

Indiana Hospital Association

Winds of Change



Dr. Alan Beaulieu
President

2017 Forecast Results If you heard ITR around two years ago...

| | Duration | Accuracy |
|-------------------|----------|----------|
| US GDP | 24 | 99.7% |
| US Ind. Prod. | 24 | 96.8% |
| Europe Ind. Prod. | 27 | 99.9% |
| Canada Ind. Prod. | 24 | 96.7% |
| China Ind. Prod. | 30 | 97.8% |
| Retail Sales | 25 | 98.0% |
| Housing | 27 | 99.5% |
| Employment | 23 | 99.5% |

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



First in Forecasts Since 1948

Summary September 2018

Macroeconomic Rise for 2018

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

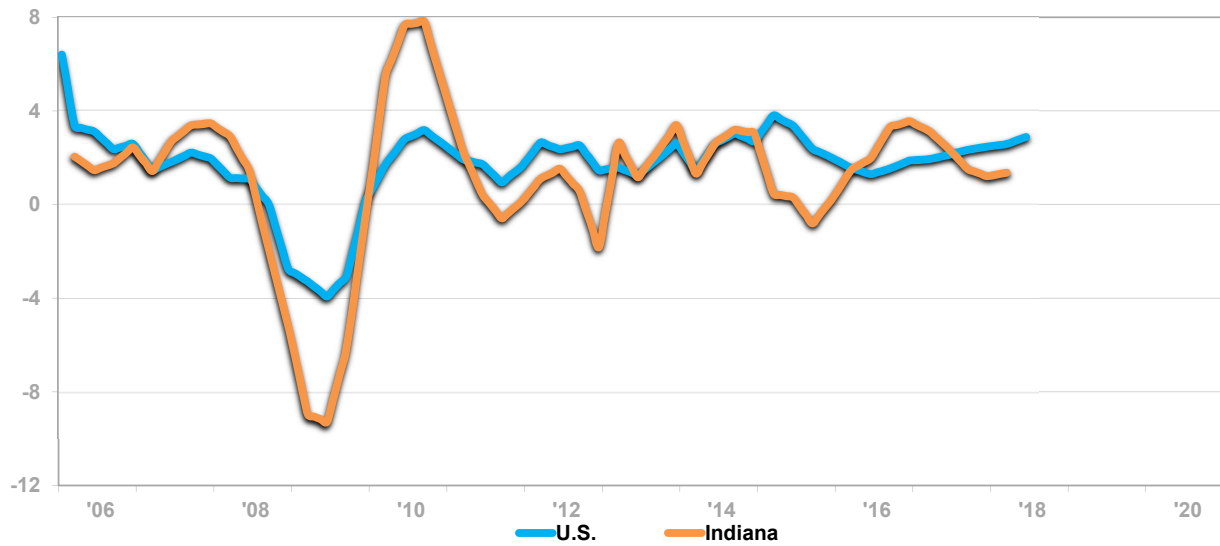
Know which ones matter to you

How to track the leading indicators



First in Forecasts Since 1948

US and Indiana GSP Growth Rate



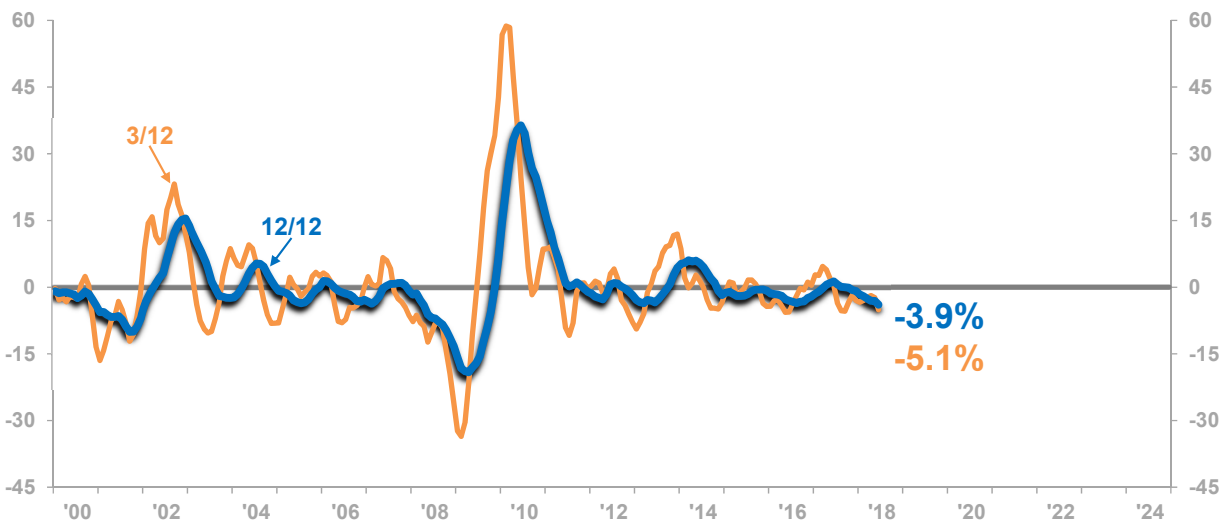
First in Forecasts Since 1948

3/12 Rates-of-Change

Source: BEA

4

Indiana Leading Indicator



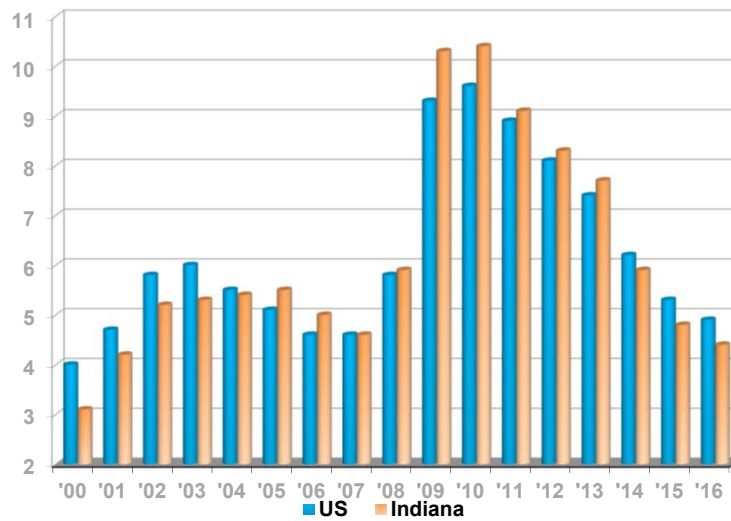
First in Forecasts Since 1948

Rates-of-Change

Source: Philadelphia Federal Reserve

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US to Indiana Unemployment Rates

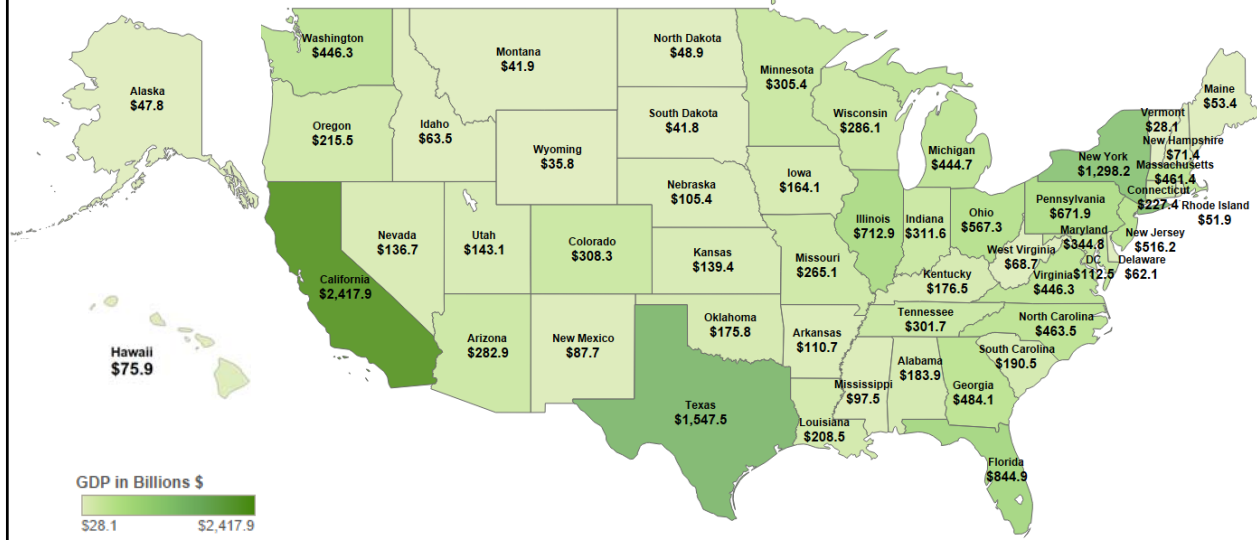


July 2018

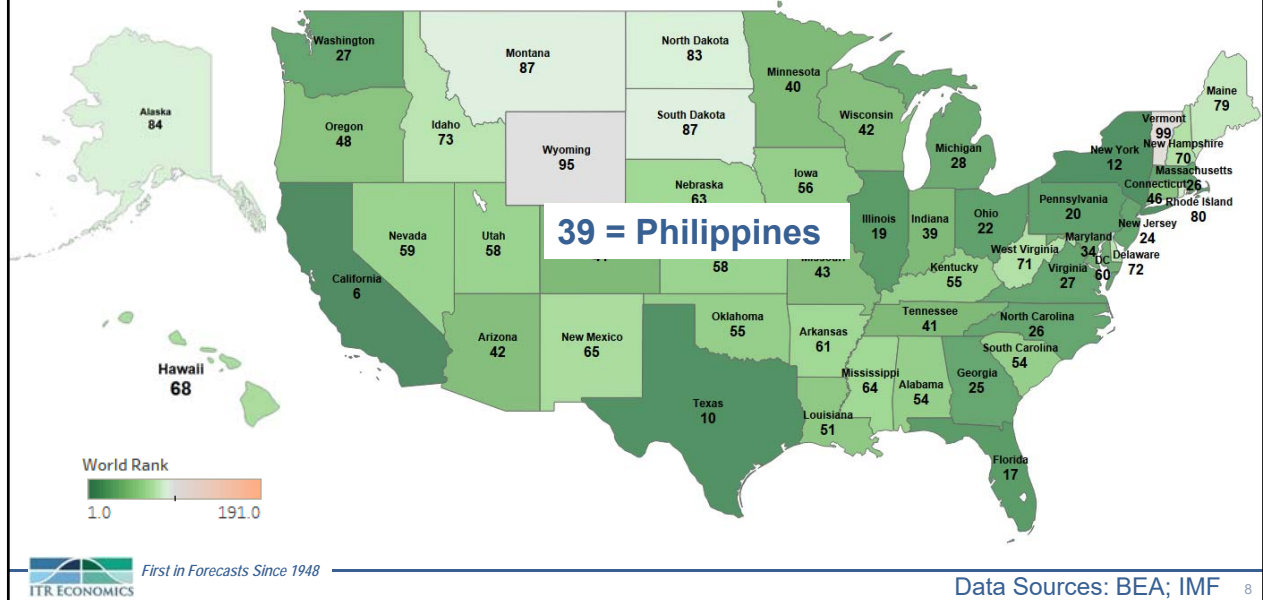
IN 3.4%

US 3.8%

State Gross Domestic Product

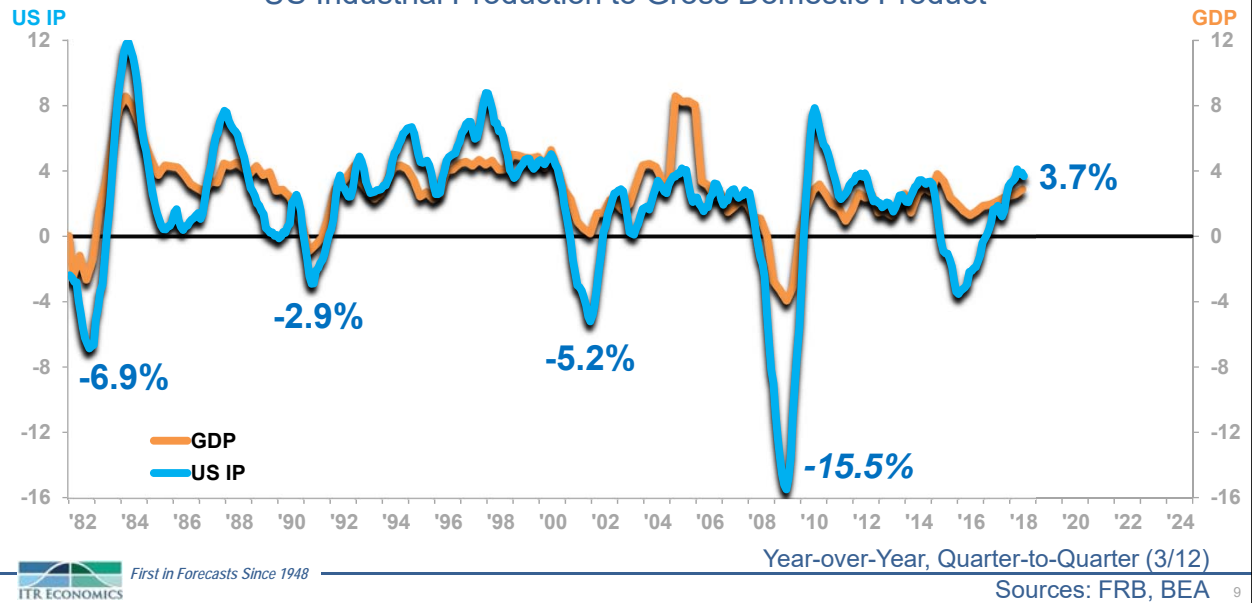


US States GDPs Ranked vs. World Country GDPs

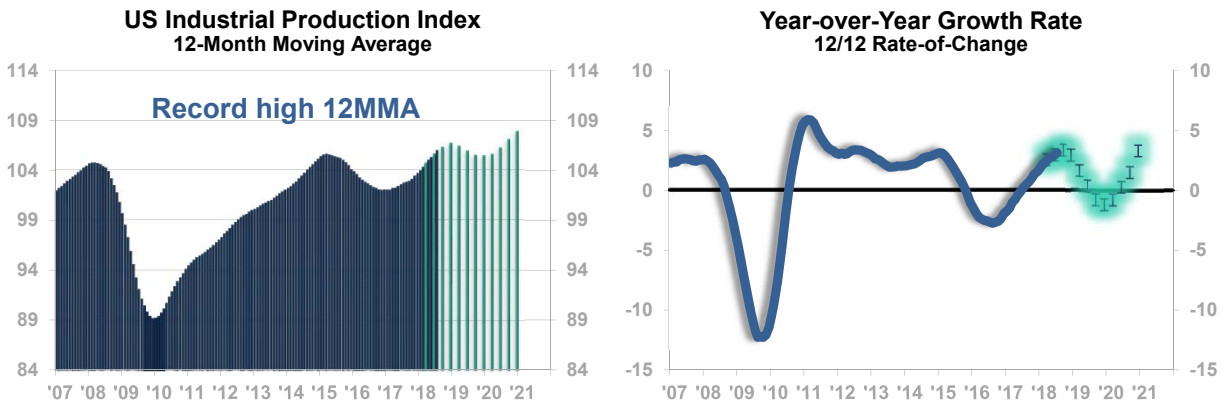


Manage the Business Cycles to Maximize Profits

US Industrial Production to Gross Domestic Product

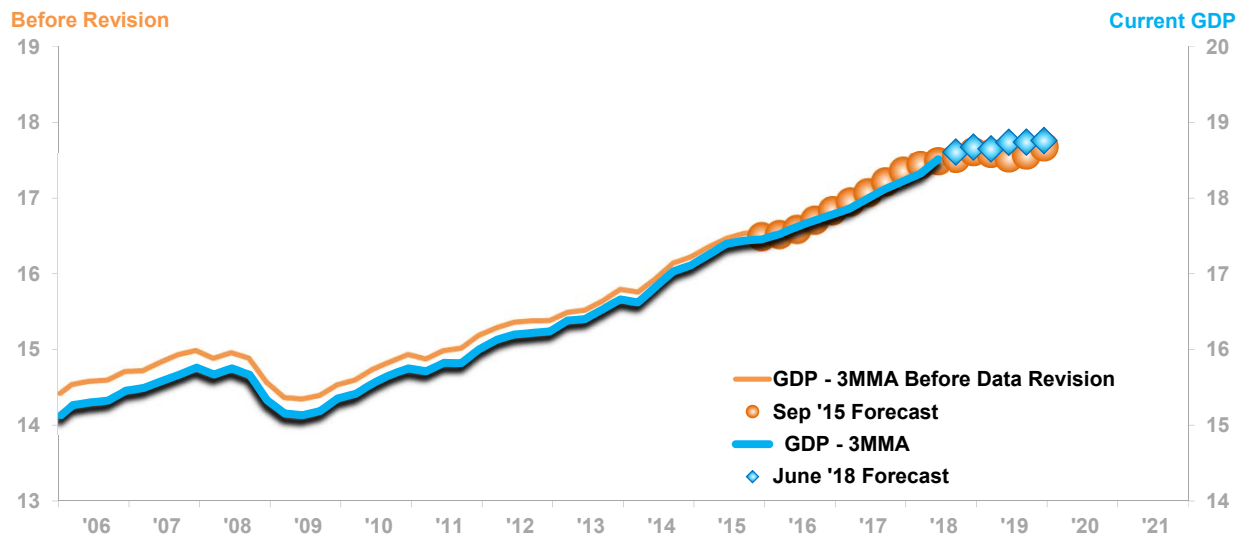


US Industrial Production Index



- Annual Trend: 106.0
- Phase: B
- Year-over-Year: 3.1%

US Real Gross Domestic Product



A Powerful Management Tool Rate-of-Change

| | Raw | 3MMT | 3/12 | 12MMT | 12/12 |
|--------|-----|------|-------|-------|-------|
| Sep-16 | 1.5 | | | | |
| Oct-16 | 1.5 | | | | |
| Nov-16 | 1.4 | 4.4 | | | |
| Dec-16 | 1.5 | 4.4 | | | |
| Jan-17 | 1.3 | 4.4 | | | |
| Feb-17 | 1.3 | 4.2 | | | |
| Mar-17 | 1.6 | 4.1 | | | |
| Apr-17 | 1.6 | 4.2 | | | |
| May-17 | 1.5 | 4.5 | | | |
| Jun-17 | 1.7 | 4.7 | | | |
| Jul-17 | 1.6 | 4.8 | | | |
| Aug-17 | 1.7 | 5.0 | | 18.0 | |
| Sep-17 | 1.7 | 5.0 | | 18.2 | |
| Oct-17 | 1.7 | 5.0 | | 18.4 | |
| Nov-17 | 1.6 | 5.1 | 15.9% | 18.6 | |
| Dec-17 | 1.7 | 5.0 | 13.6% | 18.8 | |
| Jan-18 | 1.5 | 5.0 | 13.6% | 19.0 | 26.7% |
| Feb-18 | 1.5 | 4.8 | 14.3% | 19.2 | 25.5% |
| Mar-18 | 1.9 | 4.7 | 14.6% | 19.4 | 25.2% |
| Apr-18 | 1.7 | 4.9 | 16.7% | 19.7 | 22.4% |
| May-18 | 1.7 | 5.1 | 13.3% | 19.8 | 20.0% |
| Jun-18 | 1.9 | 5.3 | 12.8% | 20.0 | 18.3% |
| Jul-18 | 1.7 | 5.3 | 10.4% | 20.2 | 15.4% |
| Aug-18 | 1.7 | 5.3 | 10.4% | 20.3 | 12.7% |

DATACAST !

