



## Wire Harness Industry Economics – *The Future and Now*

Taylor St. Germain  
Analyst and Speaker

### About ITR Economics



- Founded in 1948
- Provides industry-renowned economic intelligence to reduce risk and drive practical and profitable business decisions
- Content provider for IEWC's **Hotwire**® monthly e-newsletter



## Summary February 2019

### Business Cycle Decline for 2019

US

Global

### Segment Thinking Into 3 Time Periods

2018 - 2020

2021 - 2029

2030 - 2040

### Global Issues Impacting Our Businesses

Tariffs

### Leading Indicator Signals are Mixed

Know which ones matter to you

How to track the leading indicators



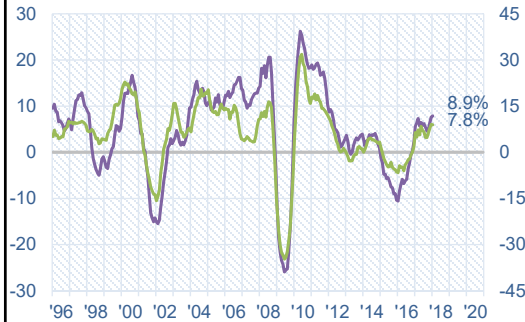
## 2018 Preliminary Forecast Results If you heard ITR around two years prior...

	Duration	Accuracy
US GDP	24	99.7%
US Ind. Production	34	99.4%
Europe Ind. Production	24	97.2%
Canada Ind. Production	27	94.5%
China Ind. Production	30	99.9%
Retail Sales	28	99.6%
Housing (Single Family Units)	26	99.2%
Employment (private sector)	30	99.4%

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

# Rate-of-Change & Leading Indicators

Tools for Seeing the Future



## A Powerful Management Tool Rate-of-Change

	Raw	3MMT	3/12	12MMT	12/12
Feb-17	1.5				
Mar-17	1.5				
Apr-17	1.4	4.4			
May-17	1.5	4.4			
Jun-17	1.3	4.4			
Jul-17	1.3	4.2			
Aug-17	1.6	4.1			
Sep-17	1.6	4.2			
Oct-17	1.5	4.5			
Nov-17	1.7	4.7			
Dec-17	1.6	4.8			
Jan-18	1.7	4.8		18.0	
Feb-18	1.7	5.0		18.2	
Mar-18	1.7	5.0		18.4	
Apr-18	1.6	5.1	15.9%	18.6	
May-18	1.7	5.0	13.6%	18.8	
Jun-18	1.5	5.0	13.6%	19.0	26.7%
Jul-18	1.5	4.8	14.3%	19.2	25.5%
Aug-18	1.9	4.7	14.6%	19.4	25.2%
Sep-18	1.7	4.9	16.7%	19.7	22.4%
Oct-18	1.7	5.1	13.3%	19.8	20.0%
Nov-18	1.9	5.3	12.8%	20.0	18.3%
Dec-18	1.7	5.3	10.4%	20.2	15.4%
Jan-19	1.7	5.3	10.4%	20.3	12.7%

### 3/12 Rate-of-Change

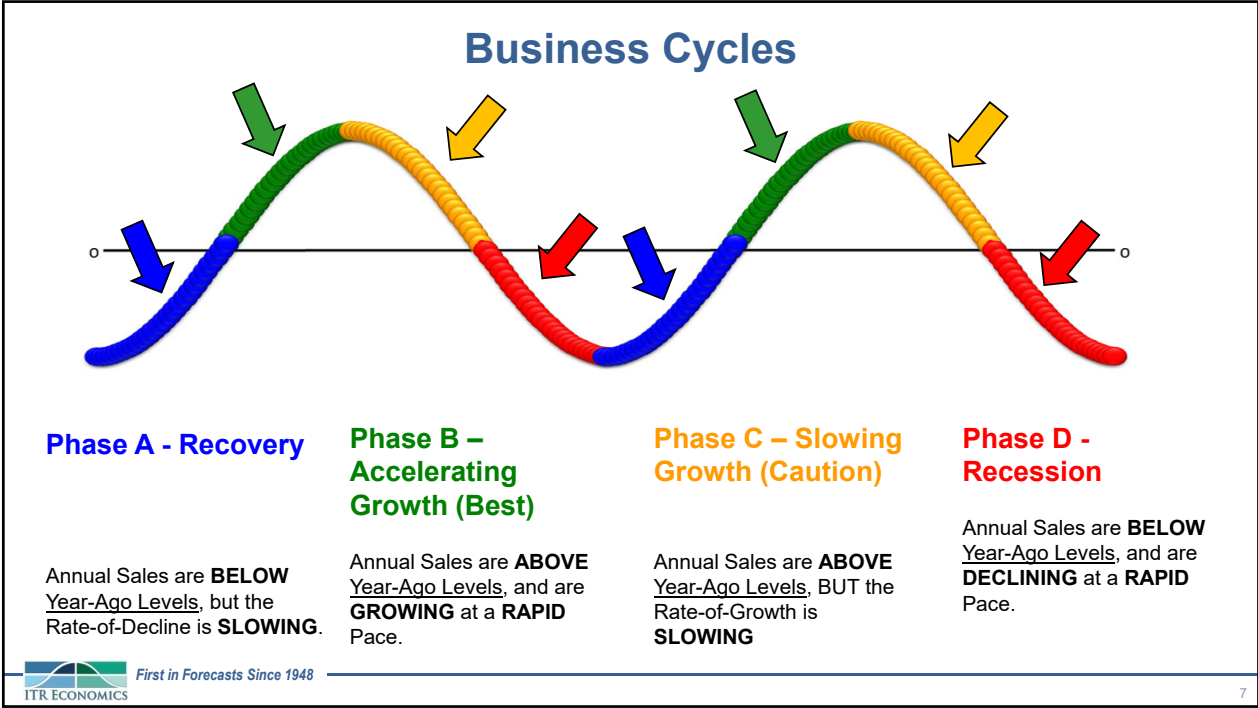
$$= \frac{\text{January 2019 3MMT}}{\text{January 2018 3MMT}} \times 100 - 100$$

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

### 12/12 Rate-of-Change

$$= \frac{\text{January 2019 12MMT}}{\text{January 2018 12MMT}} \times 100 - 100$$

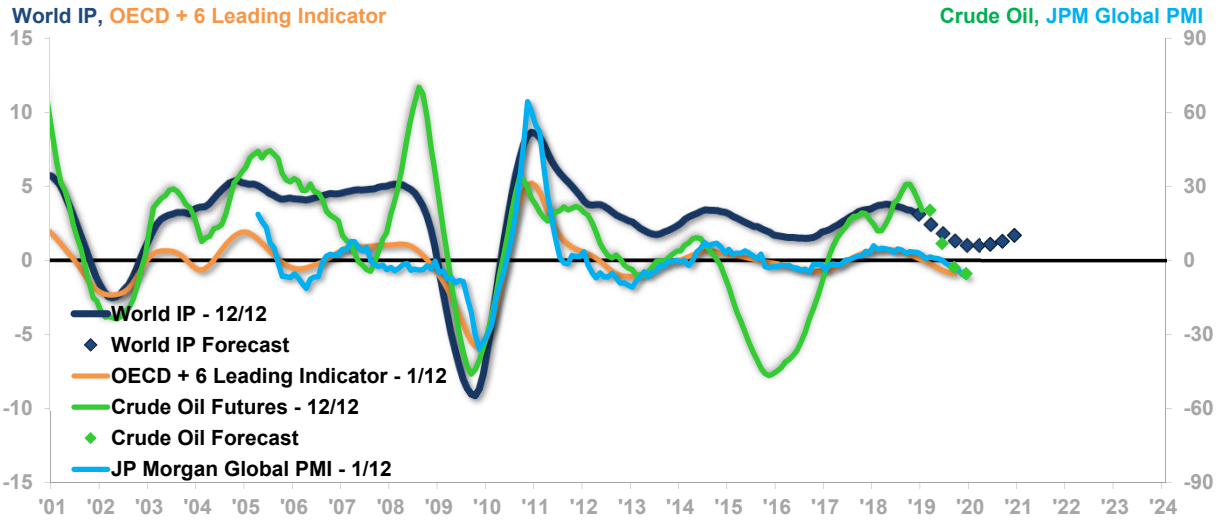
$$= \frac{20.3}{18.0} \times 100 - 100 = 12.7\%$$



# General Economic Outlook

# Global Economy Enters Backside of Business Cycle

## World Industrial Production Index to Various Leading Indicators



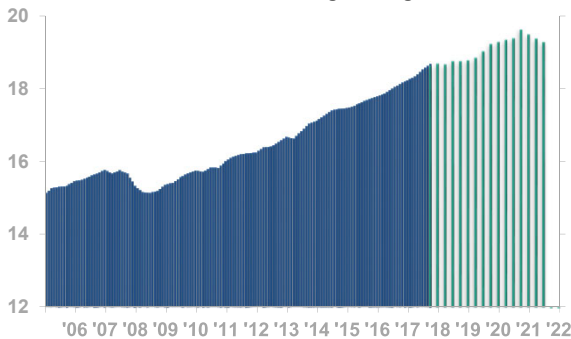
First in Forecasts Since 1948

Sources: OECD, WSJ, IHS Markit, Yahoo Finance, CPB Netherlands Bureau For Economic Policy Analysis

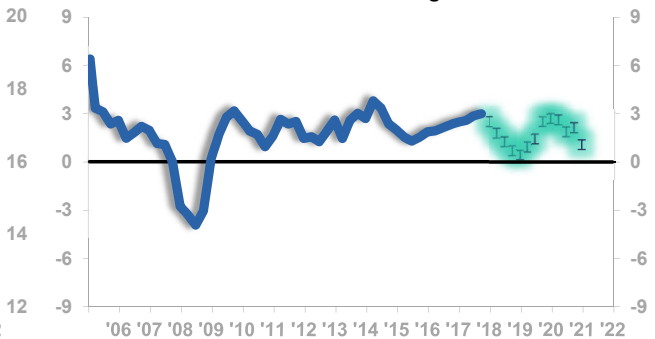
# US Economy Stalls in 2019 and Into 2020

## US Gross Domestic Product, SAAR, Chained 2012 \$

US Gross Domestic Product  
3-Month Moving Average



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



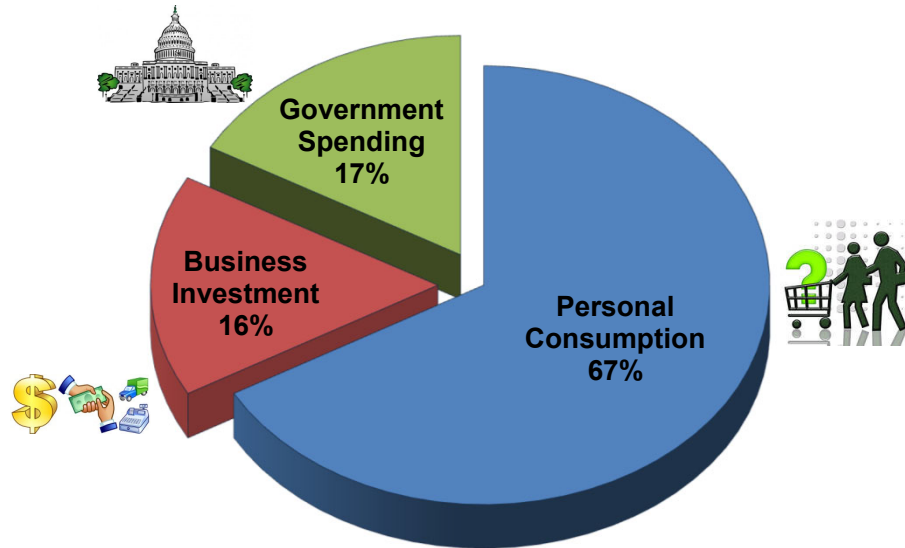
- **\$18.7 trillion**
- **Phase: B**
- **Quarter-over-Quarter: 3.0%**



