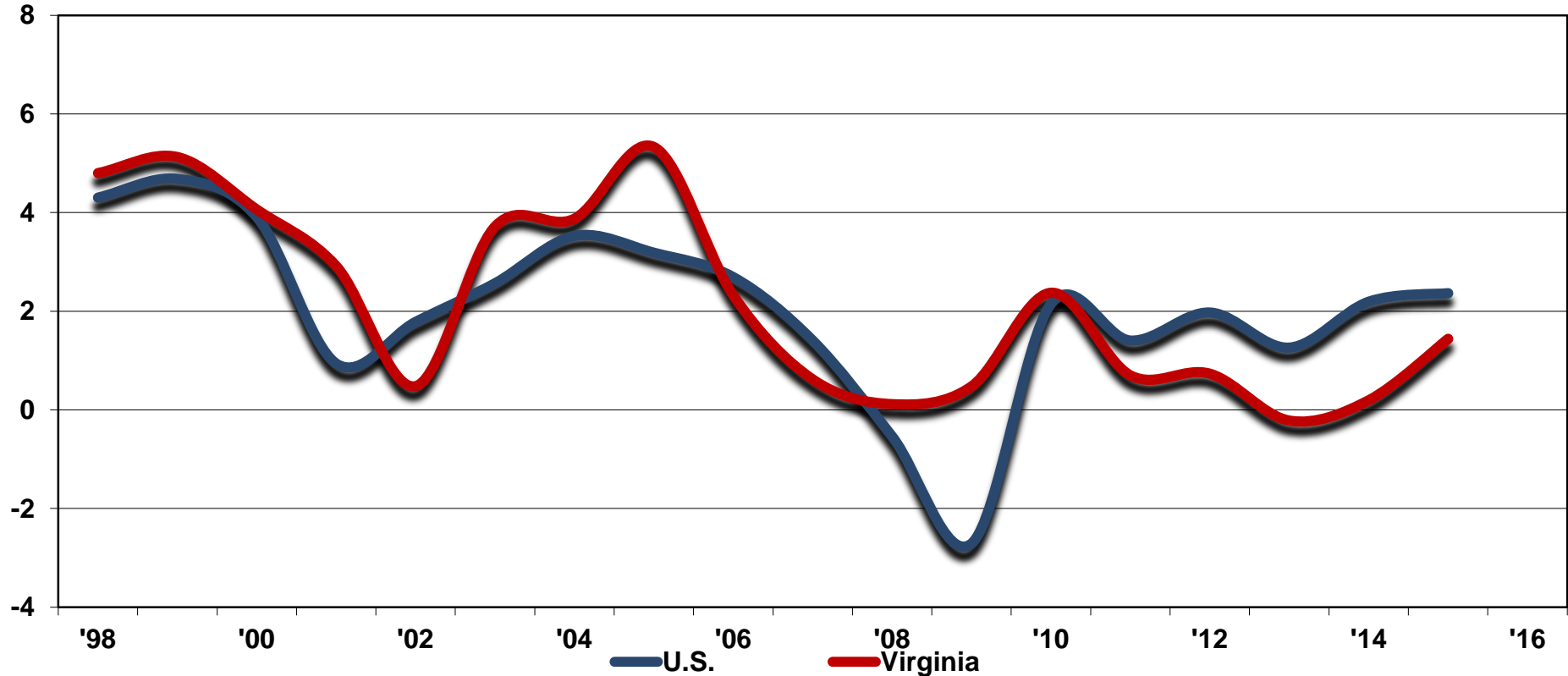
- Annual Trend: \$16.7 trillion
- Phase: B
- Year-over-Year: 1.6%

Quarter-over-Quarter Growth Rate
3/12 Rate-of-Change

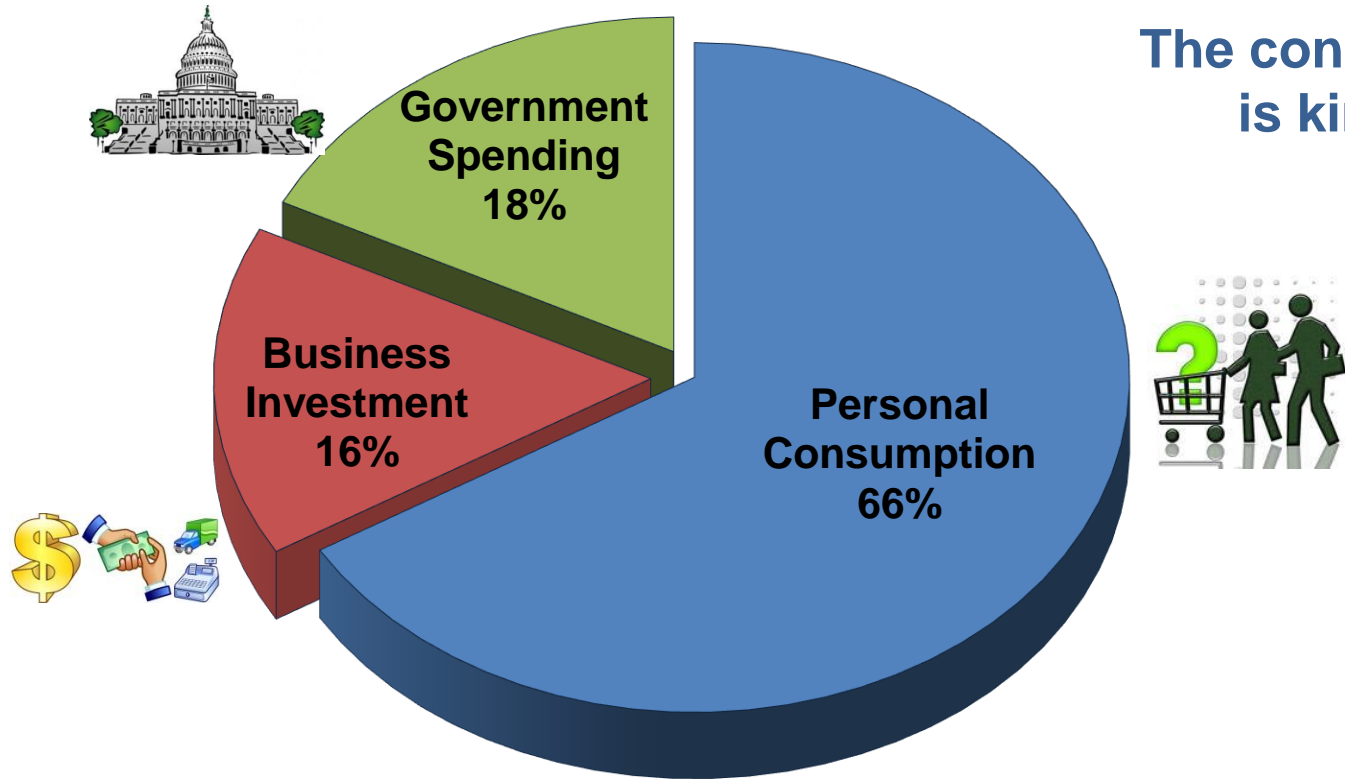


Industry 2017: 3.2%
 **Outlook** 2018: 1.6%
2019: 0.4%

US and Virginia Annual GSP Growth Rate

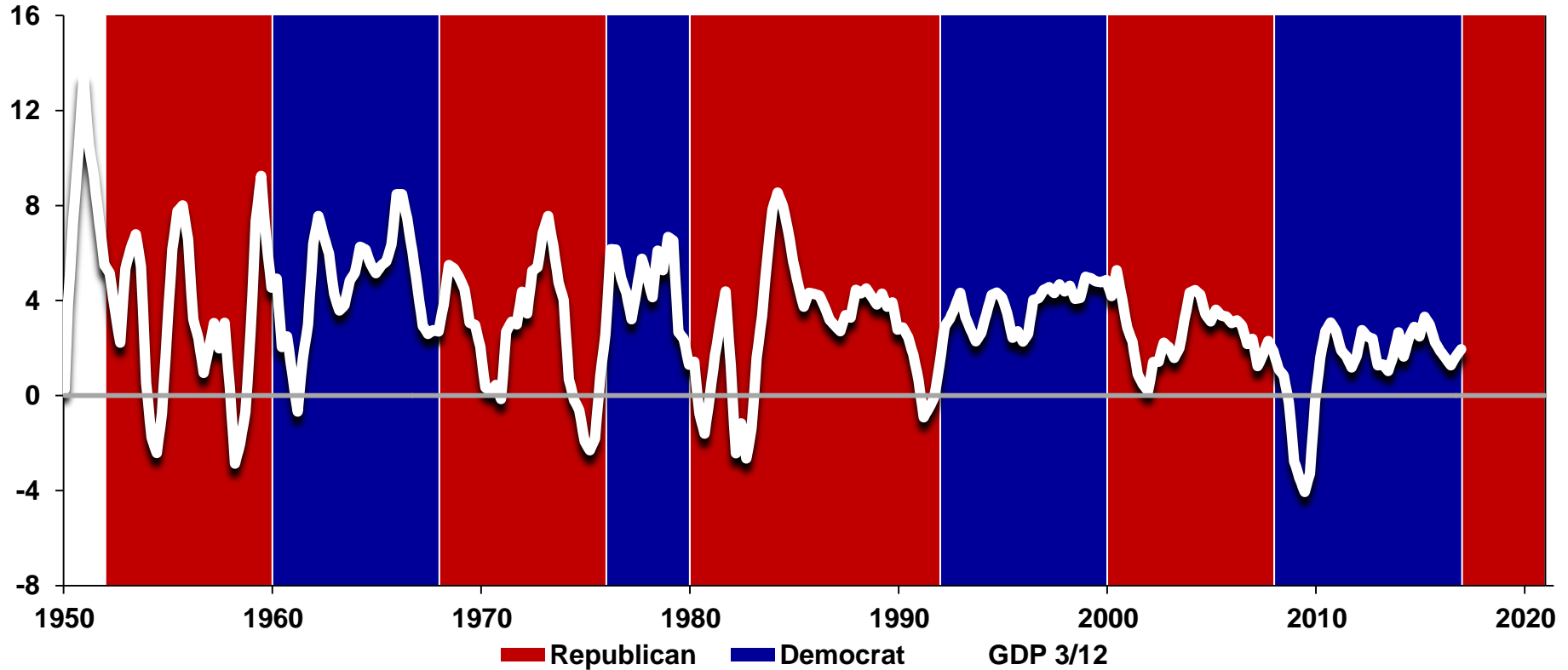


US GDP by Consumption, 2014



The consumer
is king

Real Gross Domestic Product

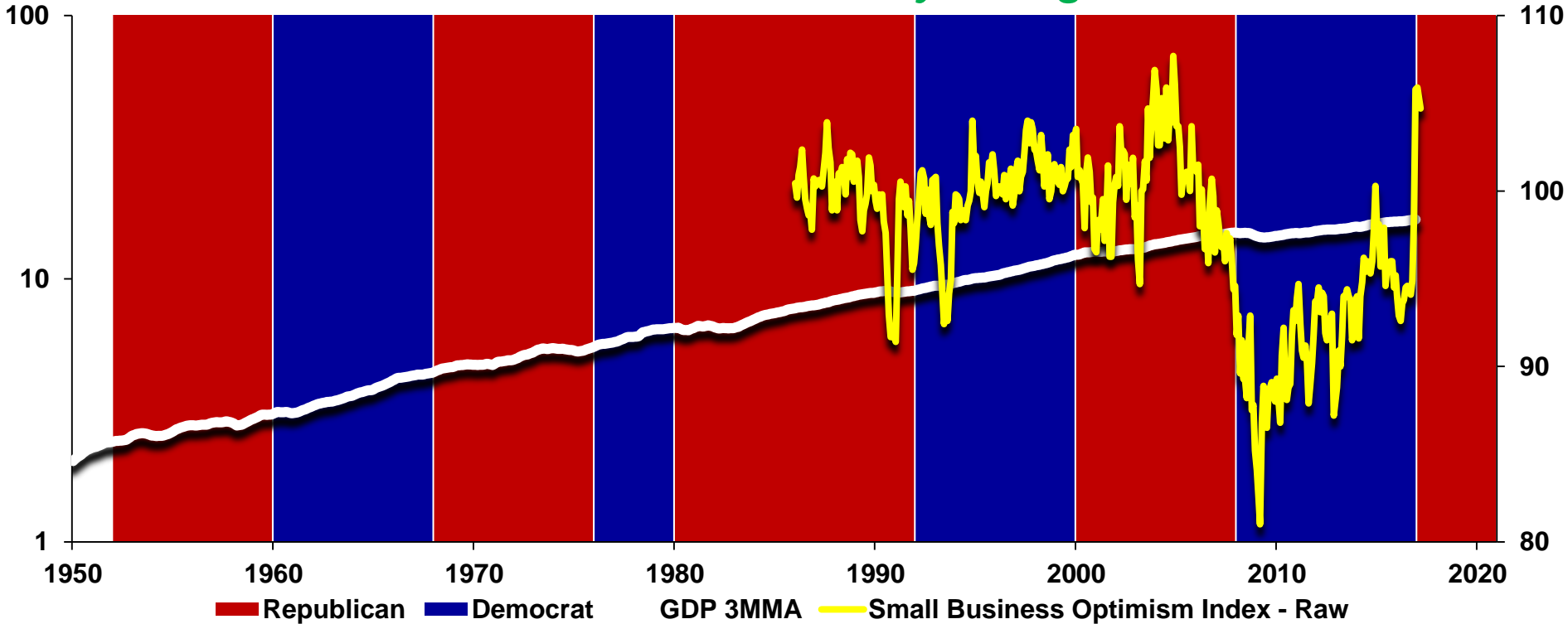


Real Gross Domestic Product to Small Business Optimism Index

Consumer Confidence at 15-year high in Dec

GDP (trils\$)

Small Business



Data Preparation

	Raw	3MMT	3/12	12MMT	12/12
May-15	1.5				
Jun-15	1.5				
Jul-15	1.4	4.4			
Aug-15	1.5	4.4			
Sep-15	1.3	4.4			
Oct-15	1.3	4.2			
Nov-15	1.6	4.1			
Dec-15	1.6	4.2			
Jan-16	1.5	4.5			
Feb-16	1.7	4.7			
Mar-16	1.6	4.8			
Apr-16	1.7	4.8		18.0	
May-16	1.7	5.0		18.2	
Jun-16	1.7	5.0		18.4	
Jul-16	1.6	5.1	15.9%	18.6	
Aug-16	1.7	5.0	13.6%	18.8	
Sep-16	1.5	5.0	13.6%	19.0	26.7%
Oct-16	1.5	4.8	14.3%	19.2	25.5%
Nov-16	1.9	4.7	14.6%	19.4	25.2%
Dec-16	1.7	4.9	16.7%	19.7	22.4%
Jan-17	1.7	5.1	13.3%	19.8	20.0%
Feb-17	1.9	5.3	12.8%	20.0	18.3%
Mar-17	1.7	5.3	10.4%	20.2	15.4%
Apr-17	1.7	5.3	10.4%	20.3	12.7%

DATACAST !