3/12 Rate-of-Change

$$= \frac{\text{August 2018 3MMT}}{\text{August 2017 3MMT}} \times 100 - 100$$

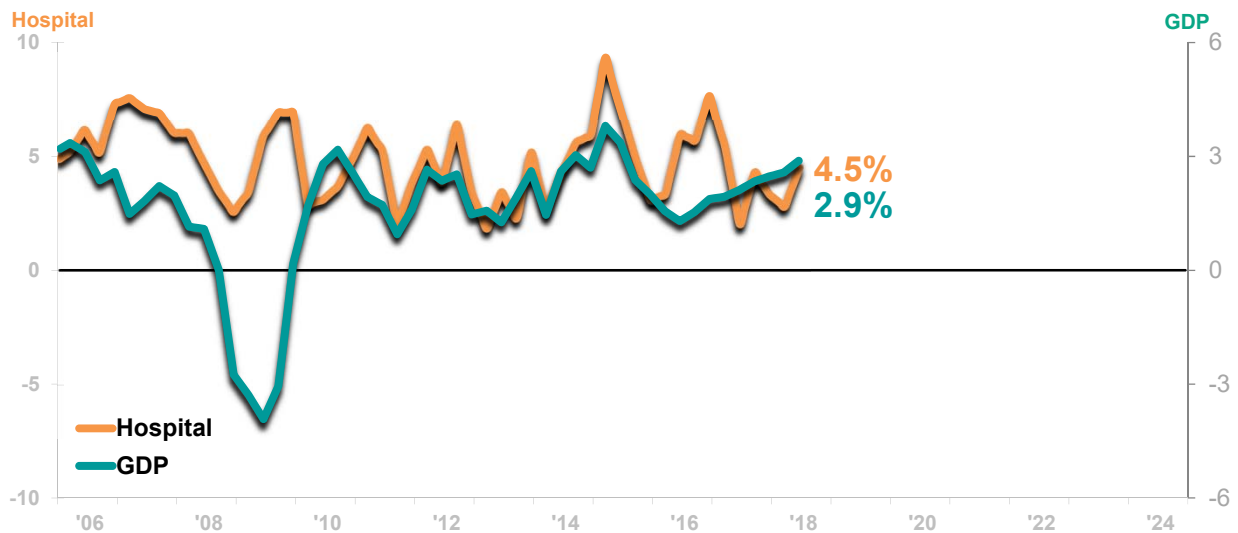
$$= \frac{5.3}{4.8} \times 100 - 100 = 10.4\%$$

12/12 Rate-of-Change

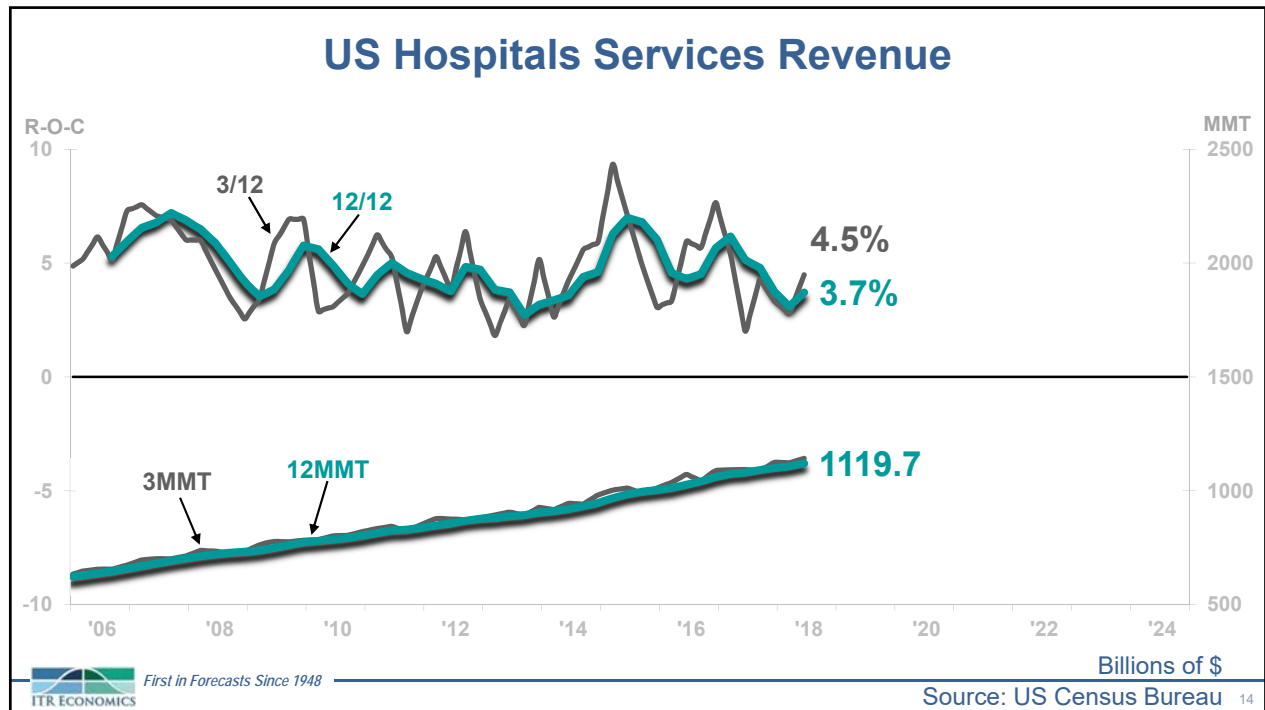
$$= \frac{\text{August 2018 12MMT}}{\text{August 2017 12MMT}} \times 100 - 100$$

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

US Hospitals Services Revenue to US Real Gross Domestic Product



4.5%
2.9%



Tariff

A tax or duty that a government charges on goods coming into or going out of their country

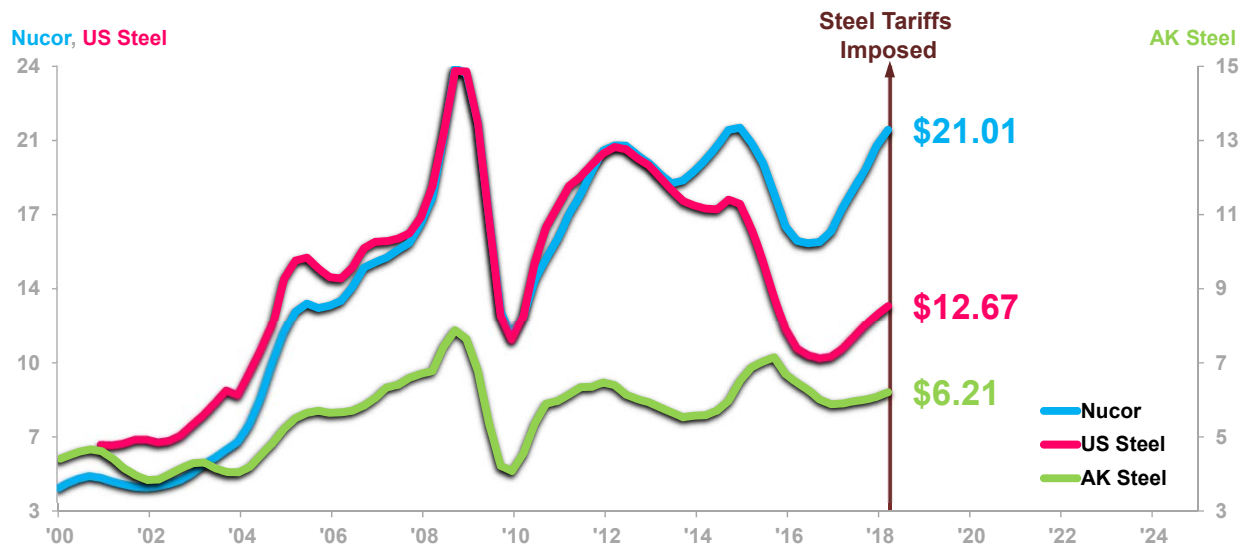
Tariffs and other fun things

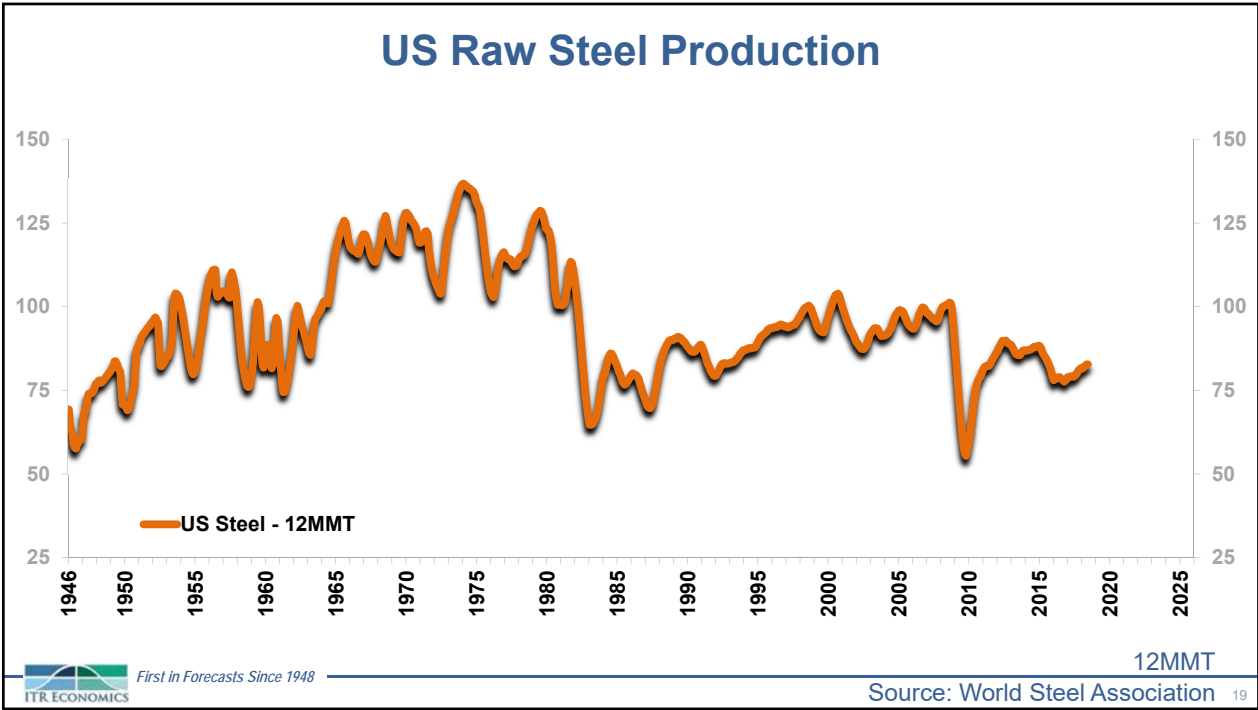
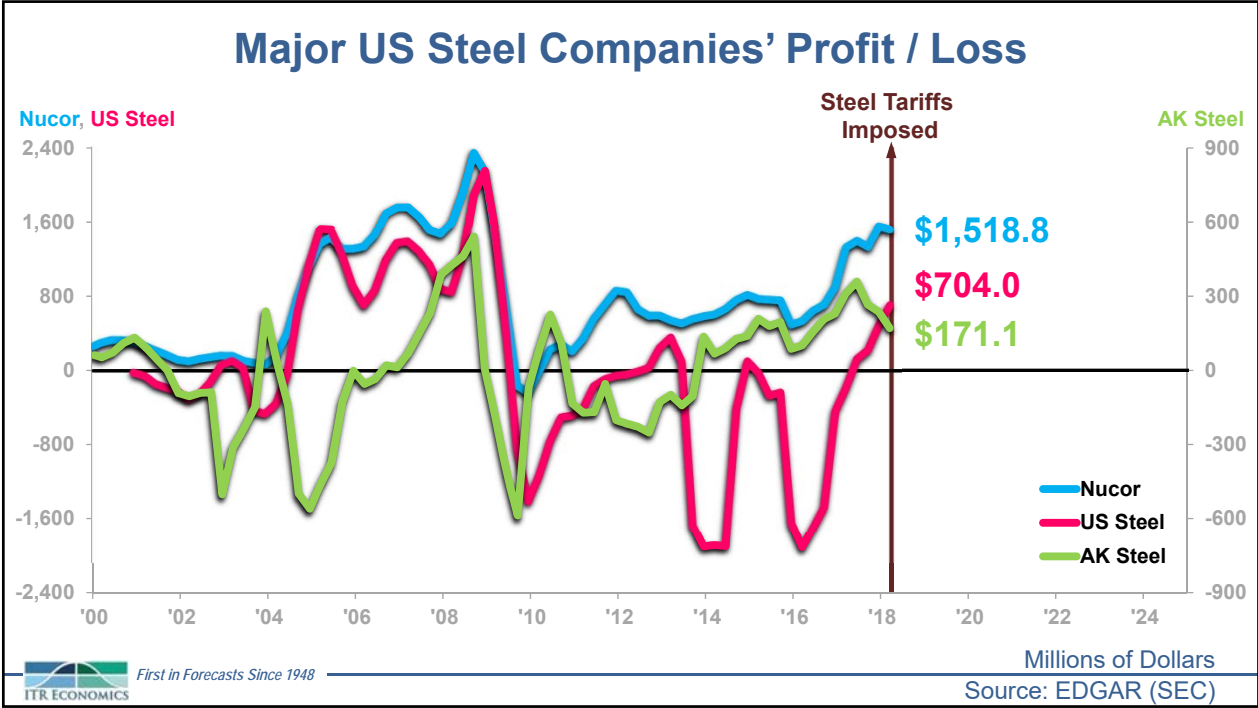
Ease of Doing Business



| | |
|-----------|-----|
| NZ | 1 |
| Singapore | 2 |
| Denmark | 3 |
| Korea | 4 |
| Hong Kong | 5 |
| US | 6 |
| UK | 8 |
| Germany | 21 |
| Japan | 35 |
| Russia | 36 |
| China | 75 |
| India | 100 |
| Brazil | 125 |

Major US Steel Companies' Sales Revenue





US Steel Mill Employment



Exports (orange line, left axis) and **Exchange Rate** (blue line, right axis) from 2000 to 2024. The chart shows significant volatility in both series. A horizontal line at 0% is shown. Annotations indicate 12/12 Rates-of-Change: 8.1% for Exports and -5.1% for Exchange Rate as of 3/12.

| Year | Exports (12/12 Rate-of-Change) | Exchange Rate (12/12 Rate-of-Change) |
|------|--------------------------------|--------------------------------------|
| 2000 | ~5% | ~5% |
| 2002 | ~-15% | ~-10% |
| 2004 | ~10% | ~35% |
| 2006 | ~10% | ~10% |
| 2008 | ~15% | ~30% |
| 2010 | ~-20% | ~-15% |
| 2012 | ~5% | ~5% |
| 2014 | ~5% | ~5% |
| 2016 | ~-10% | ~-15% |
| 2018 | ~5% | ~5% |
| 2020 | ~5% | ~5% |
| 2022 | ~5% | ~5% |
| 2024 | 8.1% | -5.1% |

12/12 Rates-of-Change
Sources: Census Bureau, FRED

US Top Goods Export by State

US Top Goods Export by State

Based on annual data, 2017
Source: US Census Bureau

Tariffs

US Tariffs

| Category | Value |
|--|-------|
| Proposed Auto Imports | 350 |
| Proposed Chinese Imports | 267 |
| 10% Tariff Sep 24th Chinese Imports Round 2 | 200 |
| 25% Tariff Jan 1, 2019 Chinese Imports Round 1 | 50 |
| Steel | 29 |

Reciprocal Tariffs

| Category | Value |
|------------------|-------|
| China Round 2 | 60 |
| China Round 1 | 52.4 |
| Washing Machines | 1.8 |
| Turkey | 1.8 |
| Europe | 3.2 |
| Mexico | 2.9 |
| Canada | 12.8 |
| Aluminum | 17.4 |
| Solar Panels | 8.5 |

Legend:

- Proposed (Blue)
- Actual (Green)

Leveling the Manufacturing Field Around the Globe

Years of 15% to 20% per annum labor cost increases in China without corresponding productivity increases

Cheap and readily available energy in North America

Aggressive reengineering and automation

Exports from the US to China stand at \$130.1bn, or 0.7% of US GDP.

