## **Hardwood Manufacturers Association**

## A Bend in the Road



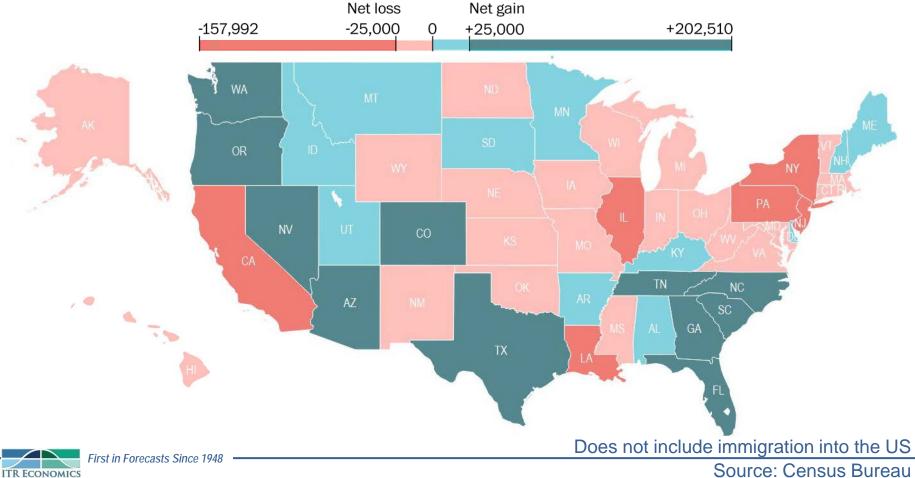
#### Preliminary 2017 Forecast Results If you heard ITR around two years ago...

	Duration	Accuracy
US GDP (Dec)	24	99.7%
US Ind. Prod. (Dec)	24	96.8%
Europe Ind. Prod. (data through Nov)	27	99.4%
Canada Ind. Prod. (data through Nov)	24	95.9%
China Ind. Prod. (Dec)	30	97.8%
Retail Sales (Dec)	25	98.0%
Housing (Dec)	27	97.2%
Employment (Dec)	23	99.6%