First in Forecasts Since 1948

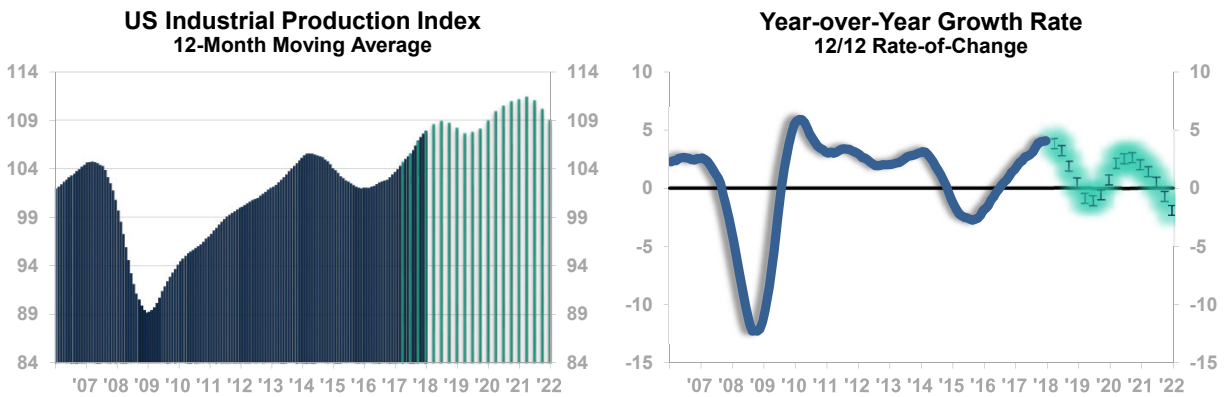
Source: BEA 10

## US GDP by Consumption

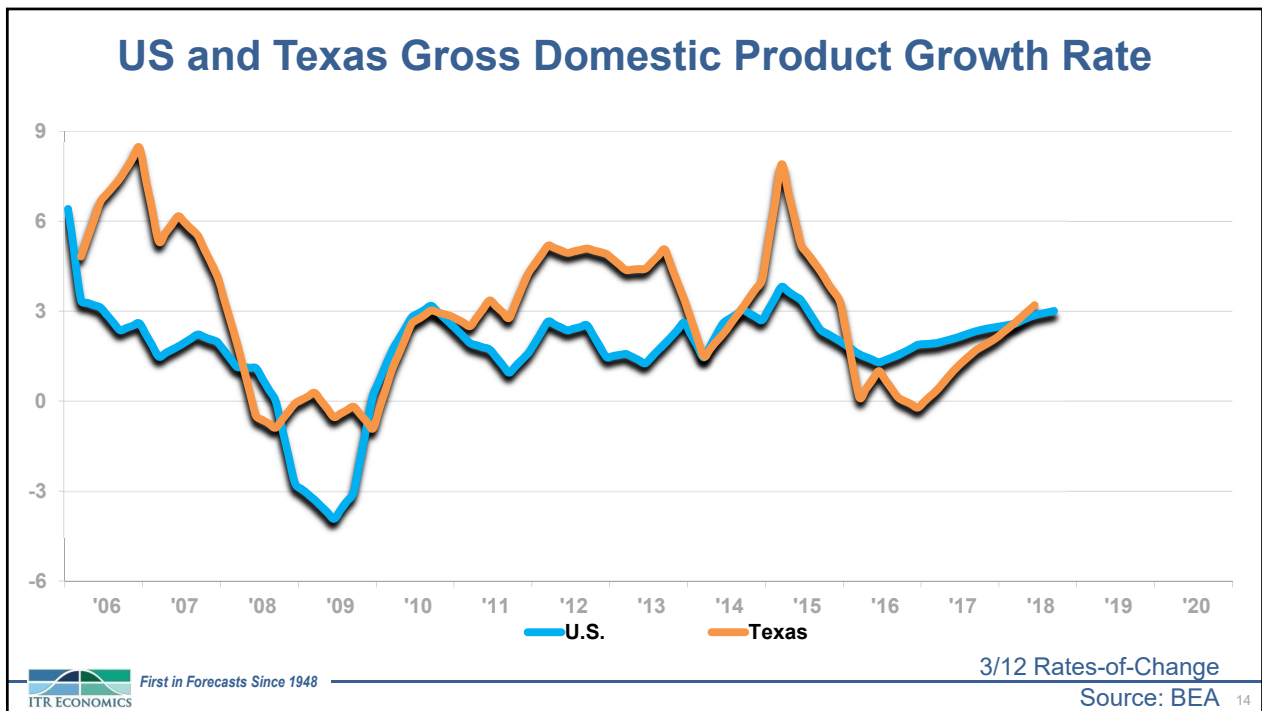
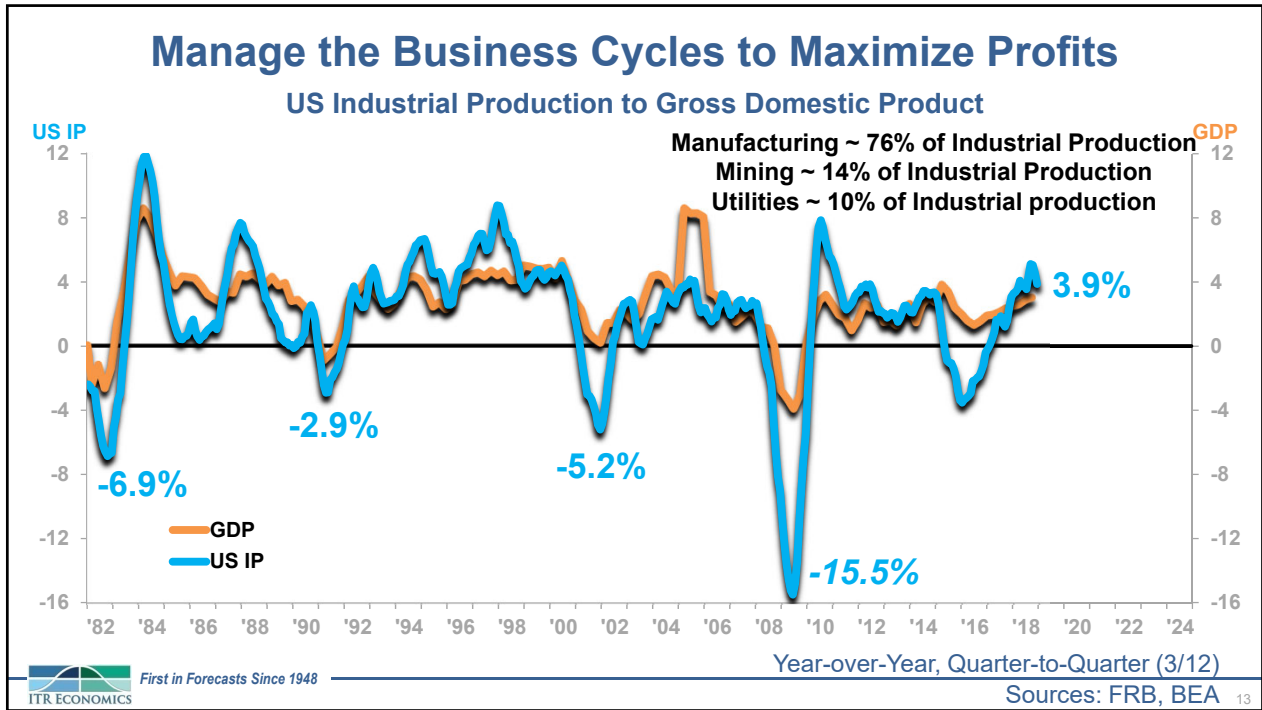


## Slowing Growth for 2019

### US Industrial Production Index

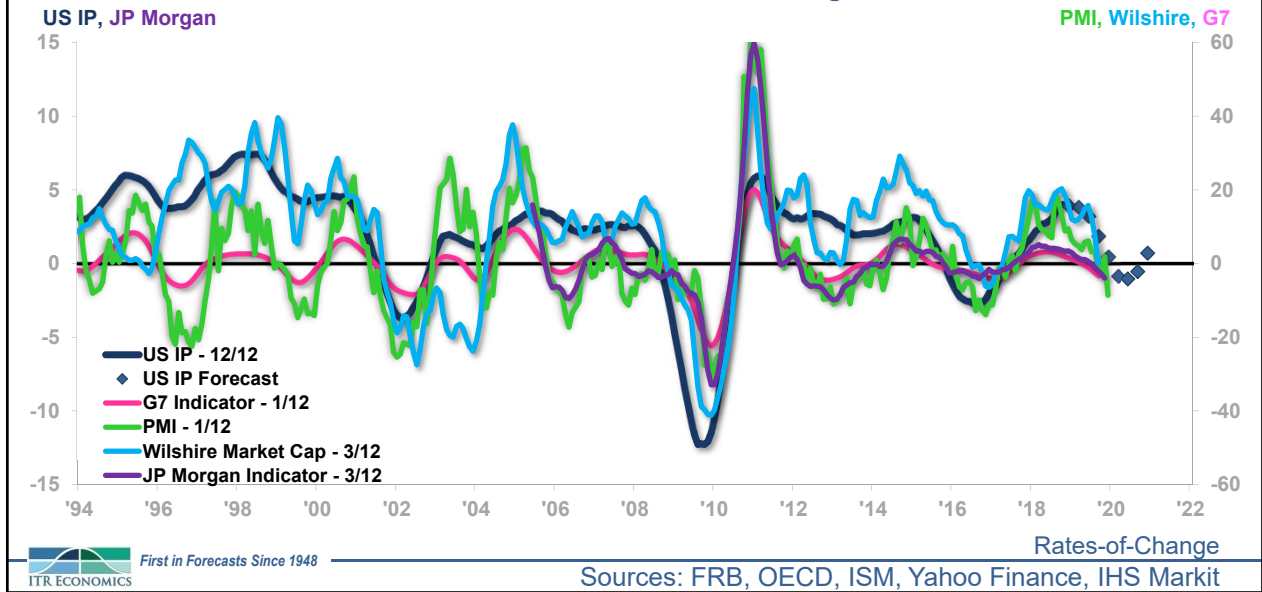


- Annual Trend: 107.3
- Phase: B
- Year-over-Year: 4.0%



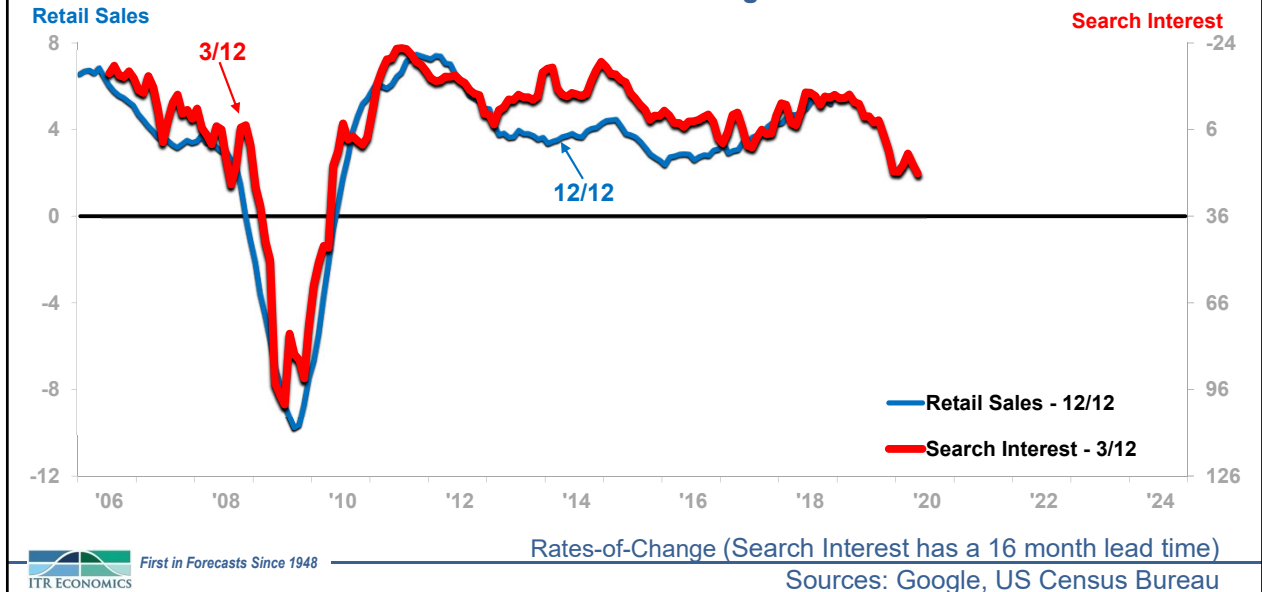
## Leading Indicator System as a Powerful Tool