3/12 Rate-of-Change

$$= \frac{\text{April 2017 3MMT}}{\text{April 2016 3MMT}} \times 100 - 100$$

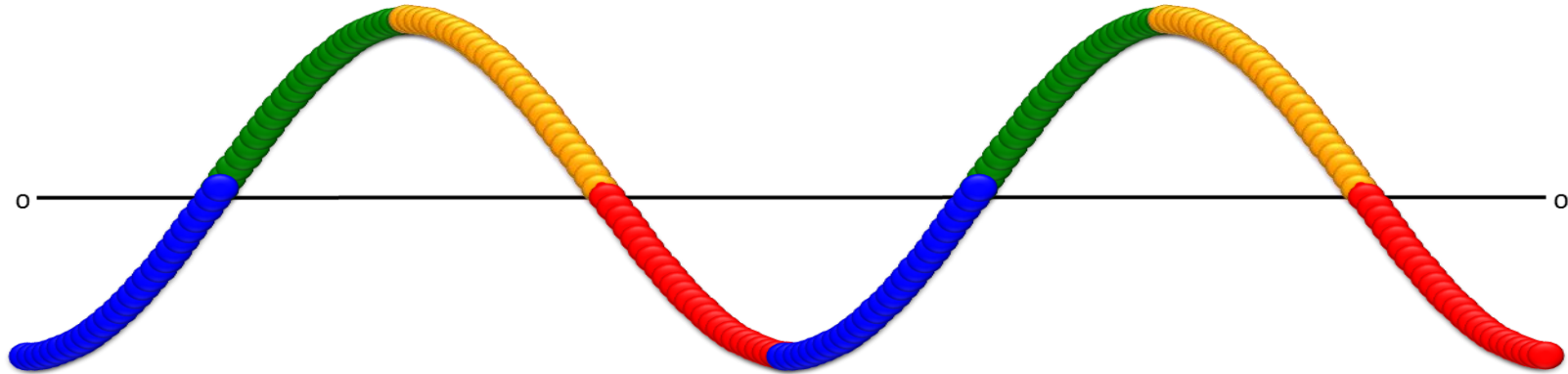
$$= \frac{5.3}{4.8} \times 100 - 100 = 10.4\%$$

12/12 Rate-of-Change

$$= \frac{\text{April 2017 12MMT}}{\text{April 2016 12MMT}} \times 100 - 100$$

$$= \frac{20.3}{18.0} \times 100 - 100 = 12.7\%$$

Business Cycles



Phase A - Recovery

Annual Sales are **BELOW** Year-Ago Levels, but the Rate-of-Decline is **SLOWING**.

Phase B – Accelerating Growth (Best)

Annual Sales are **ABOVE** Year-Ago Levels, and are **GROWING** at a **RAPID** Pace.

Phase C – Slower Growth (Caution)

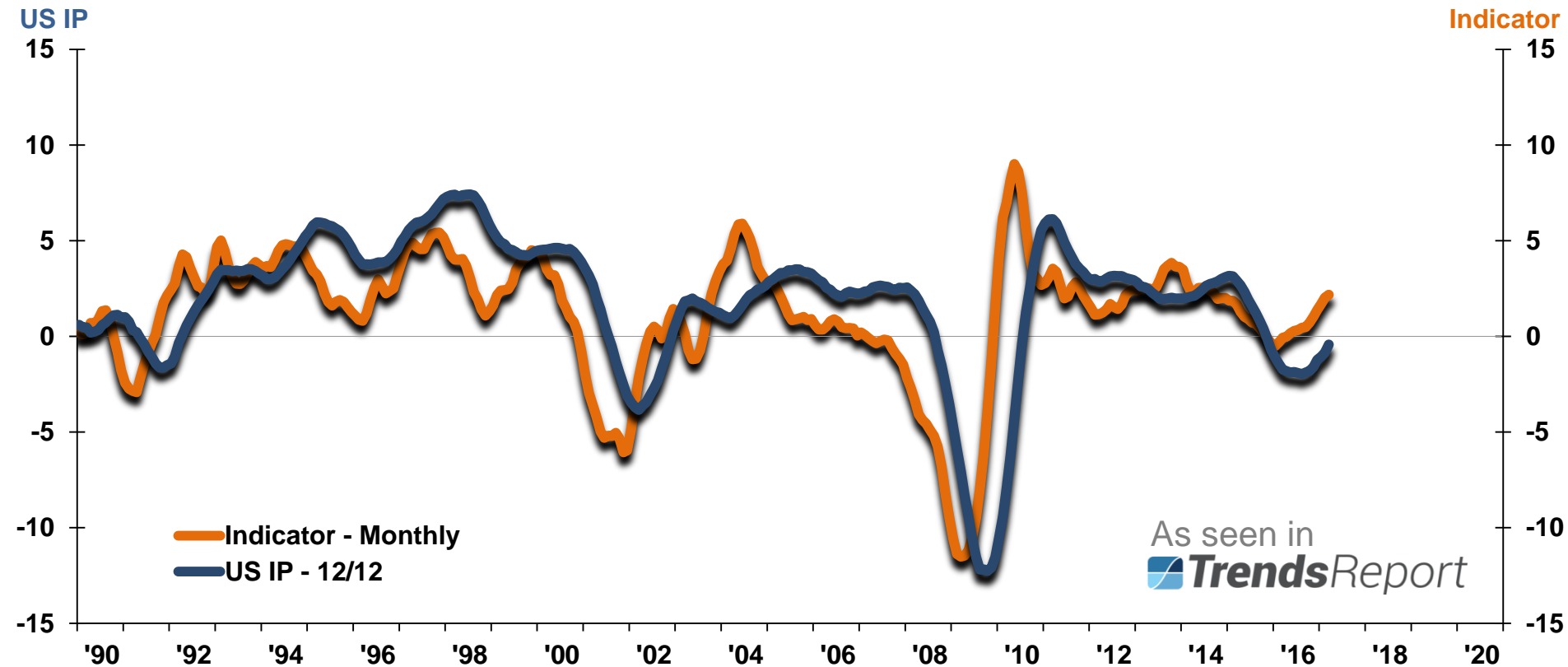
Annual Sales are **ABOVE** Year-Ago Levels, BUT the Rate-of-Growth is **SLOWING**

Phase D - Recession

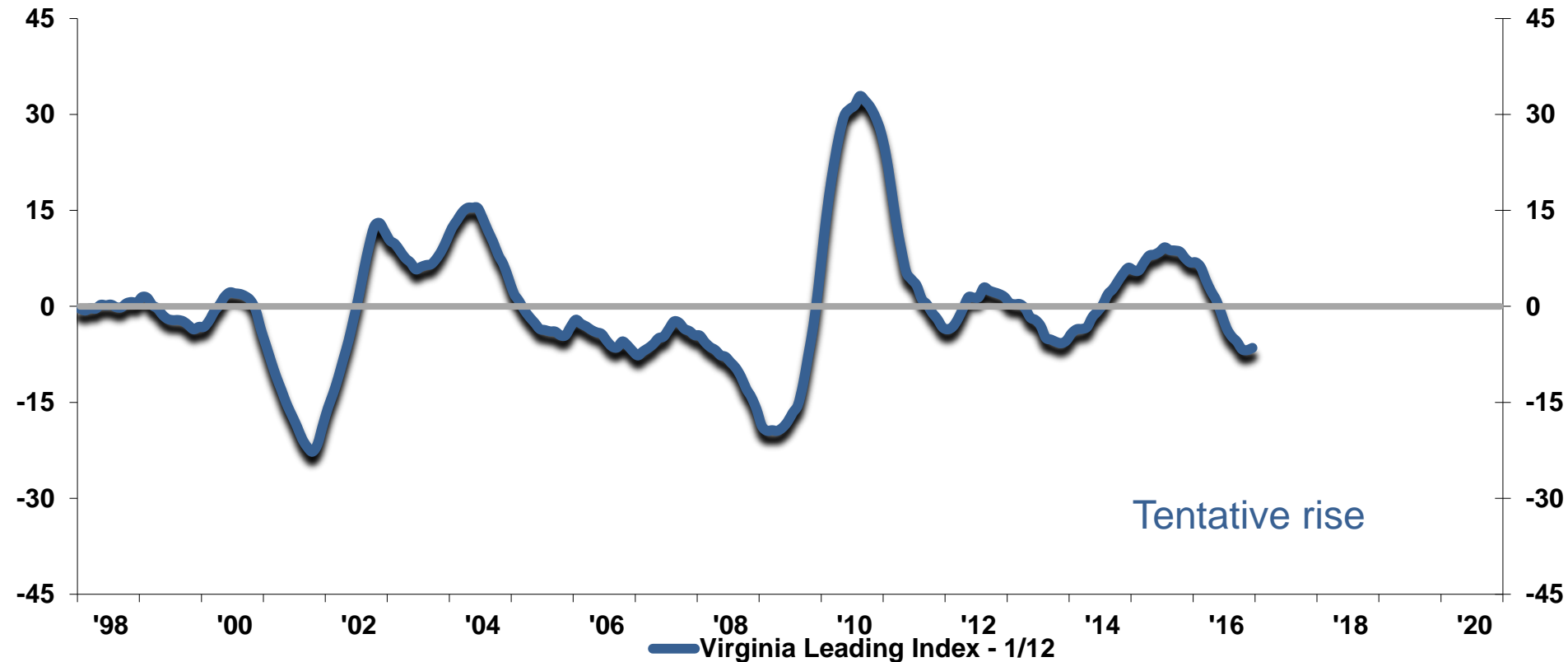
Annual Sales are **BELOW** Year-Ago Levels, and are **DECLINING** at a **RAPID** Pace.

US Industrial Production to ITR Leading Indicator™

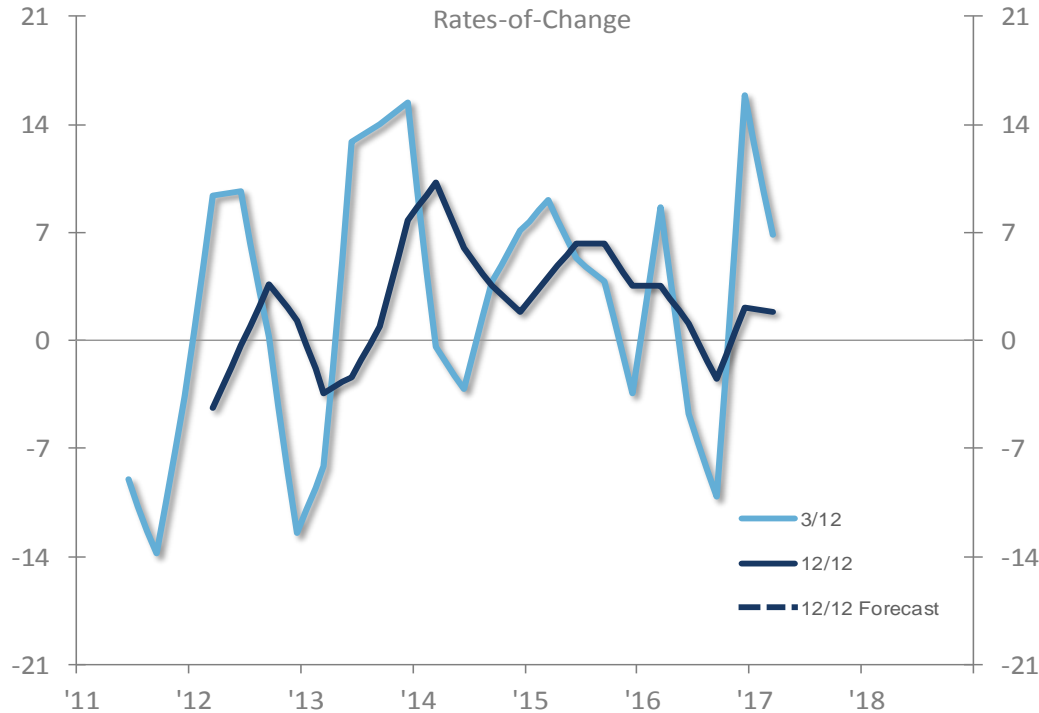
Reported in *ITR Trends Report – ITR Advisor*



Virginia Leading Index



VA CEO Economic Outlook Suvery



PHASE

Phase C

Slower Growth

QUARTERLY GROWTH

(3/12)

6.8%

ANNUAL GROWTH

(12/12)

1.8%

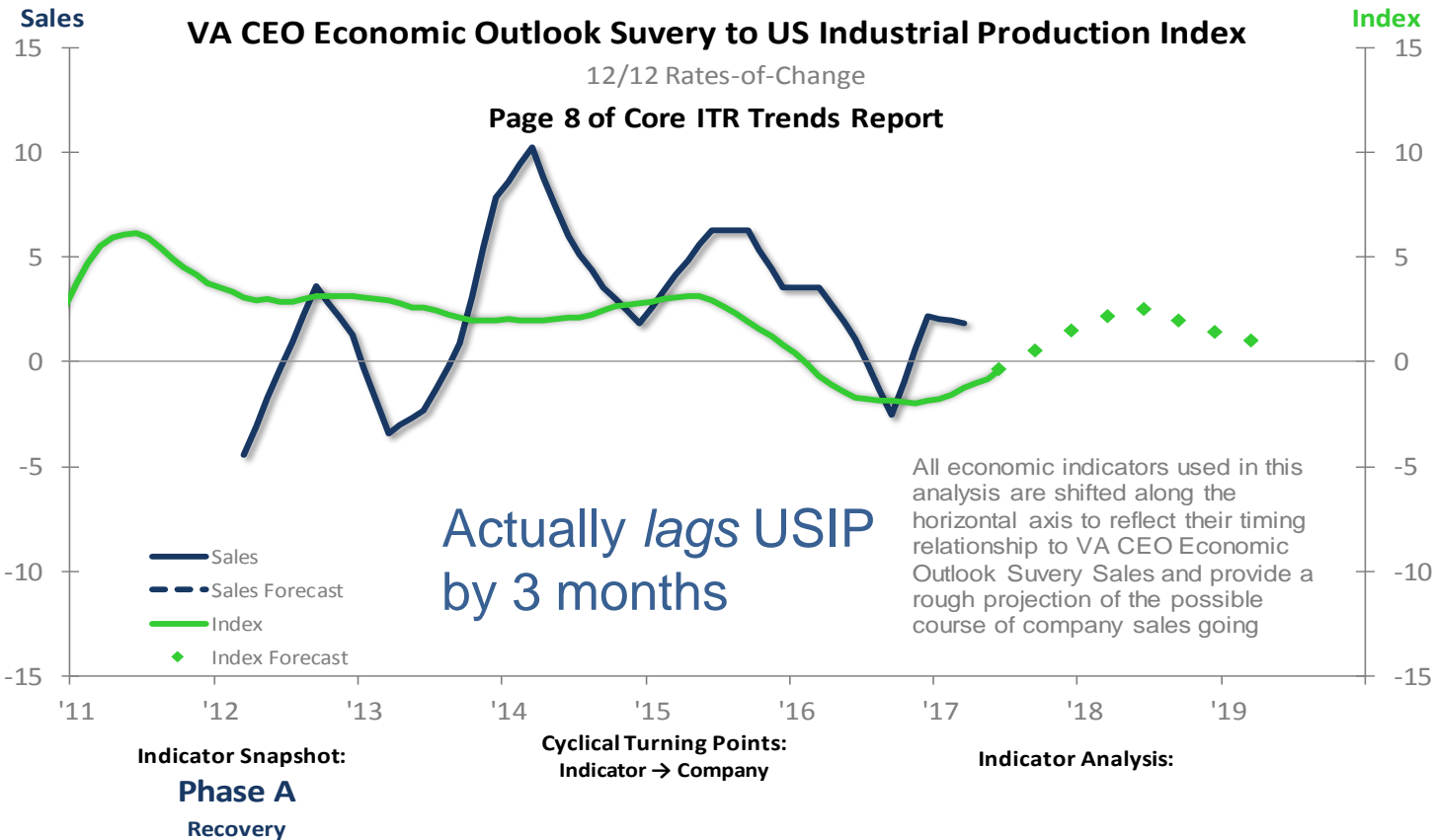
NEXT 12/12 LOW

???