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

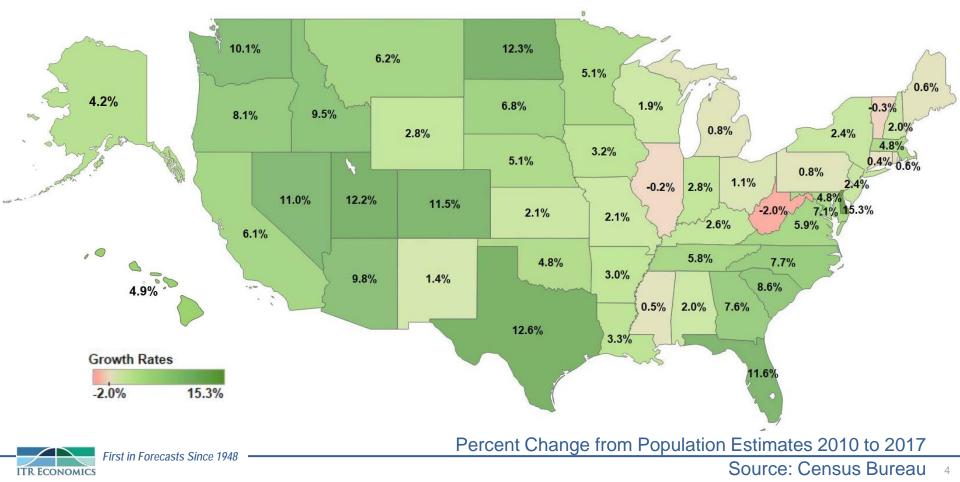


### Net Migration Between States, July 2016-July 2017

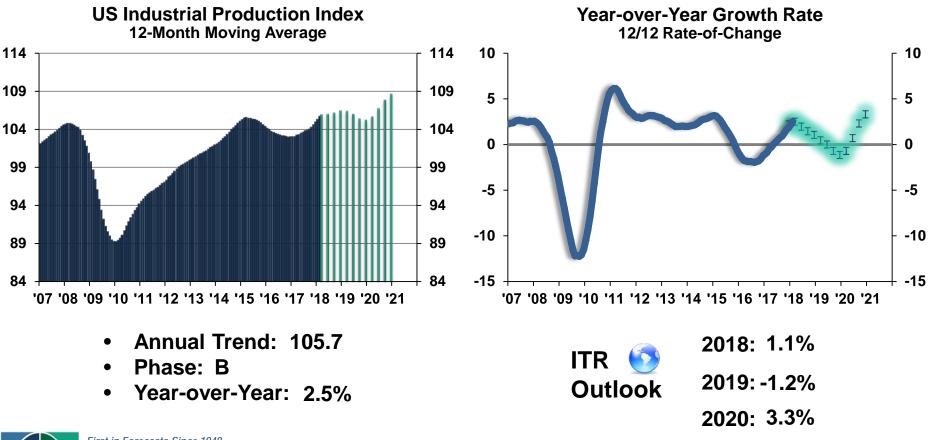


<sup>3</sup> 

### **State Population Growth Rates**



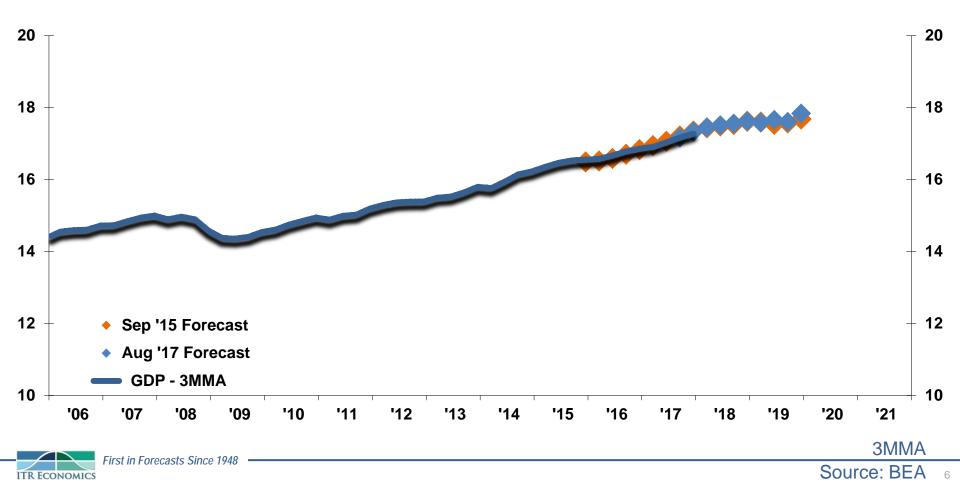
## **US Industrial Production Index**



ITR ECONOMICS

Source: FRB

#### **US Real Gross Domestic Product**



# **INDUSTRY ANALYSIS**

## **Data Preparation**

	<u>Raw</u>	_	<u>3MMT</u>	<u>3/12</u>	<u>12MMT</u>	<u>12/12</u>	
Apr-16	1.4						
May-16	1.5						
Jun-16	1.5		4.4				
Jul-16	1.4		4.4		TAC	ACT	'
Aug-16	1.5		4.4	DA	IAC	AST	
Sep-16	1.3		4.2				
Oct-16	1.3		4.1				
Nov-16	1.6		4.2				
Dec-16	1.6		4.5				
Jan-17	1.5		4.7				
Feb-17	1.7		4.8				
Mar-17	1.6		+.0		+ 18.0		
Apr-17	1.7		5.0		18.2		
May-17	1.7		5.0		18.4		
Jun-17	1.7		5.1	15.9%	18.6		
Jul-17	1.6		5.0	13.6%	18.8		
Aug-17	1.7		5.0	13.6%	19.0	26.7%	
Sep-17	1.5		4.8	14.3%	19.2	25.5%	
Oct-17	1.5		4.7	14.6%	19.4	25.2%	
Nov-17	1.9		4.9	16.7%	19.7	22.4%	
Dec-17	1.7		5.1	13.3%	19.8	20.0%	
Jan-18	1.7		5.3	12.8%	20.0	18.3%	
Feb-18	1.9		5.3	10.4%	20.2	15.4%	
Mar-18	1.7	<u> </u>	5.0	10.1%	<b>→</b> 20.3	12.7%	

#### 3/12 Rate-of-Change

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

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

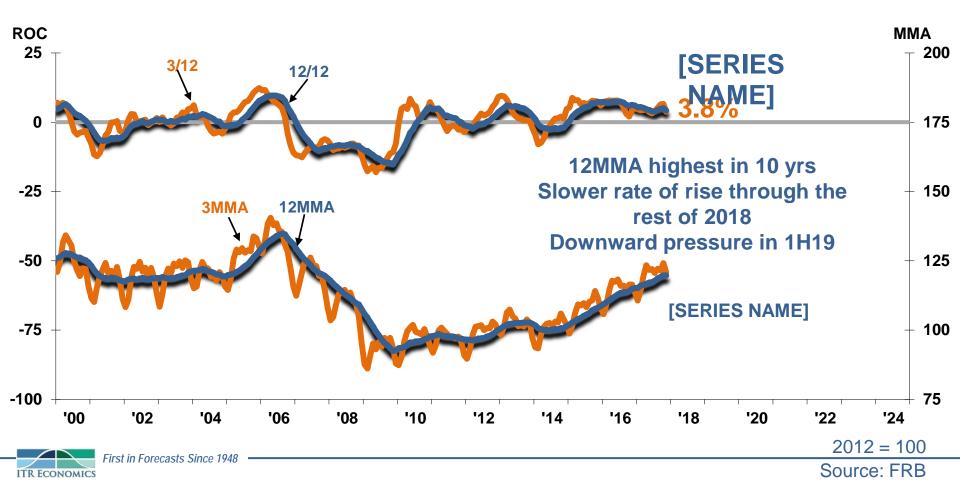
#### 12/12 Rate-of-Change

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

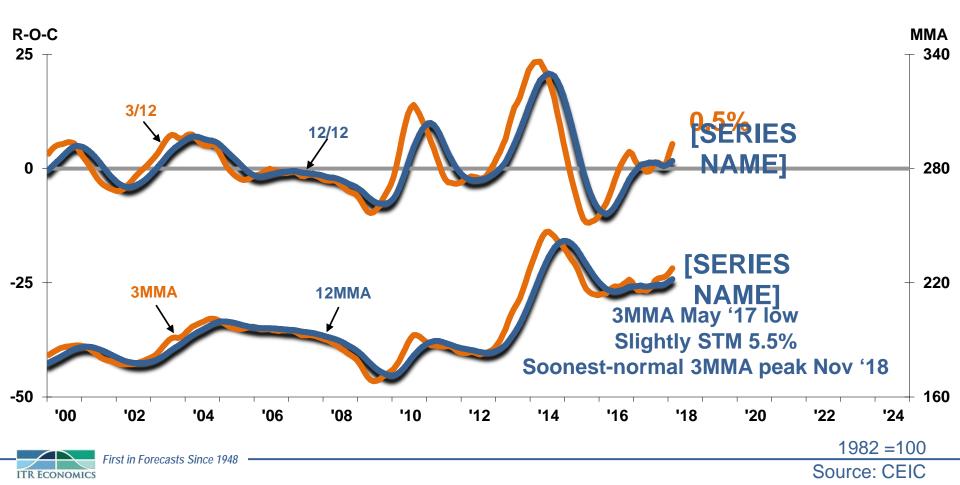
$$=\frac{20.3}{18.0} \times 100 - 100 = 12.7\%$$



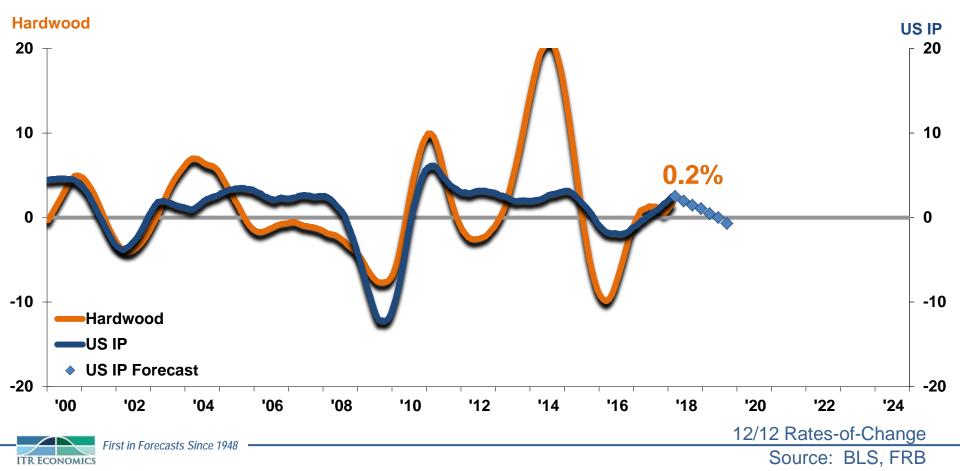
## **US Sawmills & Wood Preservation Production Index**