### US Industrial Production Index to Leading Indicators



## Searching for a Recession

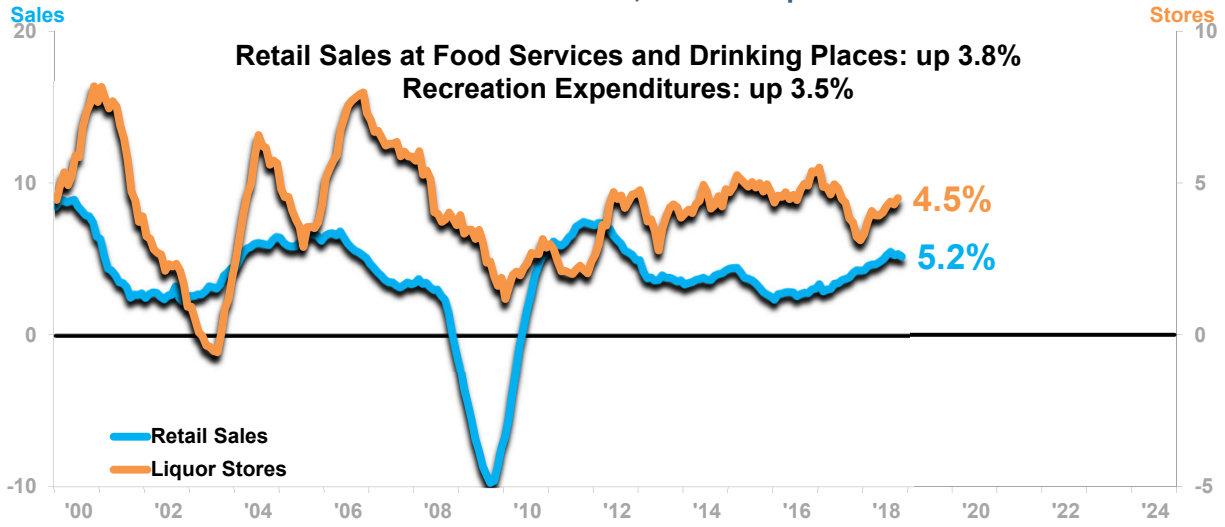
### US Search Interest for "Recession" on Google to US Total Retail Sales





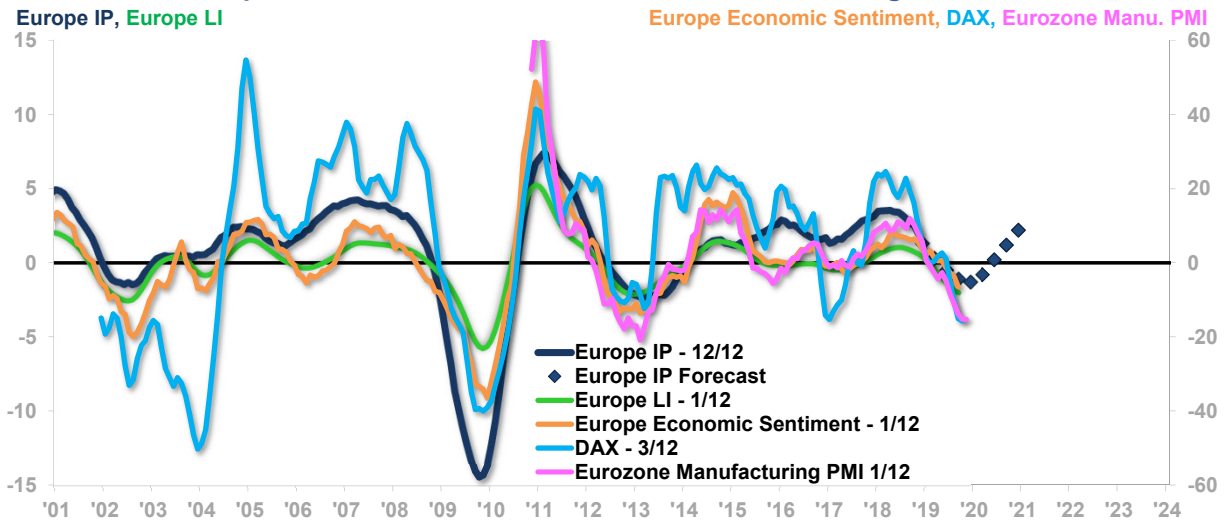
## We Drink When Times are Good... and Bad

US Total Retail Sales to US Beer, Wine & Liquor Stores Sales



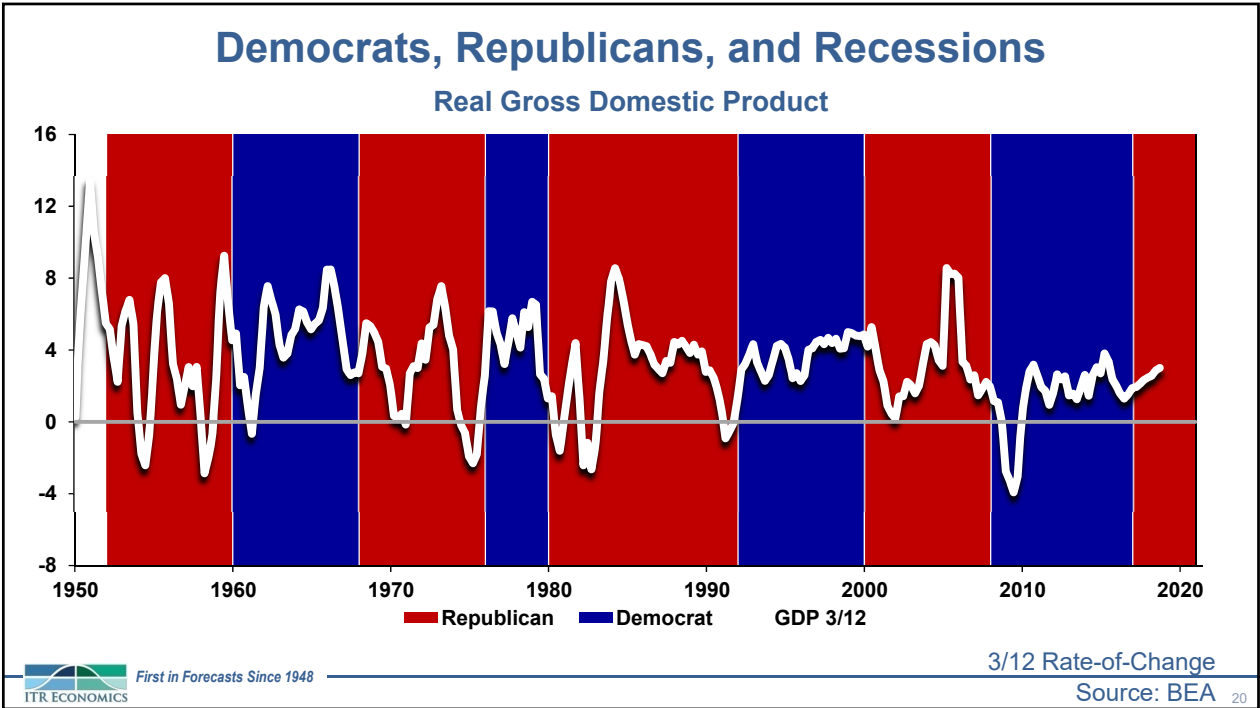
## Leading Indicators in Europe Signal Recession

Europe Industrial Production Index to Various Leading Indicators



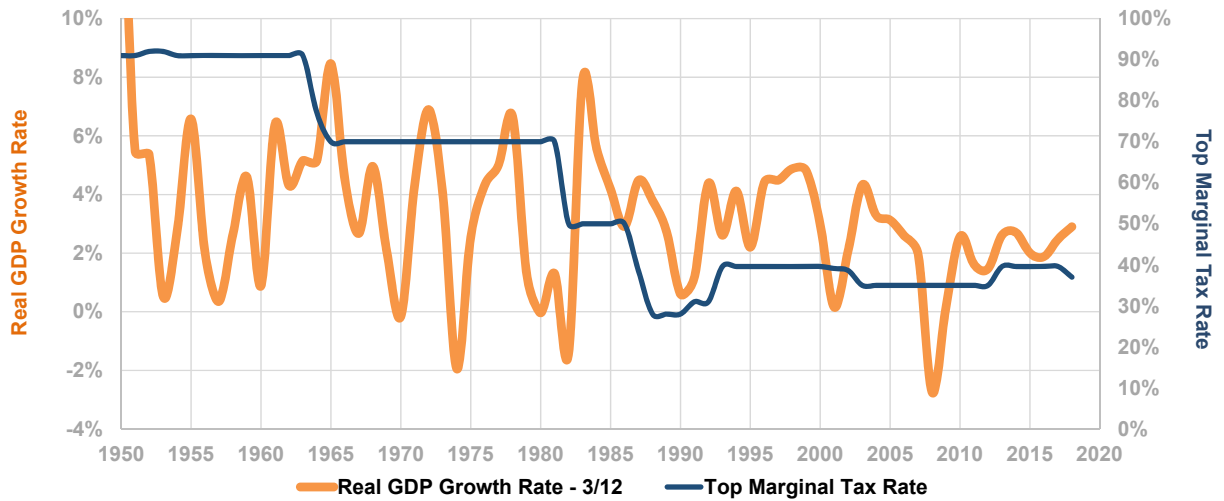


# Tax Reform & Tariffs

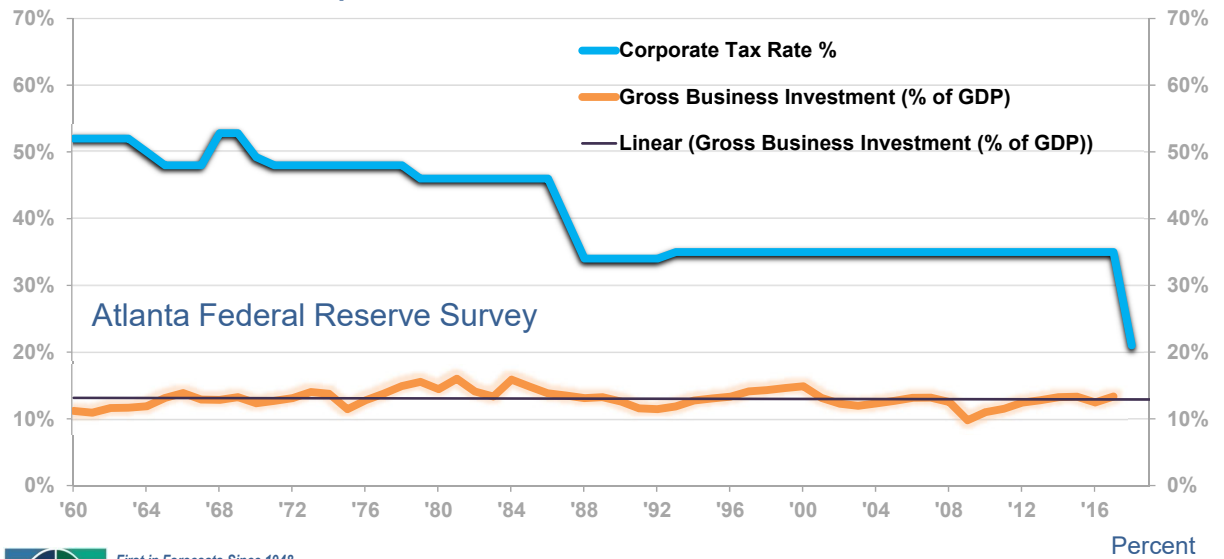
## Lower Taxes May Provide a Temporary Boost