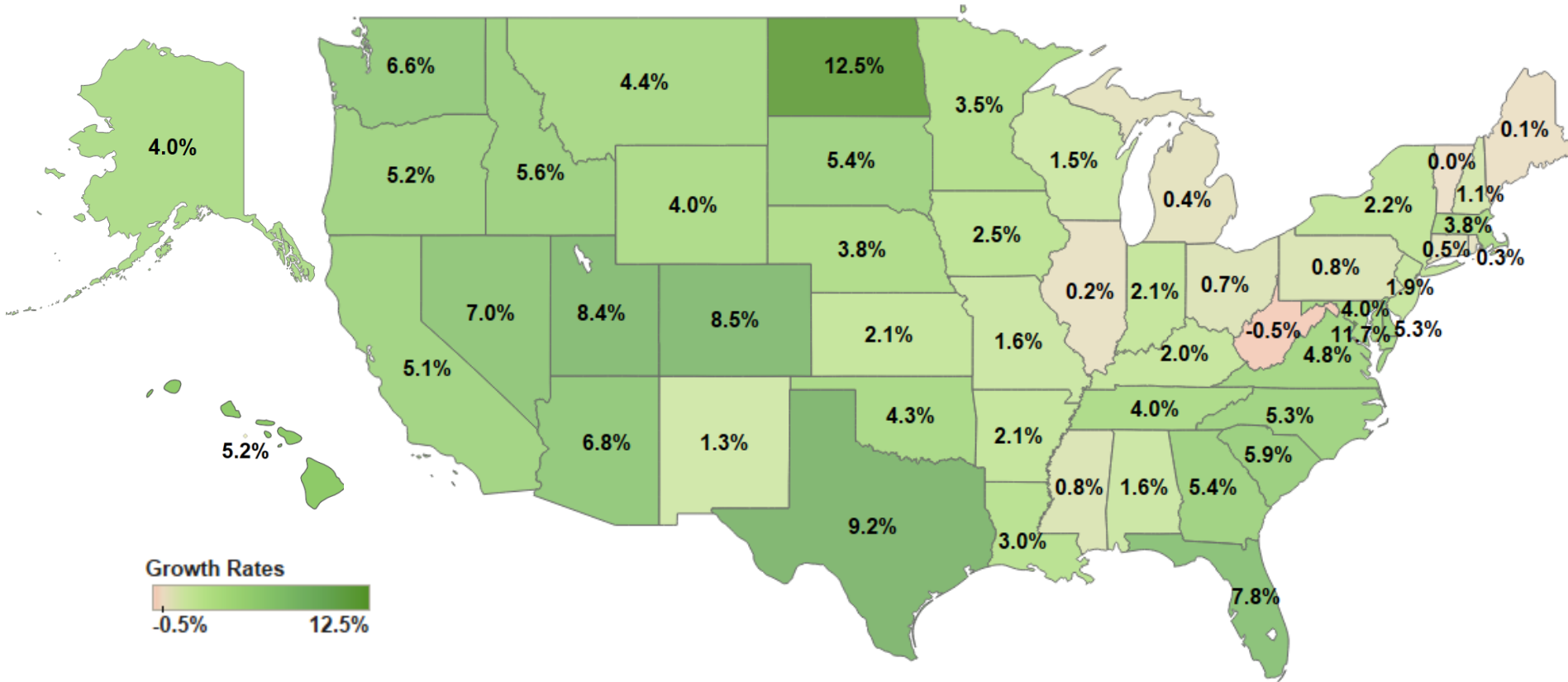
NEXT 12/12 HIGH

???

Surge in 4Q, what is relationship with economy??



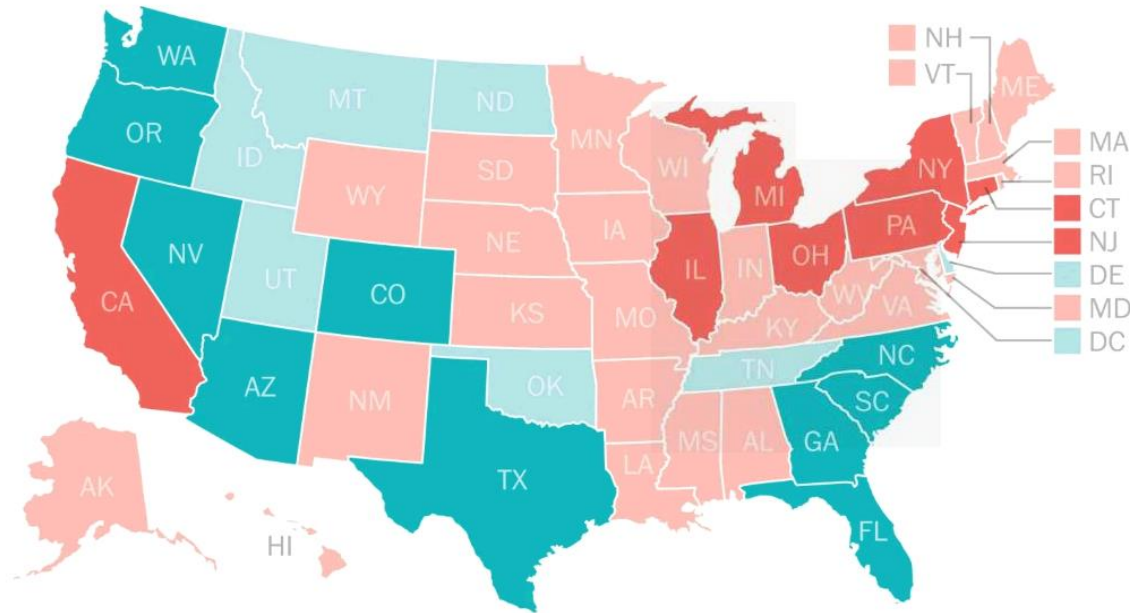
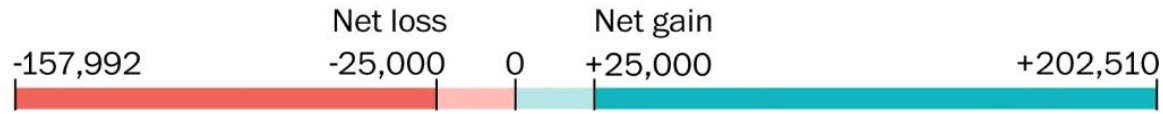
State Population Growth Rates



Growth Rates



Net Migration Between States, July 2014-July 2015



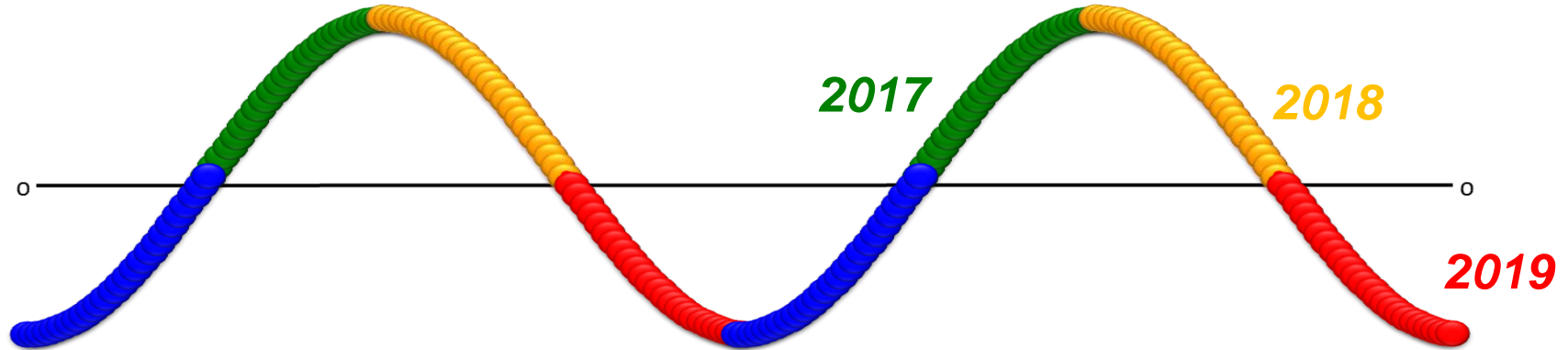
Note: Does not include immigration into the U.S.

What does this mean for you?



- Leading Indicators → fading headwinds, acceleration into 2018
- A 'Great' recession (or a mild one) can undermine the best laid plans
- Economic intelligence is the difference between Proactive vs. Reactive decision making

Business Cycles



Phase A - Recovery

Annual Sales are **BELOW** Year-Ago Levels, but the Rate-of-Decline is **SLOWING**.

Phase B – Accelerating Growth (Best)

Annual Sales are **ABOVE** Year-Ago Levels, and are **GROWING** at a **RAPID** Pace.

Phase C – Slower Growth (Caution)

Annual Sales are **ABOVE** Year-Ago Levels, BUT the Rate-of-Growth is **SLOWING**

Phase D - Recession

Annual Sales are **BELOW** Year-Ago Levels, and are **DECLINING** at a **RAPID** Pace.

Lingering Concerns



Those reliant on commodities (S. America, Oil Producers)

International Trade – NAFTA, Brexit, etc.

China: Debt, Devaluation, Doubtful growth

US Debt

US Health Care

What's happened with oil prices?

Rapid supply growth in the US from 5.5M bbl/day to over 9.6M bbl/day post recession.

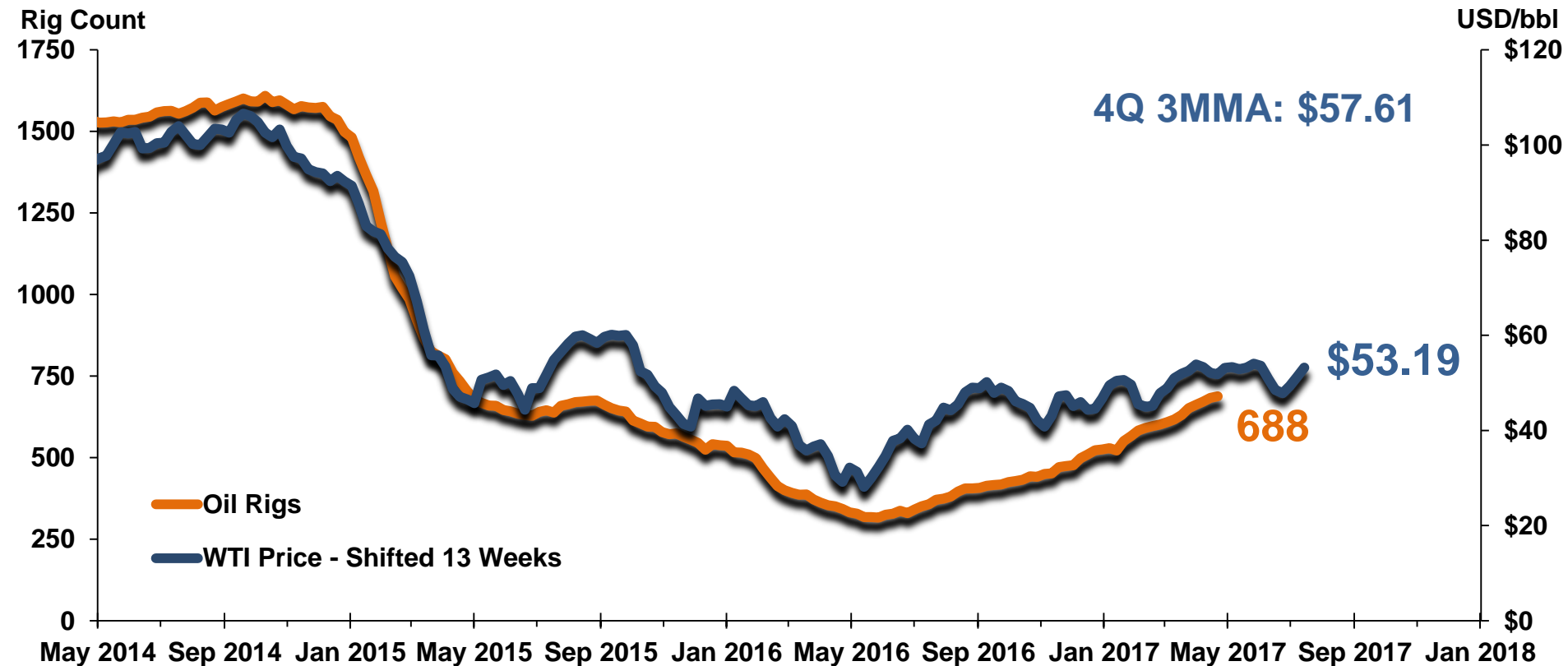
This supply growth had been largely offset by supply disruption in Iran and Libya.

Libyan production returned mid-2014, adding more than 1.5M bbl/day to global supply.

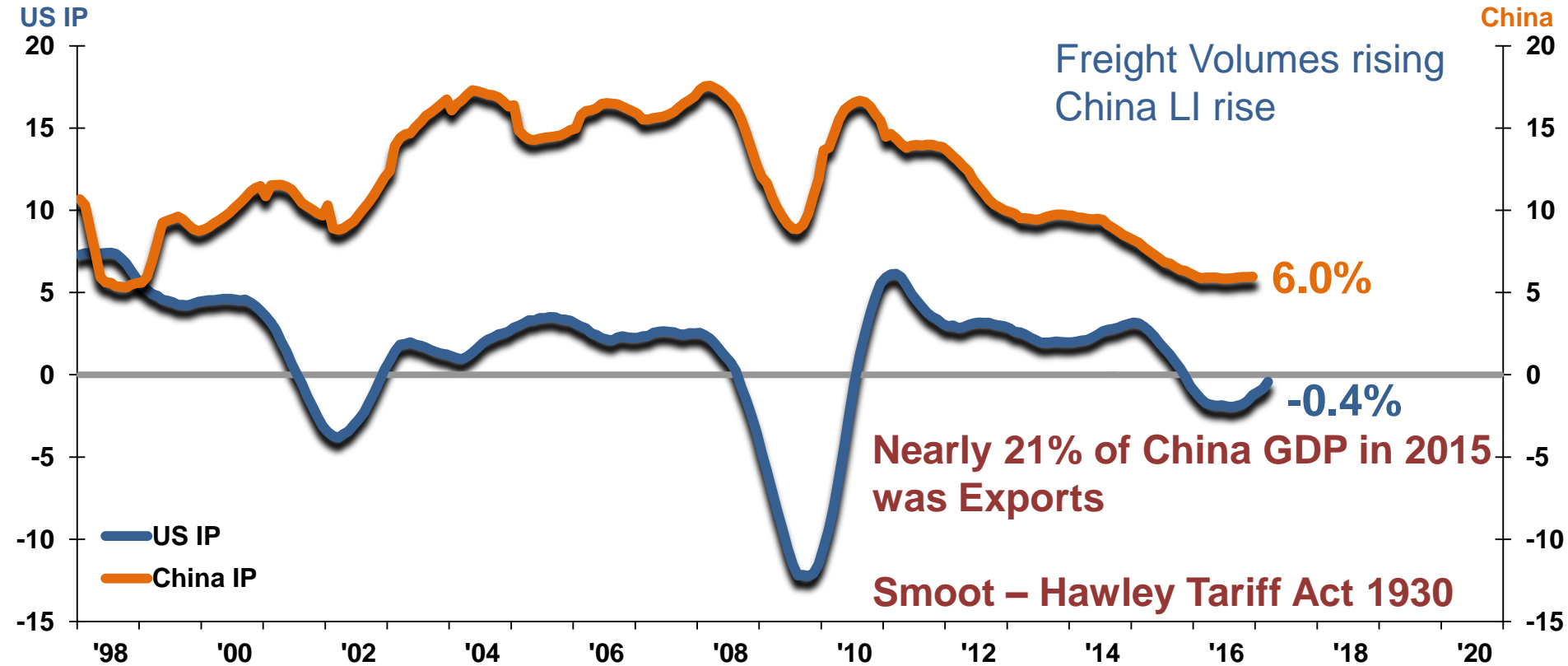
Saudi Arabia decided not to pull back supply, choosing to defend its market share.

Slowing growth in China (and US) contributed to the significant downward pressure on oil demand.