#### **US Hardwood Lumber Producer Price Index**



#### US Hardwood Lumber Producer Price Index to US Total Industrial Production Index

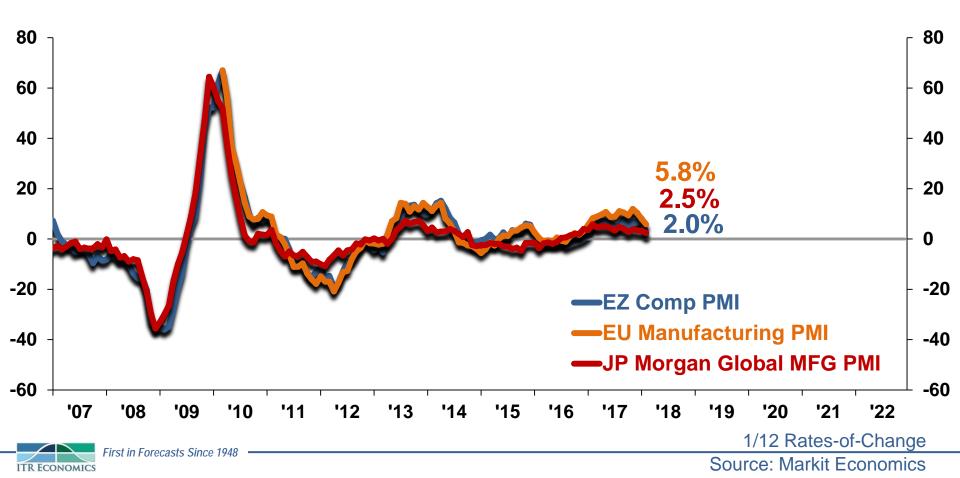


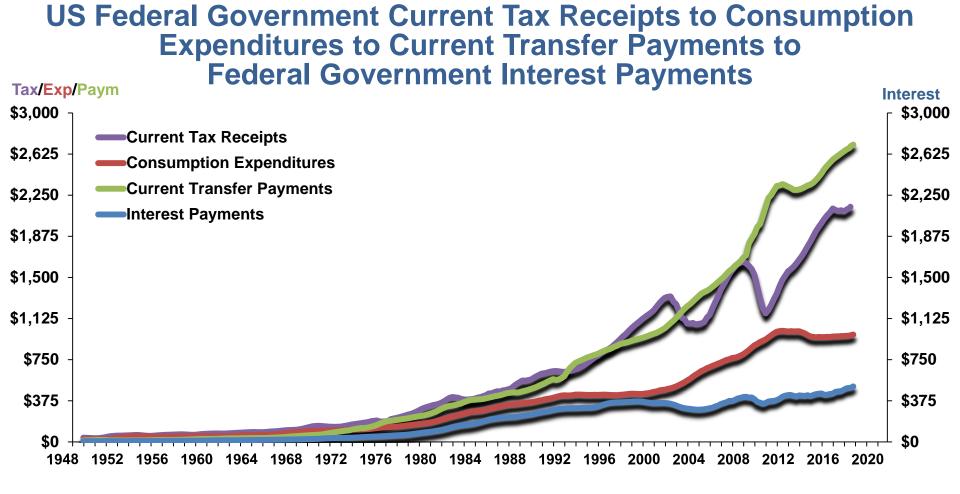
## **Ongoing Concerns**





## **Global Leading Indicators**



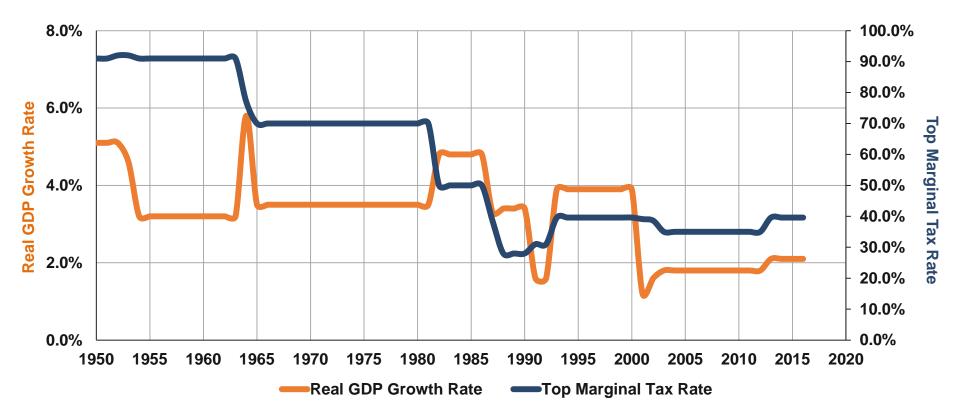


**Billions of Dollars** 

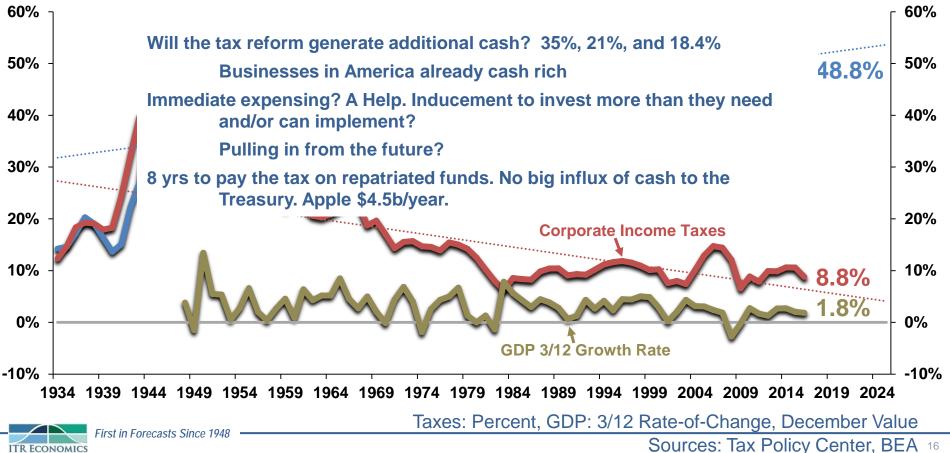


Source: BEA 14

### **US Tax Rates and Real GDP Growth**



## Percent of Total US Tax Receipts by Source to Real Gross Domestic Product



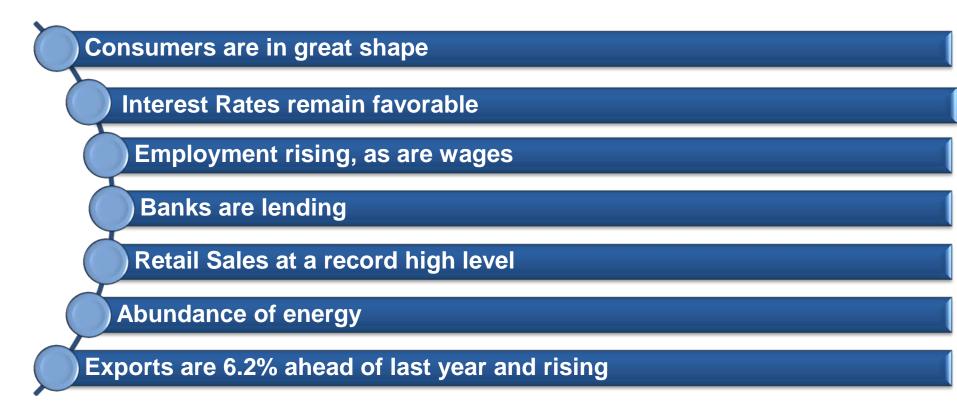
# ATLANTA FED IS WATCHING...



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.