Exports from China to US stand at \$130.1bn, or 0.7% of China GDP.

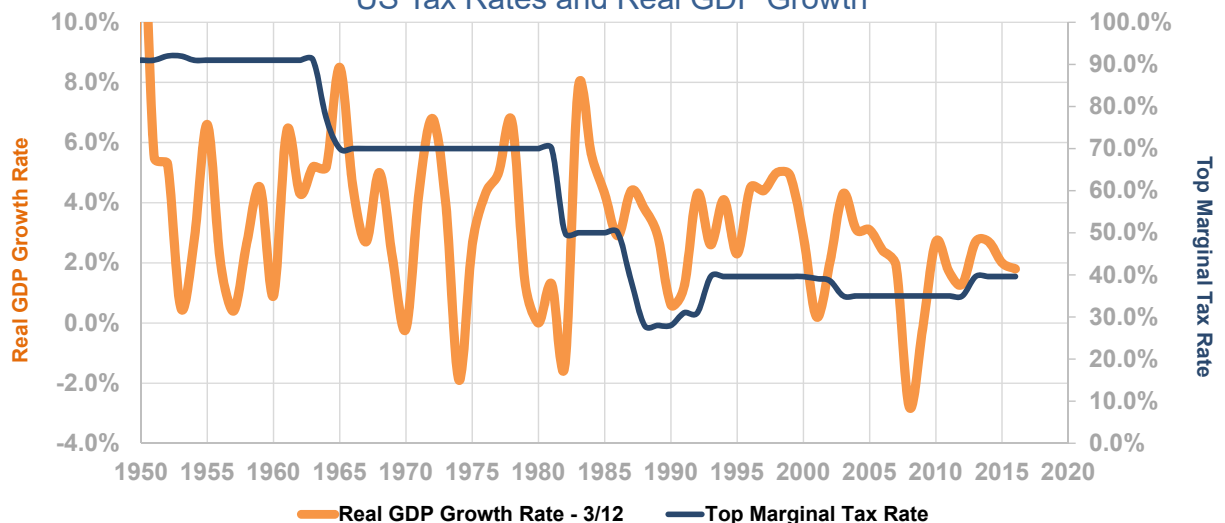
2004: 15 Percentage Point Advantage

The China Advantage?

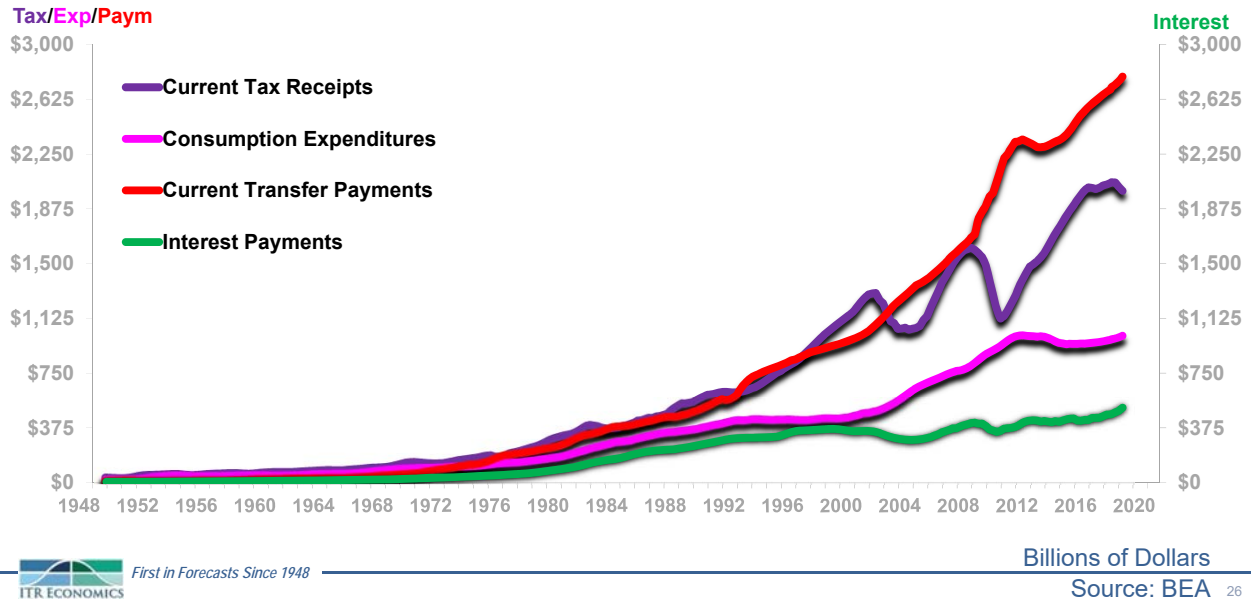
2016: Only 1 Percent Point Difference

Lower Taxes May Provide a Temporary Boost

US Tax Rates and Real GDP Growth

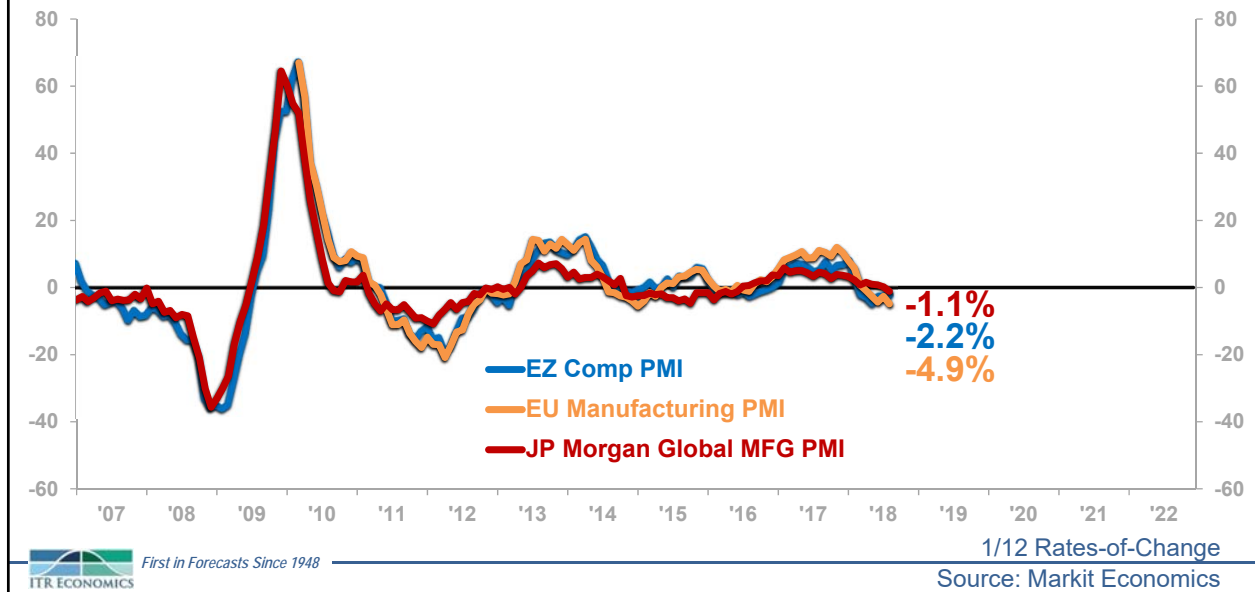


Issues Government Will and Won't Tackle

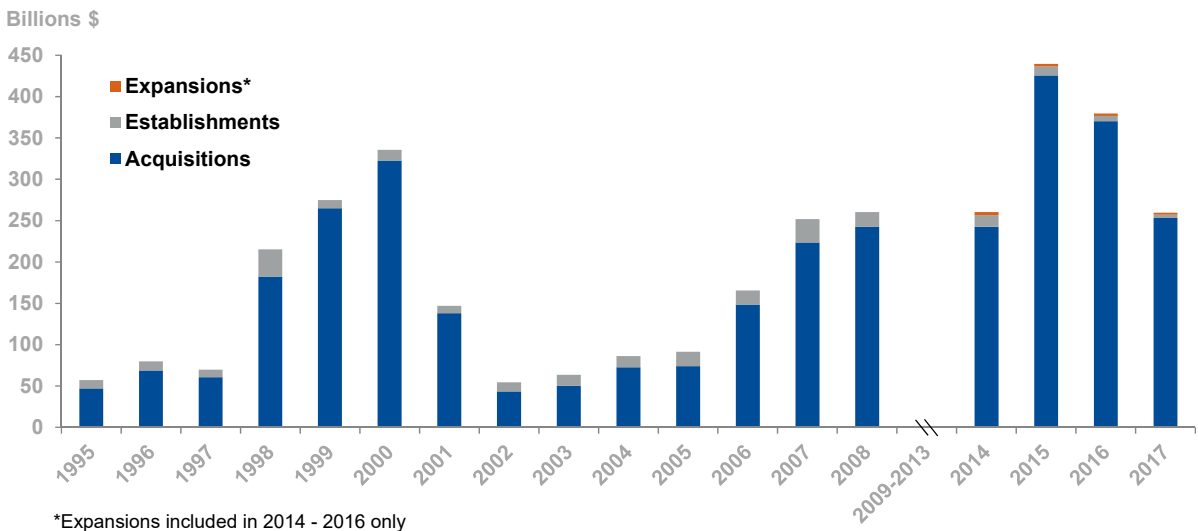


Global Partners

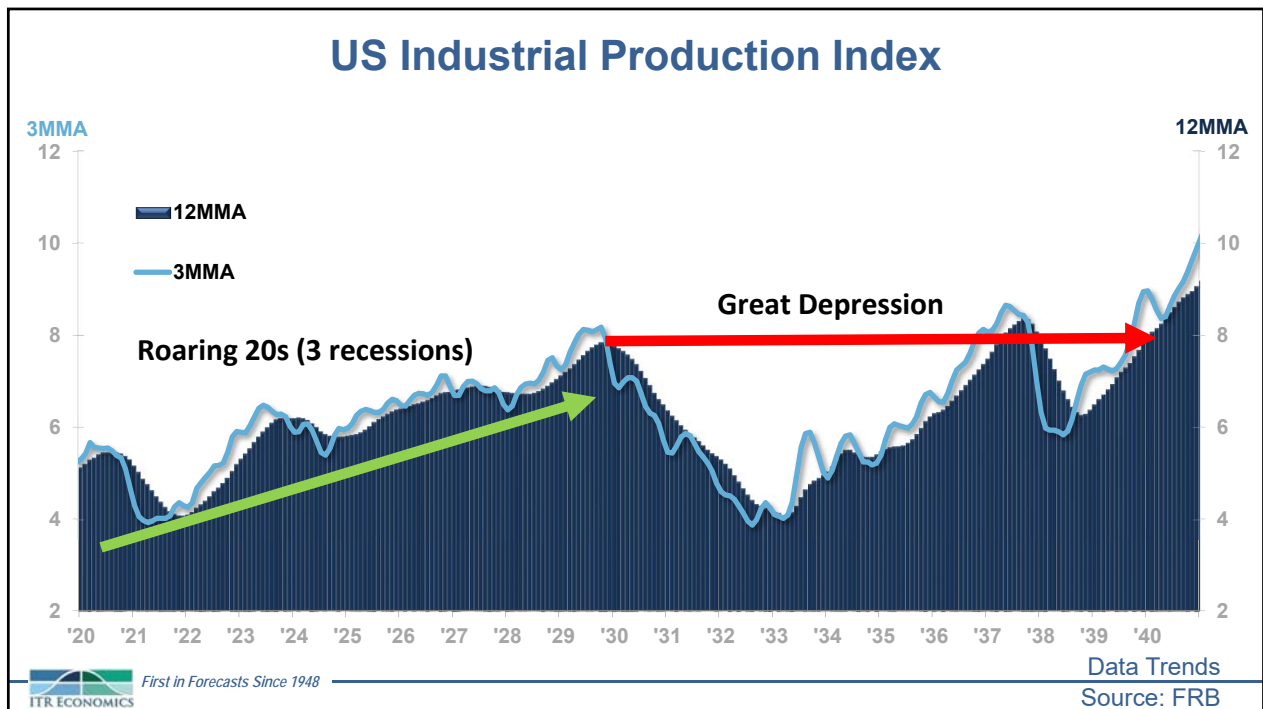
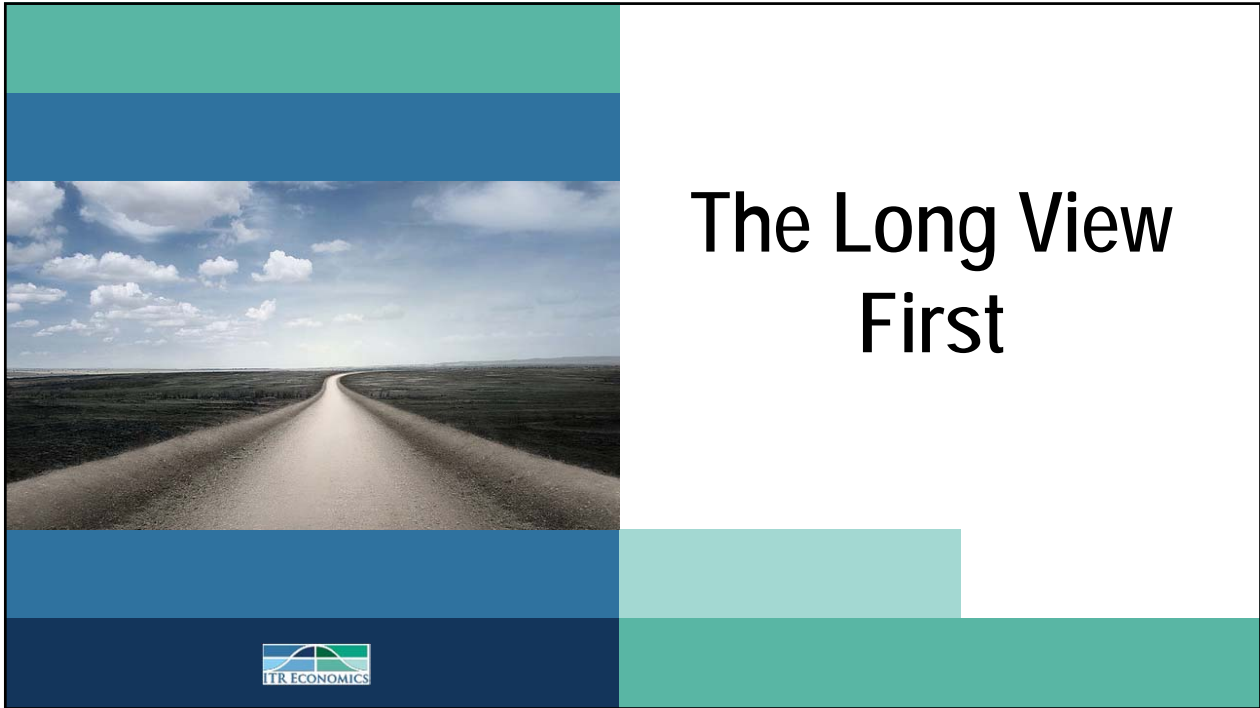
Global Leading Indicators