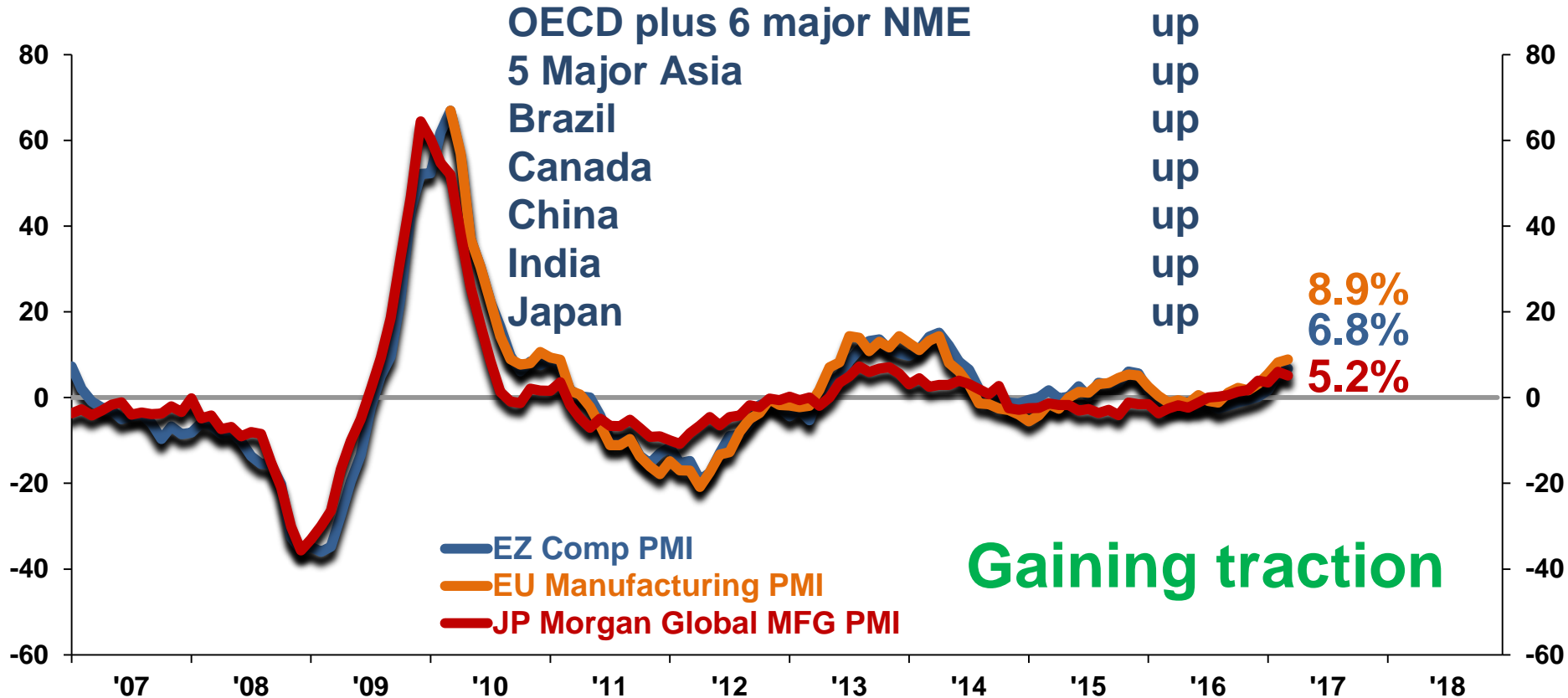
Weekly Oil Price & Rig Count



US Industrial Production to China Industrial Production



Global Leading Indicators



Signs of
Encouragement

Leading indicator improvement in ITRLI, USLI, PMI,
Utilization Rates

Favorable interest rates, banks ramping up lending,
rising corporate profitability

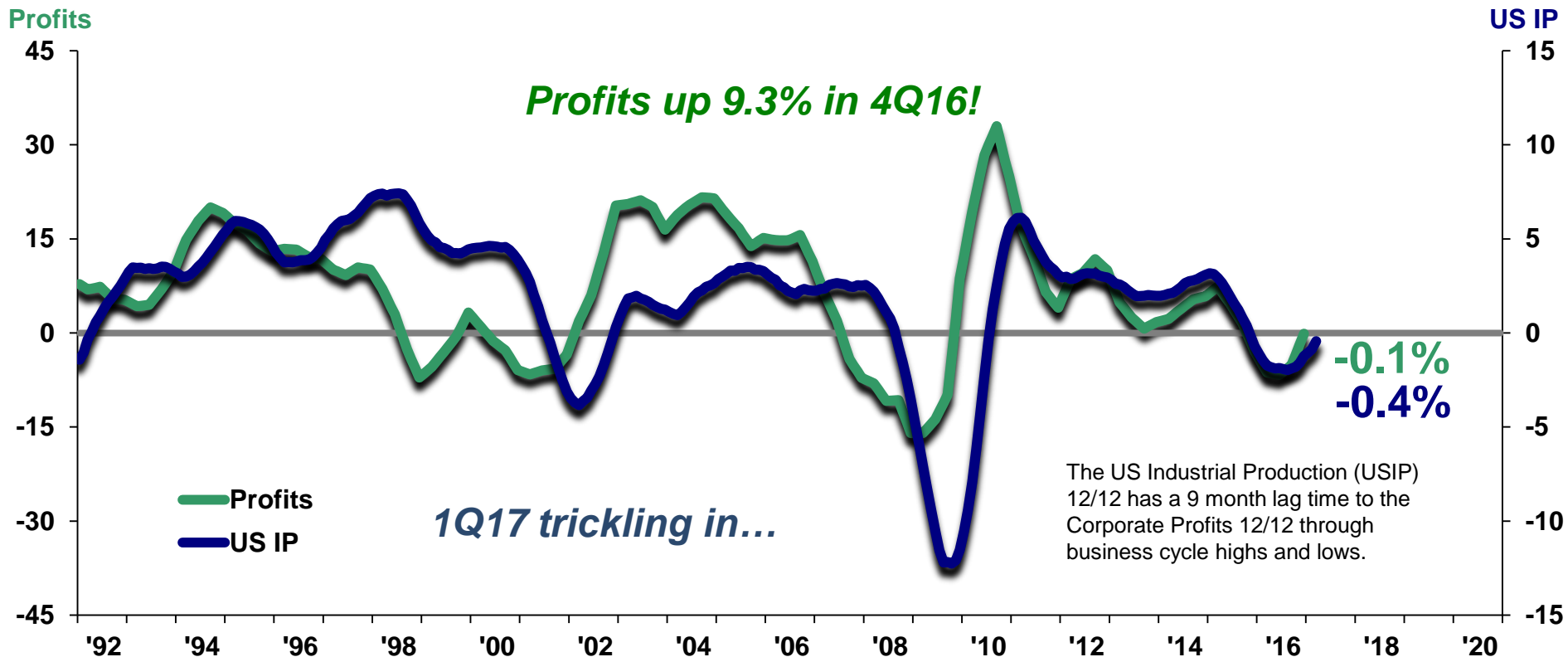
Consistent growth in the residential market

Well positioned consumer, rising wages, robust
consumer spending

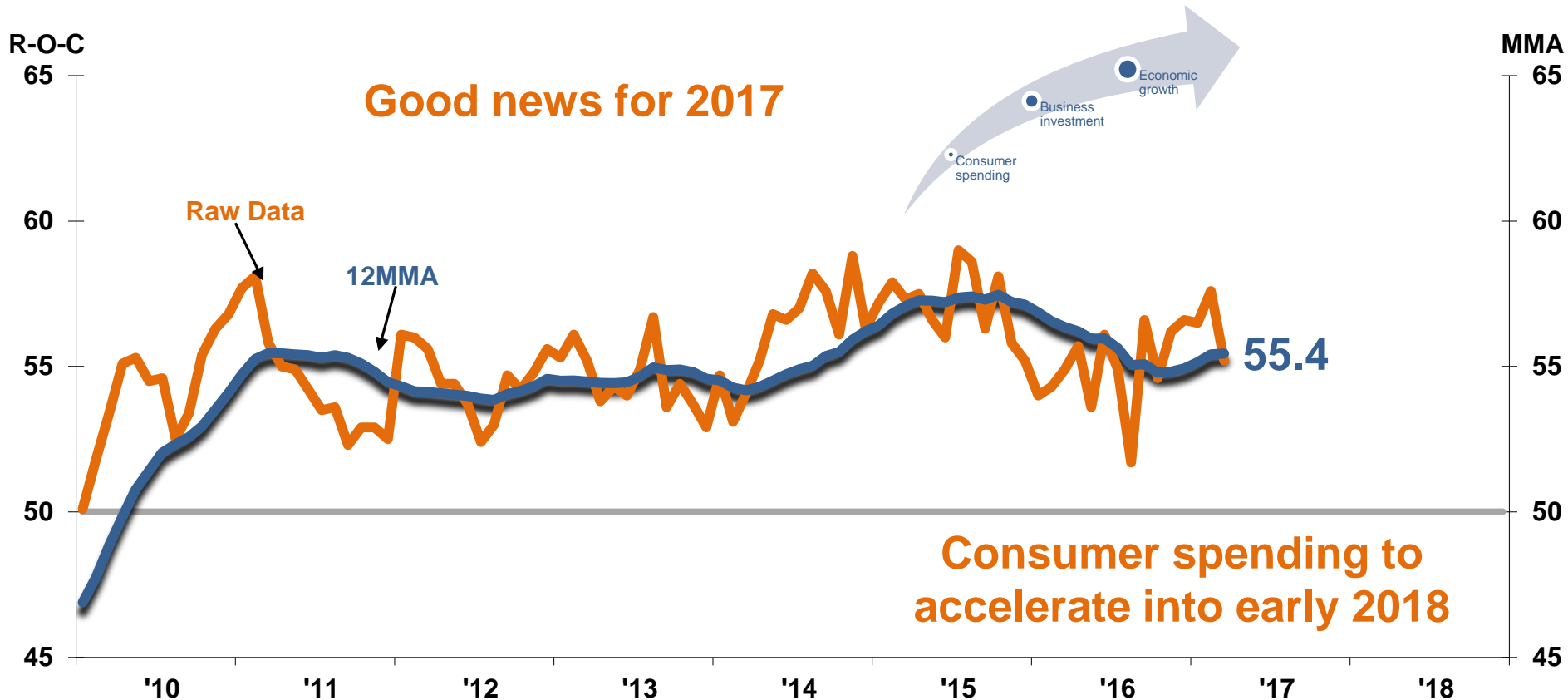
Building upside pressure on commodities

Nonresidential Construction expansion

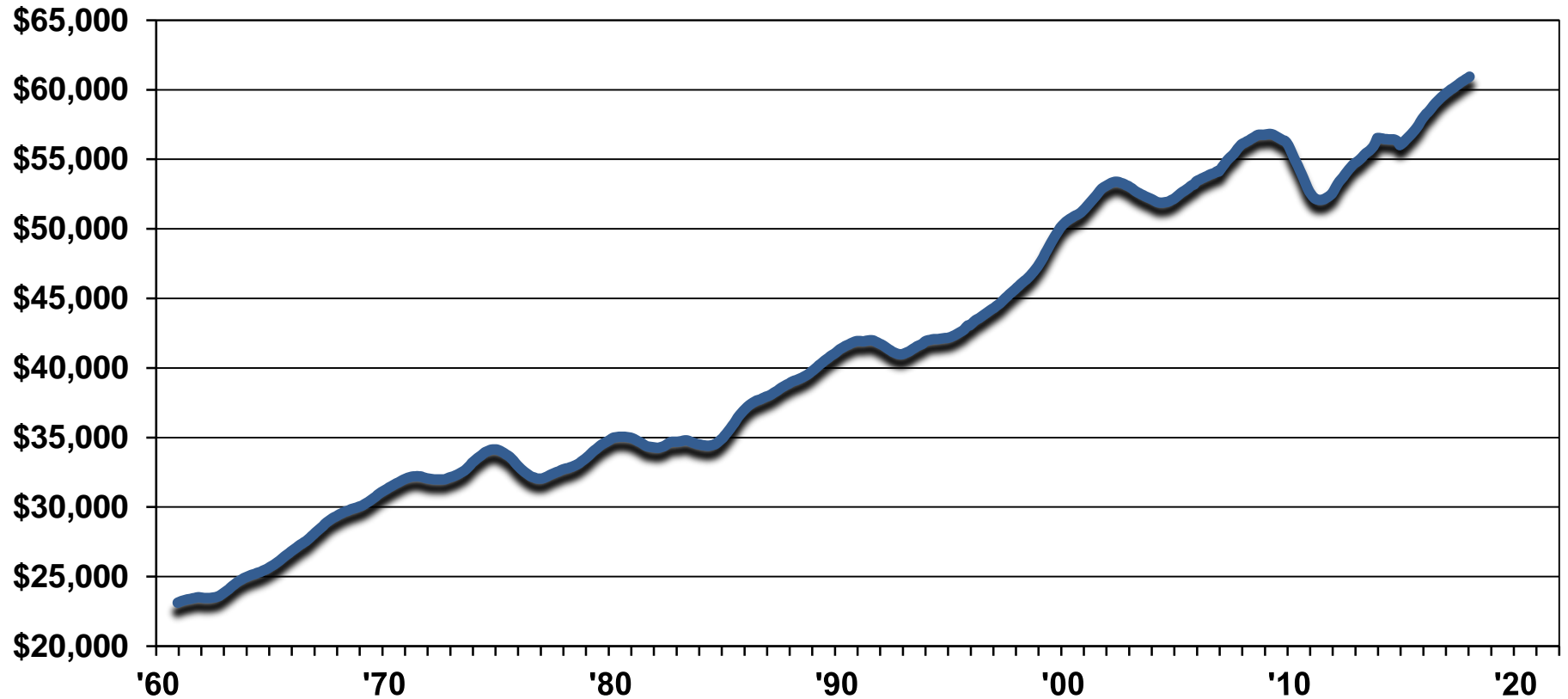
Corporate Profits to US Industrial Production



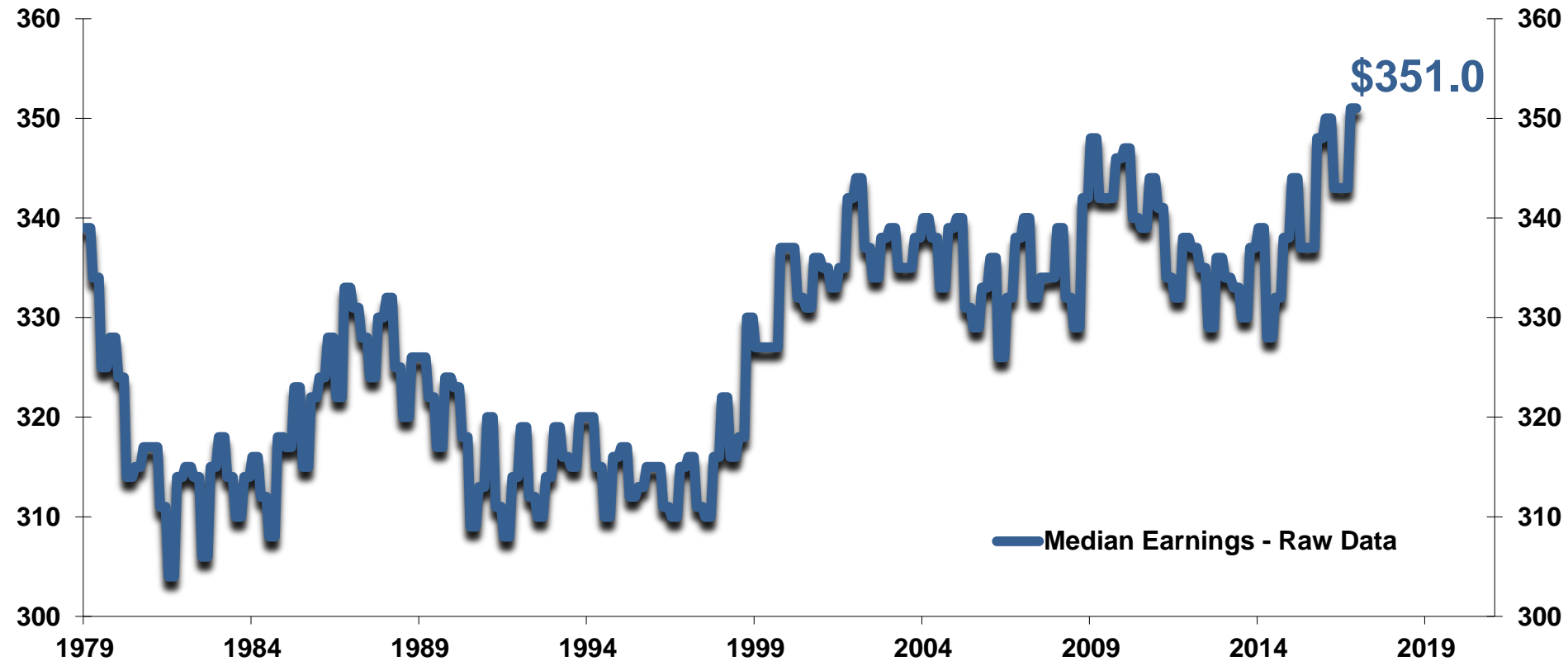
Non-Manufacturing Purchasing Managers Index