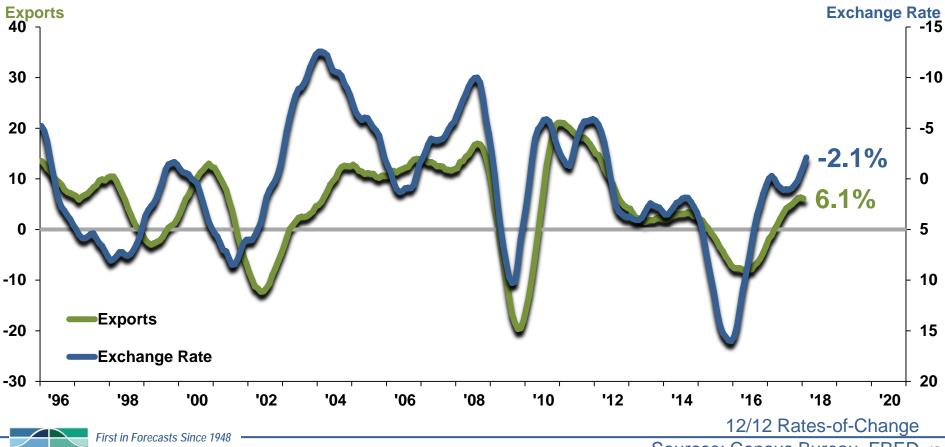
> ~ Raphael Bostic Atlanta Federal Reserve Chair Rotary Club of Atlanta January 8, 2018

## **US/Global Recovery – Good Days Ahead**





#### US Trade in Goods with World: Exports to Trade Weighted Exchange Rate Index



**ITR ECONOMICS** 

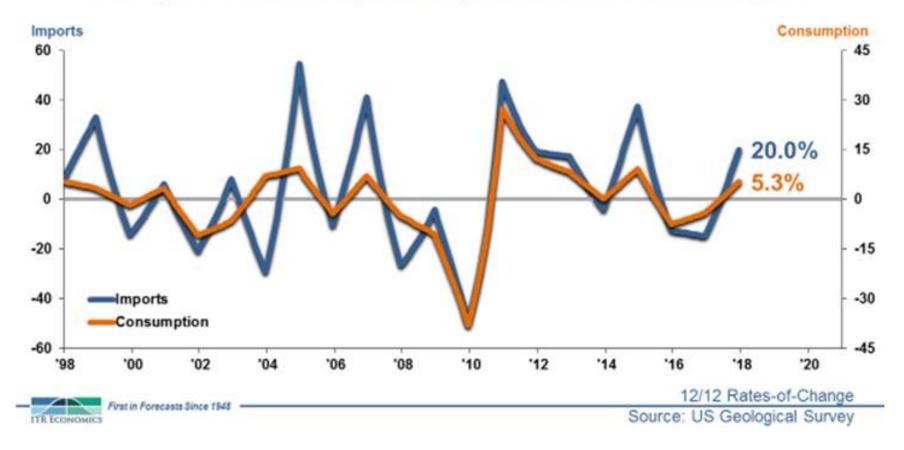
Sources: Census Bureau, FRED 19

	US Total Manufacturing Production Index	
130	NAFTA – Tariffs: Steel 25% Aluminum 10%, Russia, Japan, Taiwan, India, China	130
110	Remain globally competitive? shift production to downstream products?	110
90	Trade War? \$60B in tariffs on China	90
	Aluminum:	
70	US - 4.2% A 6.7% B 12MMA up off May '17 62-yr low China 0.2% C - 8.1% D 12MMA down 3.3% off July '17 record high	70
50	The national security angle seems to have been a means to accomplish the desired end since the Secretary of Defense and the Secretary of State both disagreed with that assessment. The probable reasoning for going this route is because there is a provision at the WTO that makes it VERY difficult	50
•••	for them to rule against something because of the national security claim. The WTO really has no option except to not stand in the way if other countries chose to retaliate). March <i>ITR Trends Report</i>	30