### US Top Marginal Individual Tax Rates to Real GDP Growth Rate



## Freed Up Money Likely Not going to Capex

### US Corporate Tax Rate and Gross Business Investment



## ATLANTA FED IS WATCHING . . .

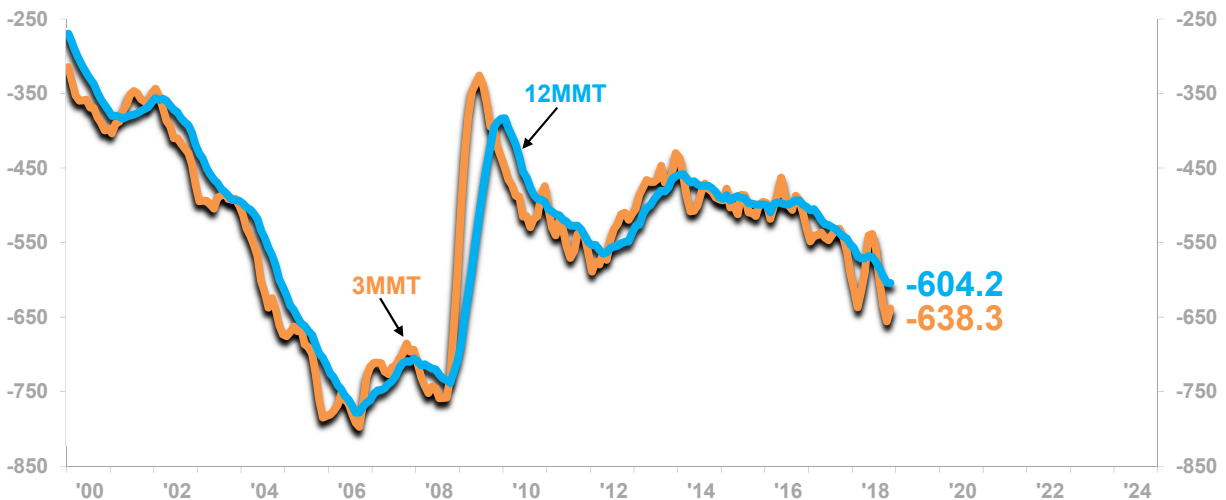


*On business investment, roughly two-thirds of respondents to our national survey...indicated that the reform wouldn't affect their capital expenditures at all. Just **15 percent** said they would increase their capital spending by **10 percent** or more, and those responses came mostly from smaller firms.*

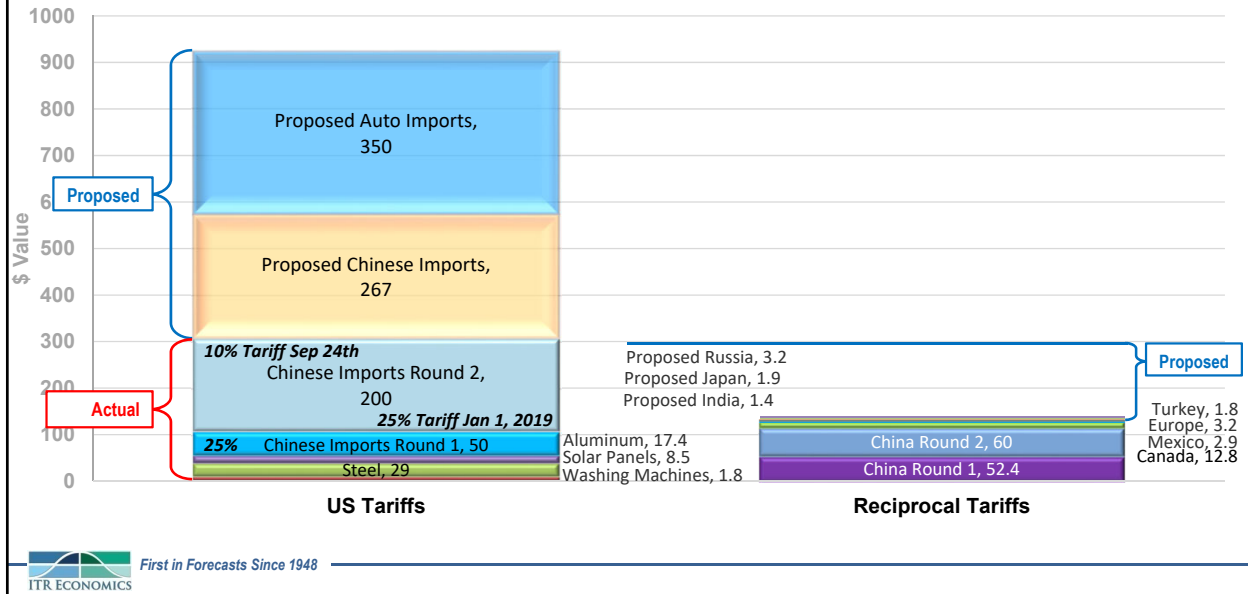
*~ Raphael Bostic  
Atlanta Federal Reserve Chair  
Rotary Club of Atlanta  
January 8, 2018*

## Trade Deficit Continues Downward Trend Despite Tariffs

US Trade Balance for Goods and Services



## Tariffs: There Will Be Winners and Losers



## Brands That Have or Will Be Increasing Prices Due to Tariffs

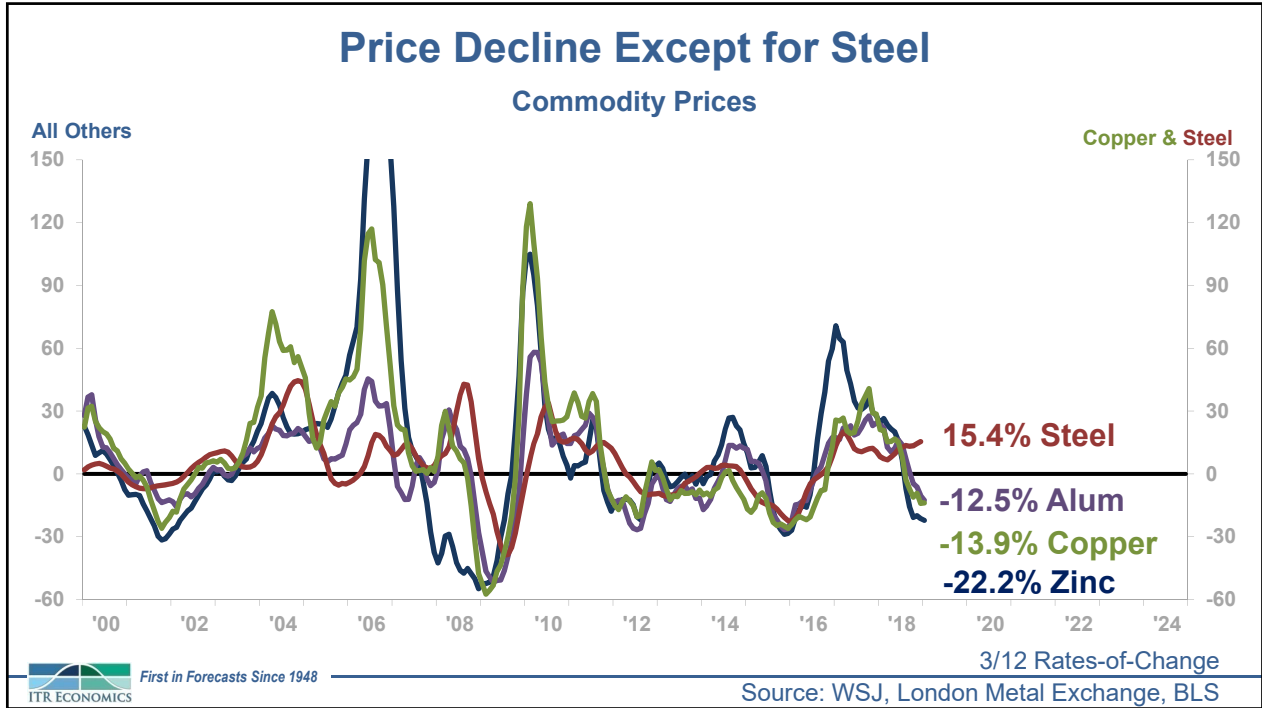
- TOYOTA
- WHIRLPOOL
- COCA-COLA
- WINNEBAGO
- MILLER COORS
- SAMUEL ADAMS
- CAMPBELL SOUP
- LG ELECTRONICS
- GENERAL MOTORS
- KLEENEX & HUGGIES
- POLARIS INDUSTRIES
- NEWELL BRANDS

(Crock-pot, Rubbermaid, Yankee Candle, & Sharpie)

*"I can't just go to the shareholders and say, 'You're just going to have to accept my profit's going to be \$40 million less. It doesn't work that way...'"*

- Gavin Hattersley, CEO MillerCoors





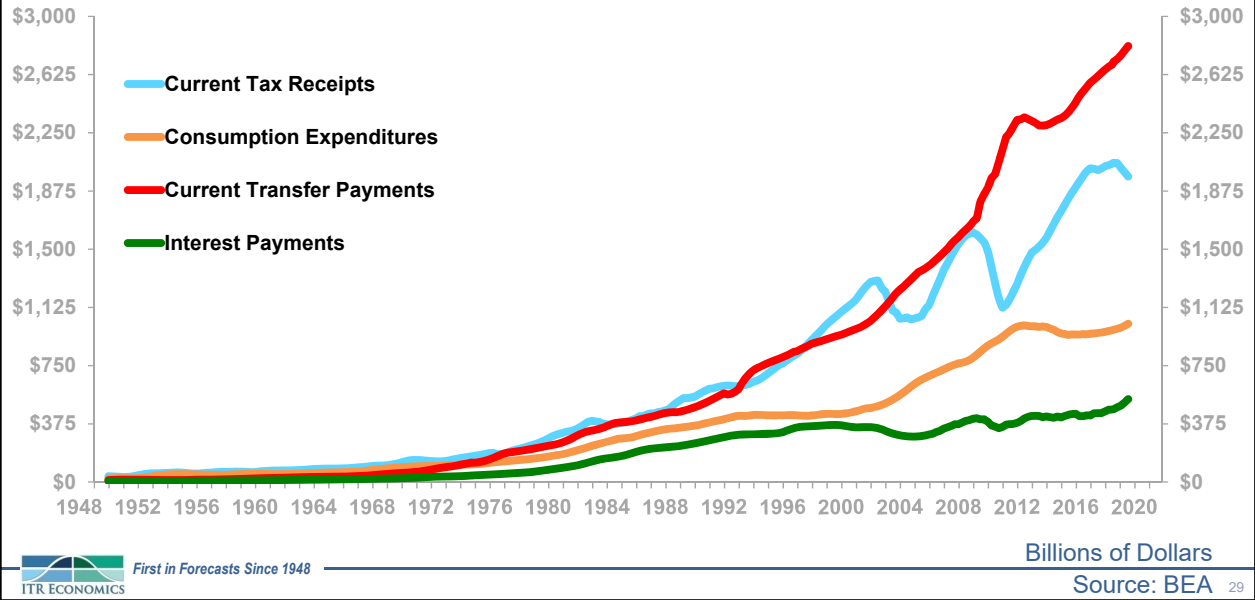
1. Demographics
2. Health Care Costs
3. Entitlements
4. Inflation
5. US National Debt