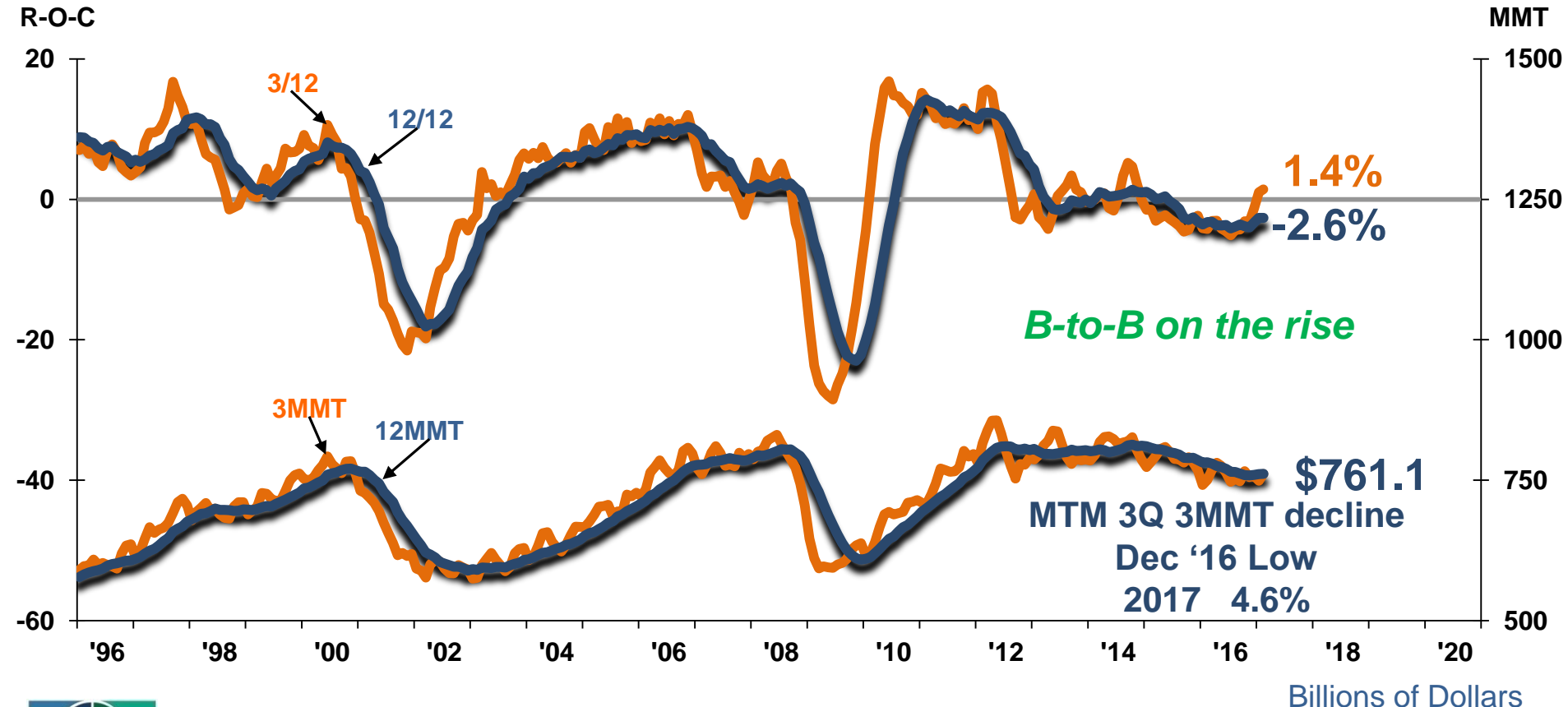
Real Personal Income Less Transfer Receipts Average per Person Age 18 to 65



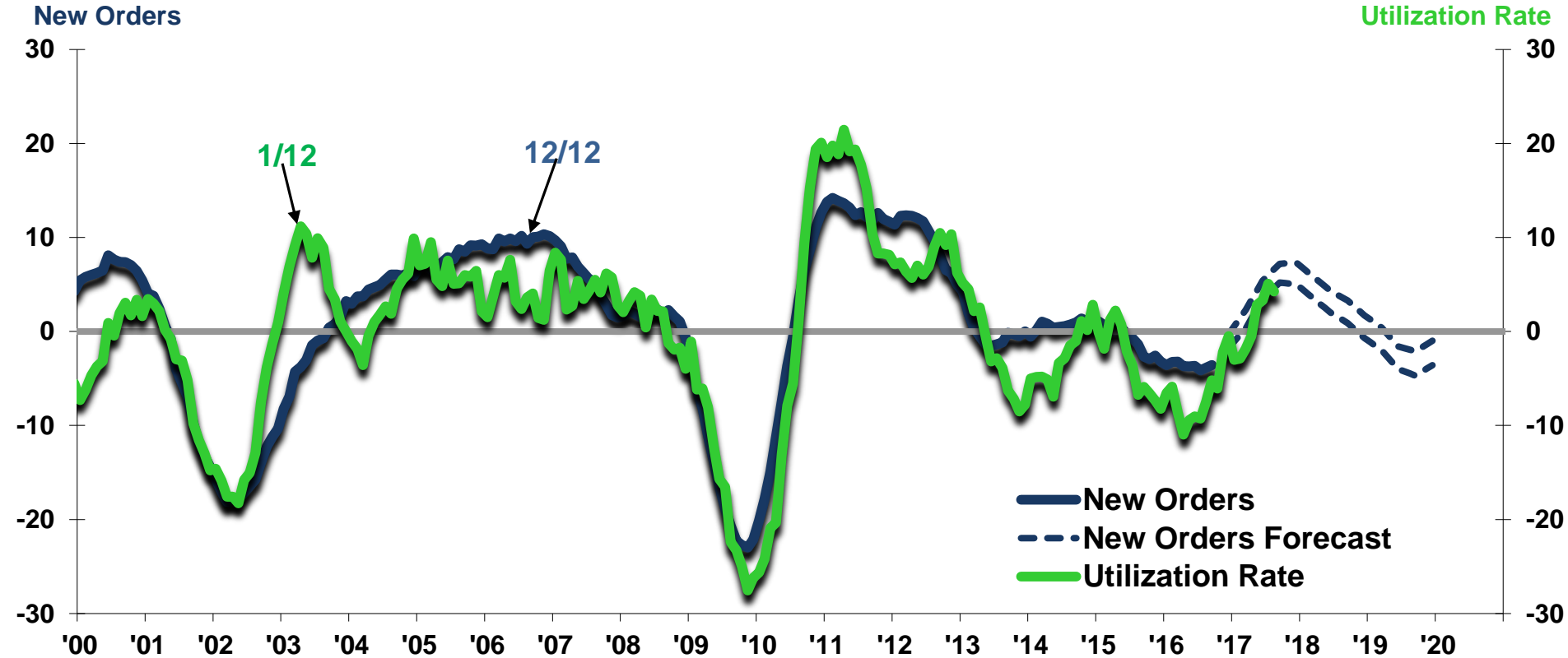
US Median Annual Earnings (deflated)



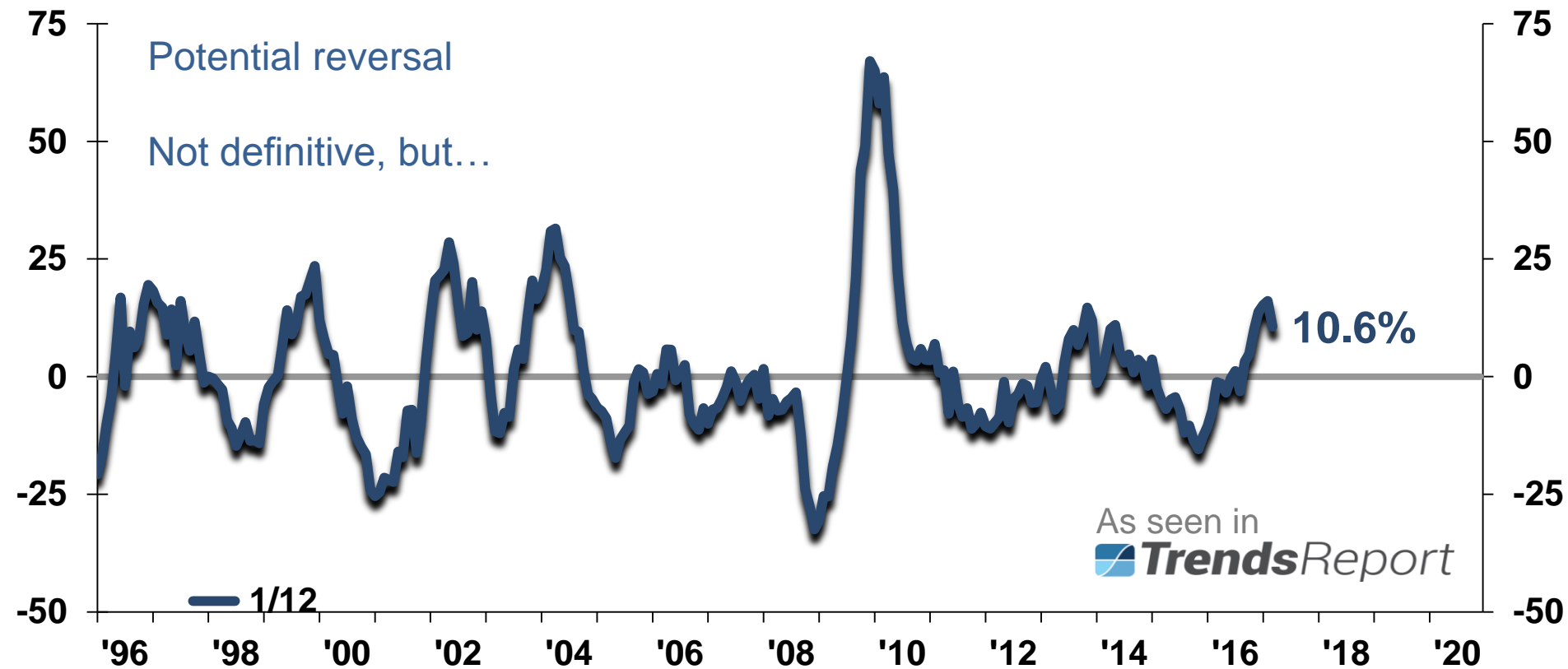
Nondefense Capital Goods New Orders w/o Aircraft



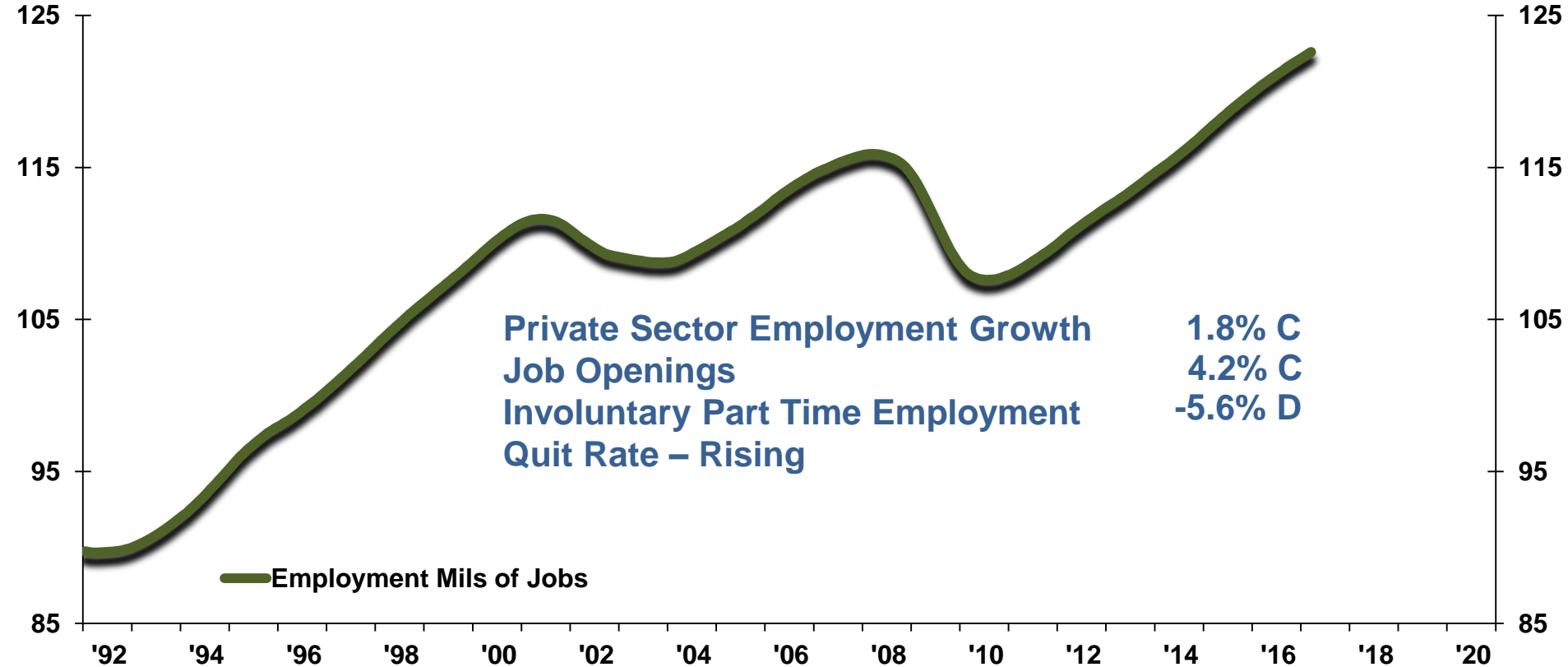
US Nondefense Capital Goods New Orders (excl. Aircraft) to Manufacturing Capacity Utilization