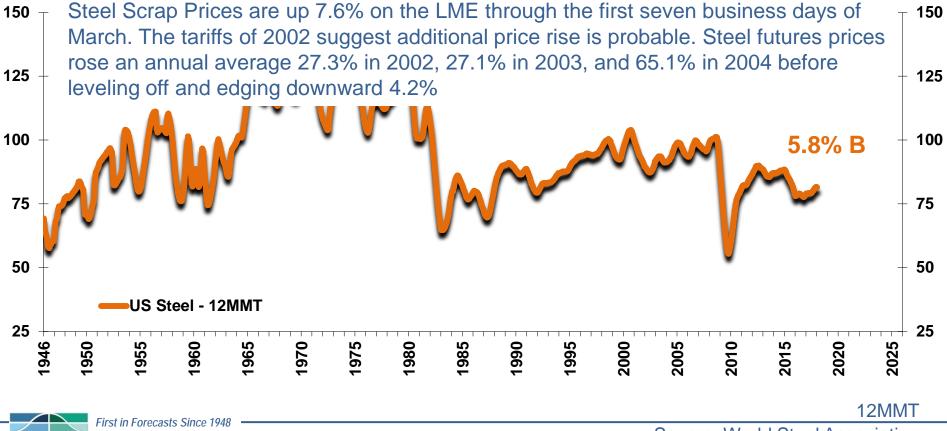
First in Forecasts Since 1948

2012 = 100, Raw Data Source: FRB

#### US Imports of Steel (volume) to US Steel Consumption



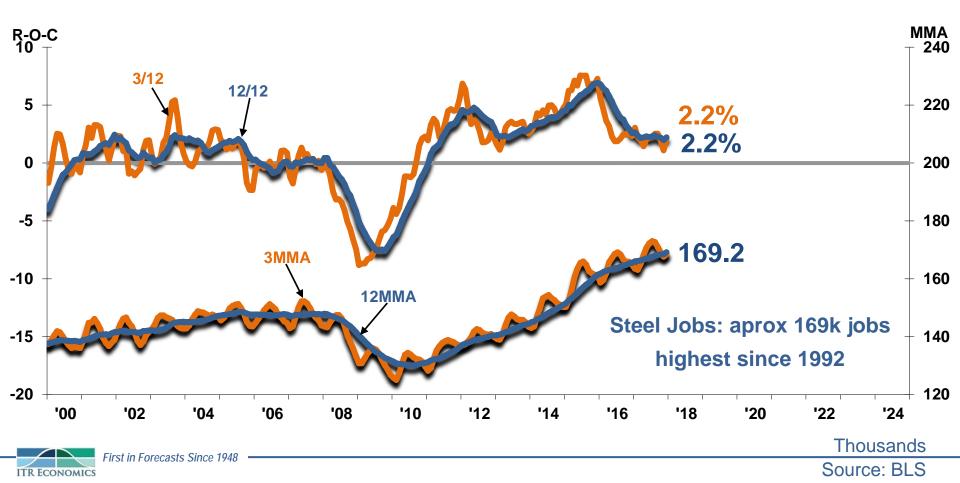
## **US Raw Steel Production**



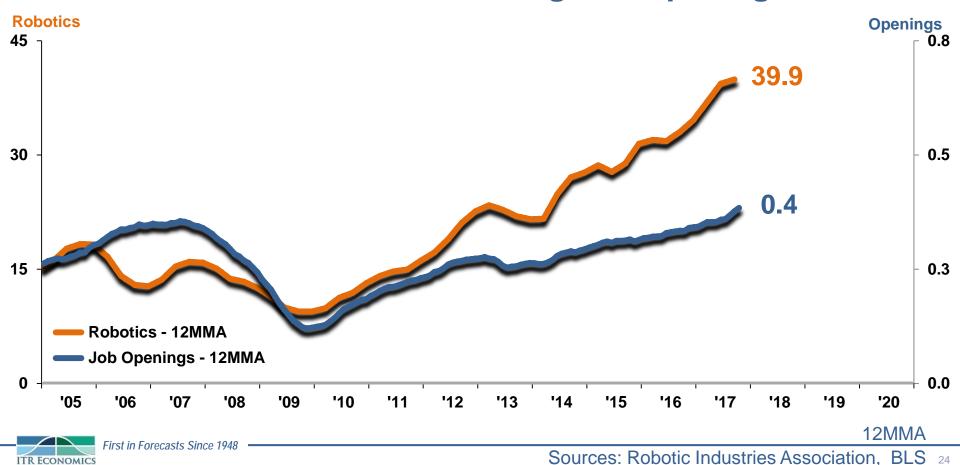
TR ECONOMICS

Source: World Steel Association 22

## **US Steel Mill Employment**



#### North America Robotics New Orders (units) to US Total Manufacturing Job Openings



## **Ease of Doing Business**



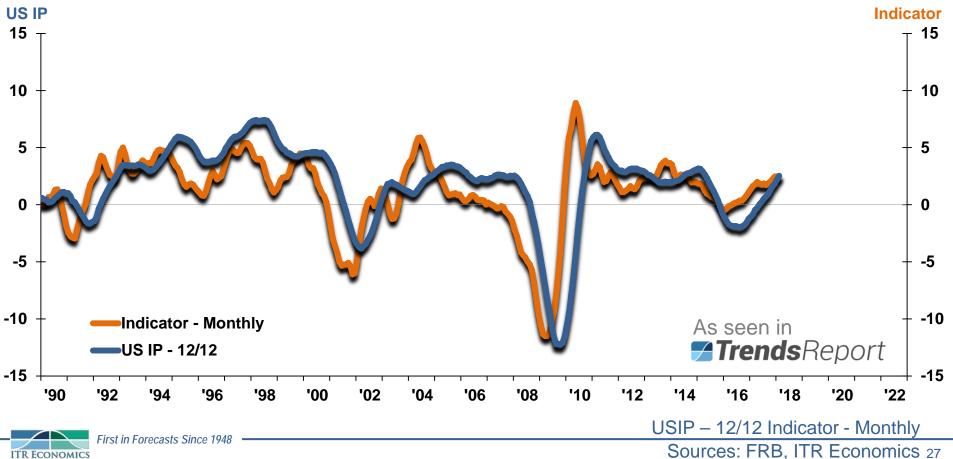
NZ	1
Singapore	2
Denmark	3
Korea	4
Hong Kong	5
US	6
UK	8
Germany	21
Japan	35
Russia	36
China	75
India	100
Brazil	125



# **LEADING INDICATORS**

#### **US Industrial Production to ITR Leading Indicator™**

Reported in ITR Trends Report - ITR Advisor



#### US Hardwood Lumber Producer Price Index to ITR Leading Indicator



#### US Industrial Production to US Total Industry Capacity Utilization Rate



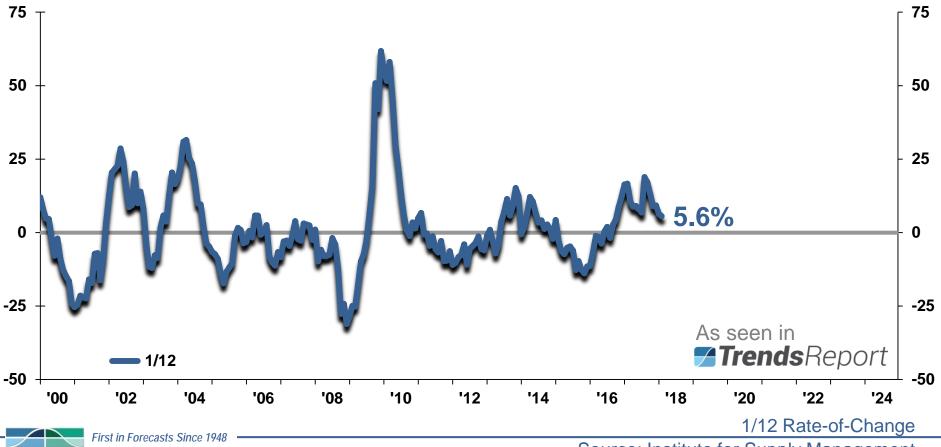
**ITR ECONOMICS** 

Source: FRB 29

#### US Hardwood Lumber Producer Price Index to US Total Industry Utilization Rate



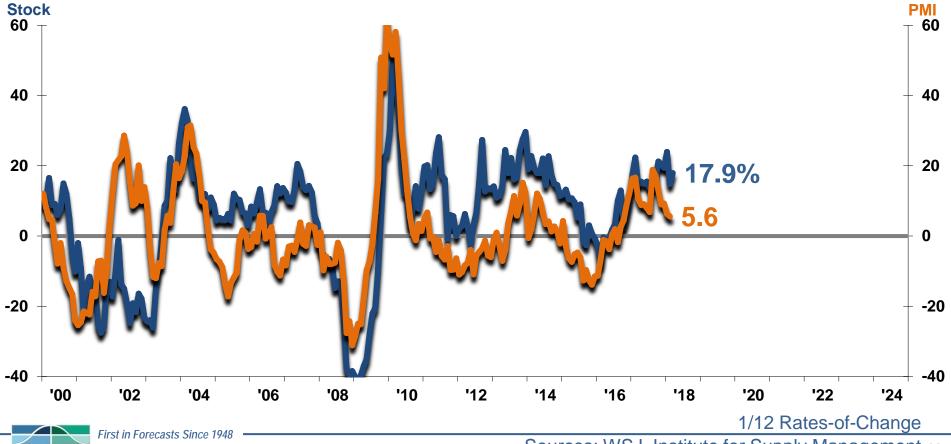
## **US Purchasing Managers Index**



**ITR ECONOMICS** 

Source: Institute for Supply Management 31

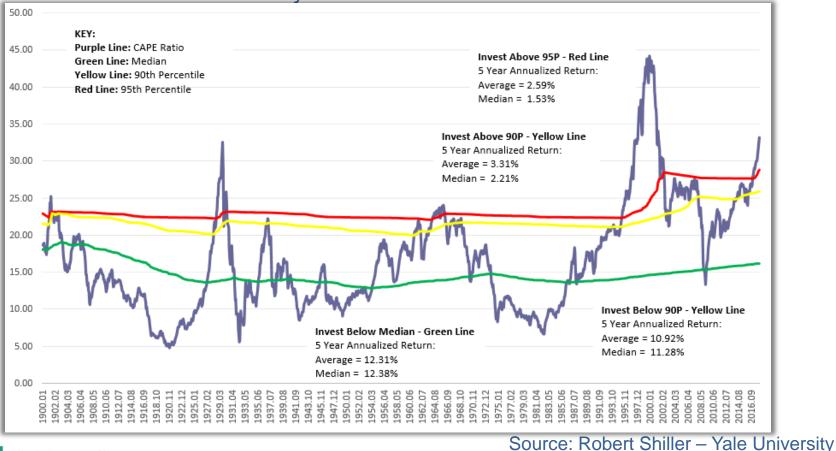
## **US Stock Prices Index to US Purchasing Managers Index**



