Hardwood Manufacturers Association

A Bend in the Road



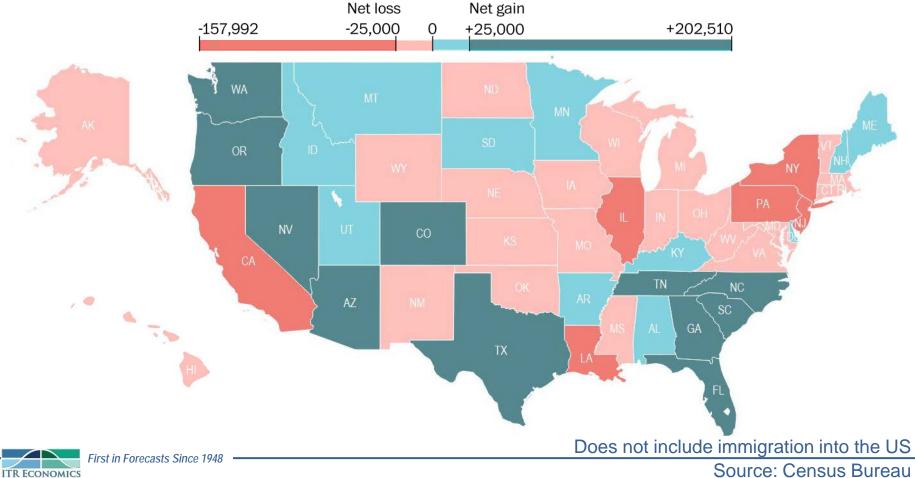
Preliminary 2017 Forecast Results If you heard ITR around two years ago...

	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.