## The Long View

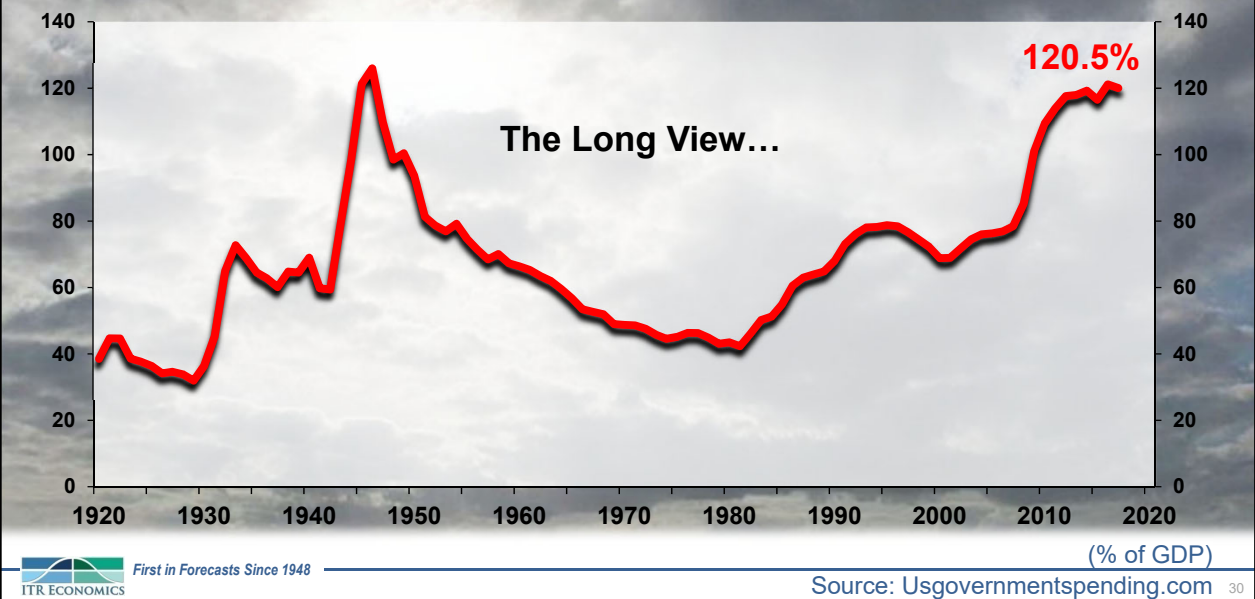
### Prosperity in the Age of Decline

ITR ECONOMICS

## Issues Government Will and Won't Tackle



## Total U.S. Public Debt



## CBO Projection Statistics

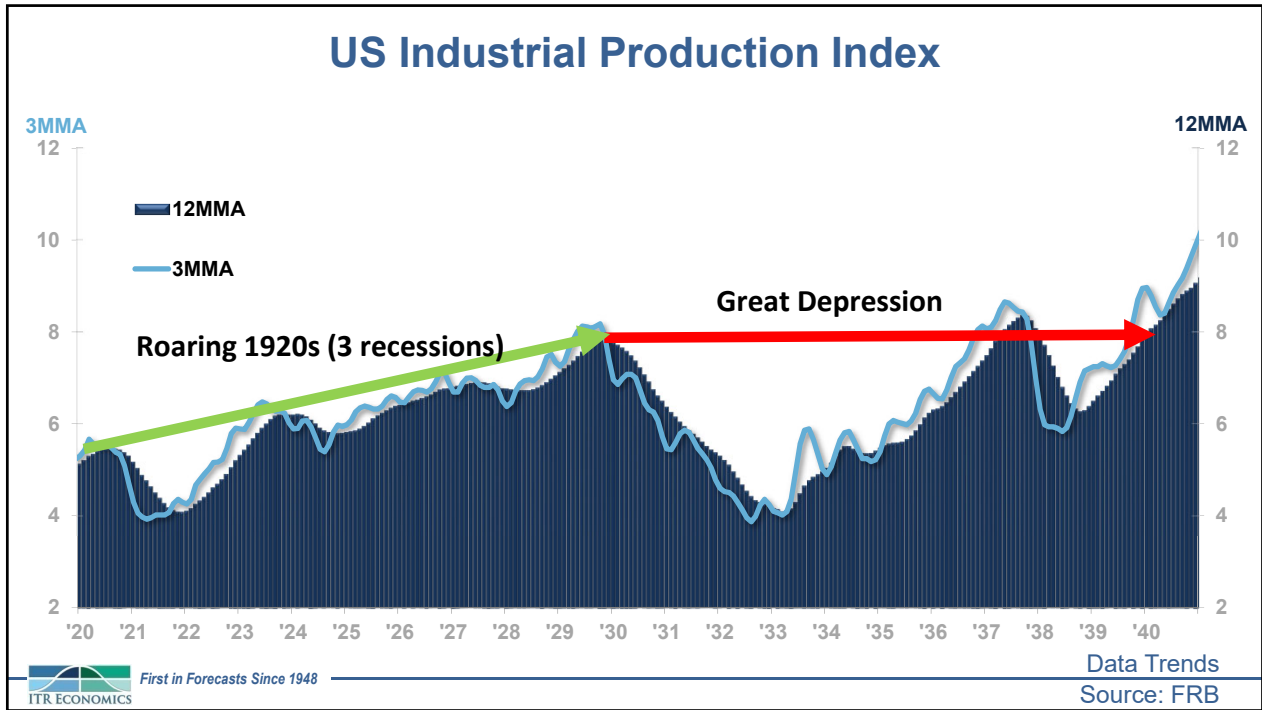
	A	B	C	D	E
	<u>(B+C+D)/E</u>	<u>Net Interest</u>	<u>Healthcare</u>	<u>Social Security</u>	<u>Total Spending as % of GDP</u>
<b>2018</b>	<b>56.8%</b>	1.6%	5.2%	4.9%	20.6%
<b>2019 - 2028</b>	<b>63.4%</b>	2.7%	6.0%	5.5%	22.4%
<b>2029 - 2038</b>	<b>69.1%</b>	3.6%	7.4%	6.2%	24.9%

## Depression Drivers



1. Demographics
2. Health Care Costs
3. Entitlements
4. Inflation
5. US National Debt





# Now Available

**The next Great Depression is coming.**

**Are you ready?**

**Available in e-book, audio and print format.**

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from Amazon.**

**PROSPERITY  
IN THE AGE OF  
DECLINE**

How to Lead Your Business  
and Preserve Wealth Through the  
Coming Business Cycles

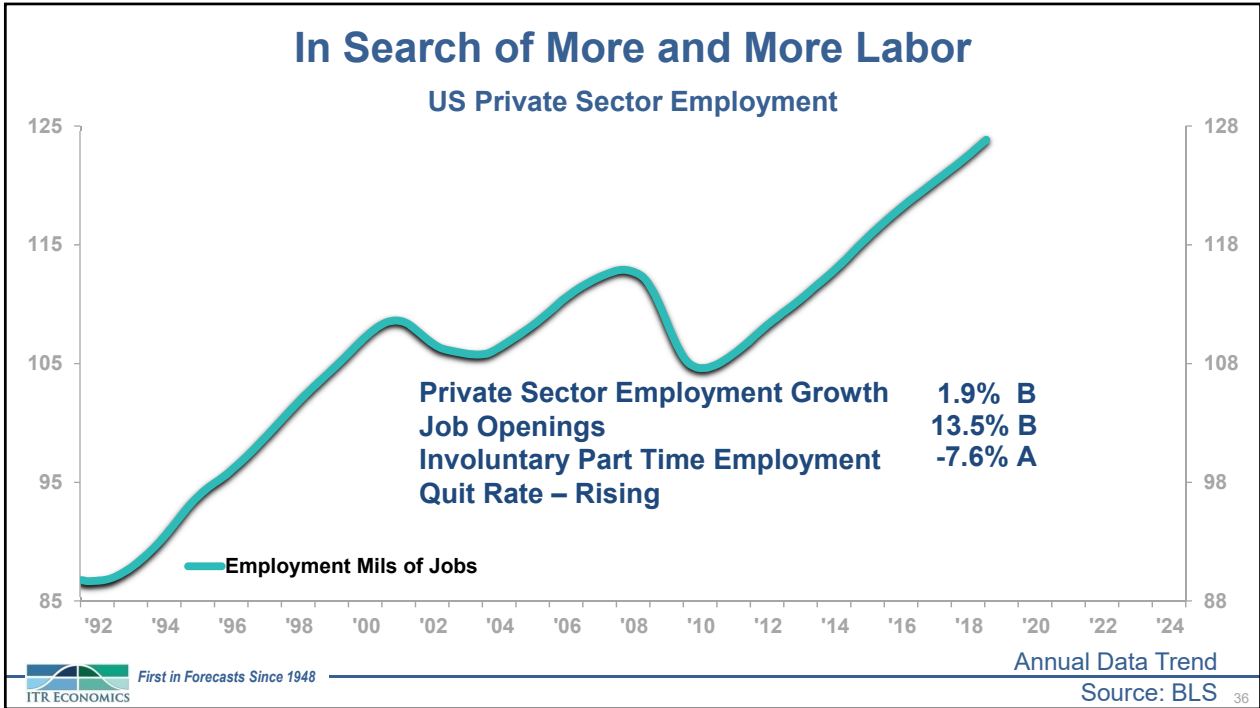
**BRIAN BEAULIEU | ALAN BEAULIEU**

WILEY

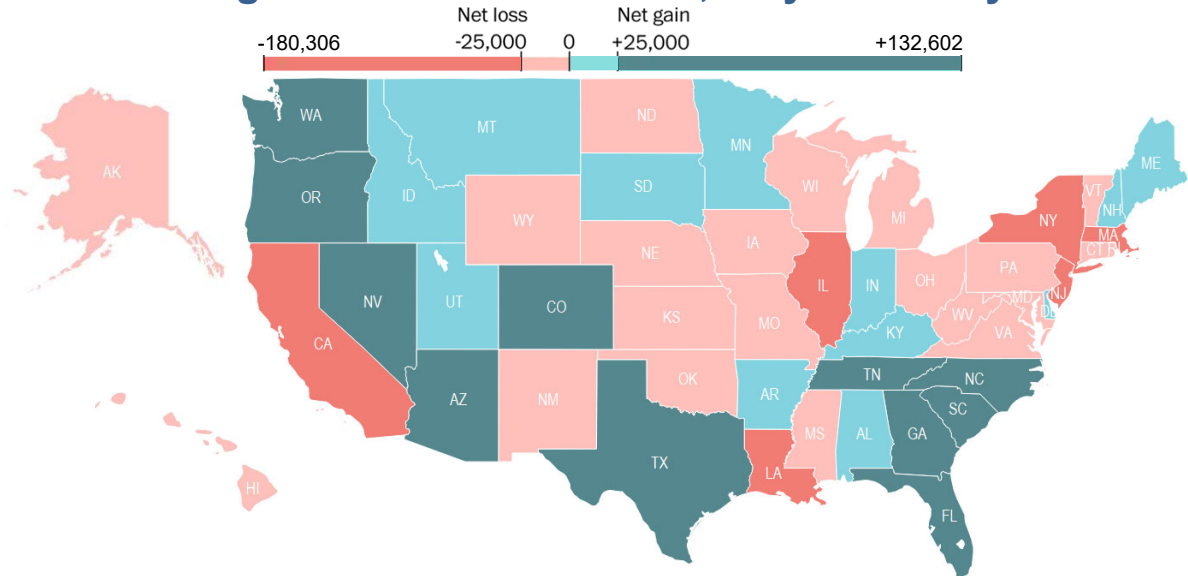
ITR ECONOMICS First in Forecasts Since 1948