**ITR ECONOMICS** 

Sources: WSJ, Institute for Supply Management 32

#### **Cyclically Adjusted Price Earnings (CAPE) Ratio** January 1900 – December 2017

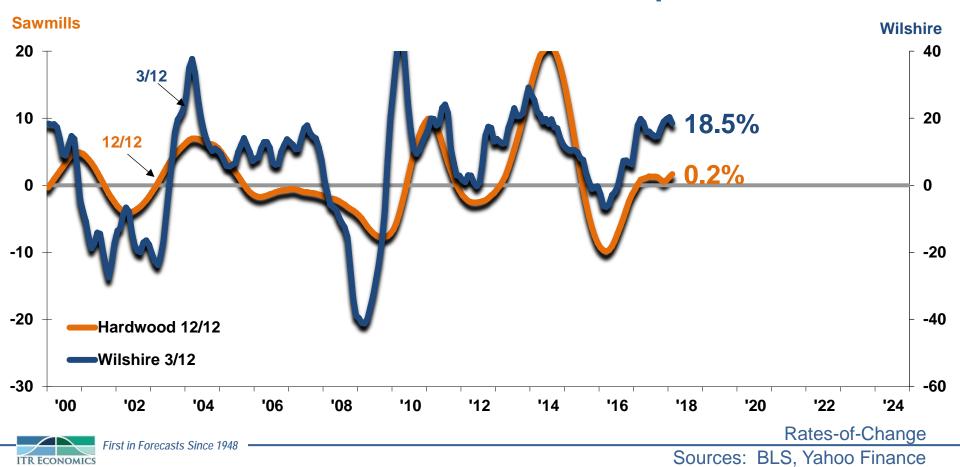


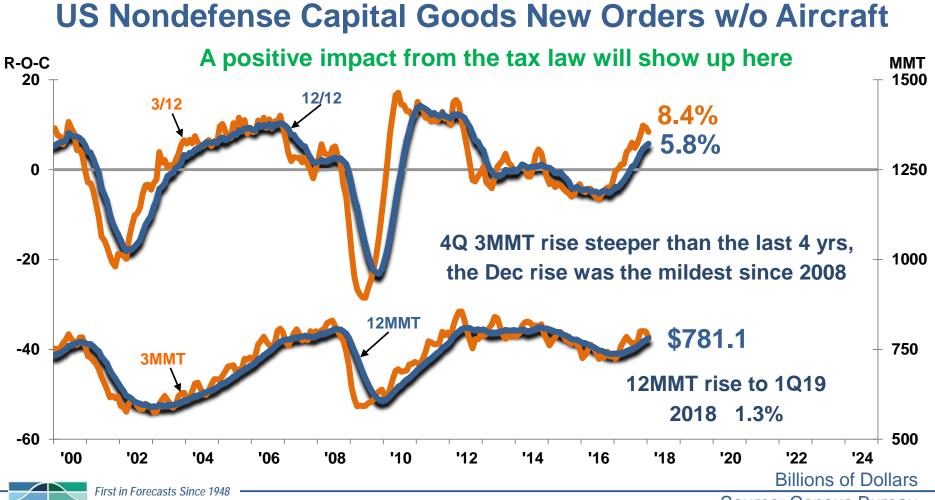


First in Forecasts Since 1948

Analysis prepared by : Baird Family Wealth Group 1/4/18

#### US Hardwood Lumber Producer Price Index to Wilshire Total Market Cap

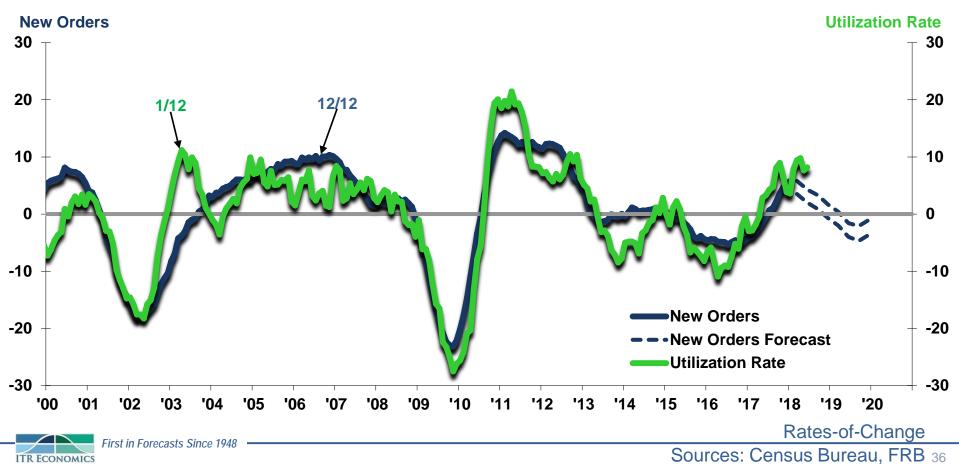




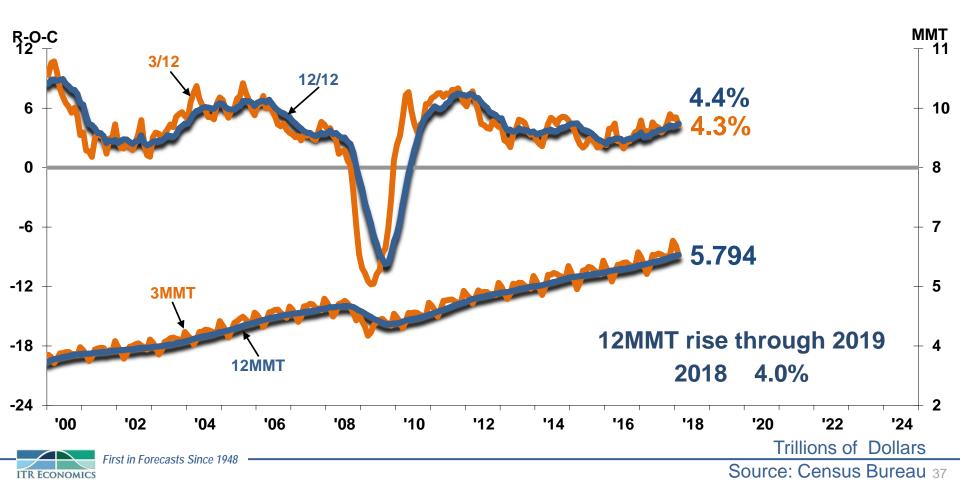
ITR ECONOMICS

Source: Census Bureau 35

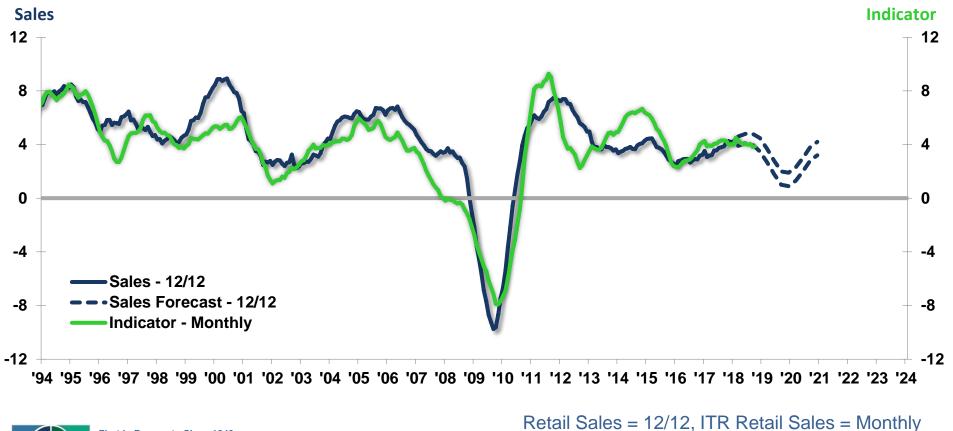
#### US Nondefense Capital Goods New Orders (excl. Aircraft) to US Machinery Manufacturing Capacity Utilization