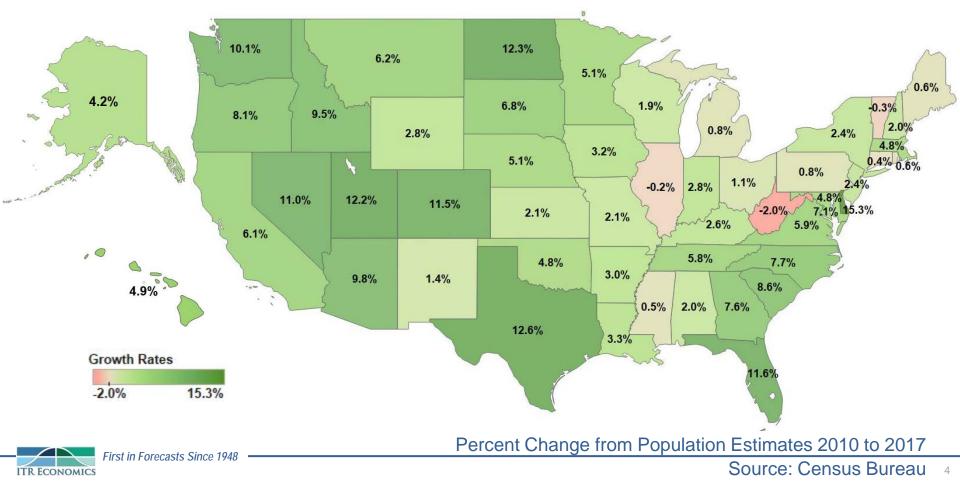


Net Migration Between States, July 2016-July 2017

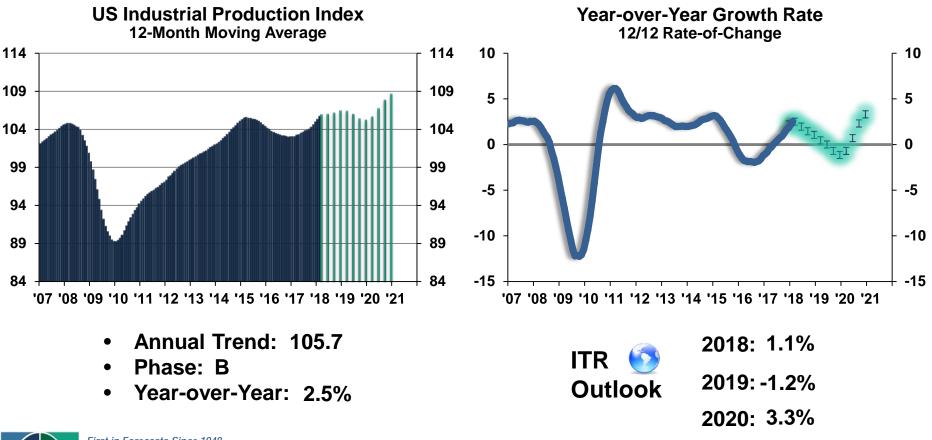


³

State Population Growth Rates



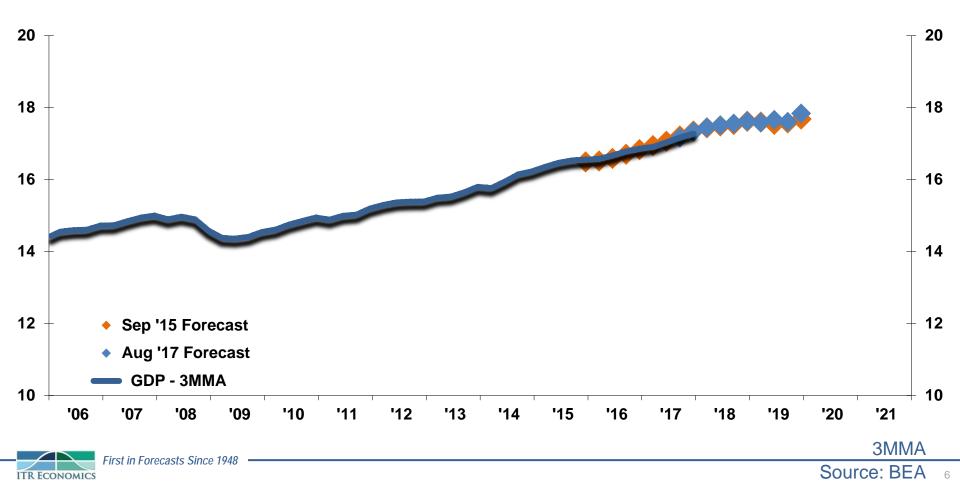
US Industrial Production Index



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%	→ 20.3	12.7%	

3/12 Rate-of-Change

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

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

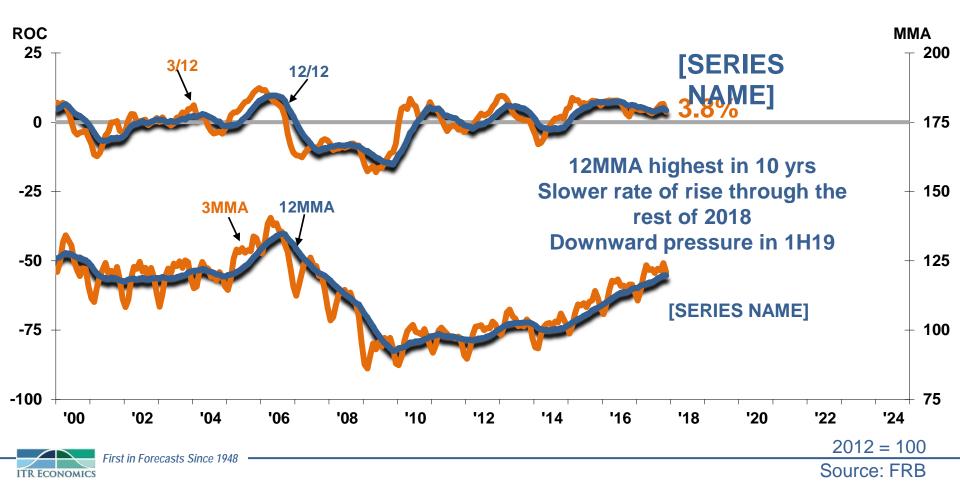
12/12 Rate-of-Change

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

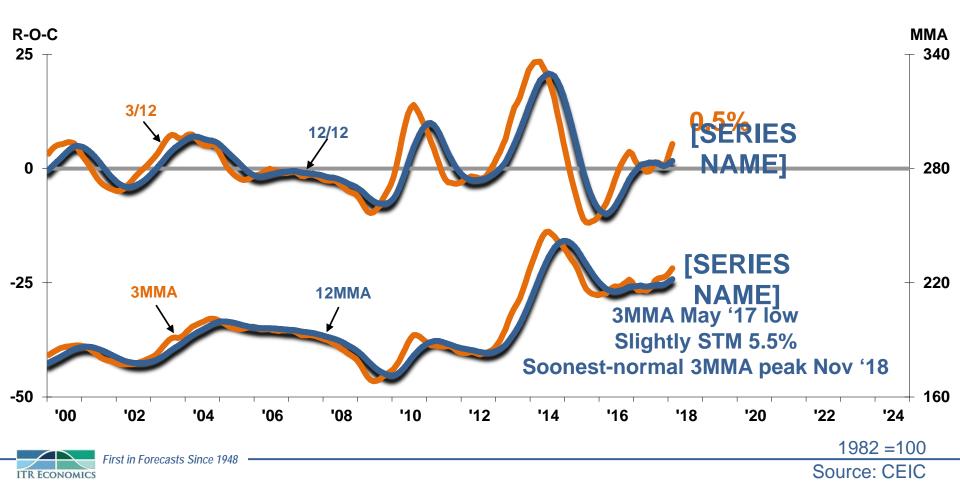
$$=\frac{20.3}{18.0} \times 100 - 100 = 12.7\%$$



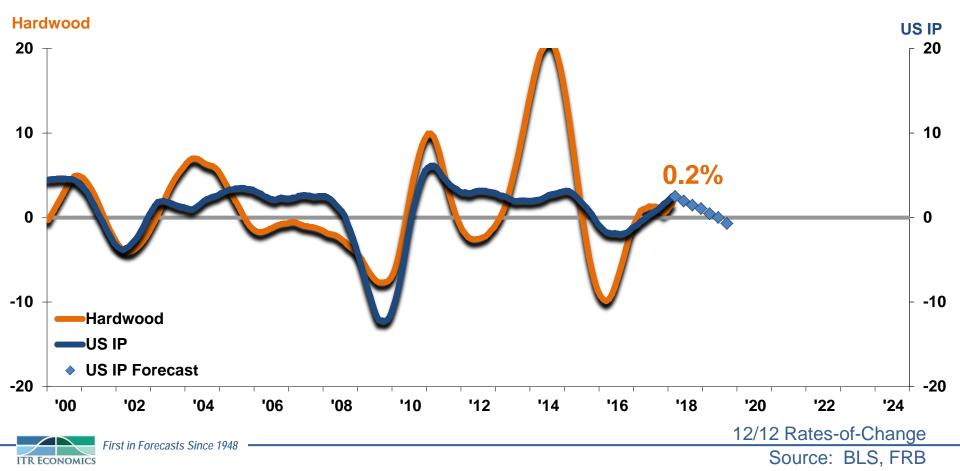
US Sawmills & Wood Preservation Production Index