New Foreign Direct Investment Expenditures by Type



Billions of Dollars
Source: BEA





DEPRESSION DRIVERS

Demographics

Inflation

Health Care Costs
and Entitlements

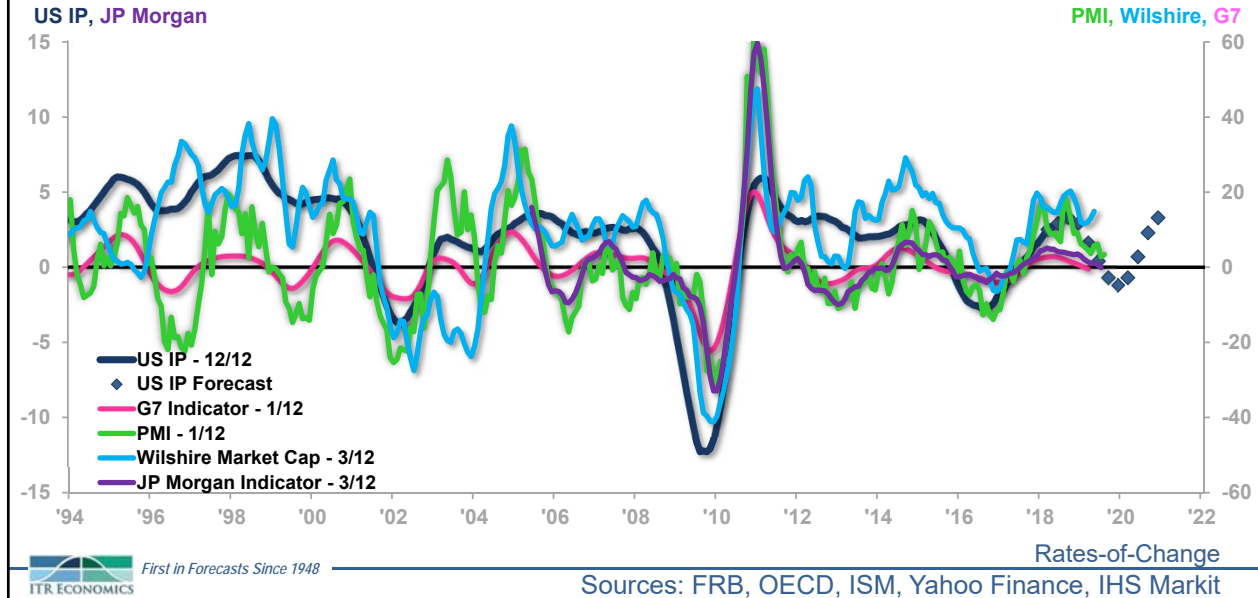
US National Debt



The US Economy 2019-2020

Leading Indicator System as a Powerful Tool

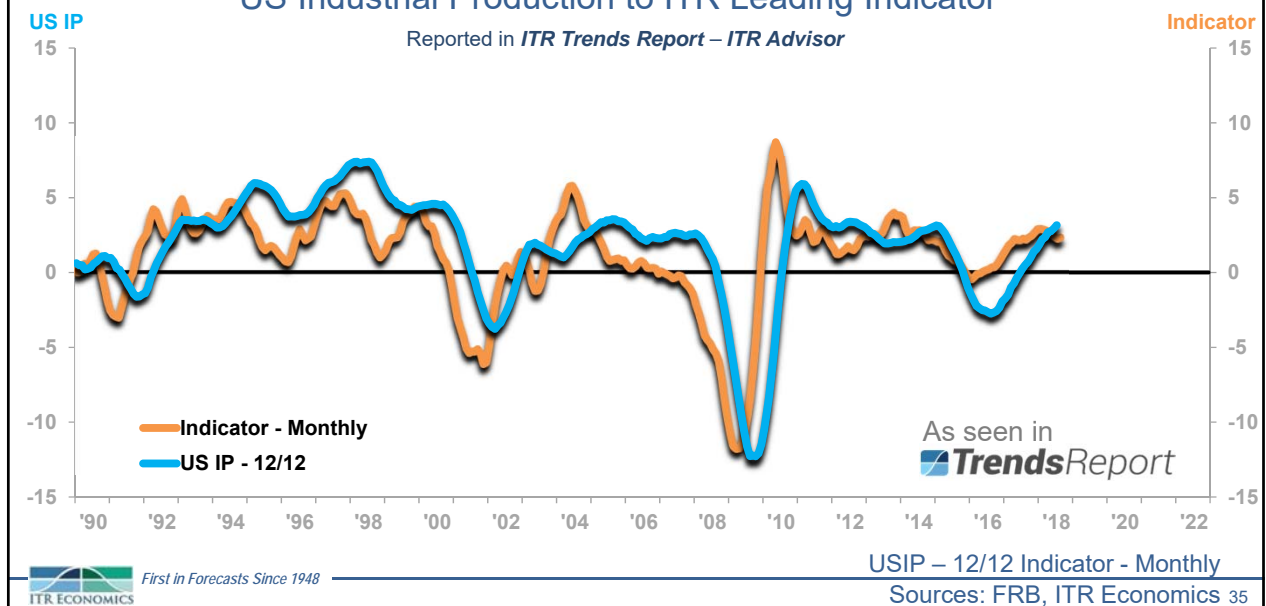
US Industrial Production Index to Leading Indicators



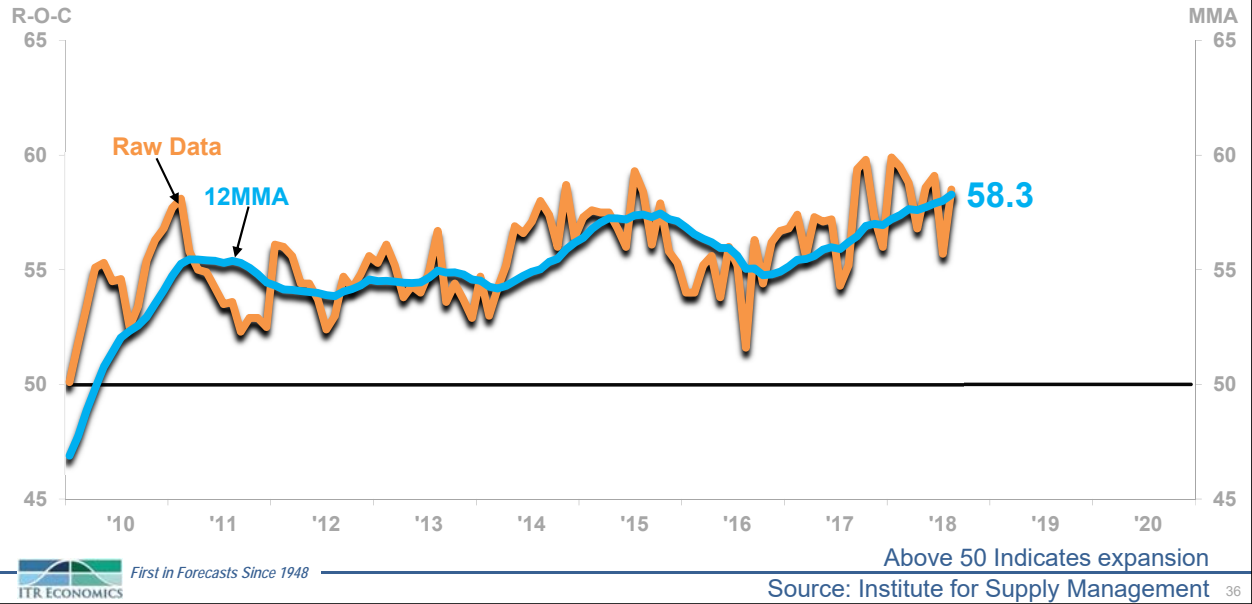
ITR's Leading Indicator™ Says Slowing Rise Ahead

US Industrial Production to ITR Leading Indicator™

Reported in *ITR Trends Report* – ITR Advisor

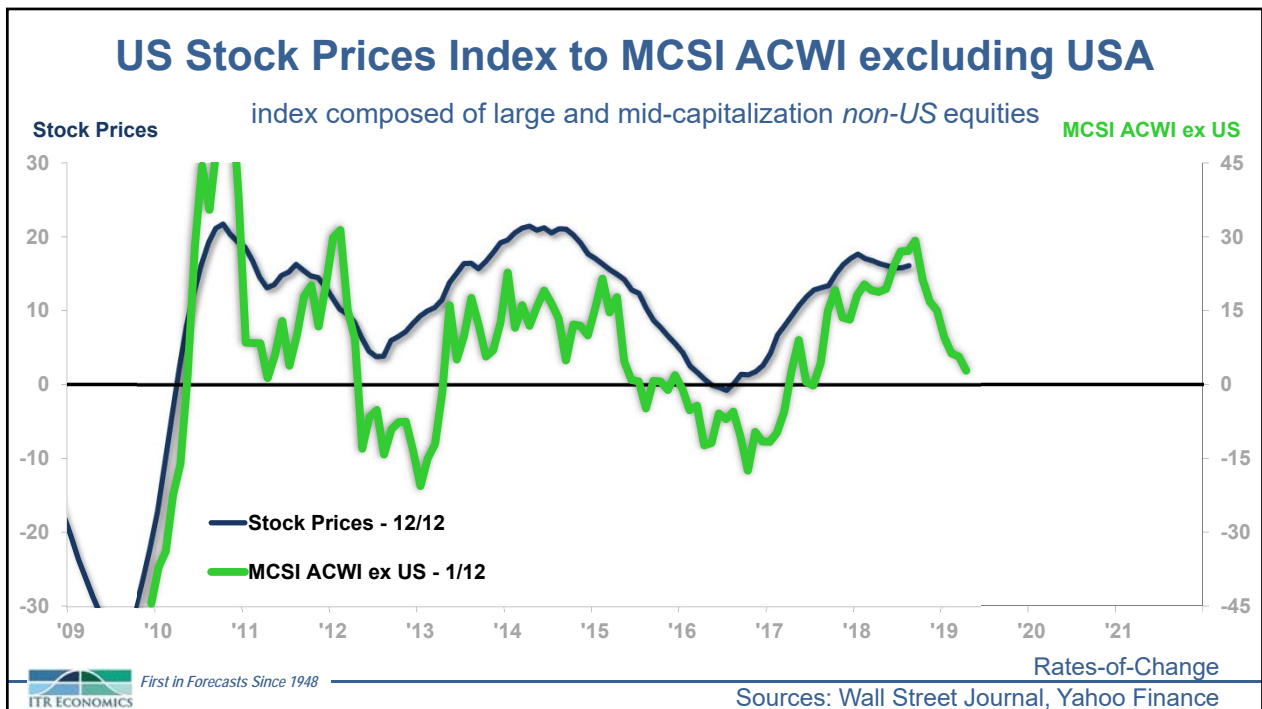
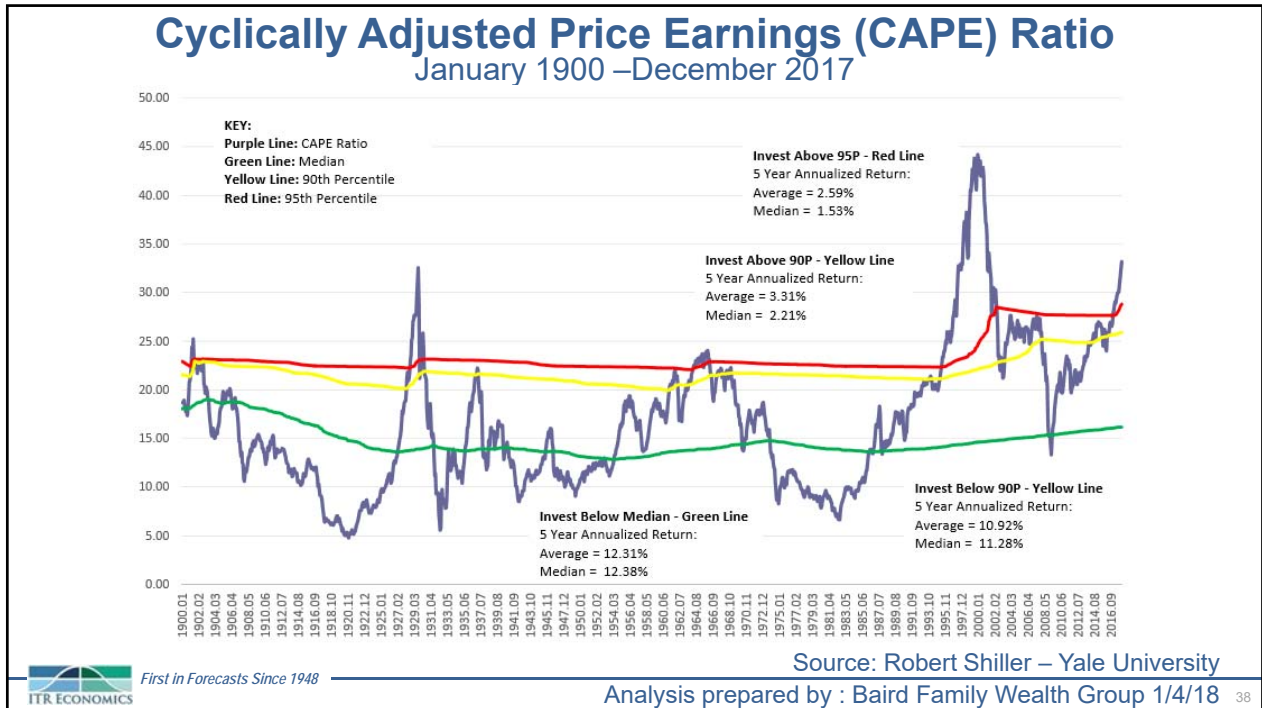


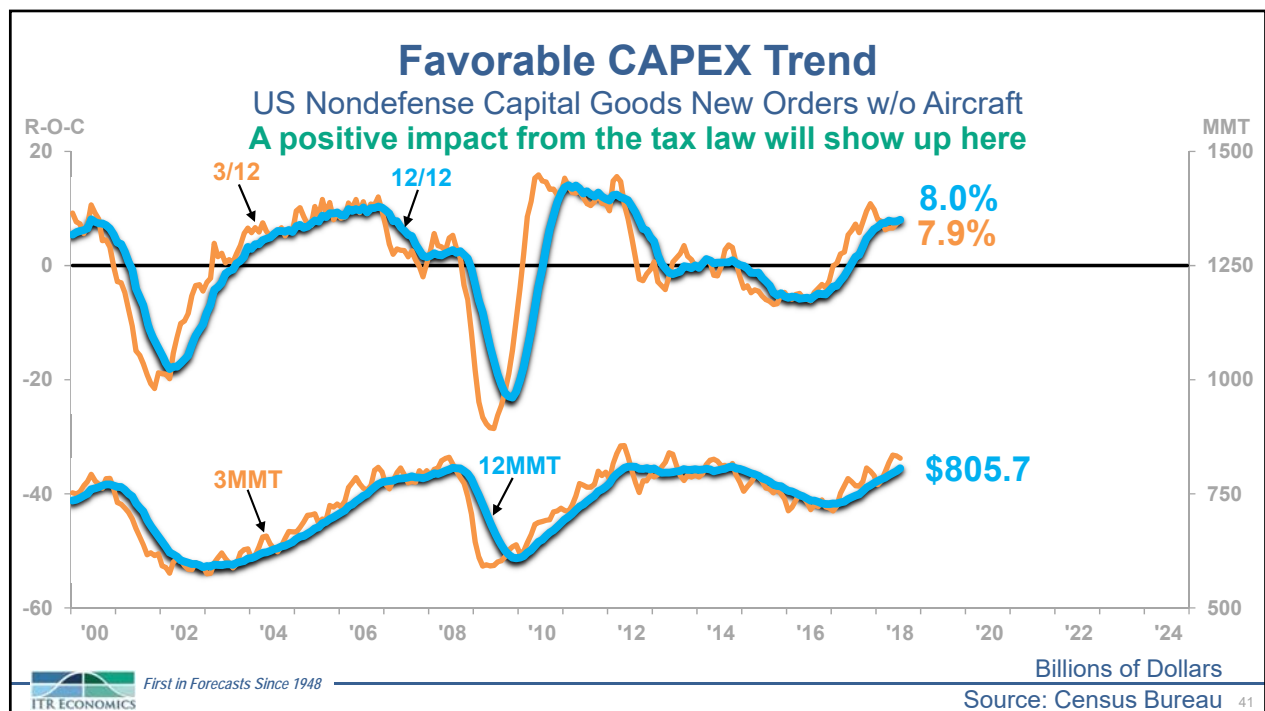
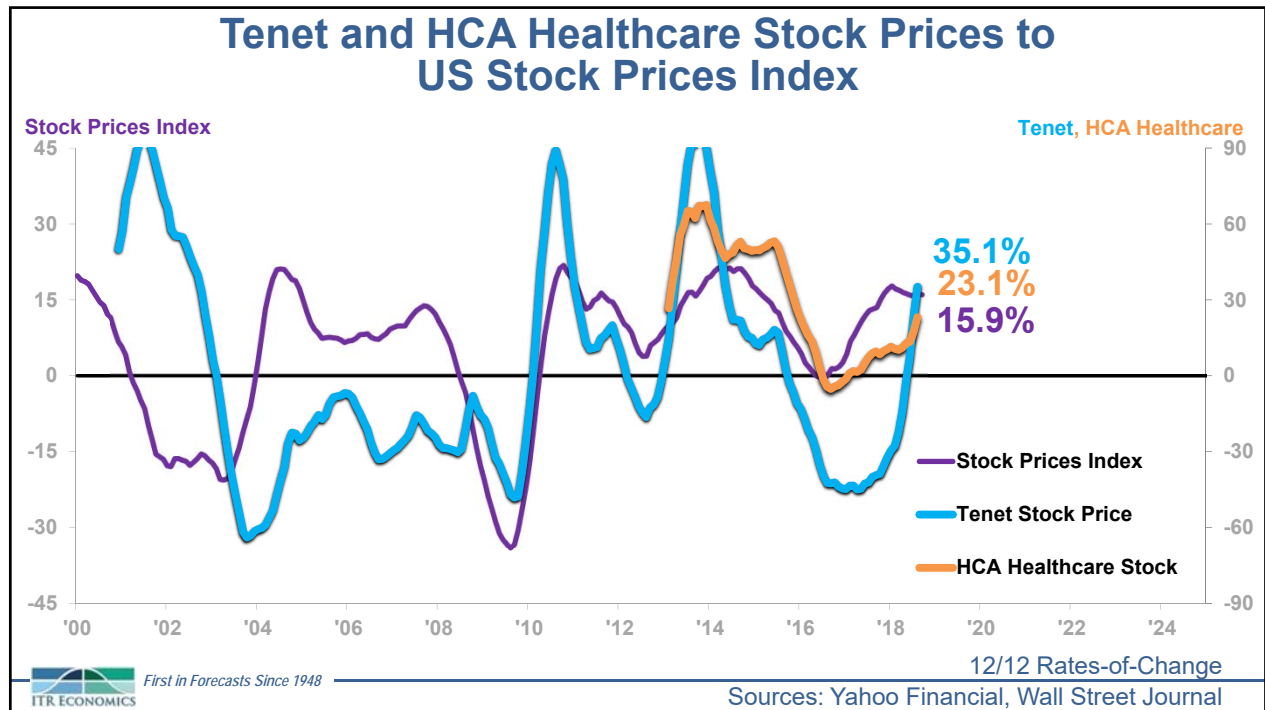
US Non-Manufacturing Purchasing Managers Index