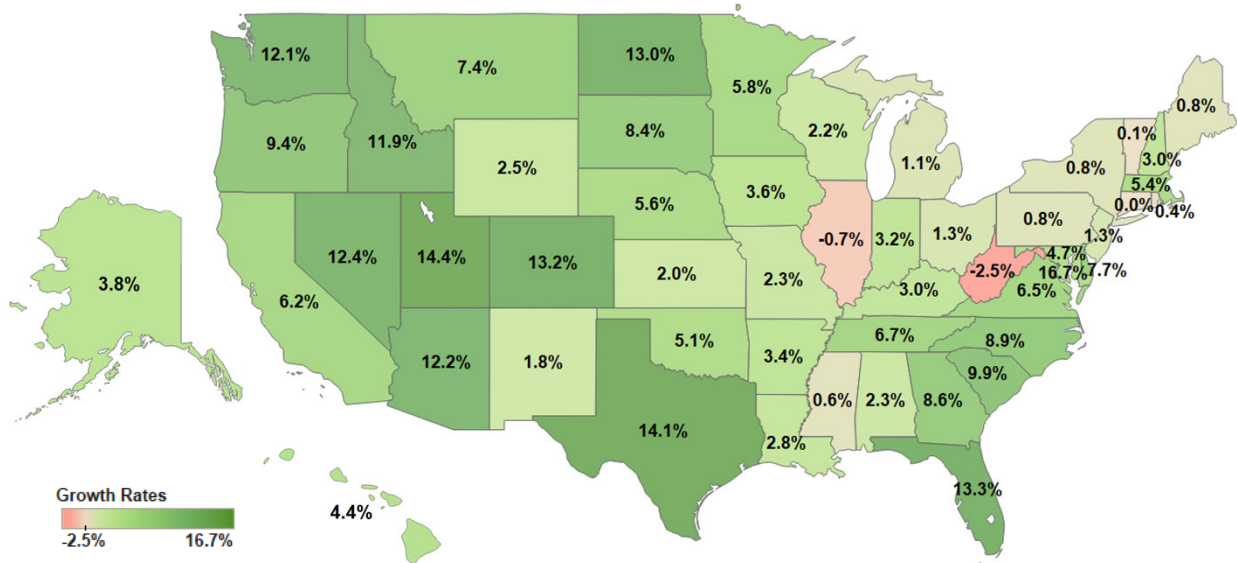
# Employment

## Net Migration Between States, July 2017-July 2018



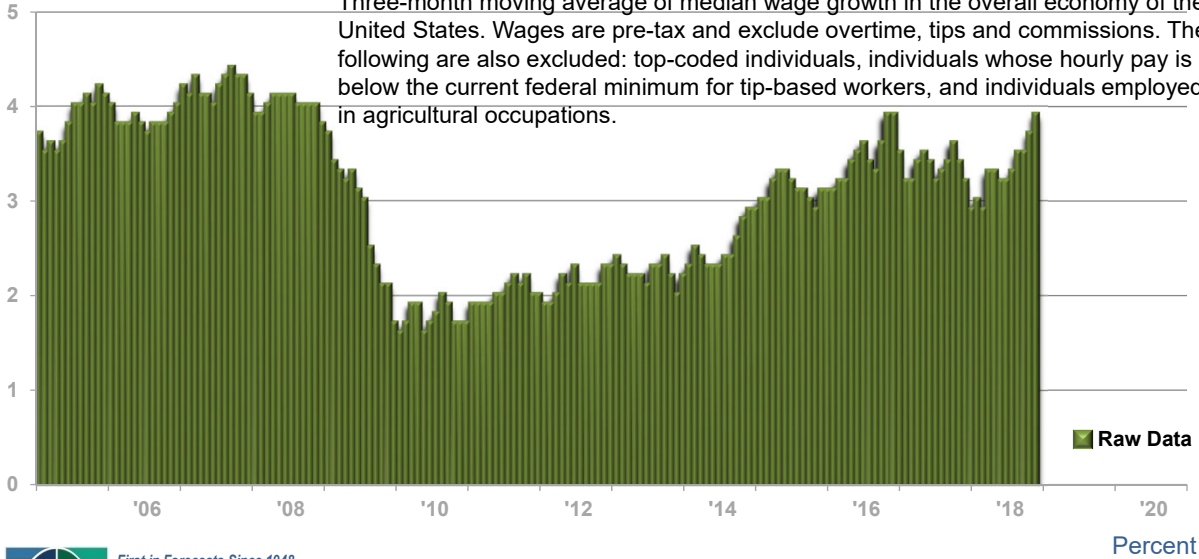
## State Population Growth Rates



## Significant Pressure on Profit Margins

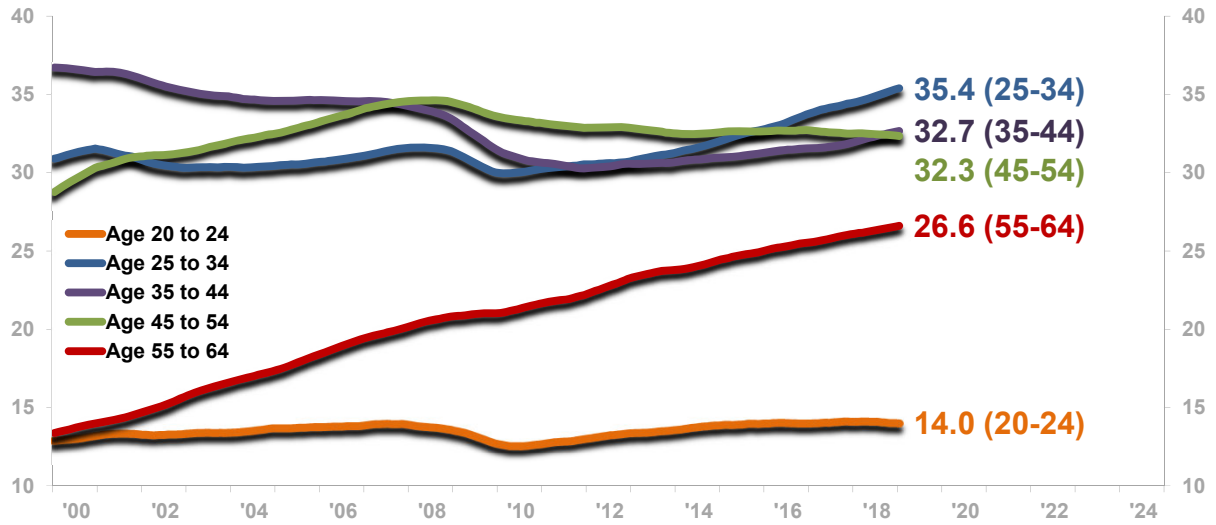
### Overall Wage Growth

Three-month moving average of median wage growth in the overall economy of the United States. Wages are pre-tax and exclude overtime, tips and commissions. The following are also excluded: top-coded individuals, individuals whose hourly pay is below the current federal minimum for tip-based workers, and individuals employed in agricultural occupations.



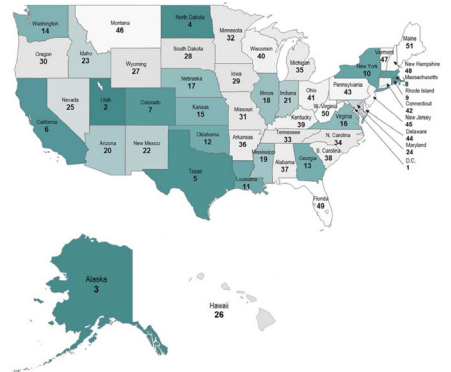
# The Rise of the Millennials

## Employment by Age




# Millennial Population


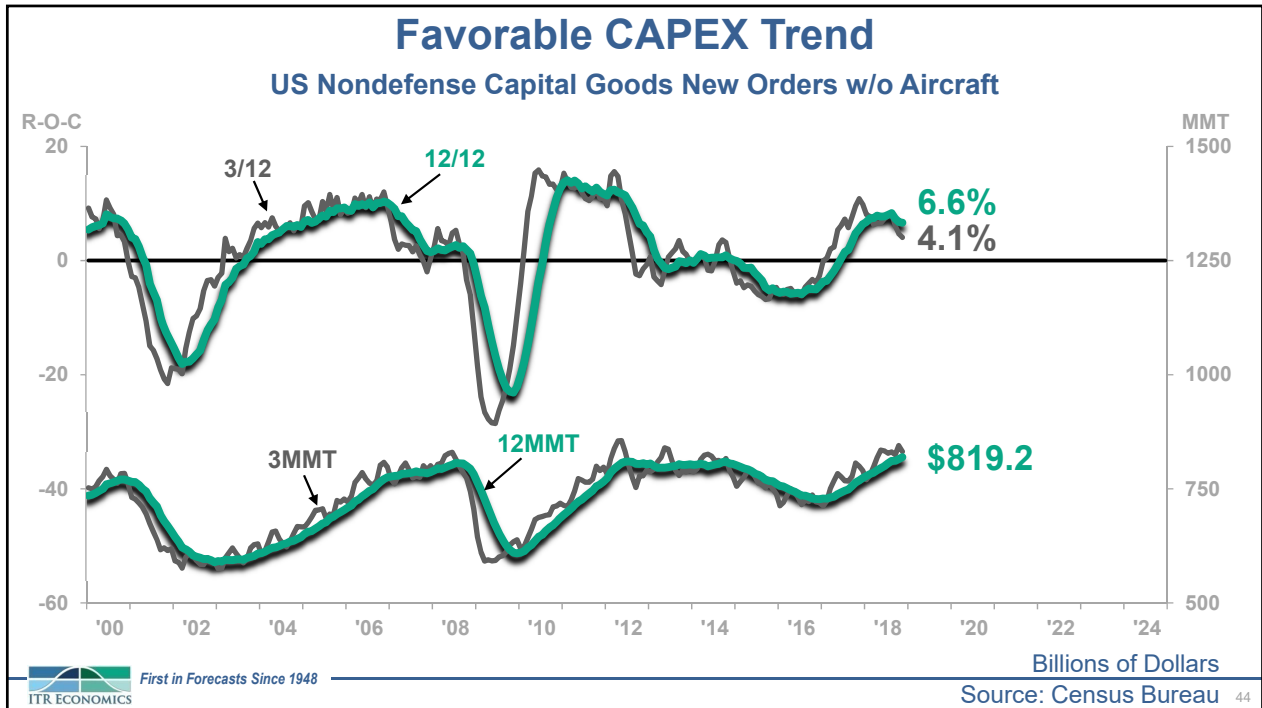
Rank	State	Rank	State
1	District of Columbia	42	Connecticut
2	Utah	43	Pennsylvania
3	Alaska	44	Delaware
4	North Dakota	45	New Jersey
5	Texas	46	Montana
6	California	47	Vermont
7	Colorado	48	New Hampshire
8	Massachusetts	49	Florida
9	Rhode Island	50	West Virginia
10	New York	51	Maine



Millennial Population Rank  
1 51

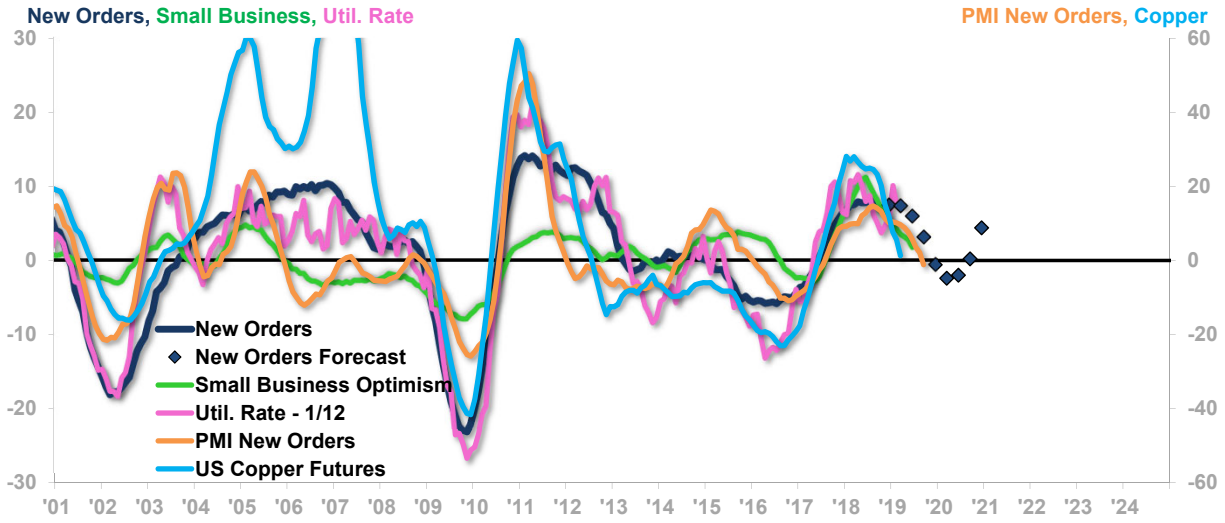


# CAPEX, Interest Rates & Inflation

# Leading Indicators Signal Business Cycle Decline for CAPEX

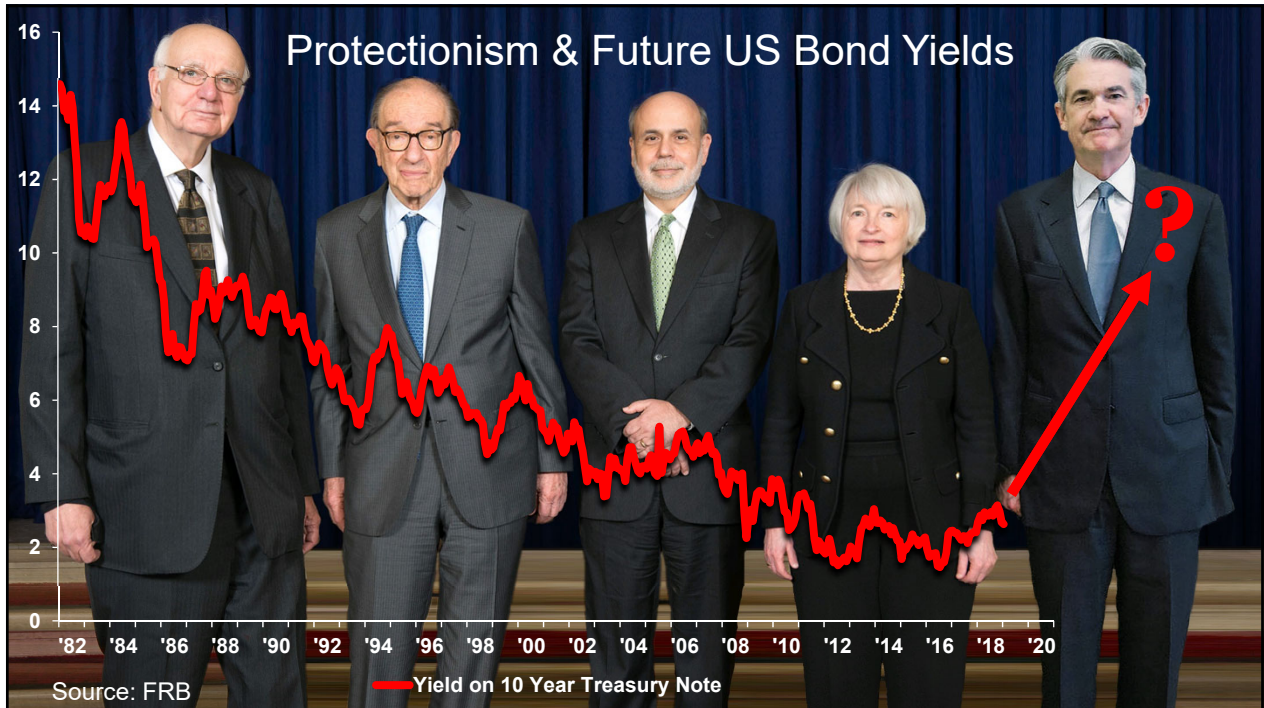
## US Nondefense Capital Goods New Orders to Various Leading Indicators