US Hardwood Lumber Producer Price Index



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

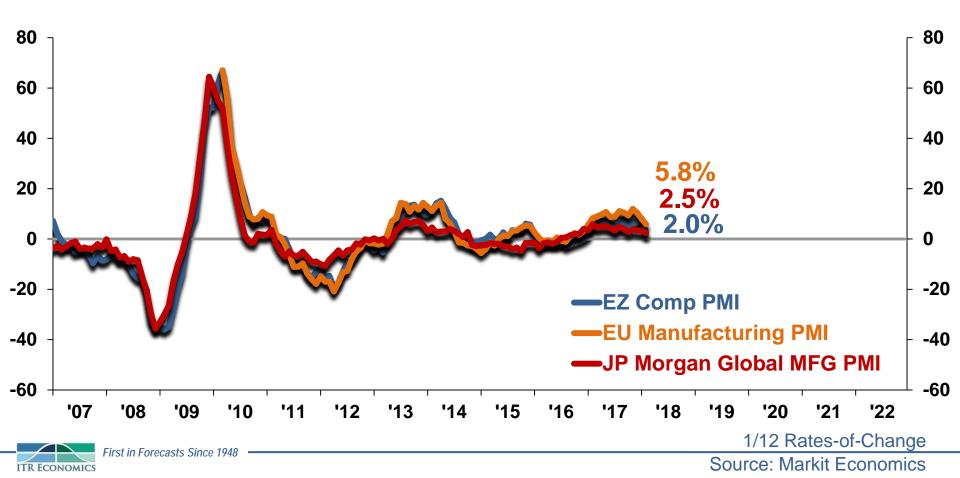


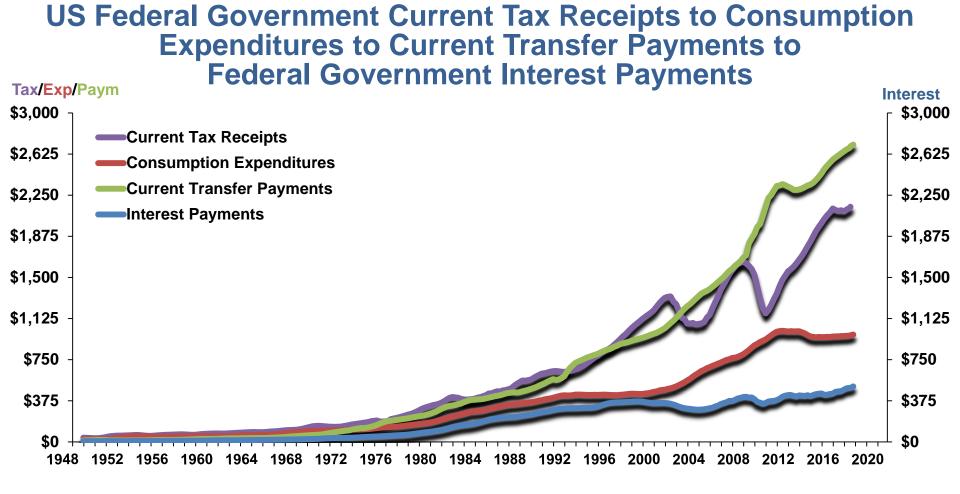
Ongoing Concerns





Global Leading Indicators



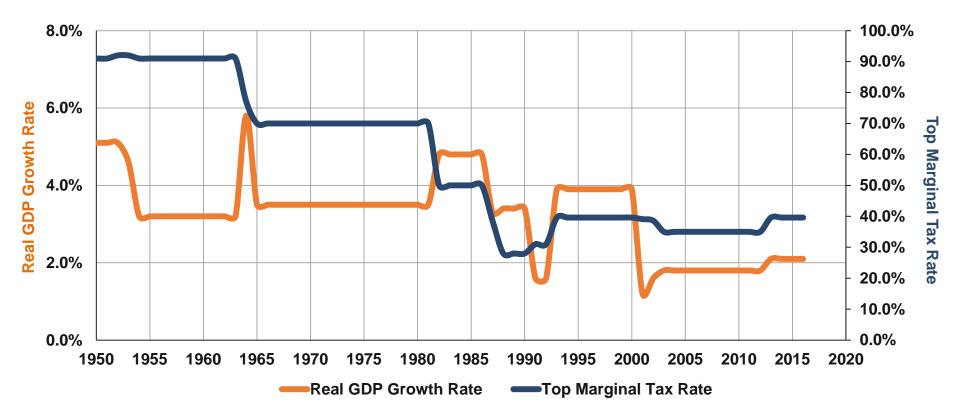


Billions of Dollars

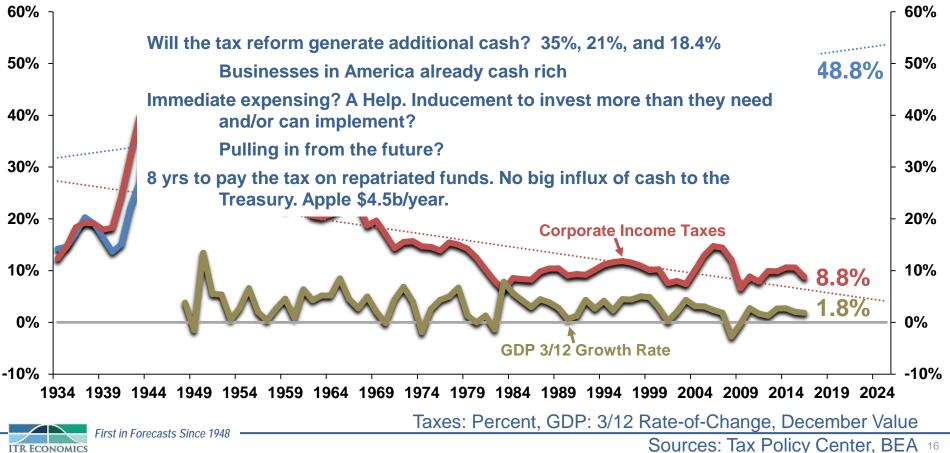


Source: BEA 14

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.