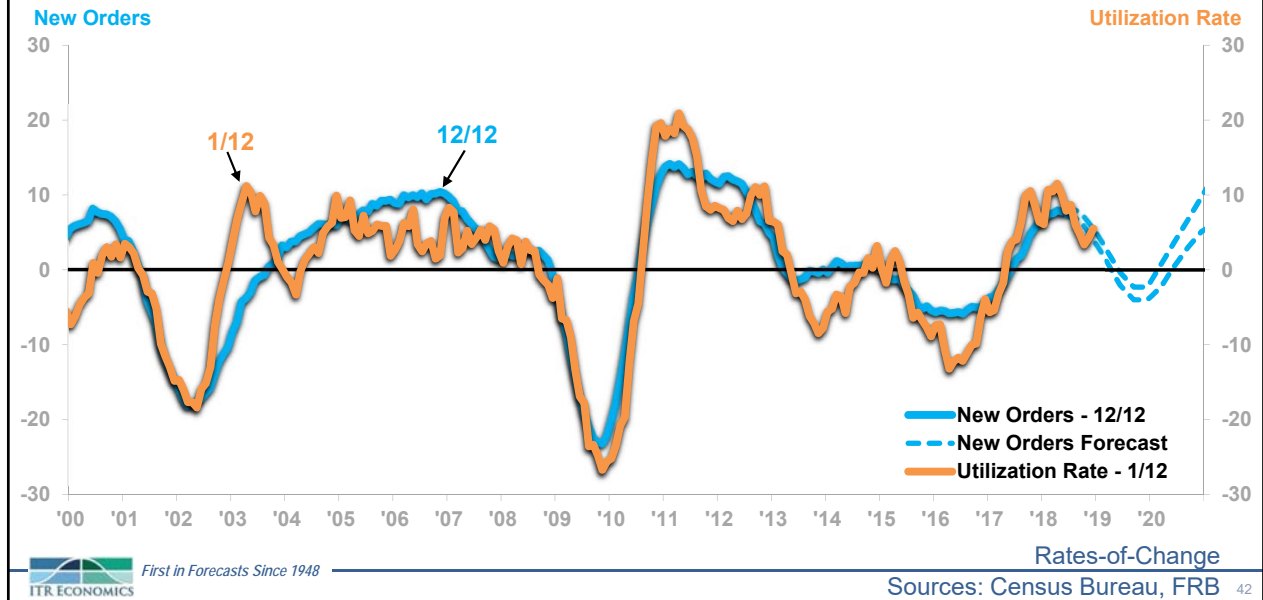
US Stock Prices Index to US Purchasing Managers Index



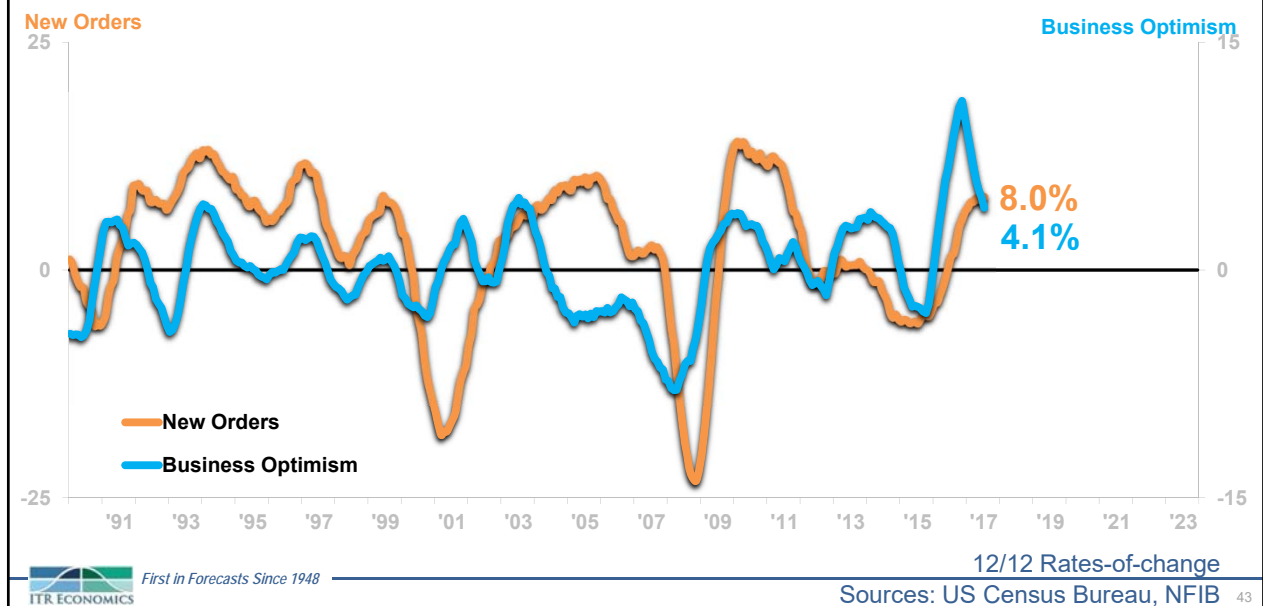


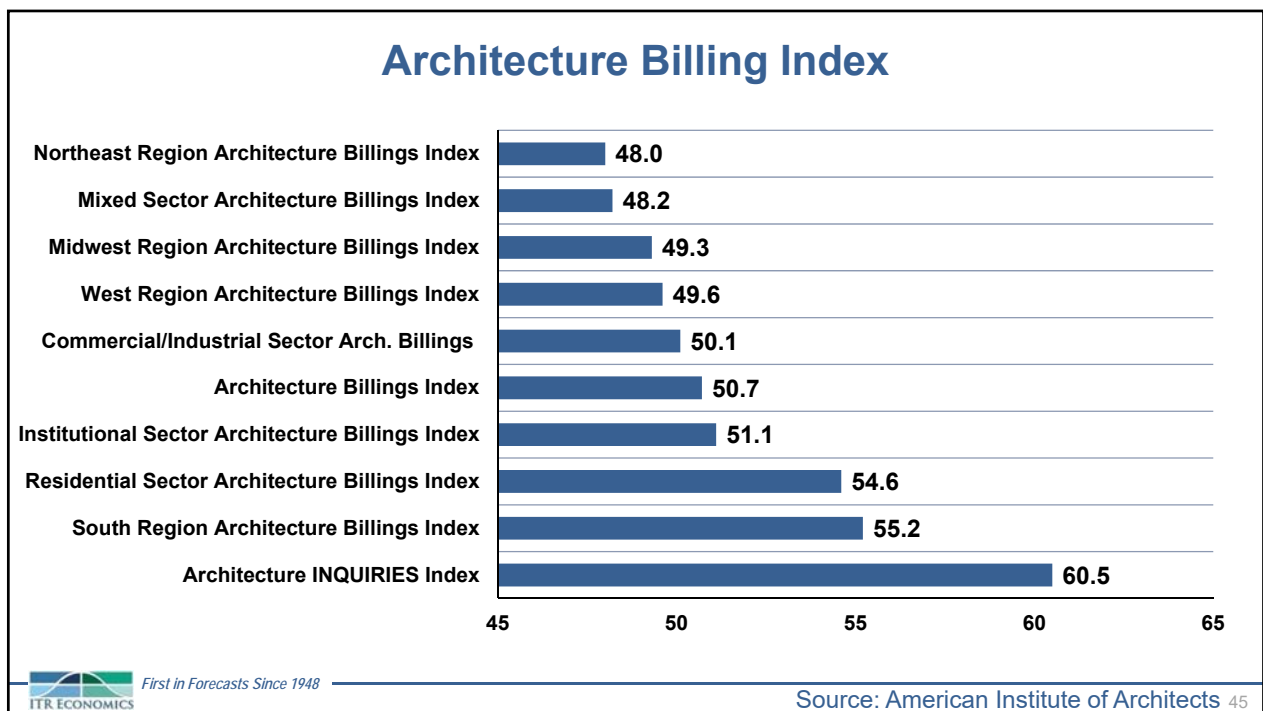
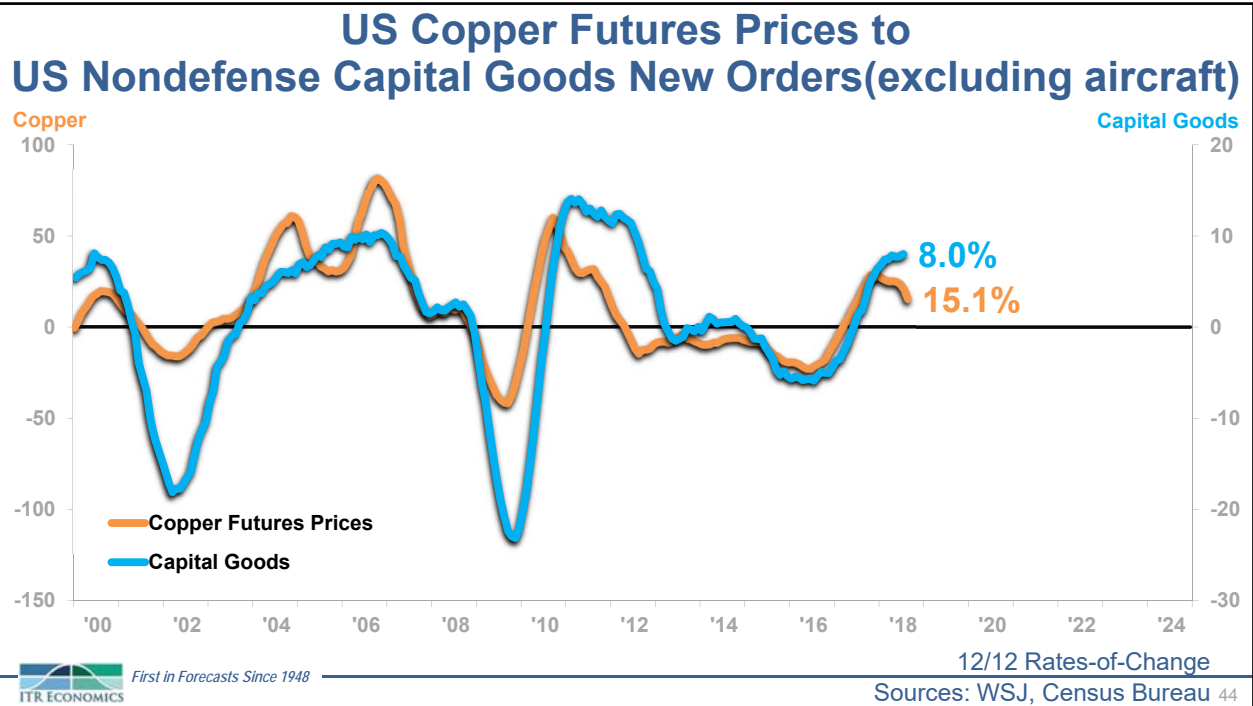


US Nondefense Capital Goods New Orders (excl. Aircraft) to US Manufacturing Capacity Utilization



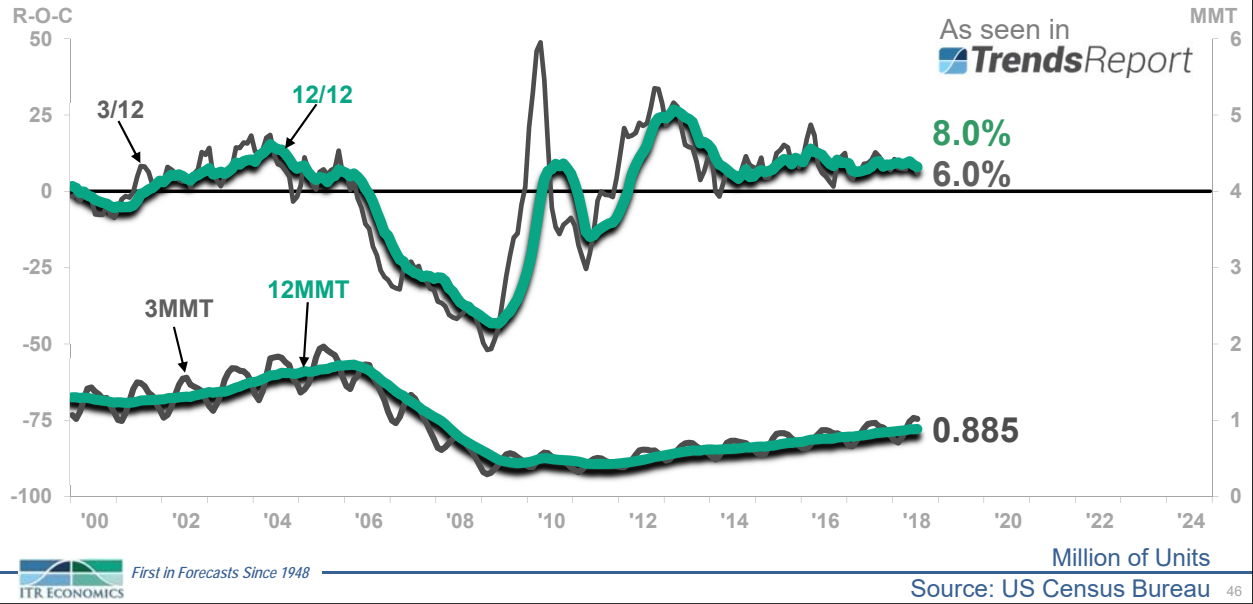
US Nondefense Capital Goods New Orders (excluding aircraft) to Small Business Optimism Index





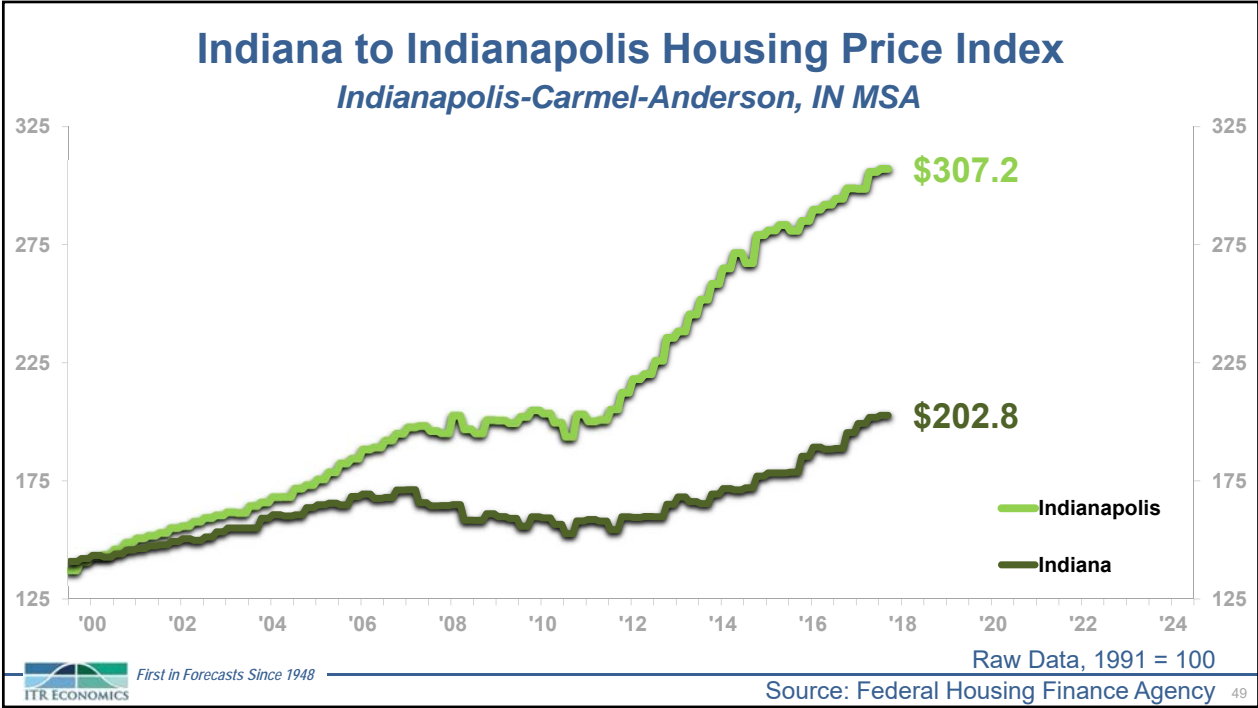
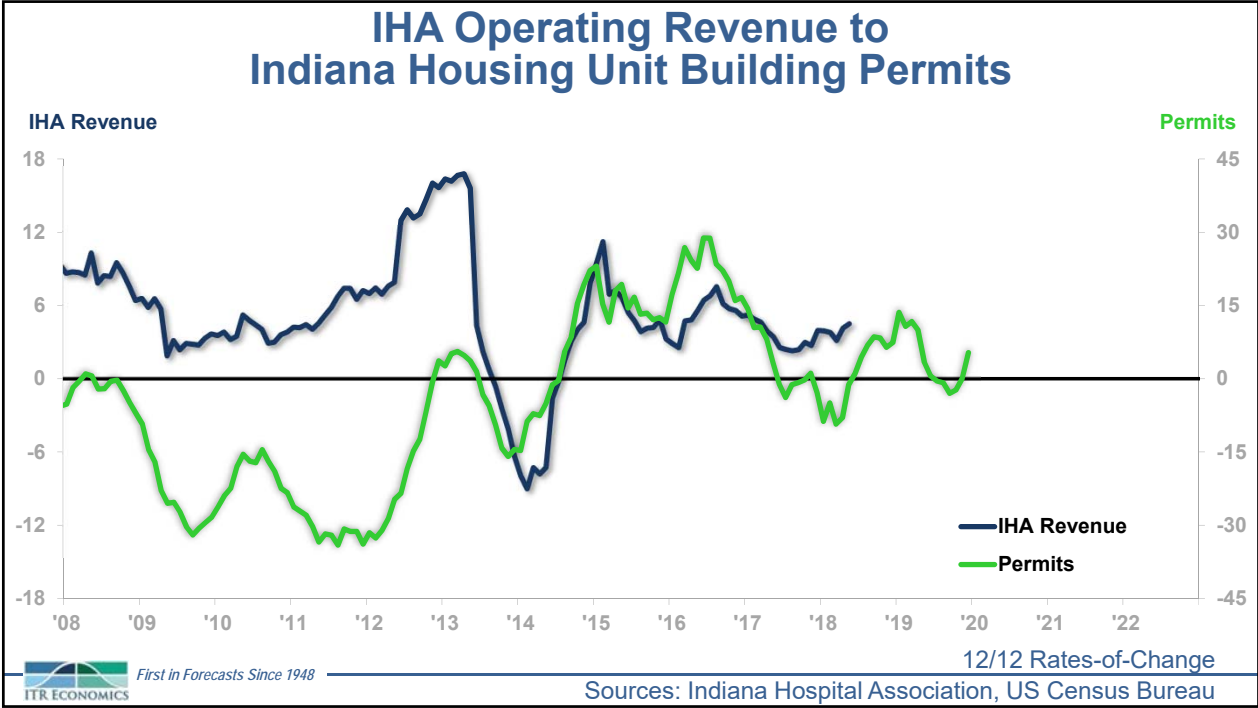
Rise with No Great Recession Cliff for Now