First in Forecasts Since 1948

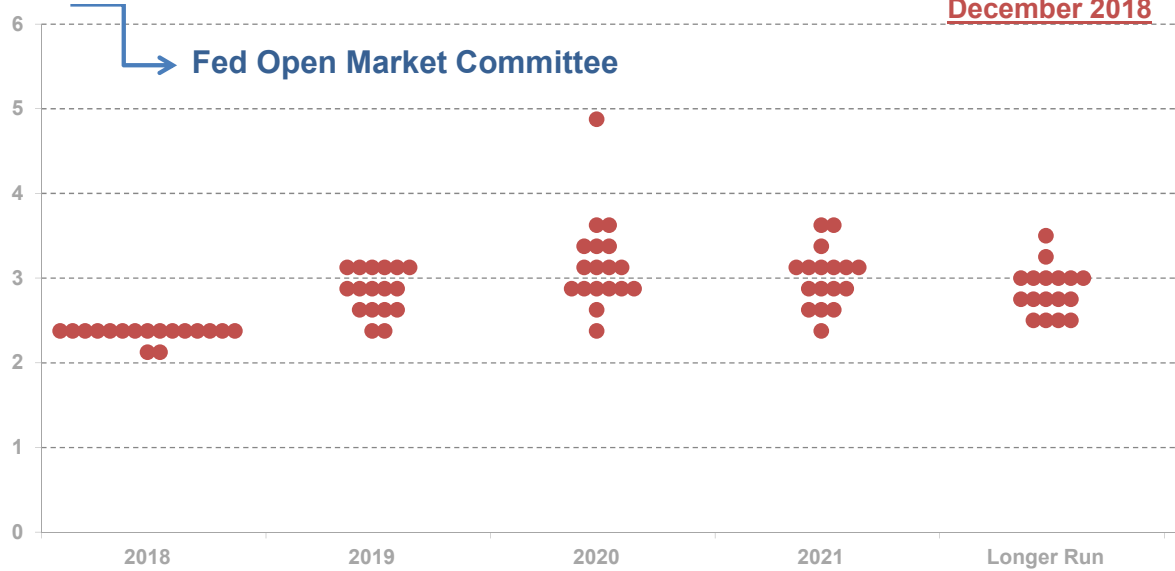
Sources: US Census Bureau, NFIB, FRB, Industry for Supply Management, WSJ

Rates-of-Change



## FOMC Member Interest Rate Projections

December 2018



## Budget for Higher Prices, but Take Caution Not to Budget Linearly

US Consumer Price Index to US Producer Price Index





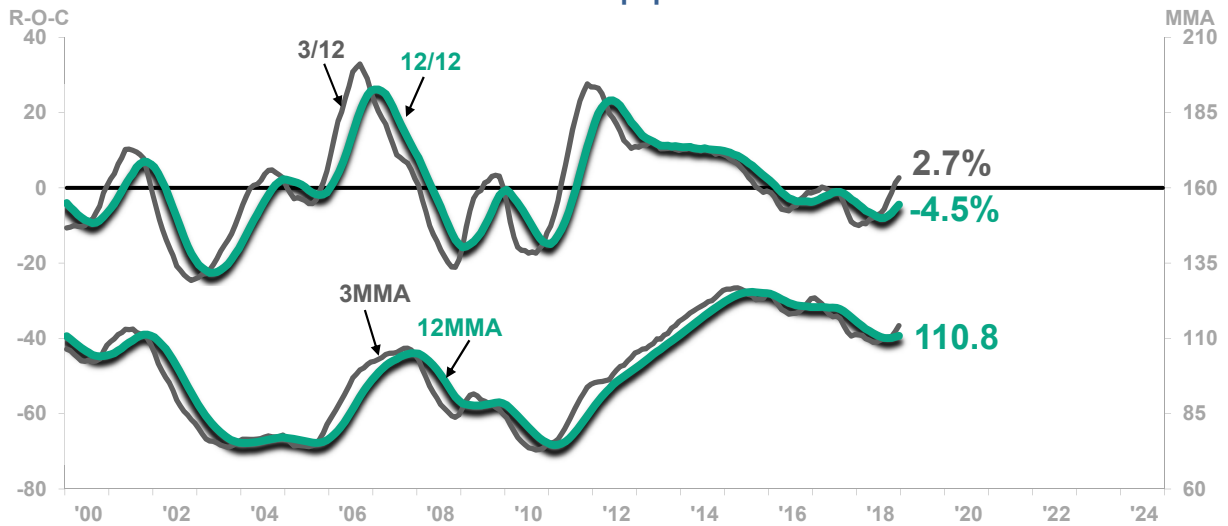


# Industry Drivers



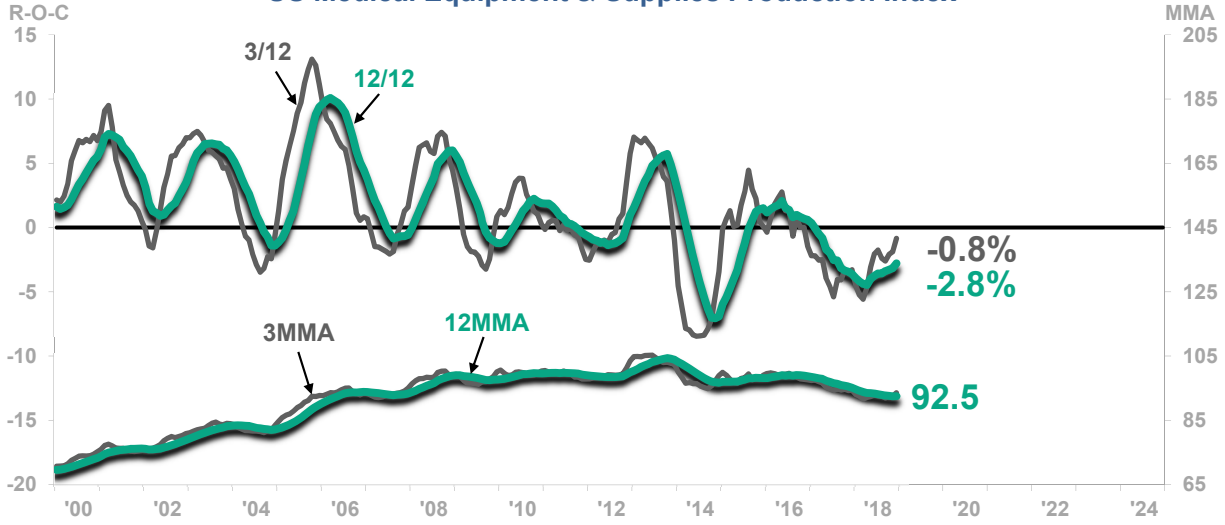
## Activity in Production Expected to Rise Into 2020

US Civilian Aircraft Equipment Production



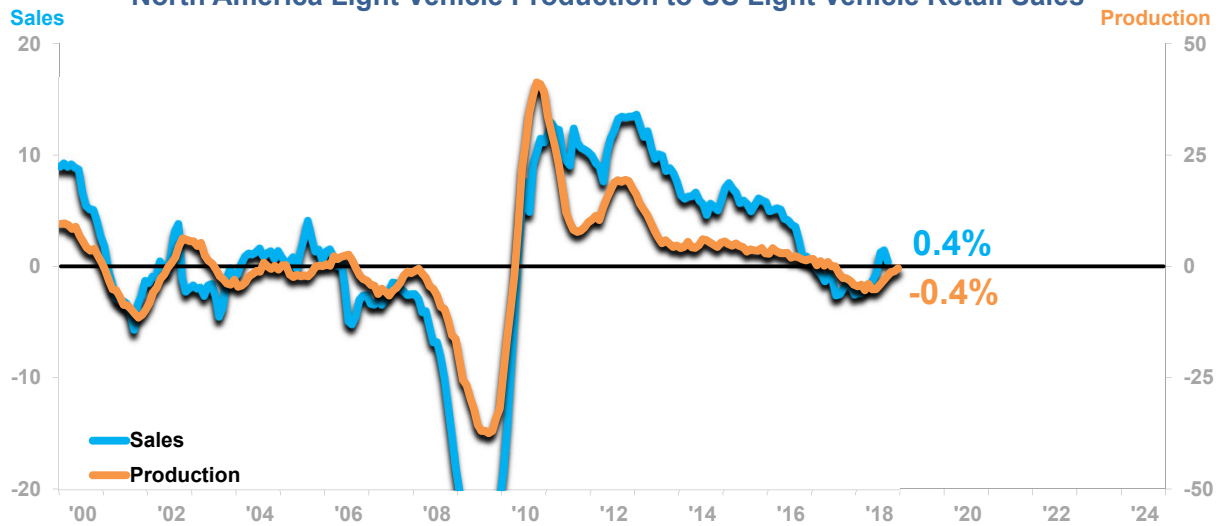
## Plan for Rise in Production Through 2019

US Medical Equipment & Supplies Production Index



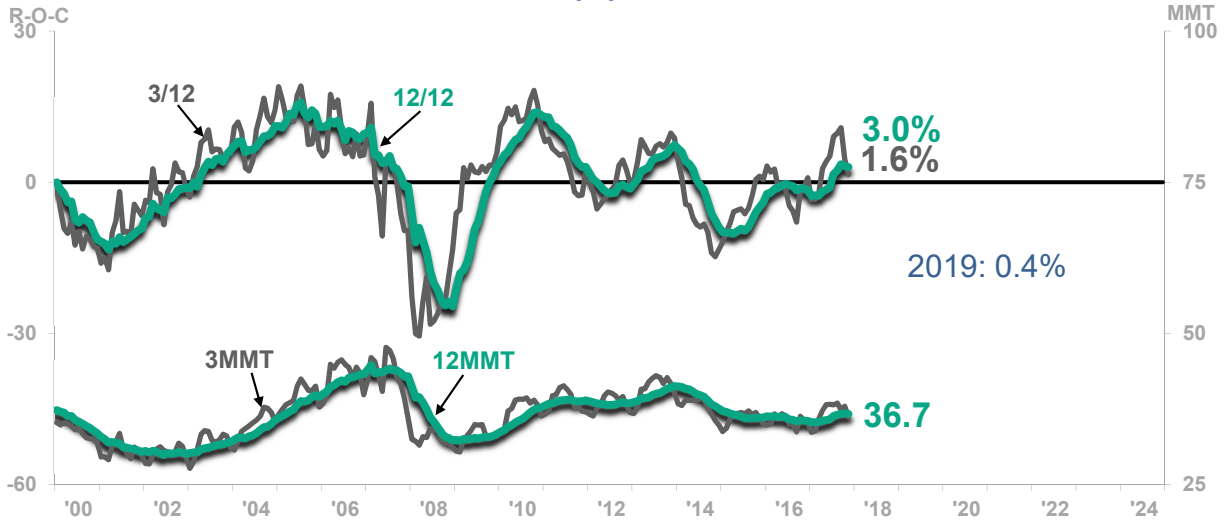
## Do Not Plan for Significant Growth Opportunities During 2019