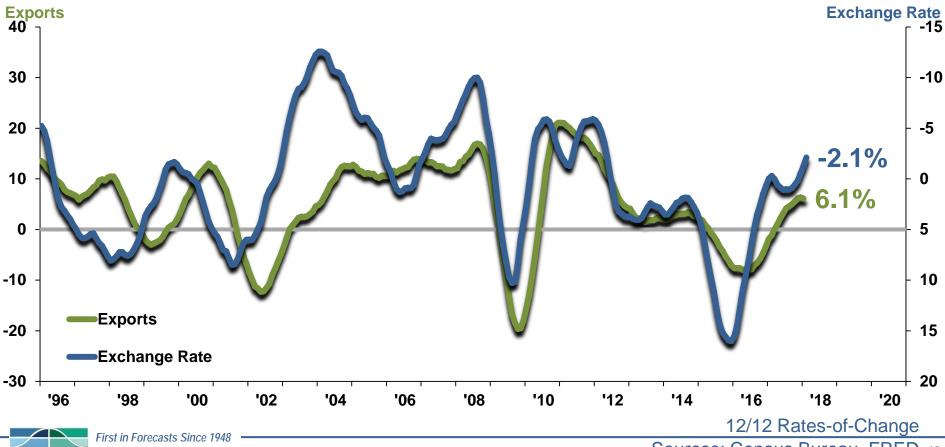
> ~ Raphael Bostic Atlanta Federal Reserve Chair Rotary Club of Atlanta January 8, 2018