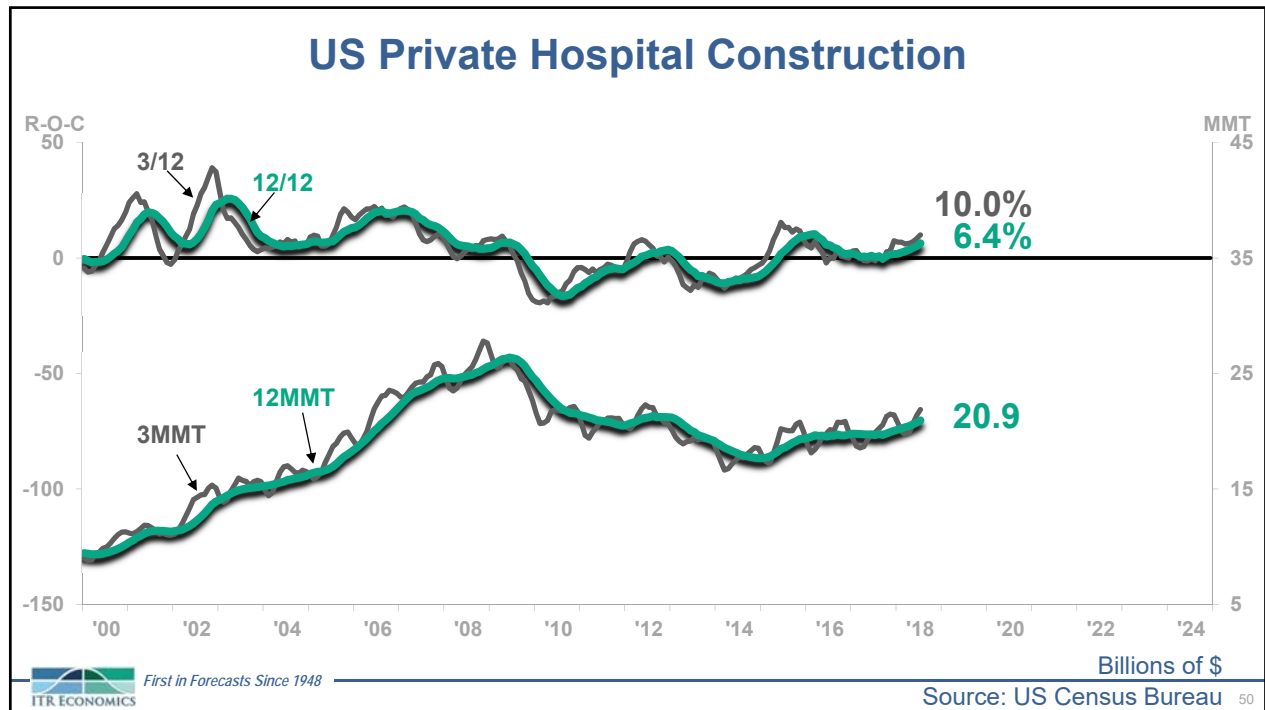
US Single Unit Housing Starts



Indiana Housing Unit Building Permits

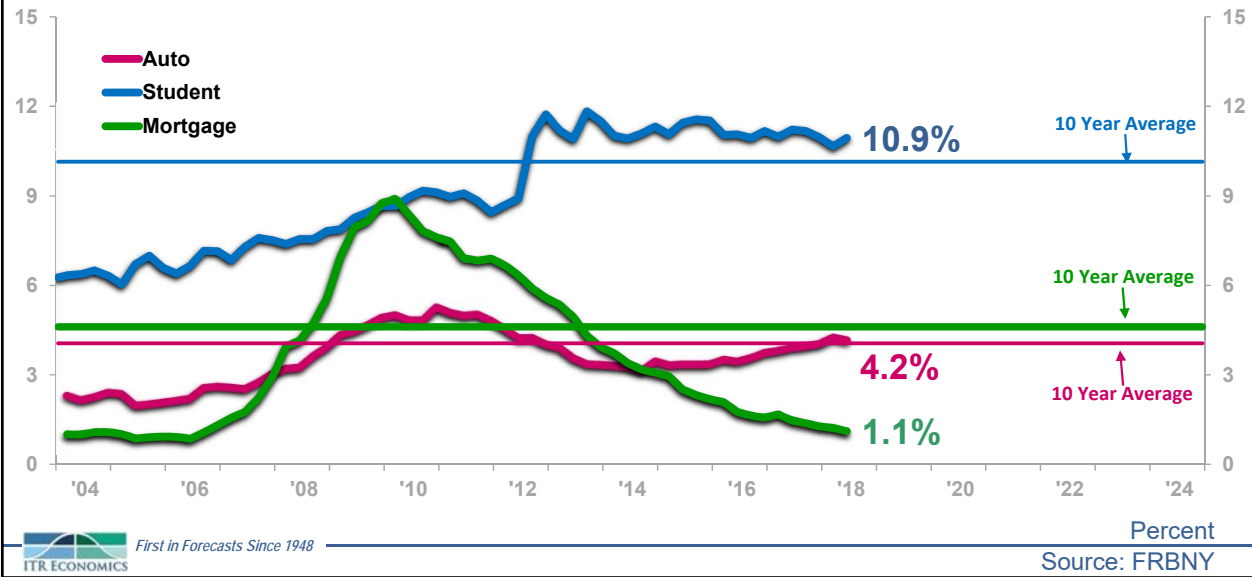






Servicing the Debt is What Matters

Consumer Delinquency Rates (over 90 days delinquent)



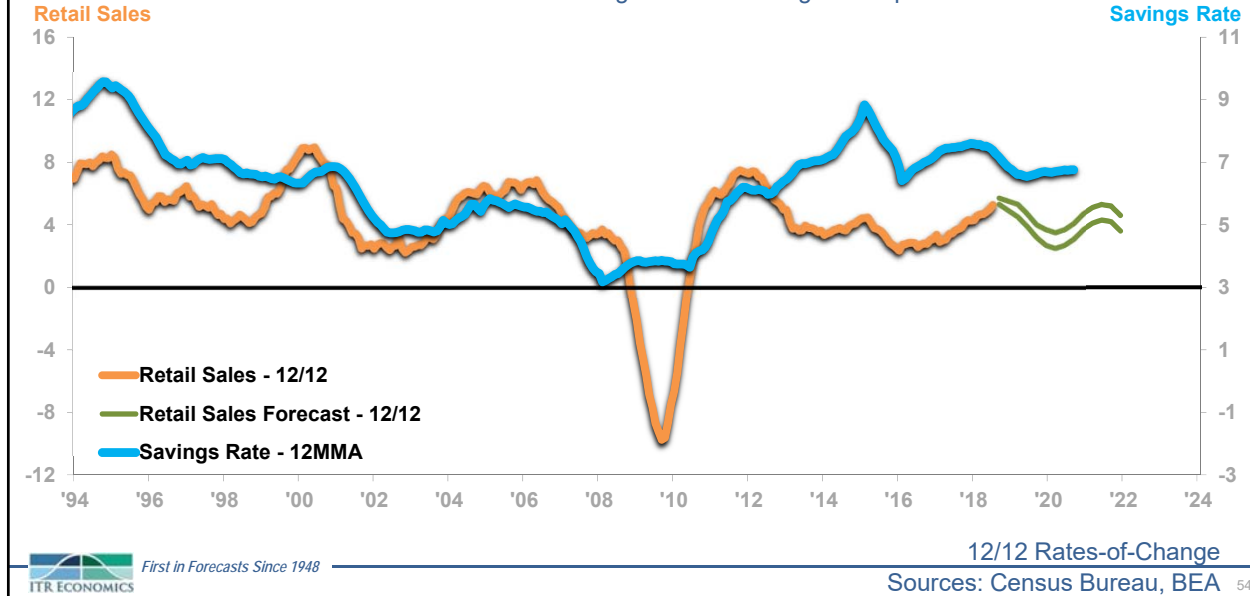
New ITR Leading Indicator Says Slowing Growth Ahead

US Total Retail Sales to ITR US Retail Sales Leading Indicator



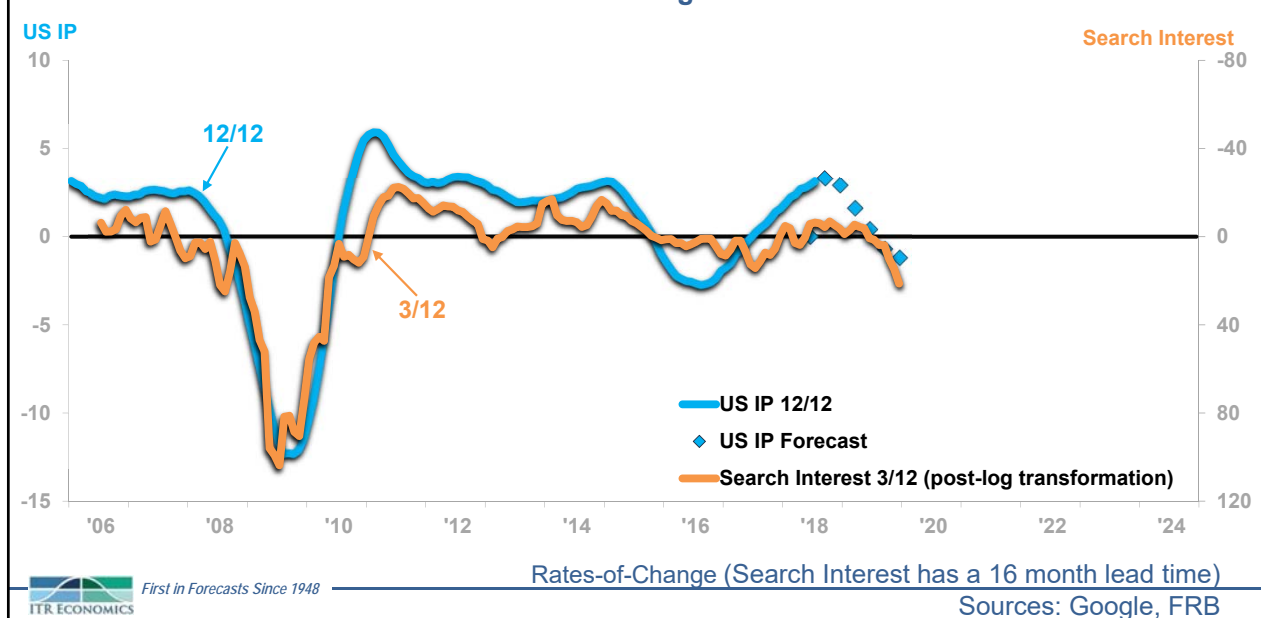
Negative Indication for 2019

US Retail Sales to US Personal Savings as a Percentage of Disposable Income

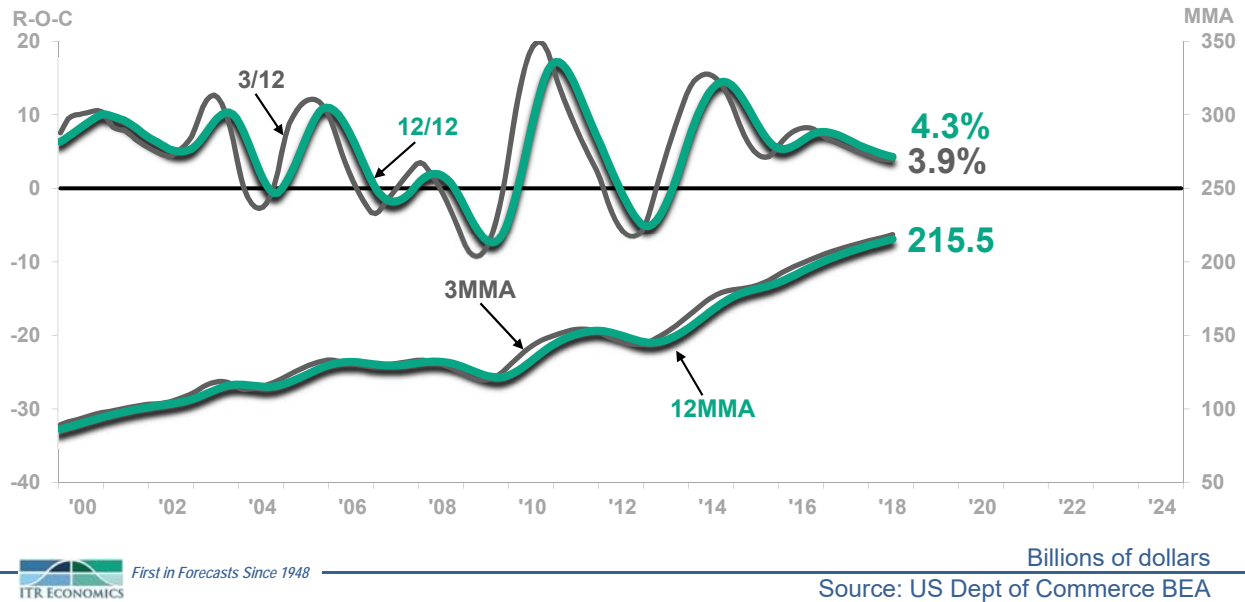


Searching for a Recession

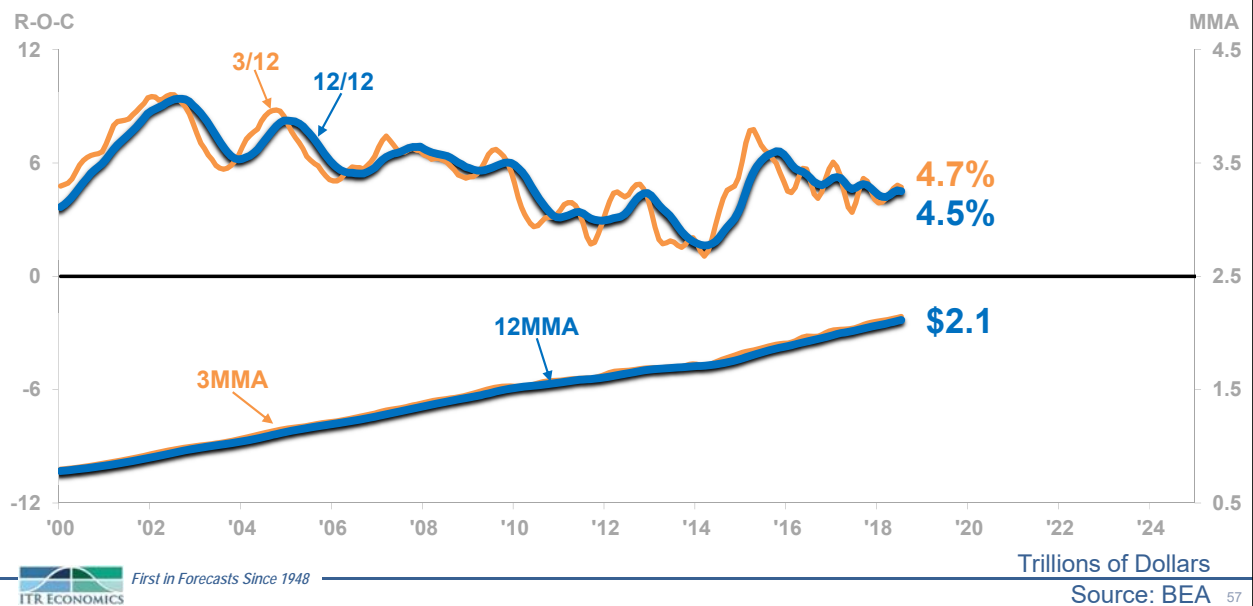
US Search Interest for "Recession" on Google to US Industrial Production Index