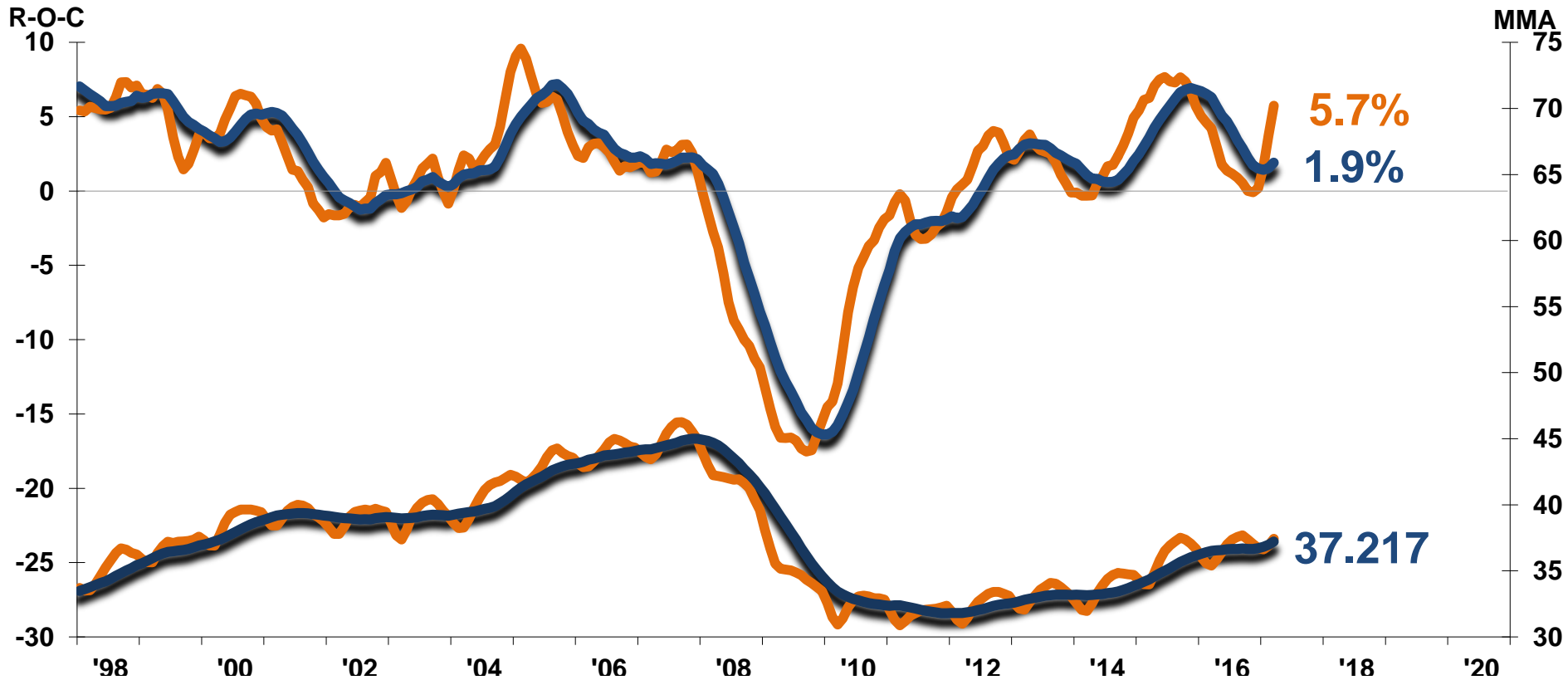
Purchasing Managers Index



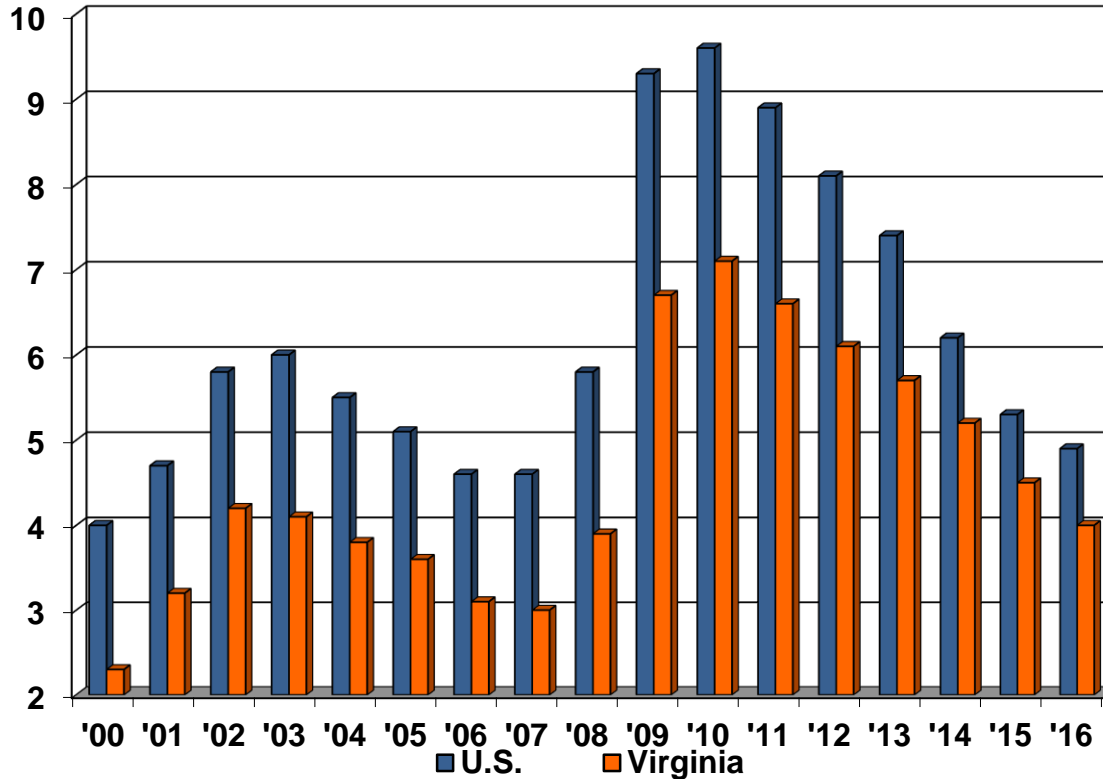
US Private Sector Employment



Richmond MSA Construction Industry Employment



US to Virginia Unemployment Rate

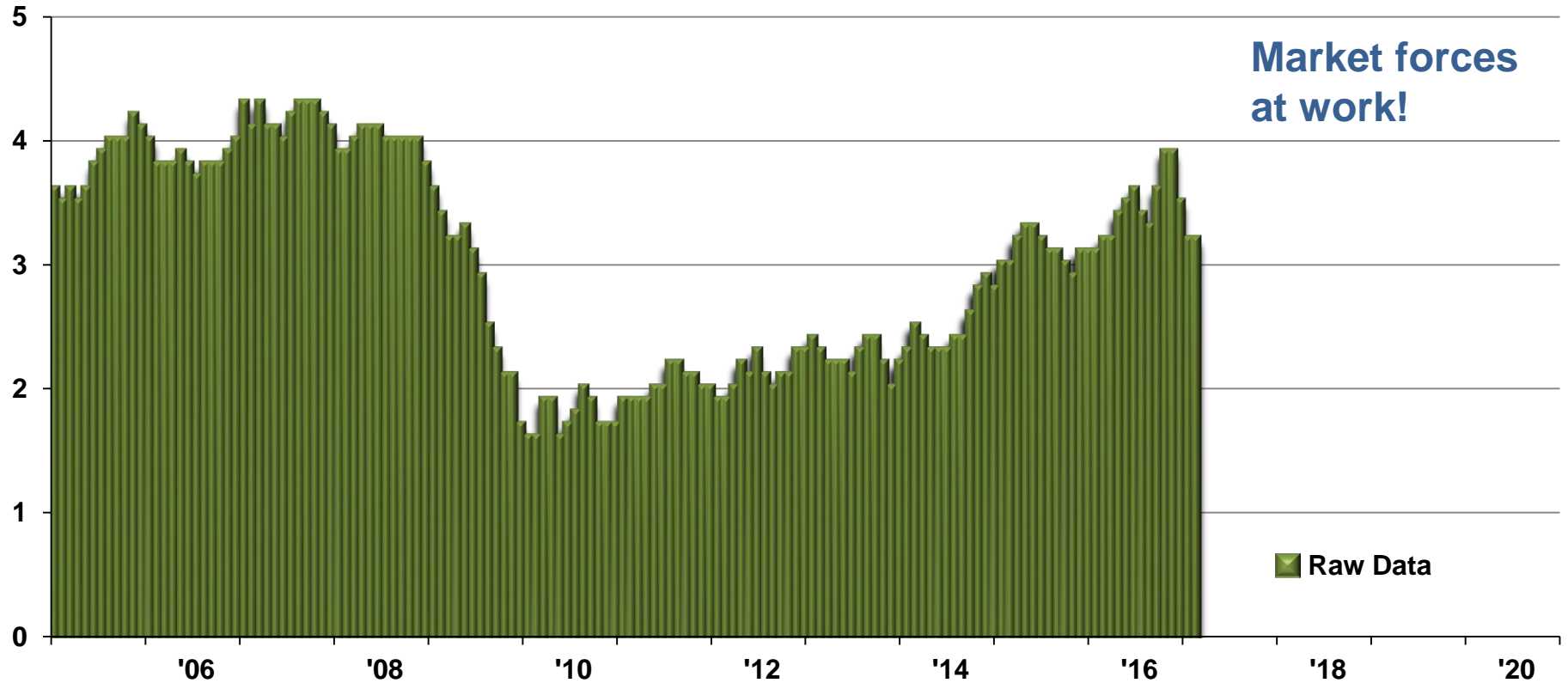


February 2017

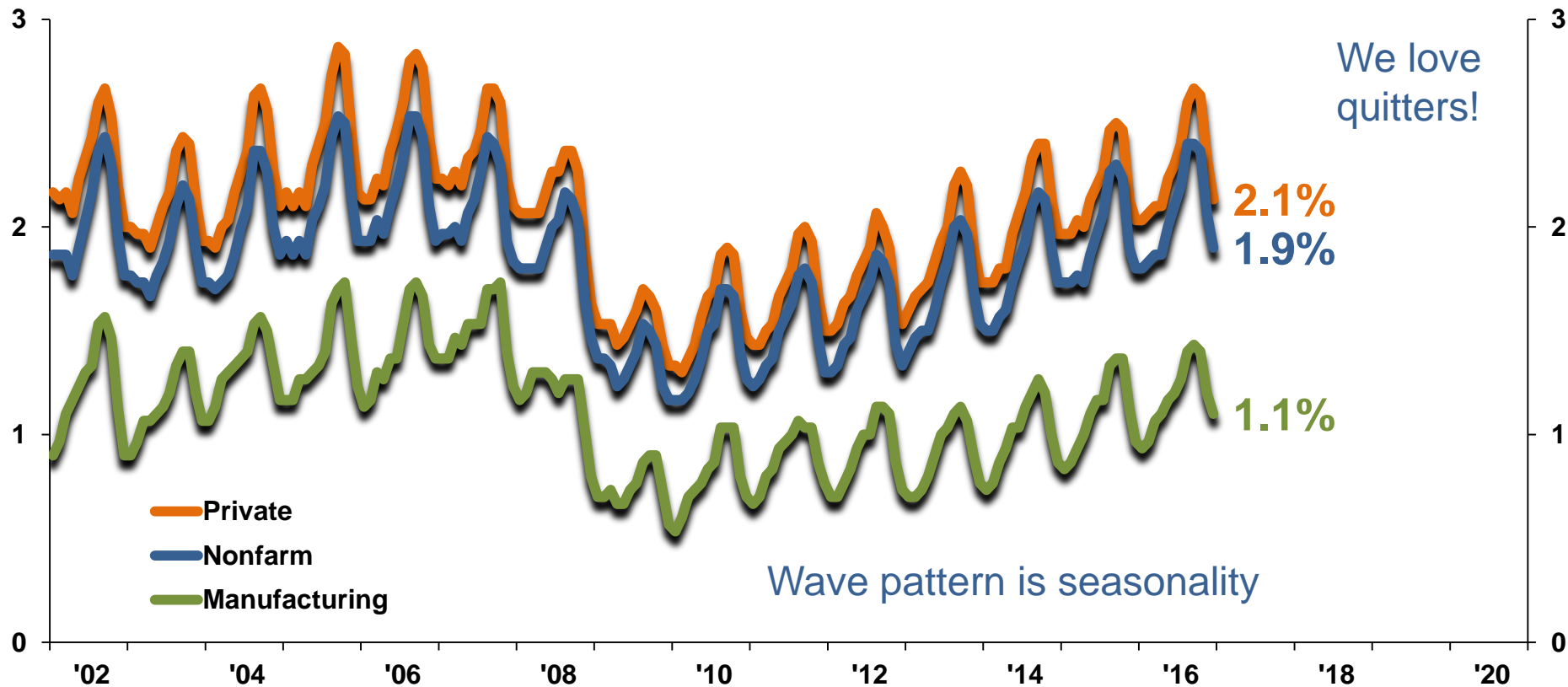
US 4.7%

VA 3.9%

US Overall Wage Growth



US Nonfarm, Total Private, and Manufacturing Quit Rates



The Generations Defined

The Millennial Generation

Born: After 1980

Age of adults in 2014: 18 to 33*

Share of adult population: 27%

Share non-Hispanic white: 57%

Ind 50%; Dem 27%; Rep 17%

Generation X

Born: 1965 to 1980

Age in 2014: 34 to 49

Share of adult population: 27%

Share non-Hispanic white: 61%

Ind 39%; Dem 32%; Rep 21%

The Baby Boom Generation

Born: 1946 to 1964

Age in 2014: 50 to 68

Share of adult population: 32%

Share non-Hispanic white: 72%

Ind 37%; Dem 32%; Rep 25%

The Silent Generation

Born: 1928 to 1945

Age in 2014: 69 to 86

Share of adult population: 12%

Share non-Hispanic white: 79%

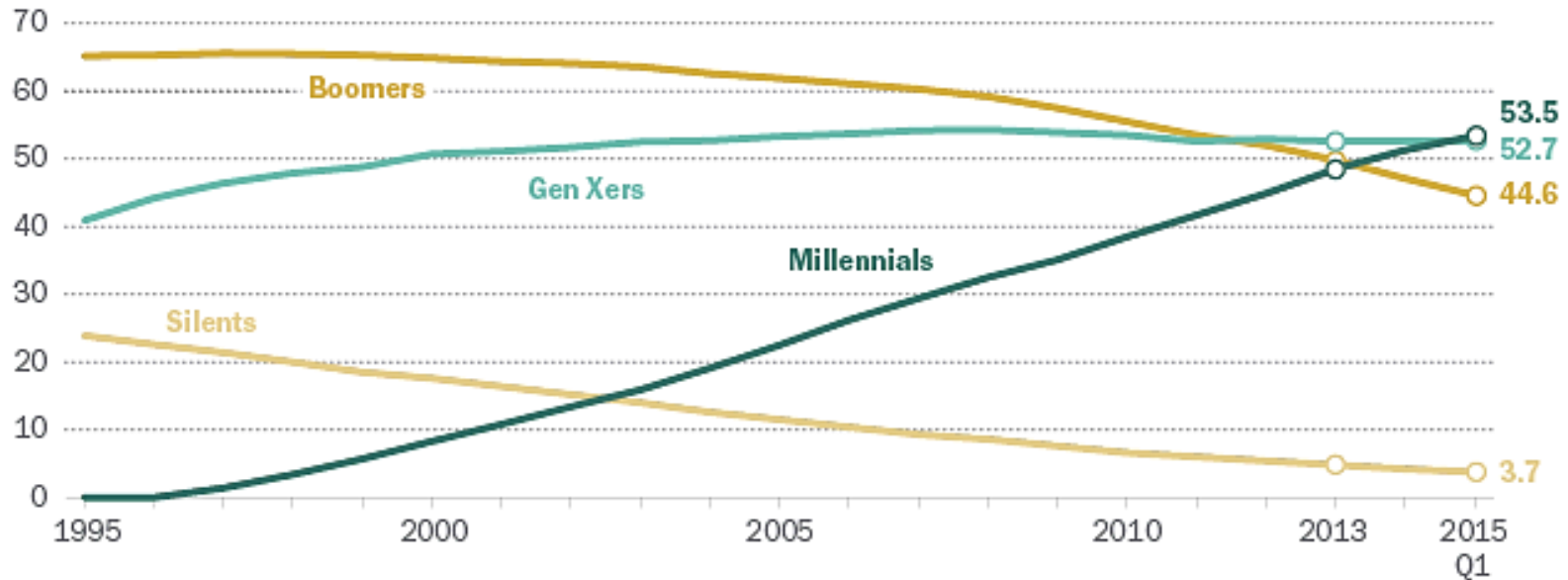
Ind 34%; Dem 32%; Rep 29%

*The youngest Millennials are in their teens. No chronological end point has been set for this group.