US/Global Recovery – Good Days Ahead





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



ITR ECONOMICS

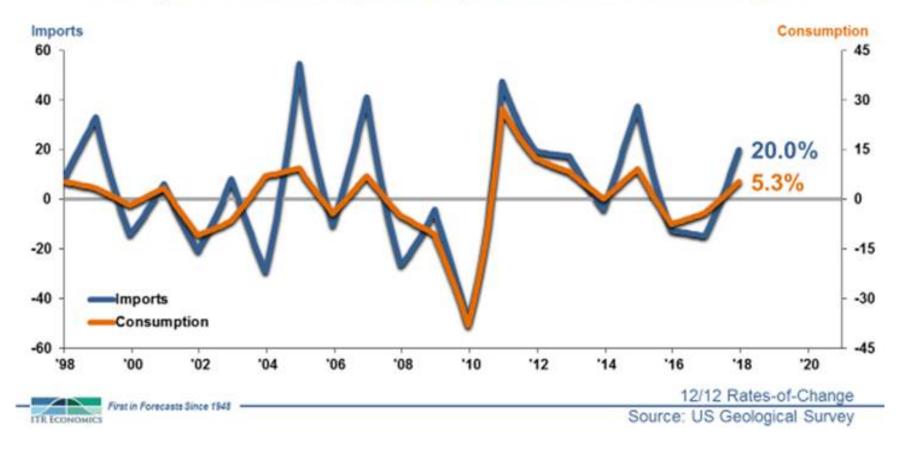
Sources: Census Bureau, FRED 19

	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

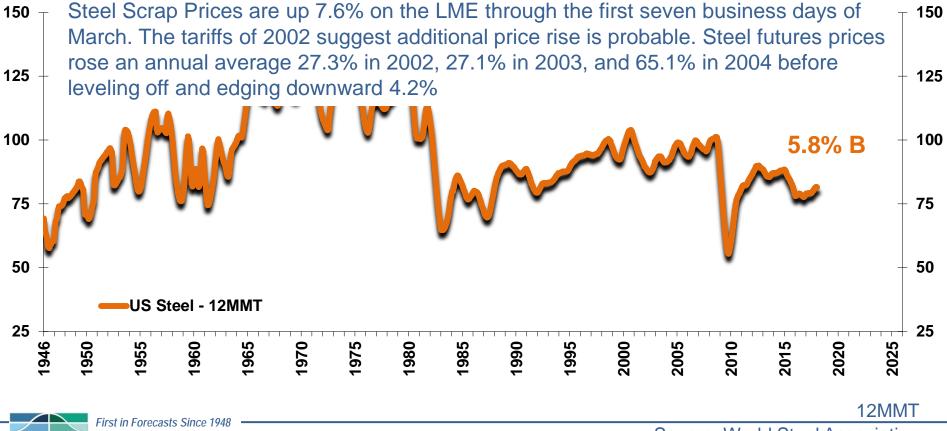
First in Forecasts Since 1948

2012 = 100, Raw Data Source: FRB

US Imports of Steel (volume) to US Steel Consumption



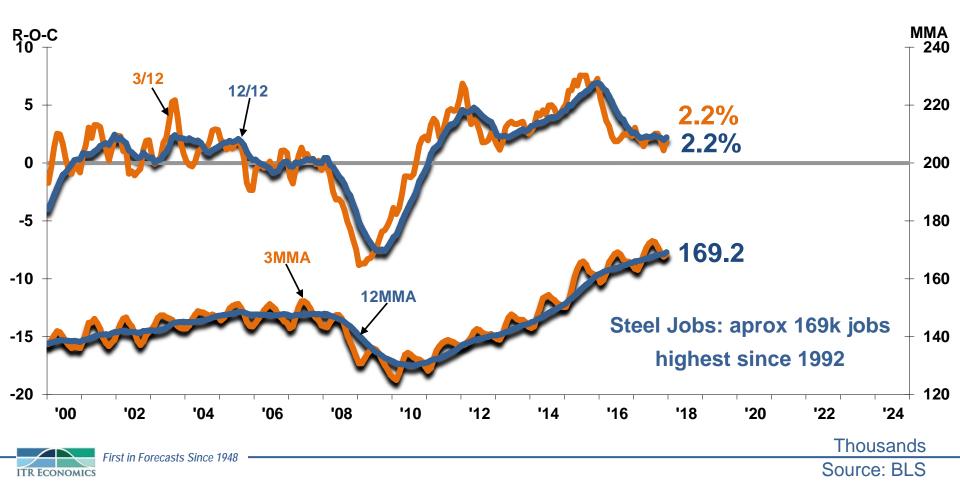
US Raw Steel Production



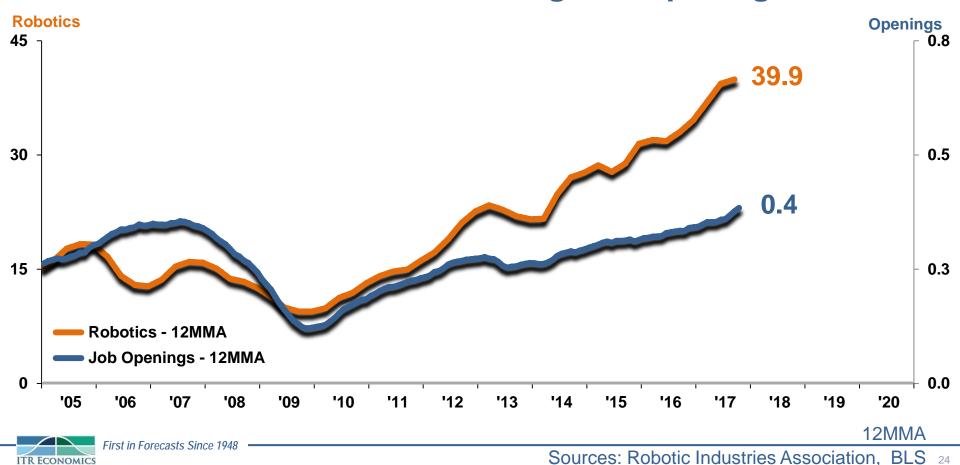
TR ECONOMICS

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



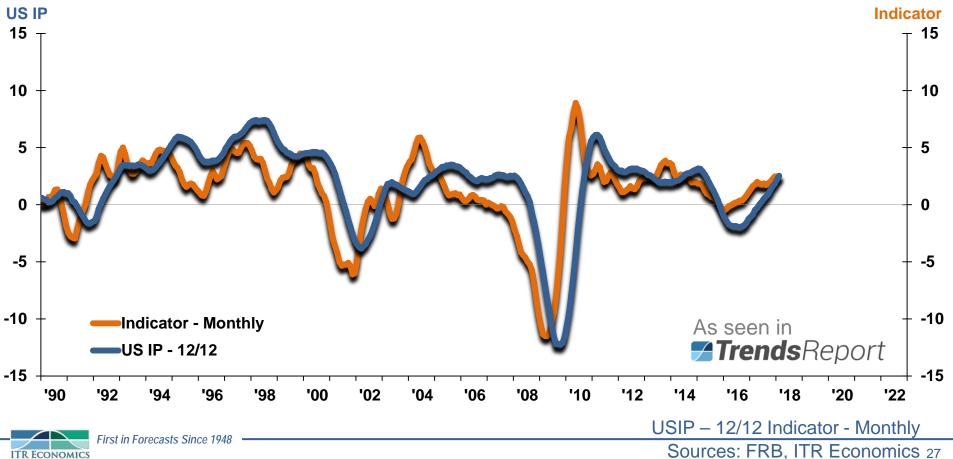
NZ	1
Singapore	2
Denmark	3
Korea	4
Hong Kong	5
US	6
UK	8
Germany	21
Japan	35
Russia	36
China	75
India	100
Brazil	125



LEADING INDICATORS

US Industrial Production to ITR Leading Indicator™

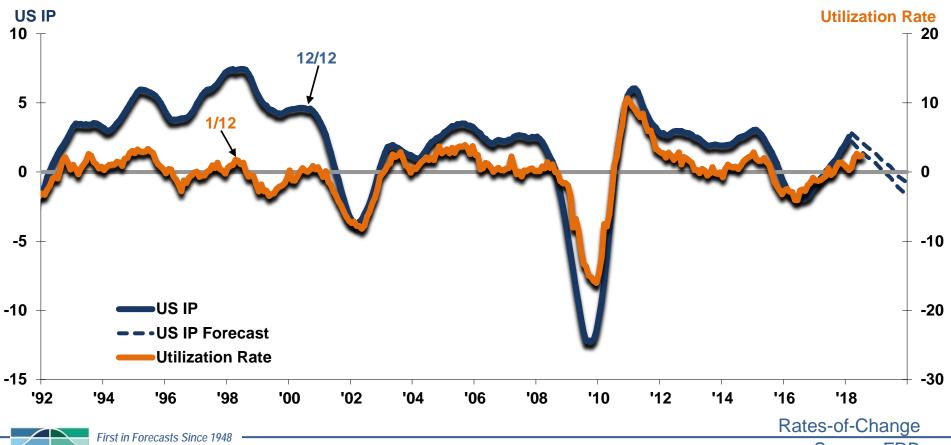
Reported in ITR Trends Report - ITR Advisor



US Hardwood Lumber Producer Price Index to ITR Leading Indicator



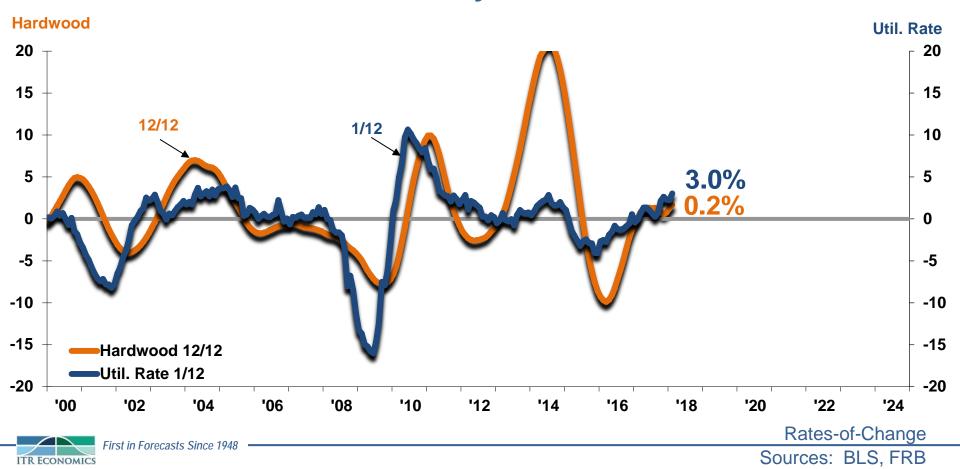
US Industrial Production to US Total Industry Capacity Utilization Rate