### **US Total Retail Sales**



### **US Total Retail Sales to ITR US Retail Sales Leading Indicator**



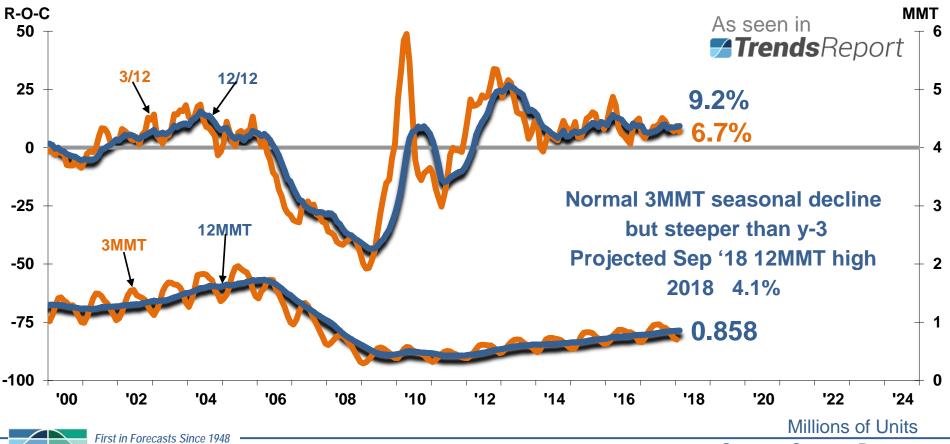
First in Forecasts Since 1948

Sources: Census Bureau and ITR Economics 38

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



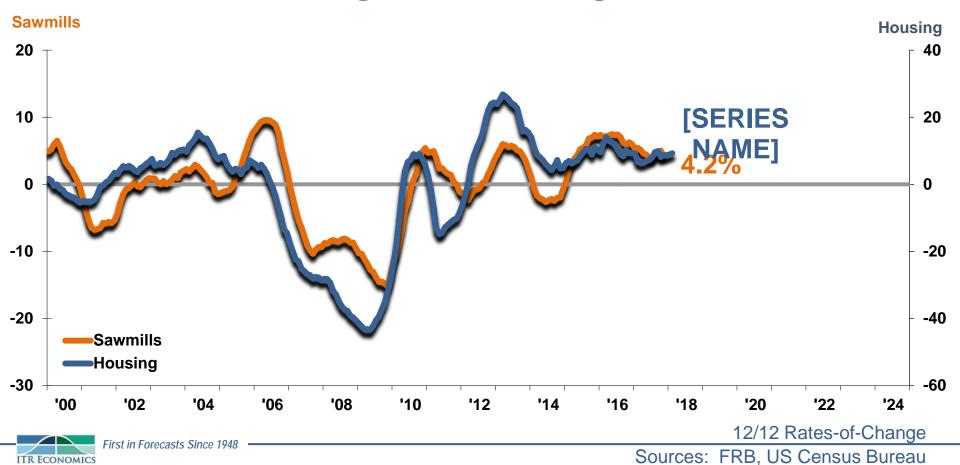
### **US Single Unit Housing Series**



**ITR ECONOMICS** 

Source: Census Bureau 40

### US Sawmills & Wood Preservation Production Index to US Single-Unit Housing Starts



#### US Hardwood Lumber Producer Price Index to US Single-Unit Housing Starts



### **US Single-Family Housing Construction Starts**

	12/12	Phase	Annual Trend (bils)	Direction
Northeast	4.2%	В	\$62.3	Up
South	6.6%	С	\$129.4	Down
Midwest	7.2%	С	\$454.3	Up
West	15.7%	В	\$207.7	Up







### **US Multi-Family Housing Construction Starts**

	12/12	Phase	Annual Trend (bils)	Direction
Northeast	-9.8%	Α	11.2%	49.5
South	-26.1%	D	-48.0%	47.3
Midwest	-14.2%	D	1.6%	144.6
West	4.5%	В	14.0%	115.2



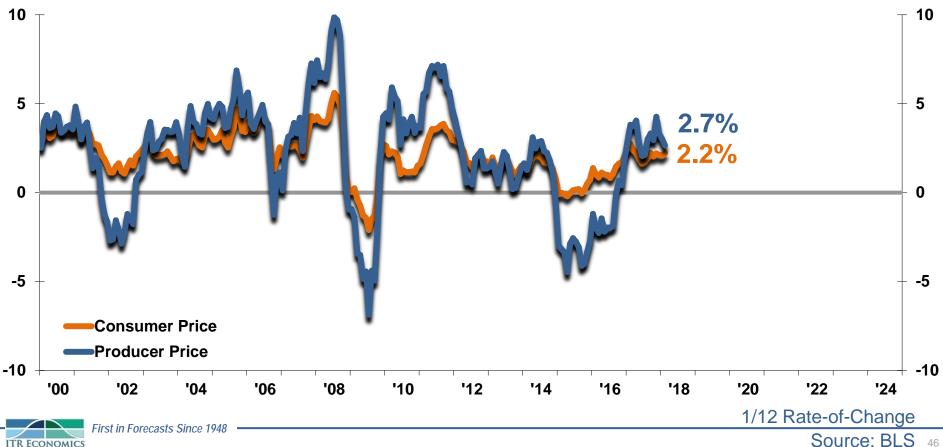




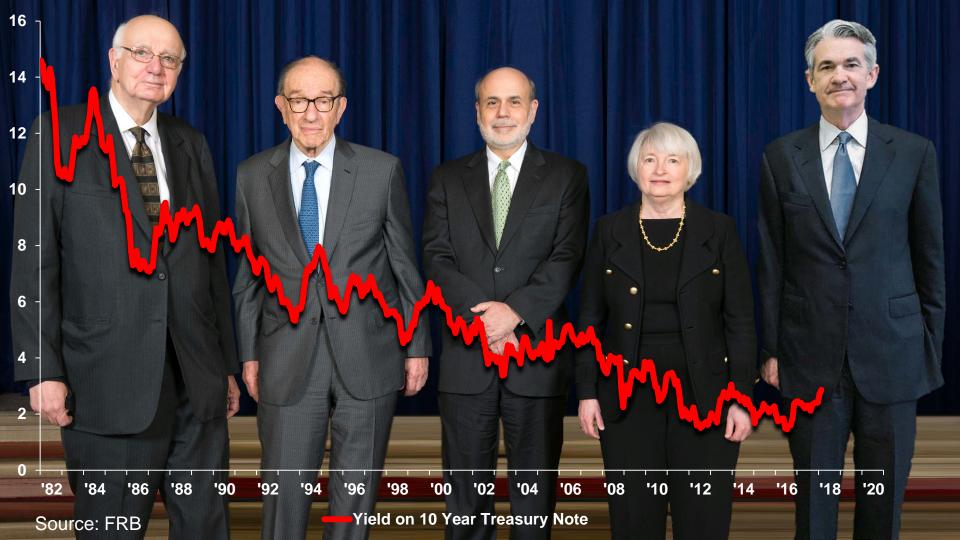
## I Can<sup>e</sup>t Adult Today.