Note: The “Greatest Generation”, which includes those born before 1928, is not included in the analysis due to the small sample size. Share of total population and share non-Hispanic white are based on adults only in 2013; 85-year-old Silents are not included due to data limitations.

Source: March 2013 Current Population Survey (IPUMS) and Pew Research surveys, January and February 2014

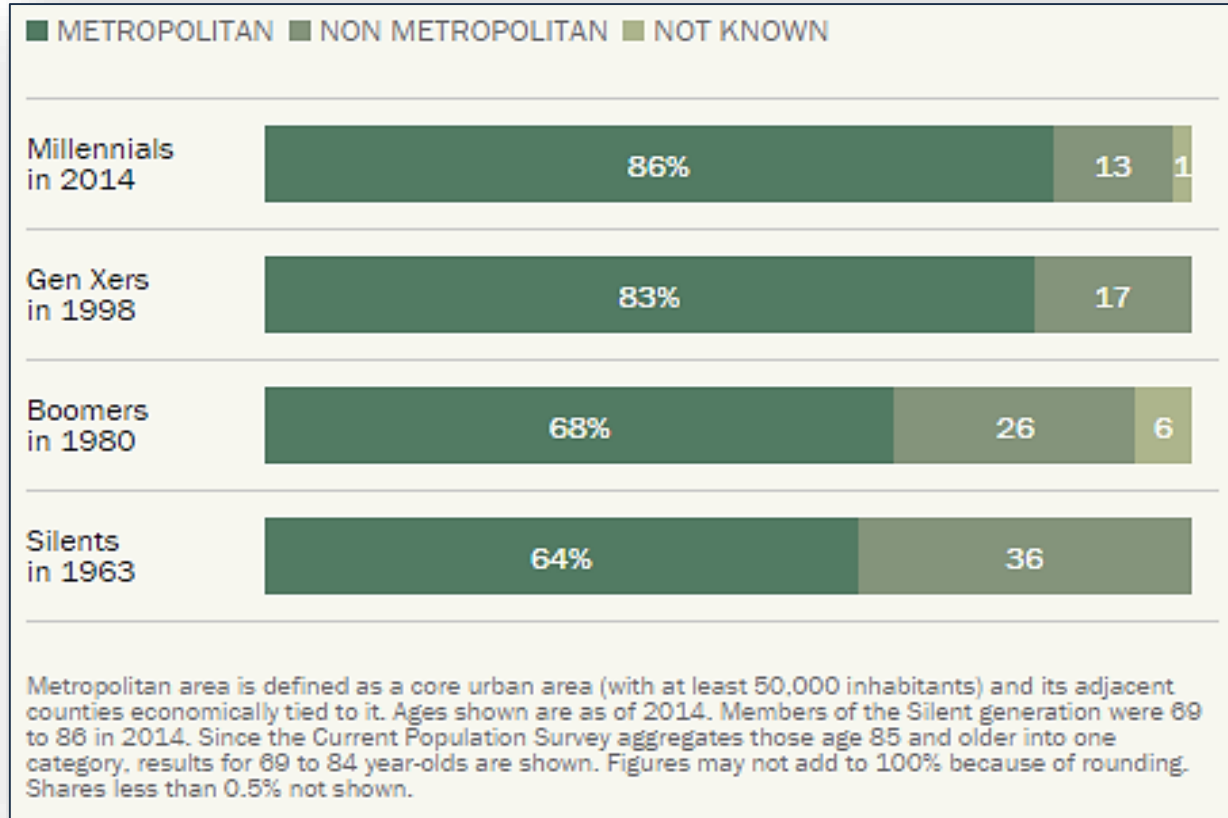
US Labor Force by Generation, 1995-2015



Note: Annual averages plotted 1995-2014. For 2015 the first quarter average of 2015 is shown. Due to data limitations, Silent generation is overestimated from 2008-2015.

Source: Pew Research Center tabulations of monthly 1995-2015 Current Population Surveys, Integrated Public Use Microdata Series (IPUMS)

Where they lived when they were ages 18-33



Millennials that entered work force before or during recession less likely to afford housing now

US Home Ownership rate near 63%, 5-year low

Under age 35? 34.1%, record low

Also – value mobility

Will we age out?

Percent

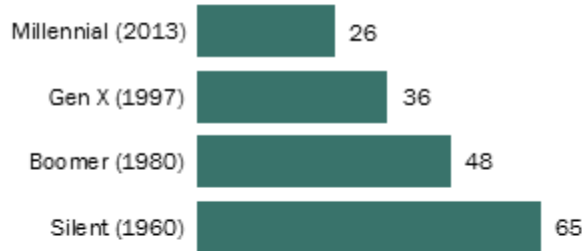
The Decline in Marriage Among the Young

% married at age 18 to 32, by generation

The Decline in Marriage Among the Young

The Decline in Marriage Among the Young

% married at age 18 to 32, by generation



Source: Data from 1980, 1997 and 2013 are from the March Current Population Survey; 1960 data are from the 1960 Census

PEW RESEARCH CENTER

Labor Market Transparency and Liquidity



***The Great Recession
ruptured millennial
loyalty to employers.***

2008: 75% expected to have between 2-5 employers in their lifetime, just 10% thought 6+

Now: just 54% think 2-5, more than 25% say 6 or more

Free Agent mentality – just 6% expect SS benefits



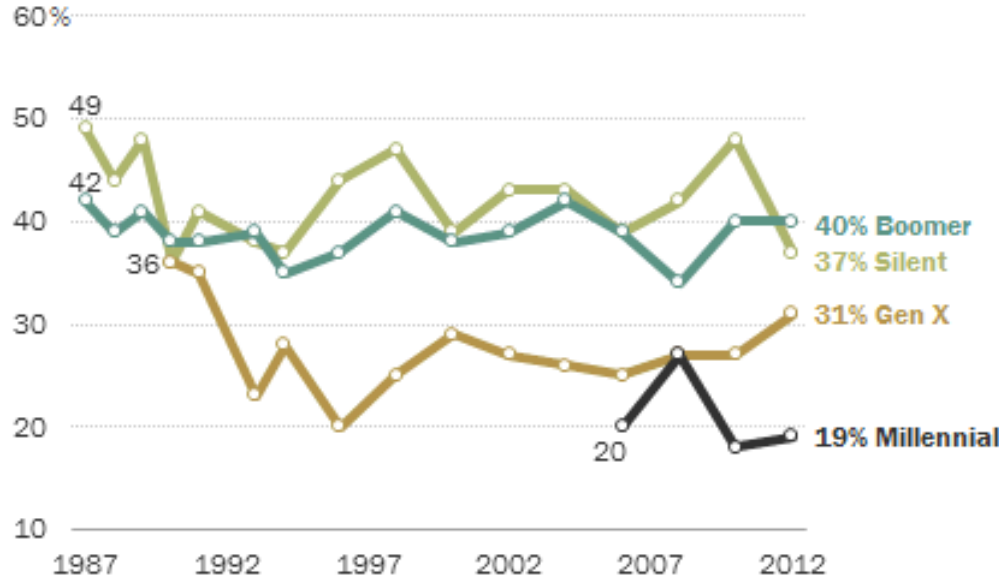
The other “carrots”

- **We want more and more challenging work**
 - Personal benefit and professional development is crucial.
- **Output not hours in office**
 - Happy to put in the hours on big projects, just don't make them sit around if their work is completed
- **Balance and flexibility**
 - Harness my selfishness by making my needs overlap with yours and reward those who work smarter, harder – not just longer.

***This can generate substantial morale boost
and productivity increase***

Millennials Less Trusting of Others

% saying that, generally speaking, most people can be trusted



Question wording: "Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?"

Source: General Social Survey data, 1987-2012

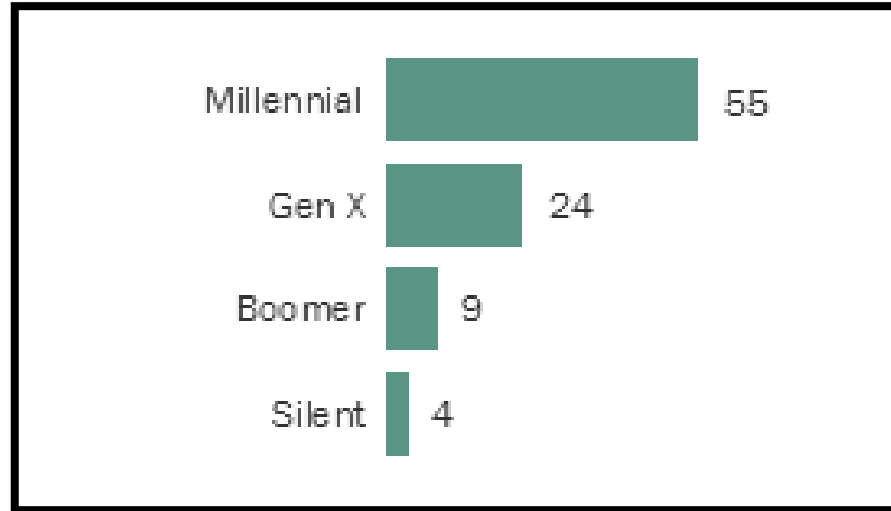
- Employers losing leverage (transparent labor market, shallow roots, etc)
- Free Agent mentality – just 6% expect SS benefits
- *Path visibility*

Looking Ahead

- **Maturing millennials (I know)**
 - rising birth rates/household formation
- **Changes in what we look for from employers**
 - Flexibility, personal growth, avoiding stagnation
- **Movement towards brands/businesses that align with our values**
 - Somewhere I get my paycheck vs somewhere I want to work

Generations and “Selfies”

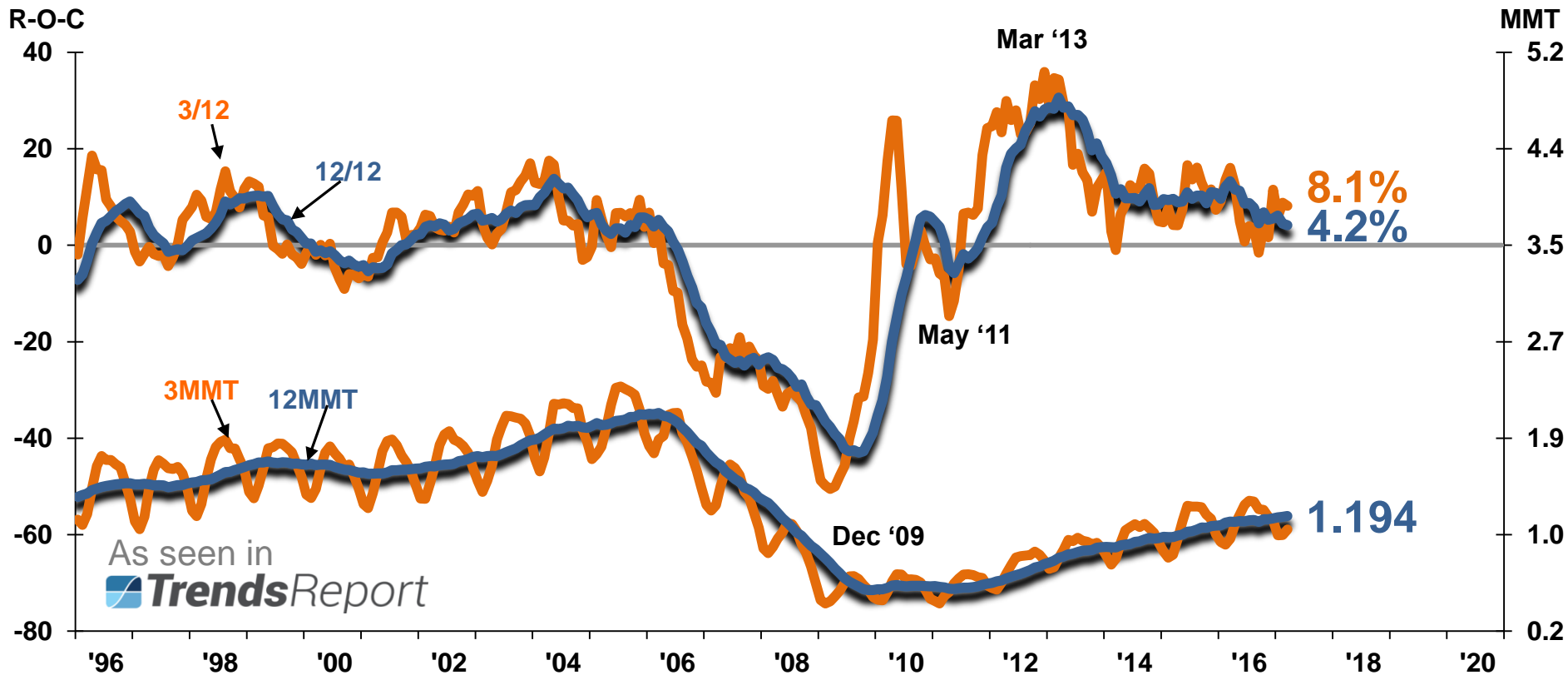
% saying they have shared a selfie



Note: Based on all adults, N=1,821. Respondents who knew what a selfie was were asked if they had ever shared a selfie on a photo sharing or social networking site such as Facebook, Instagram or Snapchat.