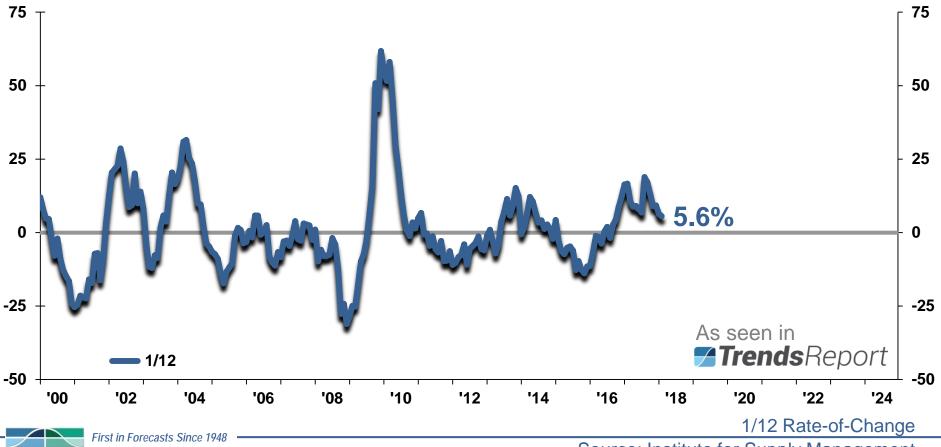
ITR ECONOMICS

Source: FRB 29

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



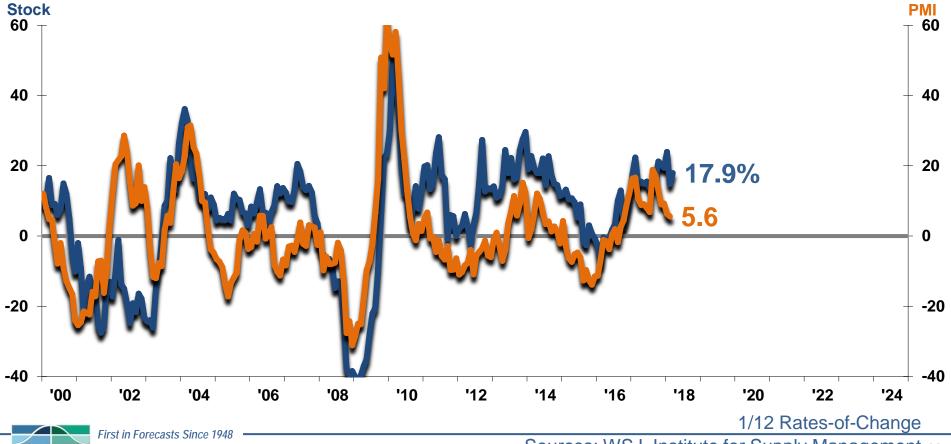
US Purchasing Managers Index



ITR ECONOMICS

Source: Institute for Supply Management 31

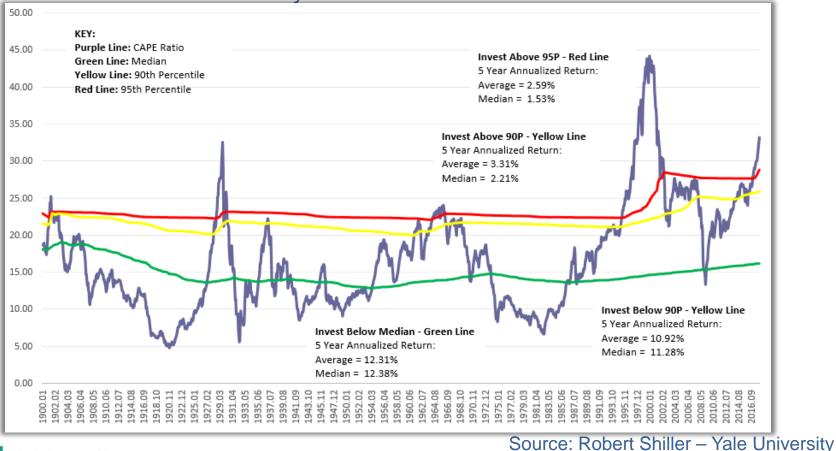
US Stock Prices Index to US Purchasing Managers Index