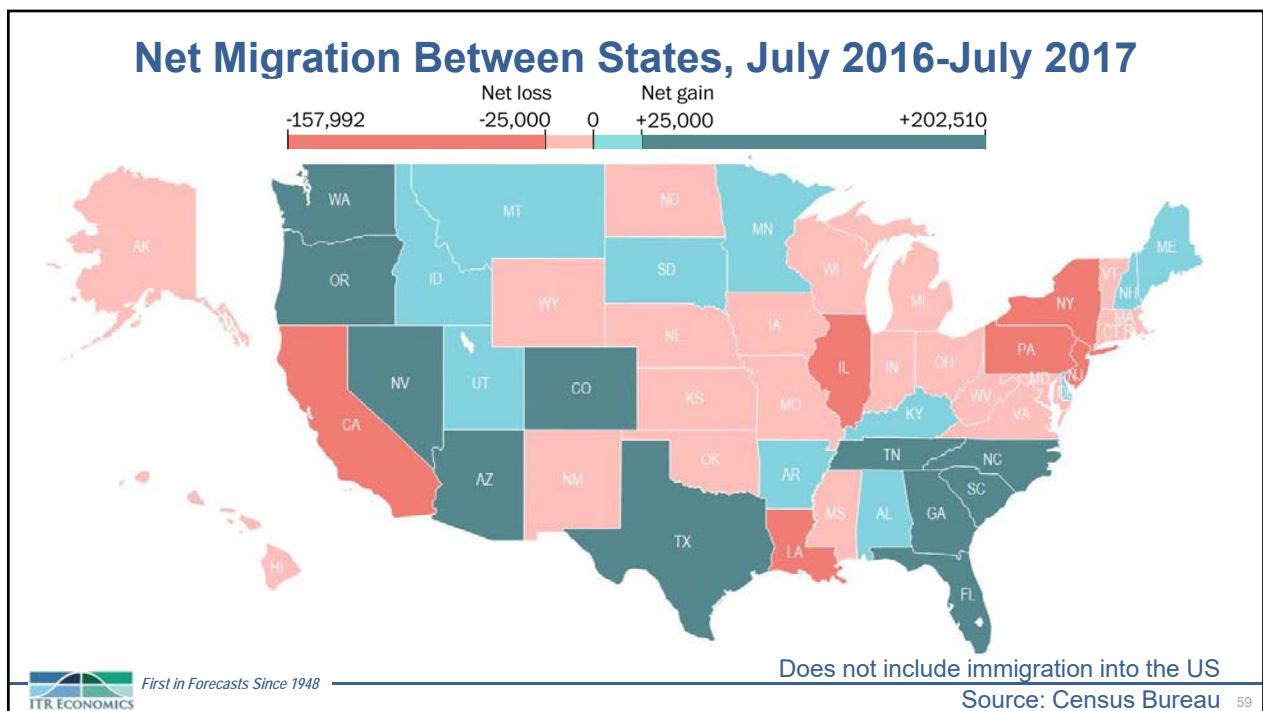
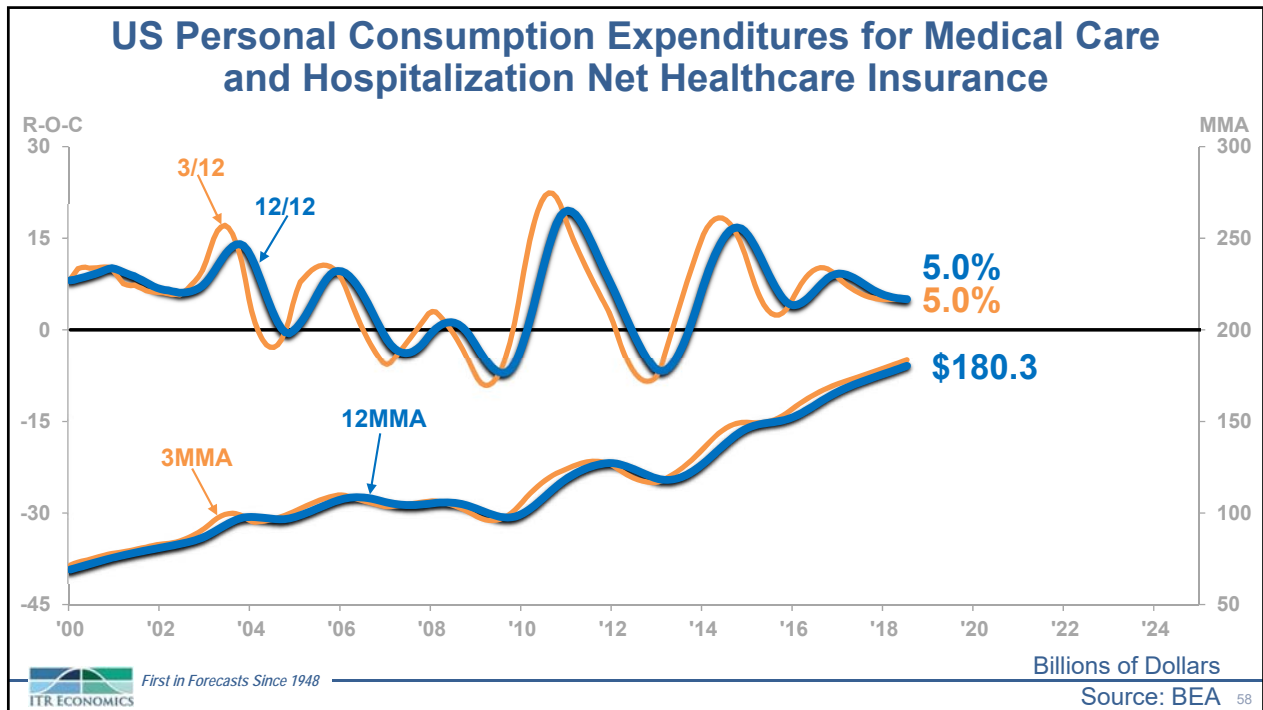


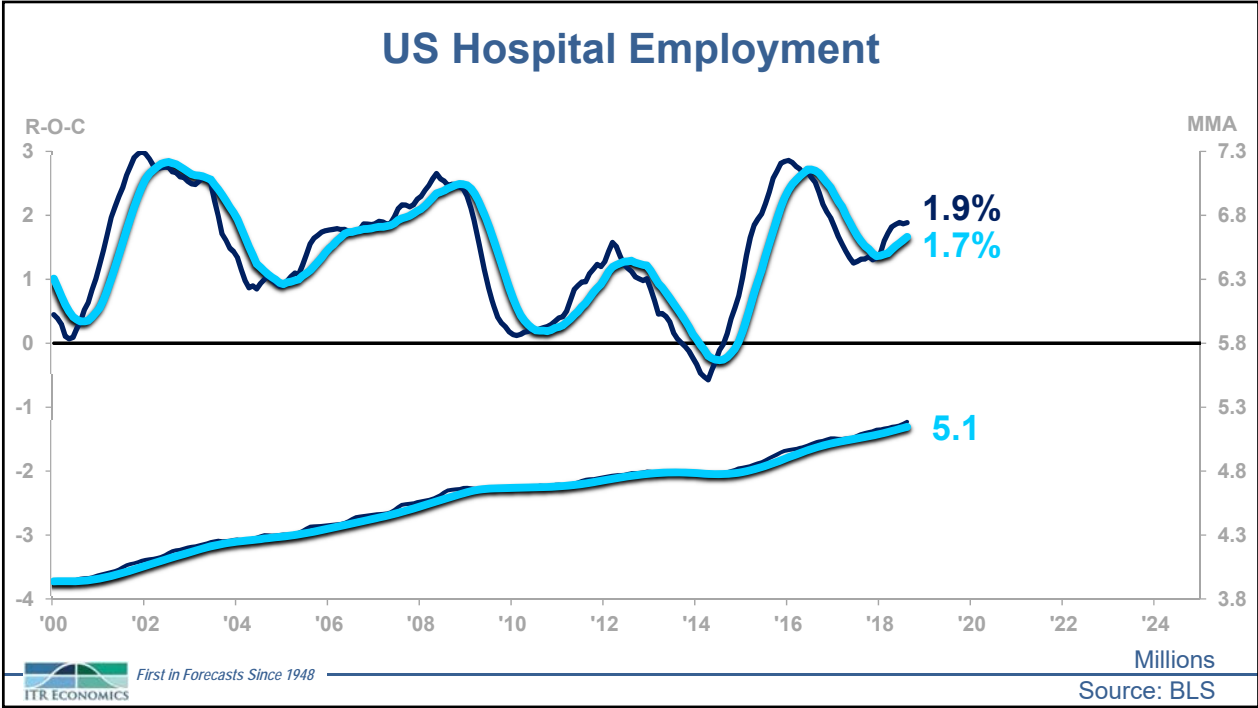
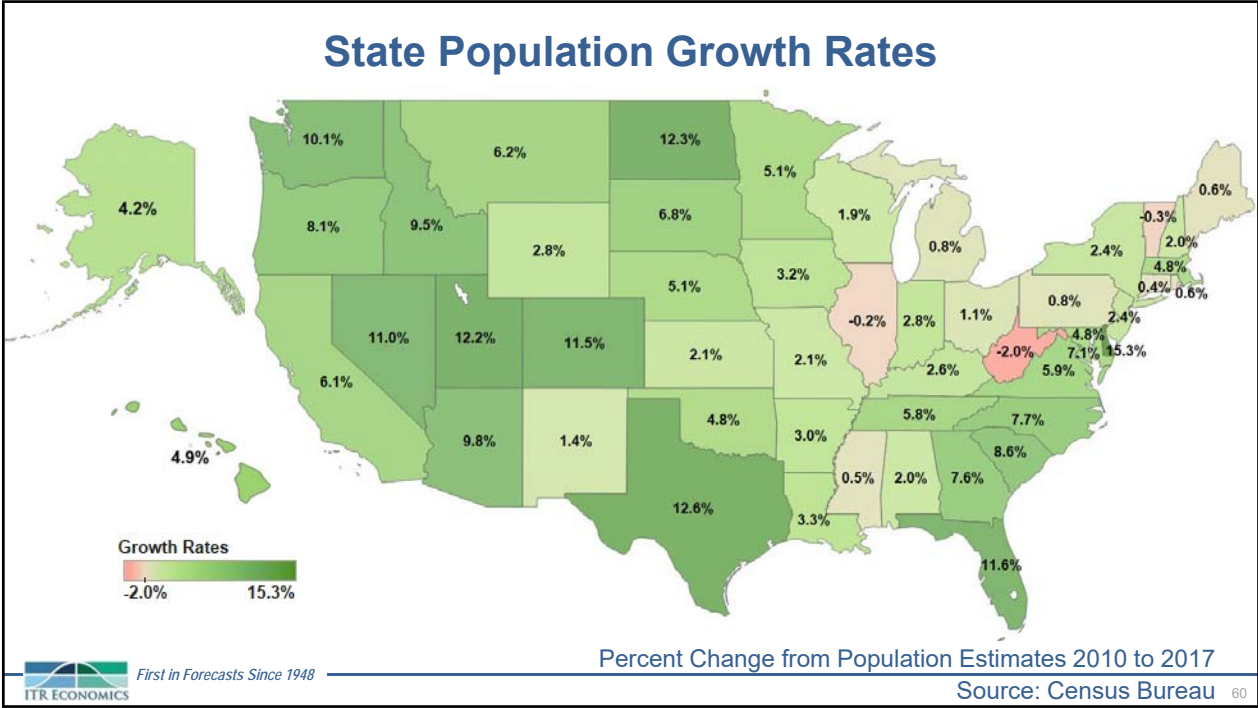
US Personal Consumption Expenditures For Net Health Insurance



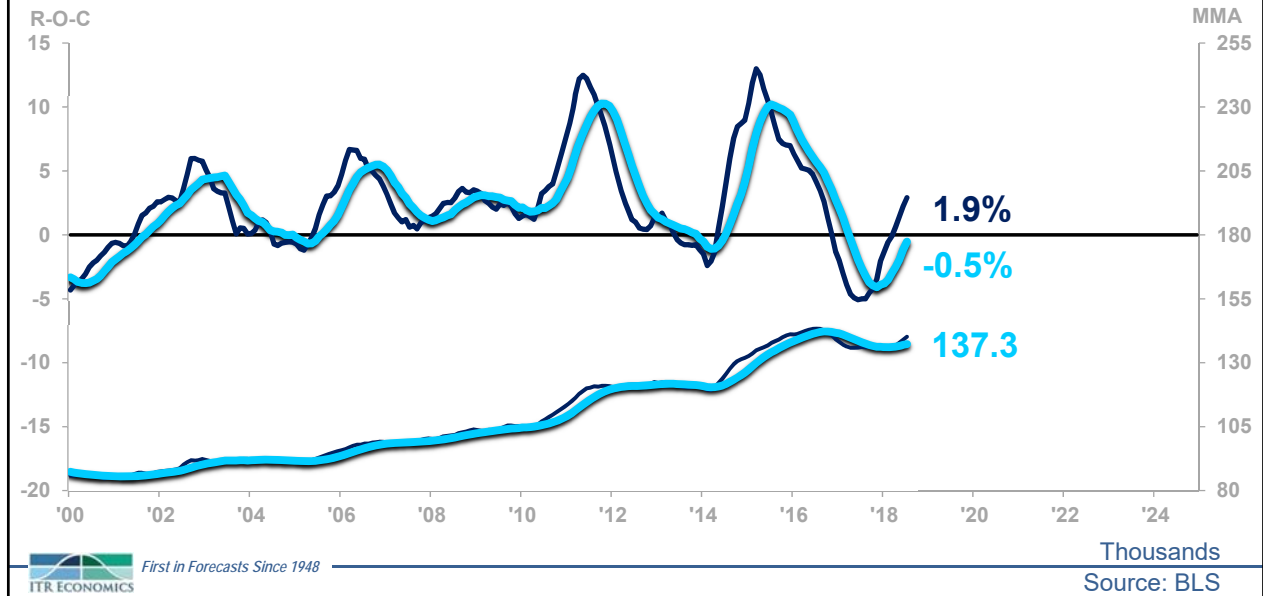
US Medical Care Expenditures Without Health Insurance



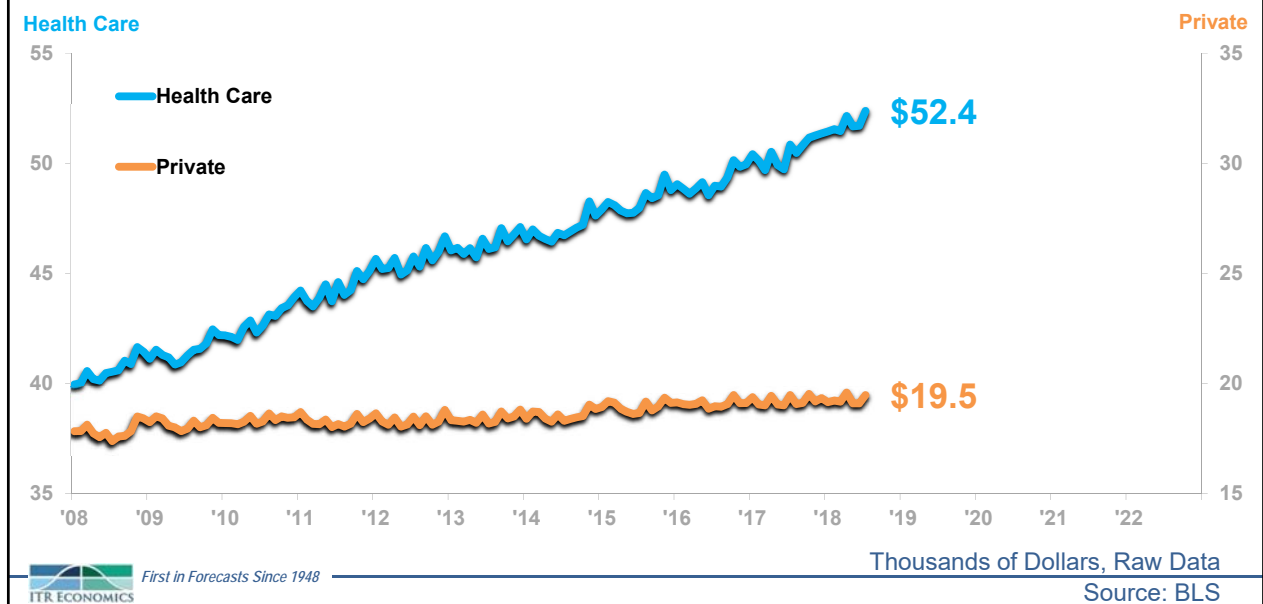




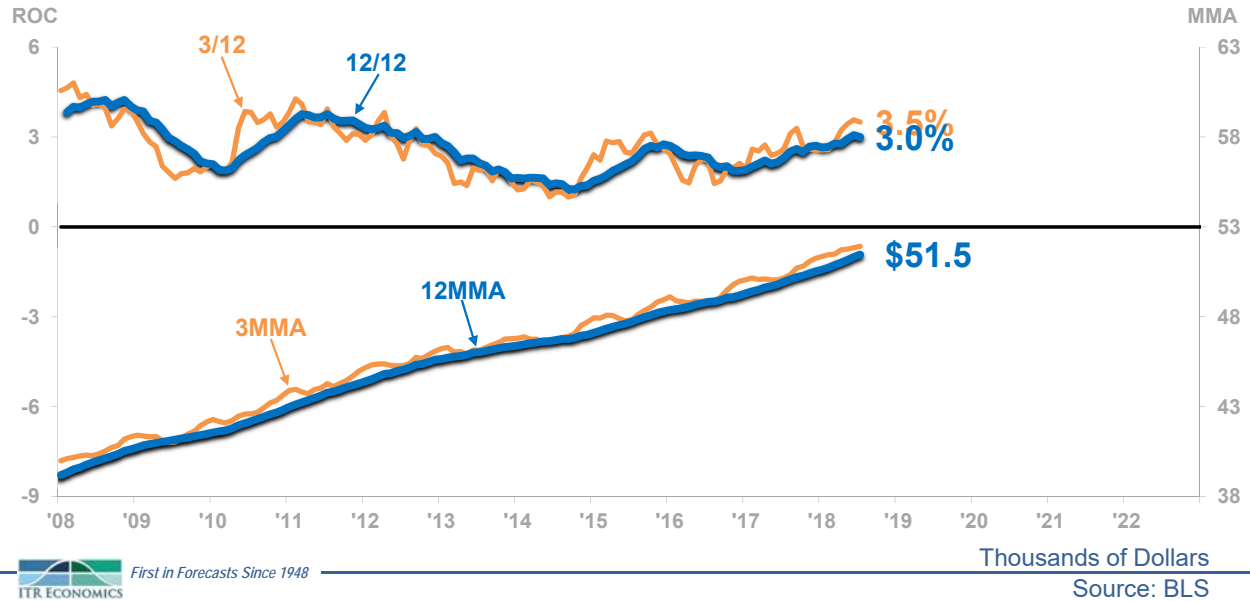
US Psychiatric and Substance Abuse Hospital Employment