Source: Pew Research survey, Feb. 14-23, 2014

Housing Starts

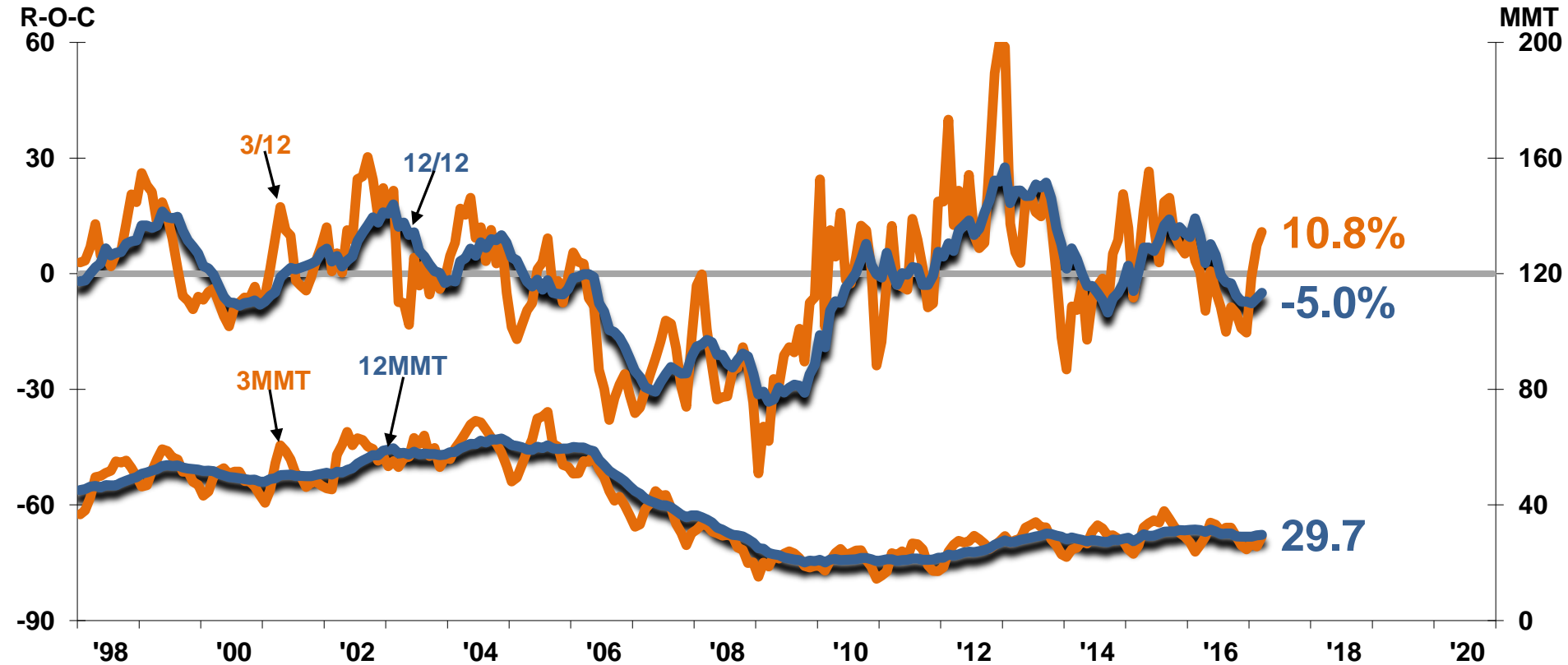


As seen in
TrendsReport

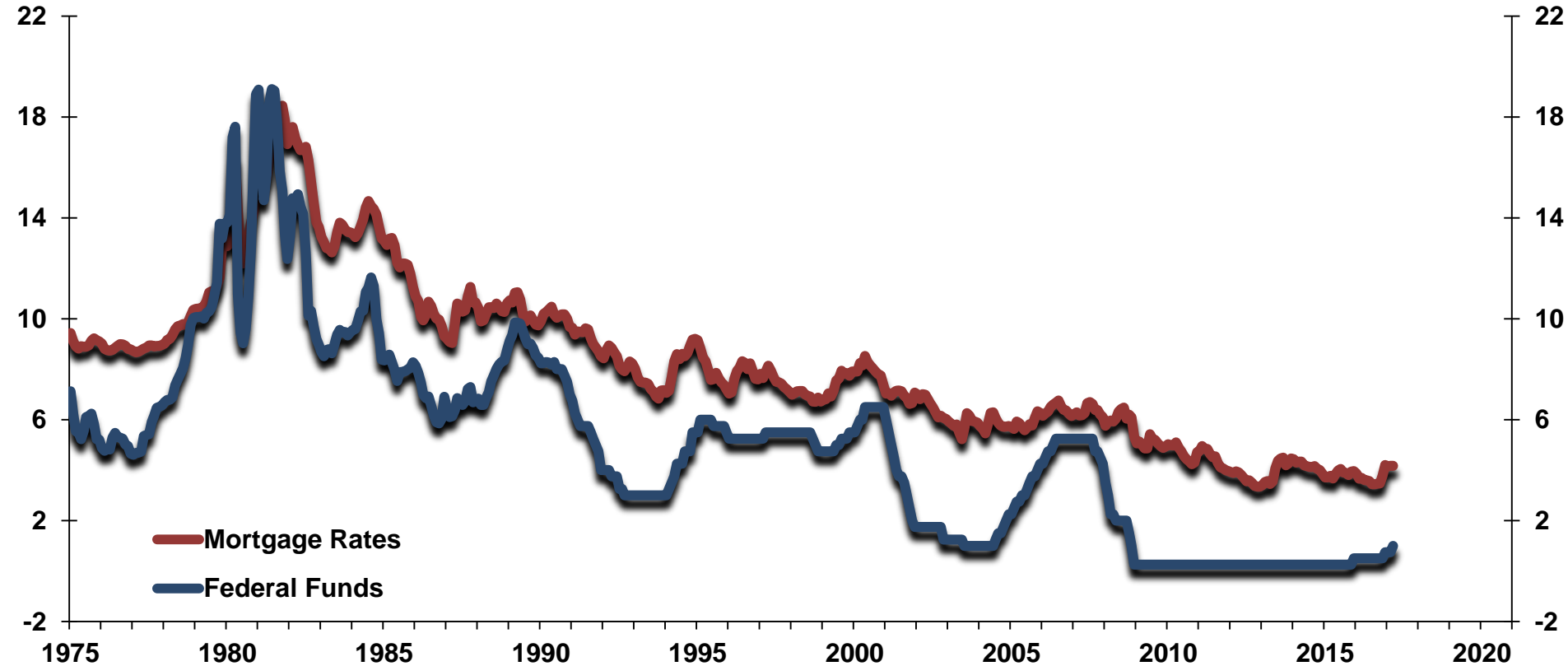
Virginia Housing Price Index



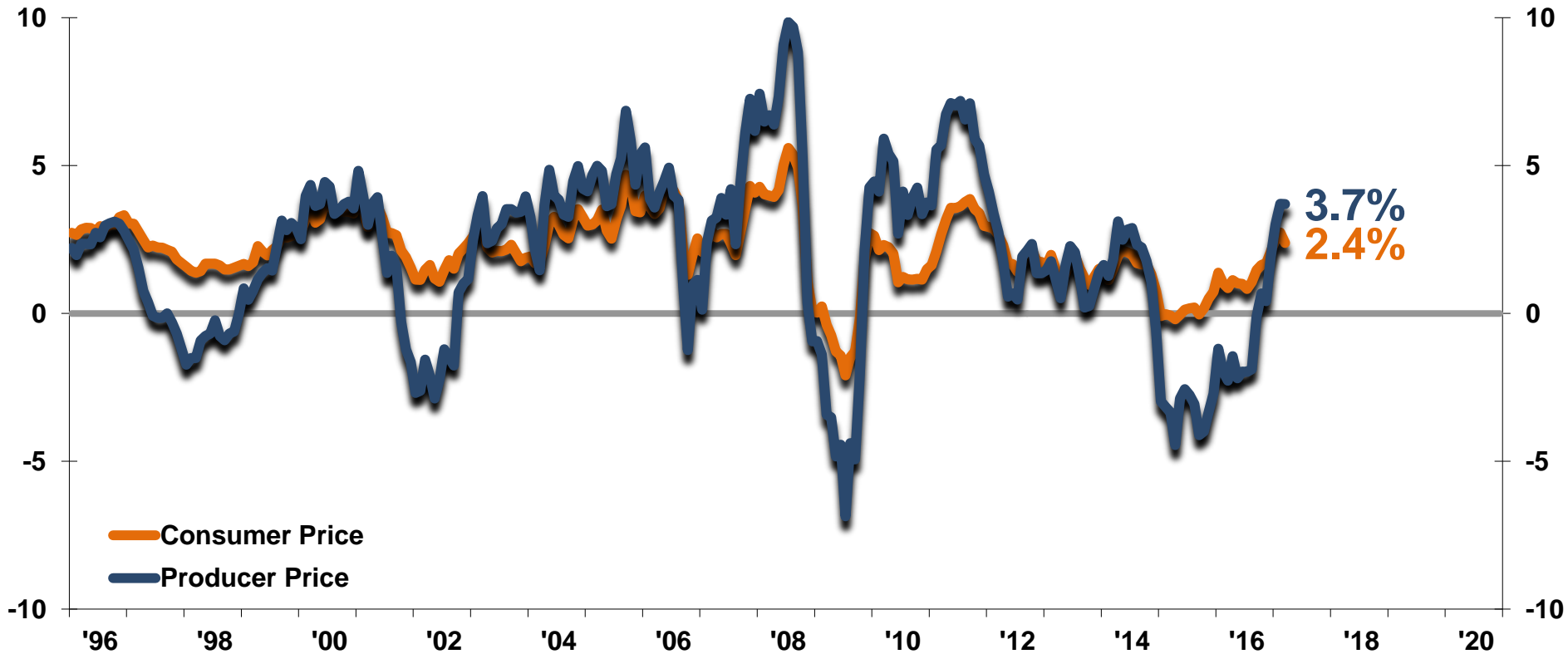
Virginia Housing Unit Building Permits



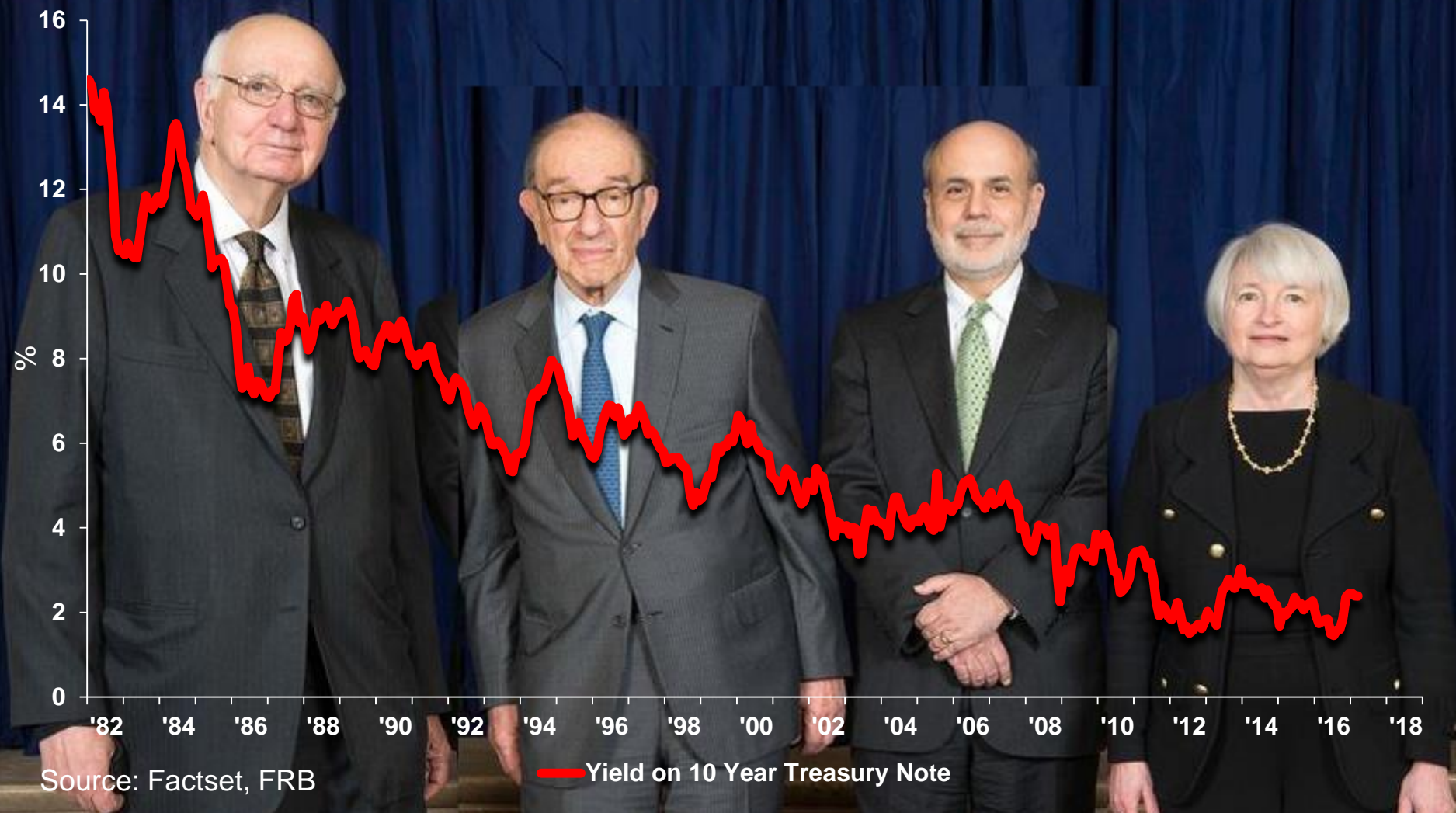
Mortgage Rates to Federal Funds



US Consumer Price Index to US Producer Price Index





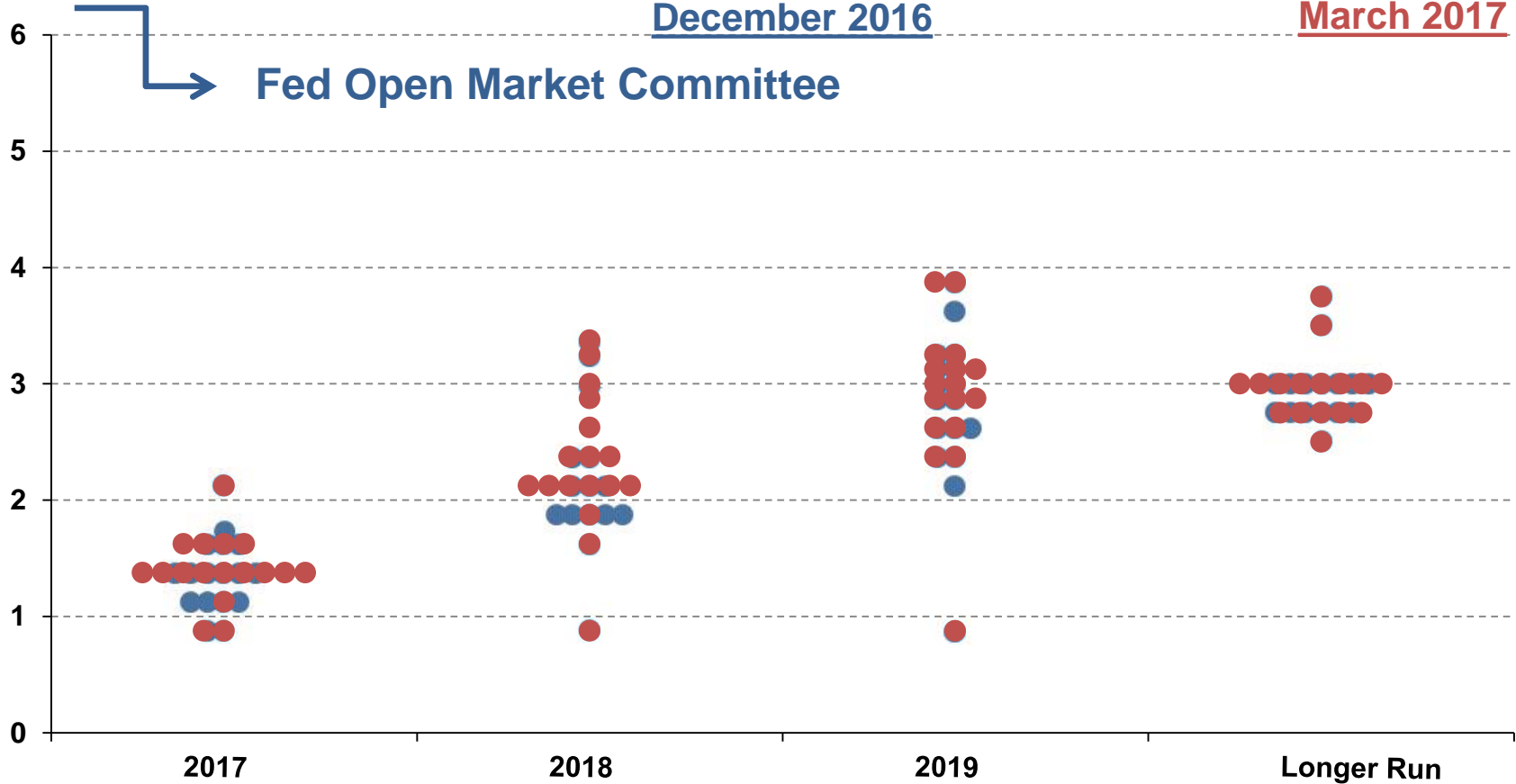


FOMC Member Interest Rate Projections

December 2016

March 2017

Fed Open Market Committee



ITR Management Objectives™

Prepare for Expansion in 2017

1. **Know where you and your markets are in the business cycle**
2. **Budget for continued overall expansion over next 18 months**
3. **Invest in operational efficiency – productivity has to match wage increases**
4. **Ensure employee development does not stagnate or it could cost you your millennials**
5. **Plan for upward pressure on input costs across the board**
6. **Beware potentially increasing international sourcing costs**
7. **Get together with your team and try to identify YOUR *Must Watch* Leading Indicators → PMI, ITRLI, Virginia LI, Housing Starts...?**



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