ITR ECONOMICS

Sources: WSJ, Institute for Supply Management 32

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

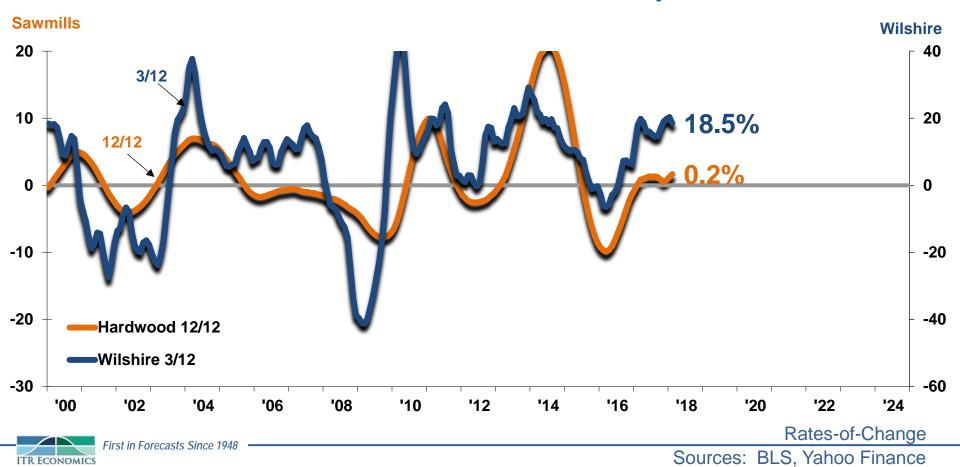


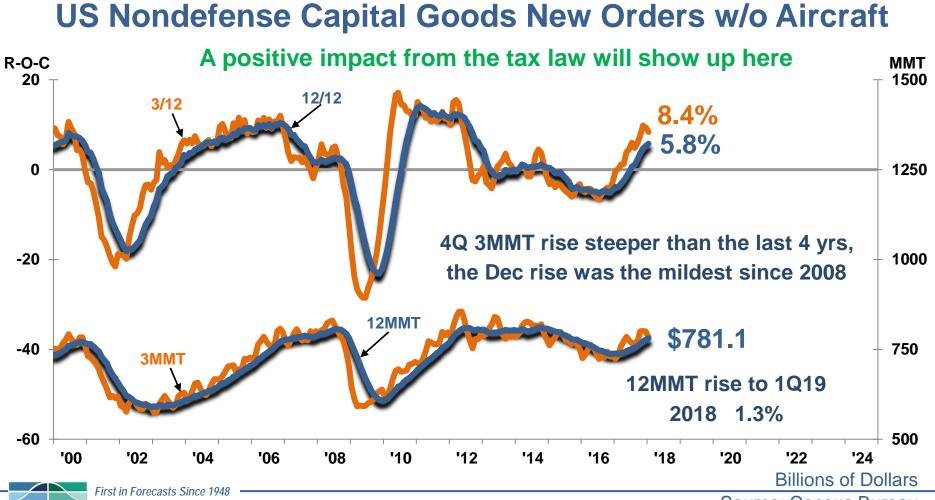


First in Forecasts Since 1948

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

US Hardwood Lumber Producer Price Index to Wilshire Total Market Cap

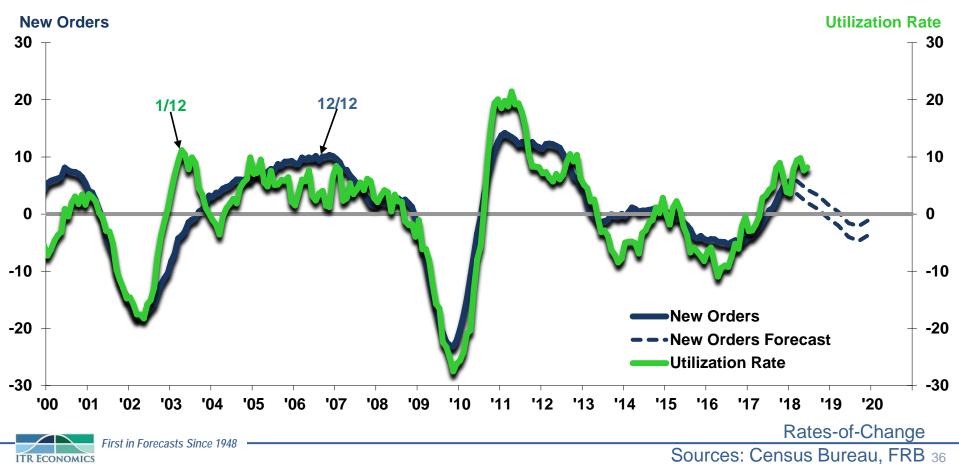




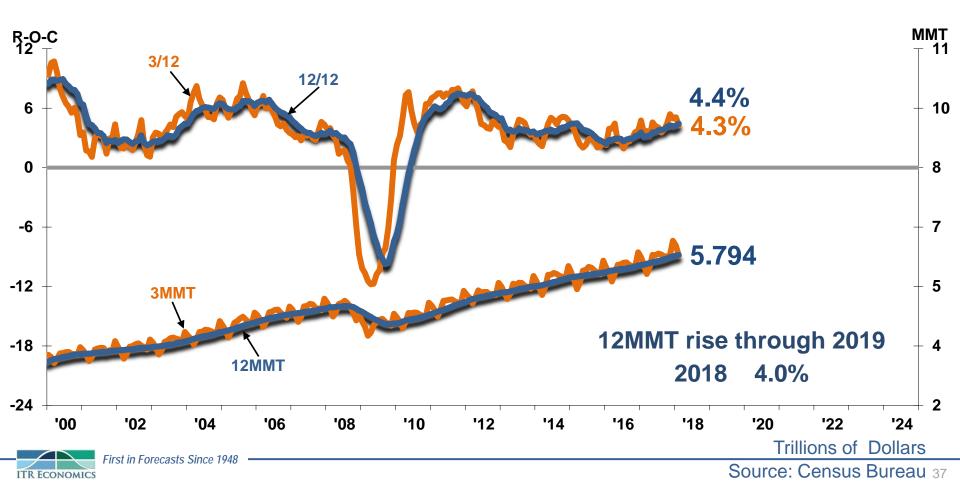
ITR ECONOMICS

Source: Census Bureau 35

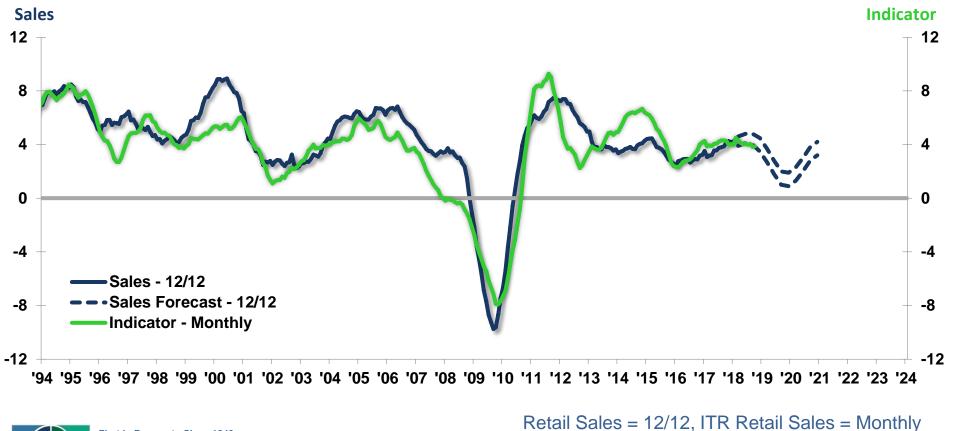
US Nondefense Capital Goods New Orders (excl. Aircraft) to US Machinery Manufacturing Capacity Utilization