North America Light Vehicle Production to US Light Vehicle Retail Sales



# Expect New Orders to End 2019 Near the 2018 Level

## US Electrical Equipment New Orders

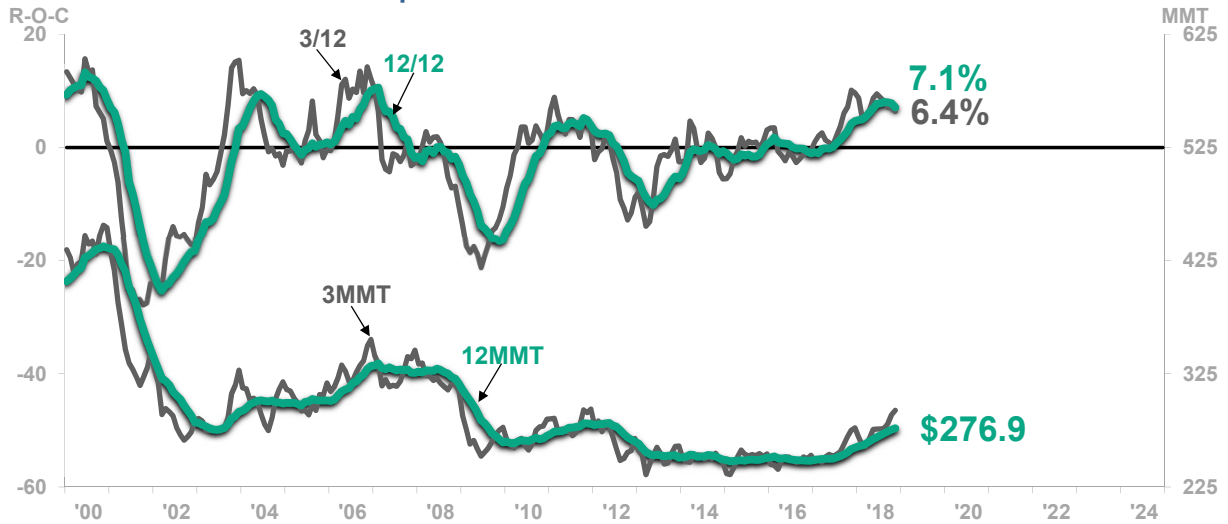


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Billions of Dollars  
Source: US Census Bureau

# Slowing Growth Will Characterize New Orders in 2019

## US Computer & Electronic Products New Orders

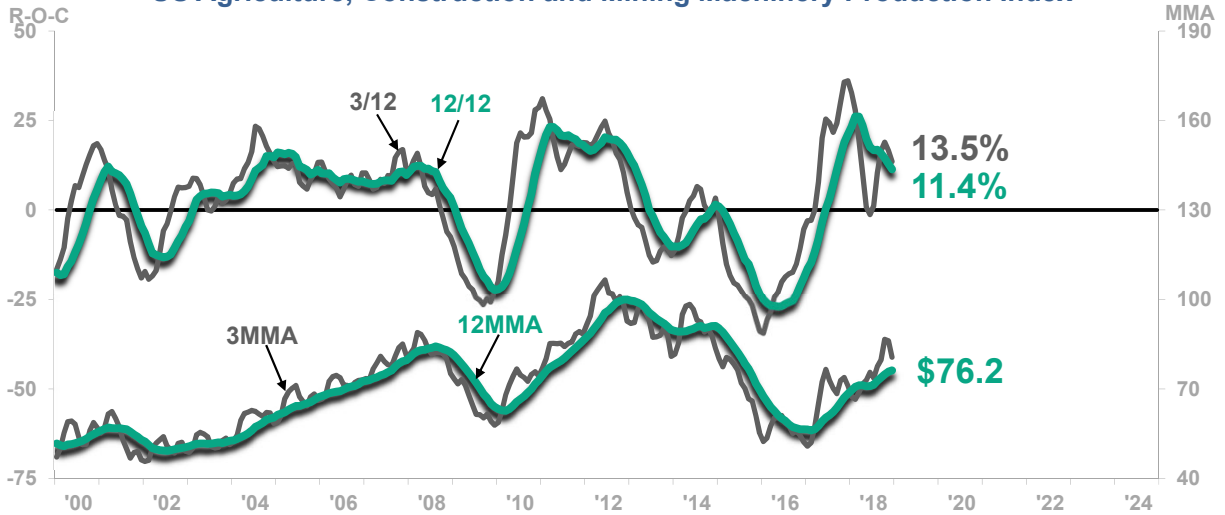


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NAICS 334, Billions of \$  
Source: FRB

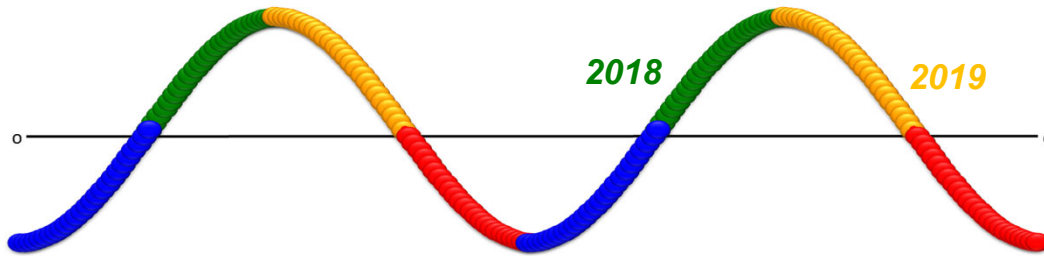
## Internal Trends Suggest Growth Into 2H19

### US Agriculture, Construction and Mining Machinery Production Index



## Summary

## 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 – Slowing 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.

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**hot wire** Feb 2019  
news and economic outlook for the wire and cable industry

**Inflation Expectations**

US consumer prices in November were 2.2% higher than the November 2017 level and prices are expected to rise through 2019. However, the rate of inflation will slow through the majority of the year. A slowing in the rise of transportation prices will likely contribute to slowing inflation rates throughout the consumer sector by reducing shipping costs. While we are not expecting deflation during this cycle, consider ensuring that your budgets reflect slowing in the pace of rise for prices. If your costs decline, use this opportunity to improve margins, but ensure that your prices remain competitive.

On the production side, US producer prices in November were up 1.6% from the same month in 2017. Inflation will persist through at least 2019. However, the rate of rise has begun to slow, and we expect further slowing in the pace of rise for prices throughout 2019. Falling metal prices are contributing to slowing the pace of rise in prices. The US Iron and Steel Group Producer Price Index, up 11.6%, is above the year-ago level, but falling from a June 2018 peak. Meanwhile, the US Copper and Brass Mill Shapes Producer Price Index was down 8.0%, and lead prices were down 21.1%. Ensure that your prices remain competitive as some input costs fall.

**READERS FORUM**

**Do you expect long-term economic impact from the government shutdown?**

The economists that IEWC consults with have not adjusted any of their outlooks based on the partial government shutdown. While they do not wish to minimize the real financial impact that the shutdown will have on federal employees, they do not expect a lasting impact on the economy as a whole. They have examined past US shutdowns, and the economy has maintained its business-cycle trend through every one of them. Standard & Poor's estimated that the 16-day shutdown in 2013 cost the US economy about \$24 billion. While no small sum, it amounted to just 0.1% of GDP. The current shutdown has been the longest on record, so it is not unreasonable to expect an atypical impact, but there is no precedent for a shutdown leaving significant lasting economic damage.

**INDUSTRY SNAPSHOTS**

Arrows indicate 12-month moving total/average direction

<b>Retail Sales</b> <ul style="list-style-type: none"> <li>• US Q4, falling 12 months through November</li> <li>• Expected to rise in 2019 with slowing pace through year</li> <li>• Consumer Prices will rise at a diminishing rate in 2019, which will contribute to slowing pace of growth for Retail Sales</li> </ul>	<b>Rotary Rig</b> <ul style="list-style-type: none"> <li>• Count during previous 12 months up 11.1%</li> <li>• Top count in being at a slowing pace</li> <li>• Oil rotary rig count (up 20.4%) is outpacing natural gas (up 11.0%), but growth in both is slowing</li> </ul>
<b>Wholesale Trade</b> <ul style="list-style-type: none"> <li>• Wholesale Trade up 0.3% year-over-year</li> <li>• Both durable &amp; nondurable goods will grow at a slowing rate in 2019</li> <li>• Wholesale trade unlikely to enter recession during this business cycle</li> </ul>	<b>Capital Goods</b> <ul style="list-style-type: none"> <li>• Nondefense capital goods orders up 6.7% 12 mos. through October</li> <li>• Defense capital goods new orders up 13.8%</li> <li>• Both sectors rates of growth to slow during next few quarters, with contraction expected in nondefense sector by the end of 2019</li> </ul>
<b>Auto Production</b>	<b>Nonresidential Construction</b>



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for a 90 day trial of our  
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ITR Economics Sales Team

## TAYLOR ST. GERMAIN

Taylor St. Germain is an economic analyst at ITR Economics™. He provides economic consulting services for small businesses, trade associations, and Fortune 500 companies across a spectrum of industries.



### TESTIMONIALS

“Very informational! Great planning matrix with real data. Thanks for this speaker!”

**Managing Director, Medium-Sized Manufacturing Company**

“Taylor did an excellent job. He was well prepared and engaging. I thoroughly enjoyed his presentation.”

**Executive VP, Aerospace Design and Fabrication Company**

“Taylor had a great depth of knowledge. Answered all our questions beyond the slides!”

**President, Medical Device Manufacturer**

### ABOUT TAYLOR

Taylor’s personality and understanding of the usability of economic trends in business are always refreshing and welcomed by those around him.

Before joining the Executive Vantage Point Team at ITR Economics, Taylor graduated from the University of Vermont with a major in statistics and a double minor in mathematics and political science. He is an asset to not only his EVP team but to ITR Economics as a whole!

**[Click Here to View ITR Economics’ Speaker Videos](#)**

### BOOKING INFORMATION

To learn more about ITR Economics, please call 603.796.2500 or email [itr@itreconomics.com](mailto:itr@itreconomics.com).

Visit [www.itreconomics.com](http://www.itreconomics.com) and stay in touch with us through our blog and social media.

### ABOUT ITR ECONOMICS

Founded in 1948, ITR Economics is the oldest, privately-held, continuously operating economic research & consulting firm in the United States. With a long-term 94.7% accuracy rating, ITR Economics has forecast major economic events, such as the 2008 recession, well in advance and provides reliable industry and company forecasts tailored to client’s needs. ITR Economics also offers economic webinars, subscription periodicals, consultative reports, and data collection services.

## Want to reduce your risk when deciding where and when to allocate your resources?

Join the thousands of businesses who are doing just that by using ITR's forecasting tools ranging from monthly subscriptions to onsite consultations on industry trends that have a direct impact on your business.

### ITR has a 94.7% Forecast Accuracy.

Our unmatched 94.7% forecast accuracy at four quarters out since 1985 allows us to help business executives make strategic movements with confidence. Our team of expert economists are ready to coach your team on how to use economic foresight to truly maximize your profitability. We will work directly with you to customize a program that will meet your specific planning needs.

### Driving practical and profitable business decisions.

Our mission is to drive practical, profitable business decisions and strengthen your company through strategic use of industry trends. Thousands of business leaders from around the world are turning to ITR's subscriptions, consultative programs, and onsite speaking engagements for guidance in increasing their foresight of what is to come for their business.

Initiative	Available Solutions from ITR Economics™			
	EVP Series	Trends Report	Company Forecasts	Insider
Understanding events impacting business activity	●	●		●
Resource Allocation	●	●		
Marketing Initiatives	●	●		
Sales Forecasting	●	●	●	
Setting Sales Goals	●			
Benchmarking for gauging internal success	●			
Budget Setting	●		●	
Increasing internal forecasting accuracy/ability	●			

“ITR’s insight and ability to relate global and US leading and lagging indicators to our industry was astounding and quite informative. I highly recommend ITR to anyone interested in sound knowledge of future economic conditions.”

*Jim Rohr, Co-Chairman, National Shipbuilding and Research Program*