US Average Annual Earnings of Health Care Workers and Total Private Workforce



US Average Annual Earnings of Health Care Workers



Bloomington, Indiana

Bloomington, IN Metro Area

| | | |
|----------------------|----------------|--------------|
| Population: | 164,330 | |
| Baby Boomers: | 33,962 | 20.7% |
| Generation X: | 25,421 | 15.5% |
| Millennials: | 52,108 | 31.7% |



Evansville, Indiana

Evansville, IN-KY Metro Area

| | | |
|----------------------|----------------|--------------|
| Population: | 268,646 | |
| Baby Boomers: | 70,600 | 26.3% |
| Generation X: | 48,373 | 18.0% |
| Millennials: | 53,913 | 20.1% |



First in Forecasts Since 1948

Demographics

Source: US Census Bureau

Fort Wayne, Indiana

Fort Wayne, IN Metro Area

| | | |
|----------------------|----------------|--------------|
| Population: | 426,755 | |
| Baby Boomers: | 102,794 | 24.1% |
| Generation X: | 79,770 | 18.7% |
| Millennials: | 84,236 | 19.7% |



First in Forecasts Since 1948

Demographics

Source: US Census Bureau

Indianapolis, Indiana

Indianapolis-Carmel-Anderson, IN Metro

| | | |
|----------------------|------------------|--------------|
| Population: | 1,968,768 | |
| Baby Boomers: | 458,386 | 23.3% |
| Generation X: | 398,651 | 20.2% |
| Millennials: | 406,911 | 20.7% |



First in Forecasts Since 1948

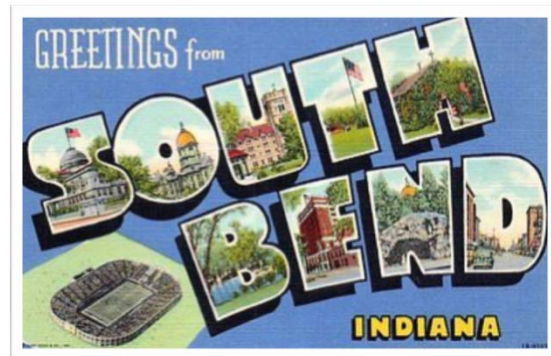
Demographics

Source: US Census Bureau

South Bend, Indiana

South Bend-Mishawaka, IN-MI Metro Area

| | | |
|----------------------|----------------|--------------|
| Population: | 267,696 | |
| Baby Boomers: | 64,318 | 24.0% |
| Generation X: | 48,178 | 18.0% |
| Millennials: | 55,390 | 20.7% |



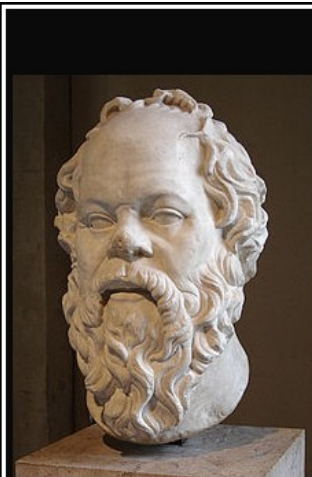
First in Forecasts Since 1948

Demographics

Source: US Census Bureau



70



The children now love luxury, they have bad manners, contempt for authority, they show disrespect for elders and love chatter in place of exercise. Children are now tyrants, not the servants of their households. They no longer rise when elders enter the room. They contradict their parents, chatter before company, gobble up dainties at the table, cross their legs, and tyrannize over their teachers.

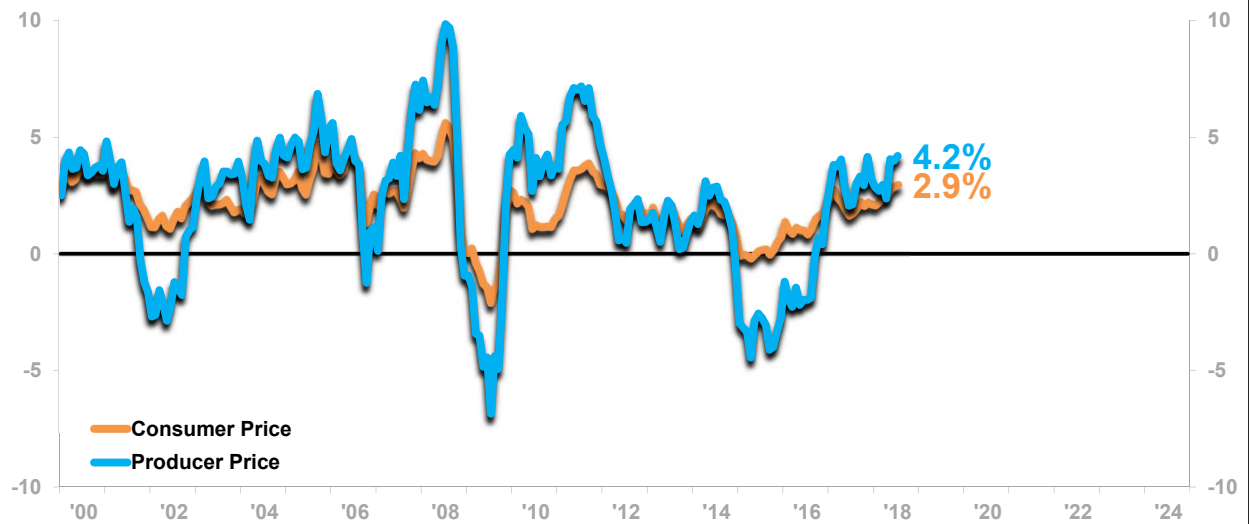
(Socrates)



Prices



US Consumer Price Index to US Producer Price Index



First in Forecasts Since 1948

1/12 Rate-of-Change

Source: FRB

Brands That Have or Will Be Increasing Prices Due to Tariffs

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

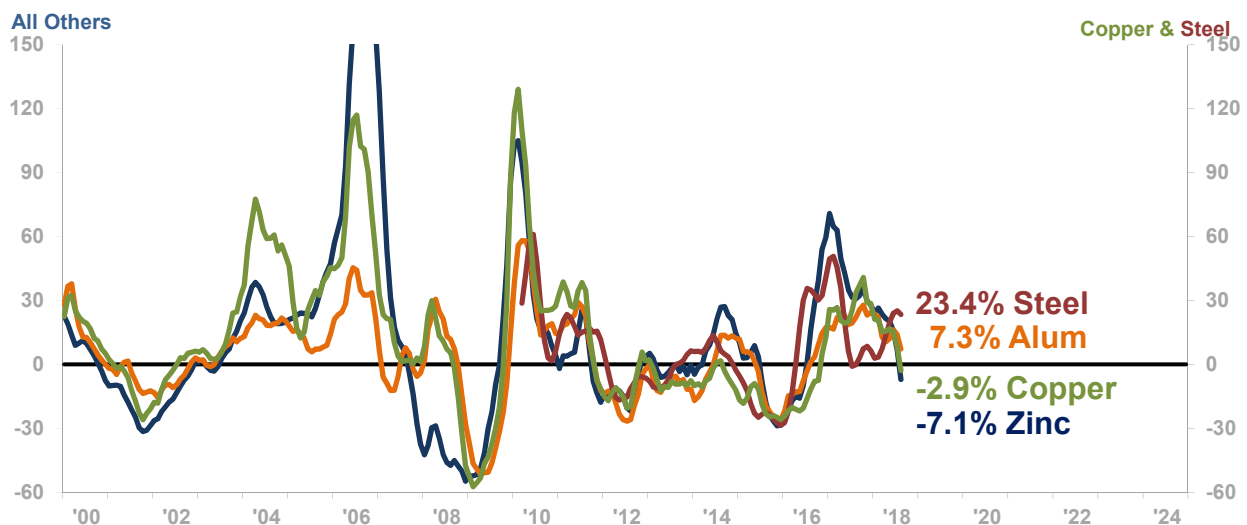


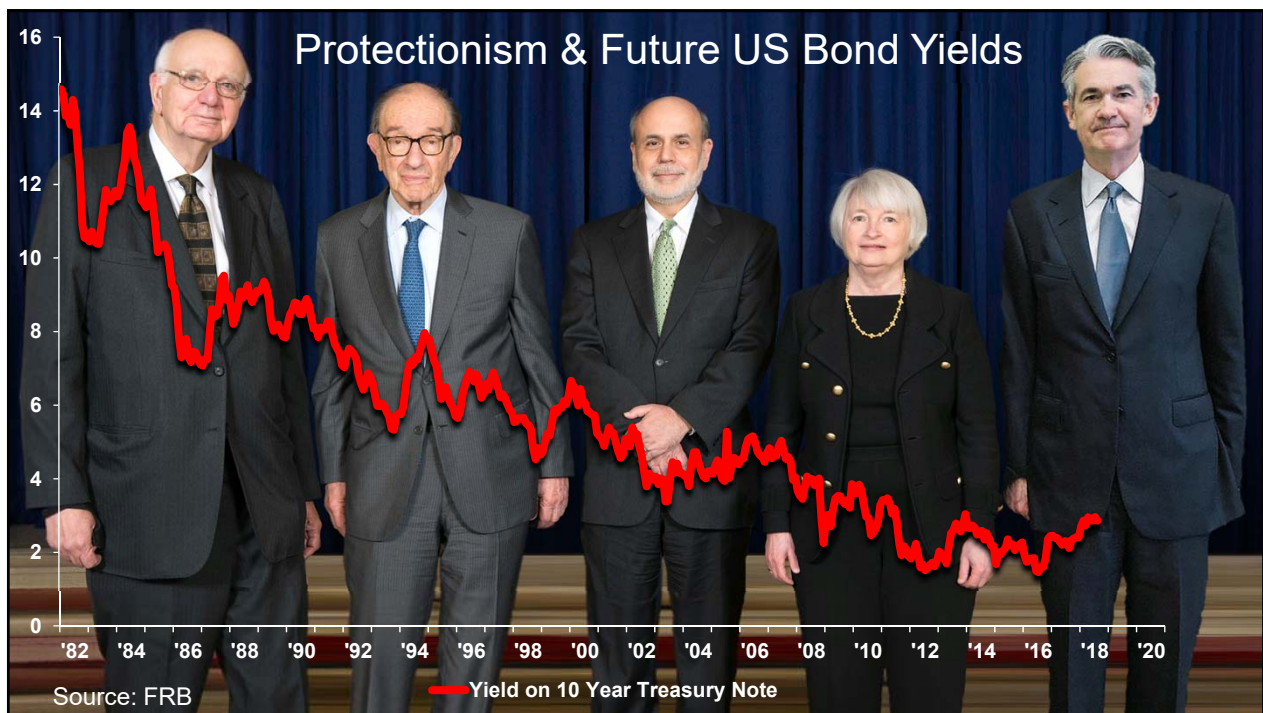
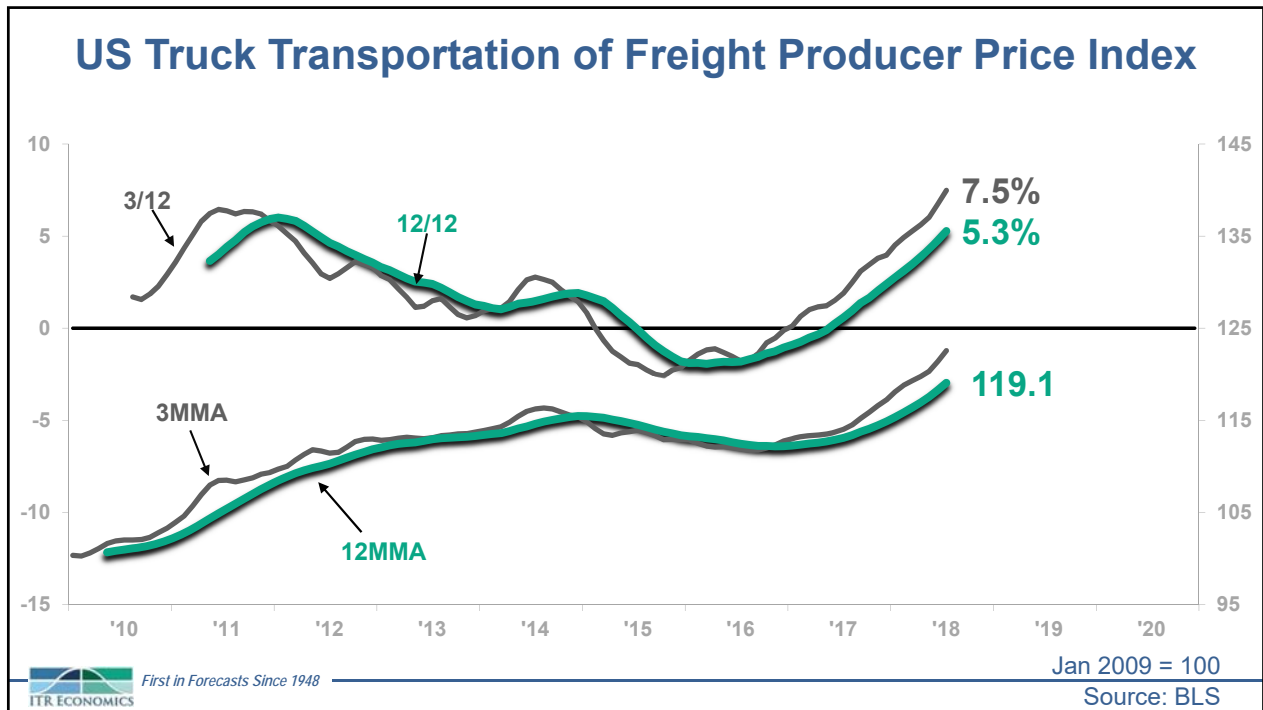
"I can't just go to the shareholders and say, 'You're just going to have to accept my profit's going to be \$40 million less. It doesn't work that way...'"

- Gavin Hattersley, CEO MillerCoors

(CROCK-POT, RUBBERMAID, YANKEE CANDLE, & SHARPIE)

Commodity Prices





Summary September 2018

Beware of Business Cycle Decline in 2019

Some industries hit harder than others
Cash, Market Share, Technology

Additional Profit Margin Pressure Points

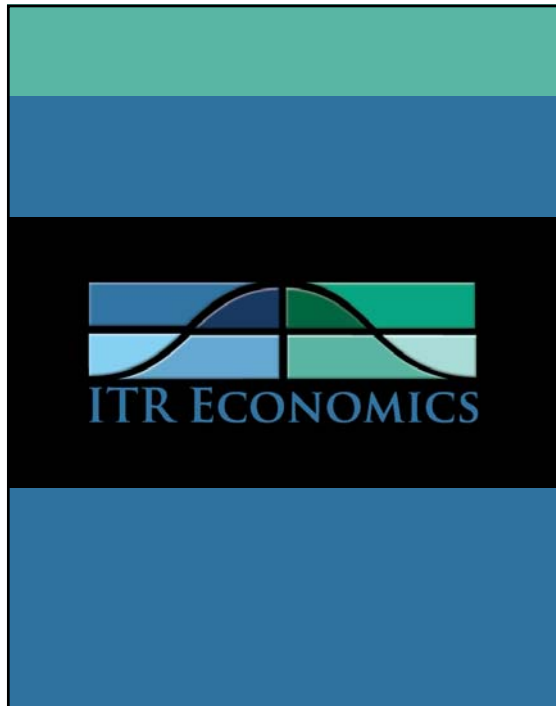
Employment
Inflation Issues

The Long View is Unchanged

Severe business cycle decline 2030-2040



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Text **TR TRIAL** to **444999**
for a 90 day trial of our
Trends Report



ITR Economics Sales Team

DR. ALAN BEAULIEU

With a reputation as an accurate, straightforward economist, Alan has been delivering award-winning workshops and economic analysis seminars in countries across the world to thousands of business owners and executives for the last 25 years.

He is co-author of *Prosperity in the Age of Decline*, a powerful look at how to make the most of the US and global trends over the next 20 years. Alan also coauthored *Make Your Move*, a practical and insightful guide on increasing profits through business cycle changes, and noted by one reviewer as "simple, yet awesome."



TESTIMONIALS

"The lessons and strategies you shared as part of the Strategies for a Tough Economy panel were of enormous value to the more than 700 entrepreneurs and small business partners in attendance."

**Mark Herlyn, Vice President, Advertising
New York Times**

"Many thanks for your excellent presentation at HMA's recent National Conference & Expo. As always, the information was extremely well-received, on point, and hit home to everyone in this room. And the 'subtle' humor is always an extra bonus!"

**Linda Jovanovich, Executive Vice President,
Hardwood Manufacturers Association**

"ITR gives us unique intelligence and insight that has helped us win during a severe recession and now win in a growing economy. Alan, you do a great job of presenting the information with a style that is engaging and fun for our audience."

Reggie Dupré, CEO, Dupré Logistics, LLC

"Thank you for your wit, charm and levity in your presentation. I always thought economists were boring, but glad to see I was wrong."

Rich Canote, Principal, Canote Group

ABOUT ALAN

Alan has been providing workshops and economic analysis seminars to countries and literally thousands of business owners and executives for the last 25 years. He is considered one of the country's most informed economists.

As the chief economist for numerous US and European trade associations, it has been remarked that Alan's "insight into our business, a track record of accurate forecasting, and unparalleled knowledge of global markets has earned him the respect and appreciation of key business leaders in our industry."

Pronouncements from ITR Economics™ and/or Alan have appeared in/on: the Wall Street Journal, New York Times, USA Today, Knight Ridder News Services, Business Week, Associated Press, The Washington Times, CBS Radio, CNN Radio, Sirius talk radio, KABC, NPR affiliate WLRN and numerous other outlets.

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