# Please Don't Make Me Adult.

### **US Consumer Price Index to US Producer Price Index**

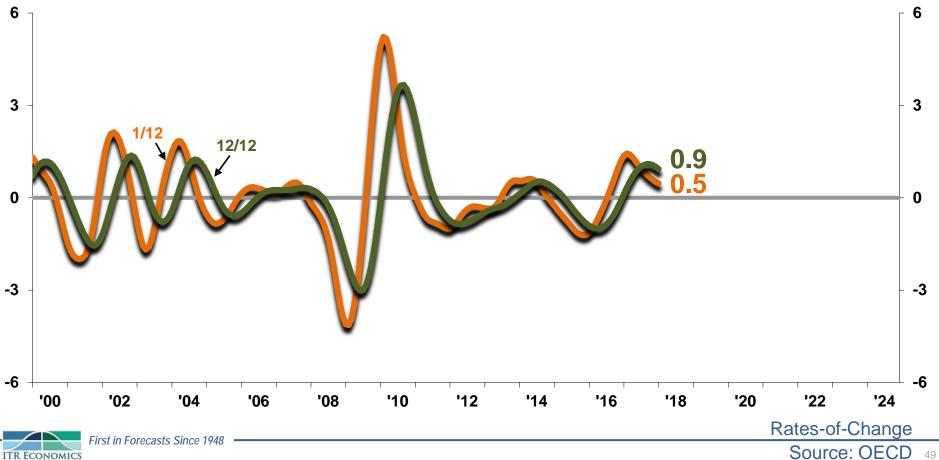


**ITR ECONOMICS** 

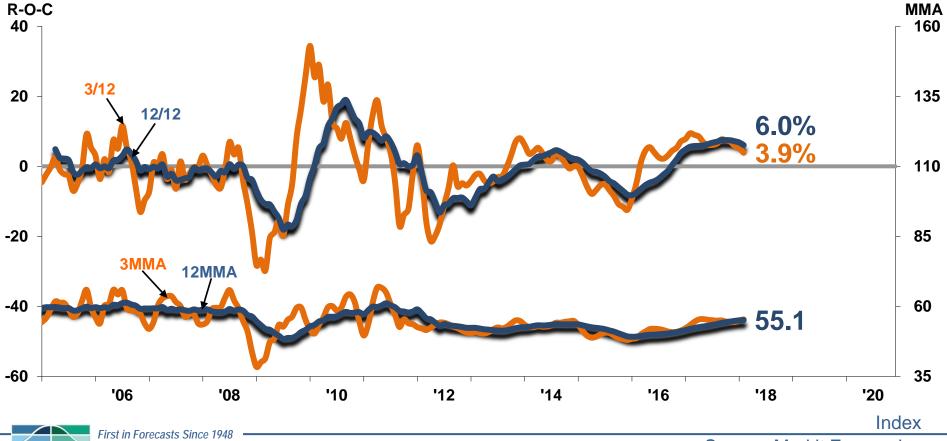


## **OUR NEIGHBOR**

### **Canadian Leading Indicator**



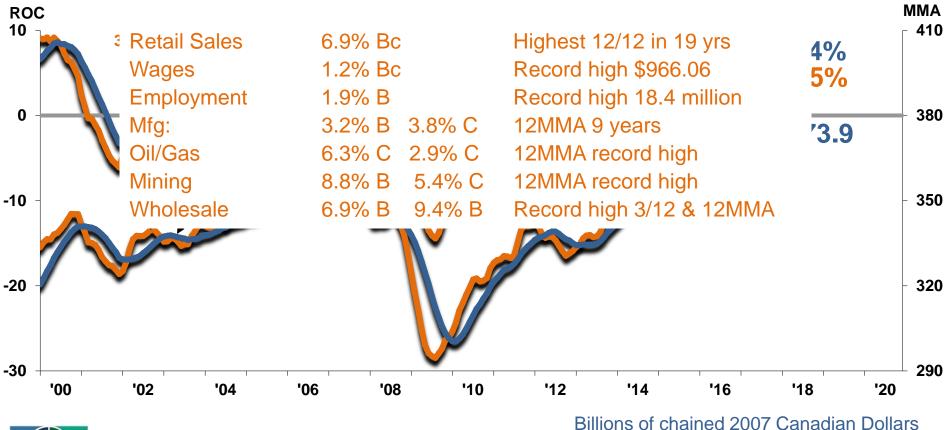
### **Canada Purchasing Managers Index**



**ITR ECONOMICS** 

Source: Markit Economics 50

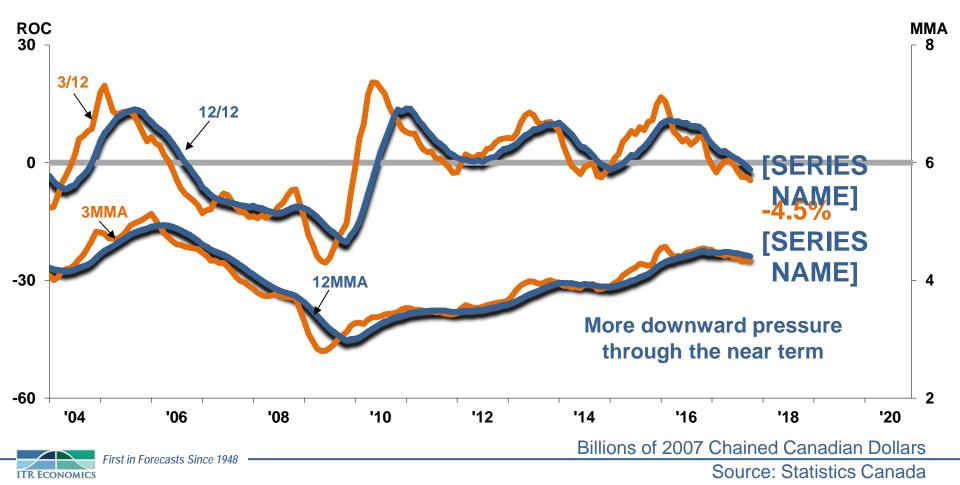
### **Canada Industrial Production**



First in Forecasts Since 1948

Source: Statistics Canada 51

### **Canada Sawmills and Wood Preservation**



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