US Total Retail Sales



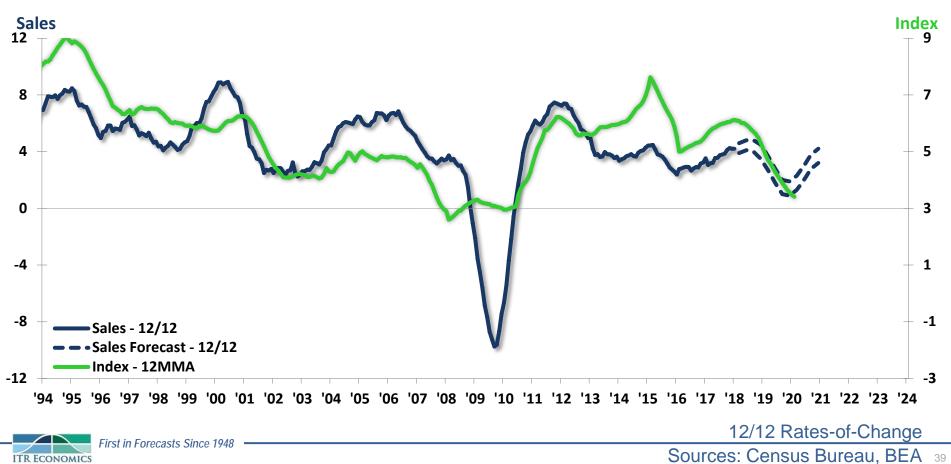
US Total Retail Sales to ITR US Retail Sales Leading Indicator



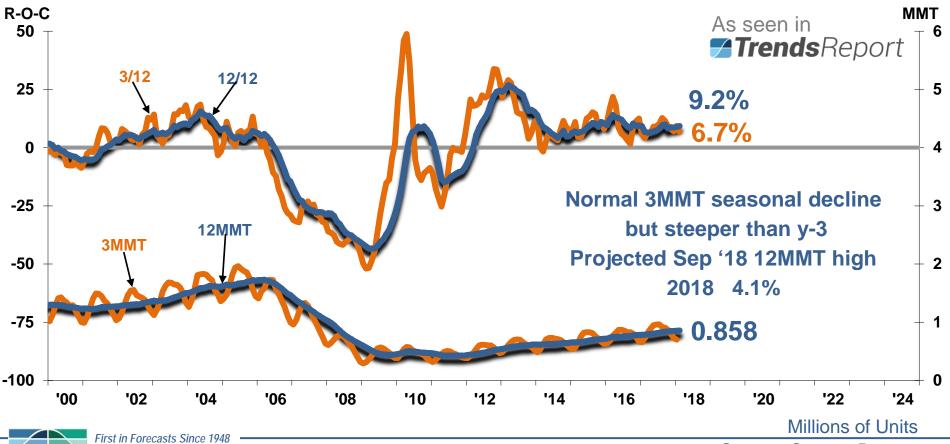
First in Forecasts Since 1948

Sources: Census Bureau and ITR Economics 38

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



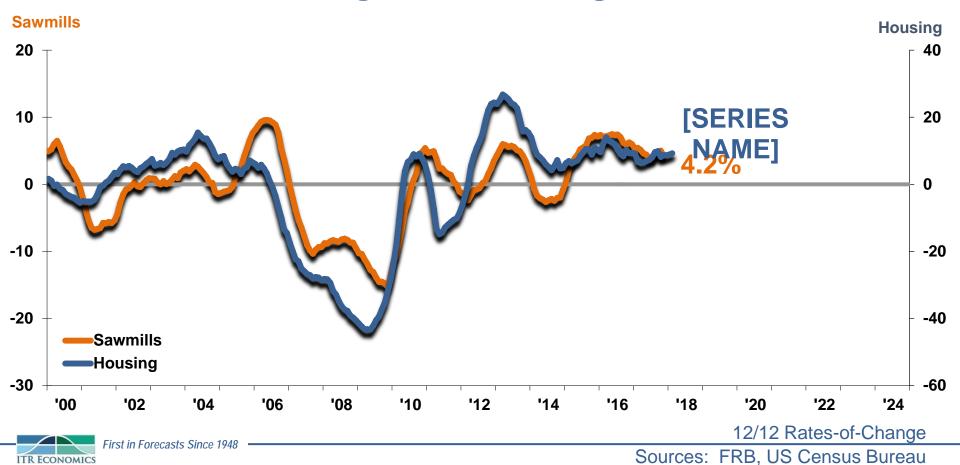
US Single Unit Housing Series



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



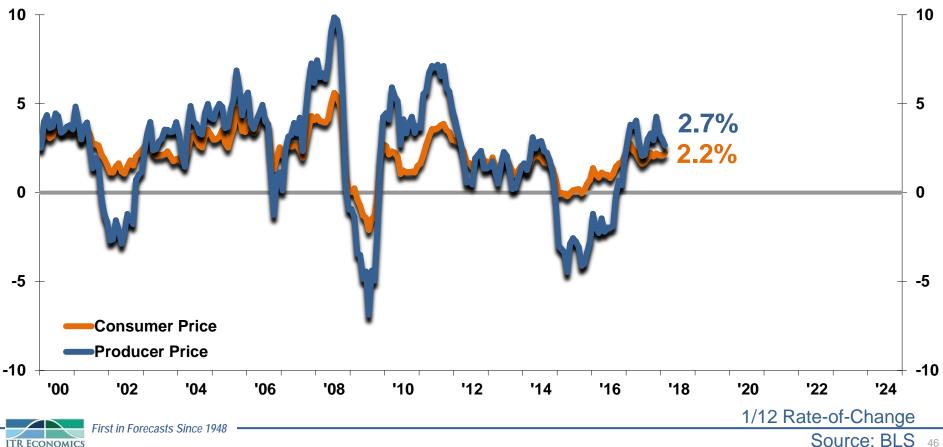




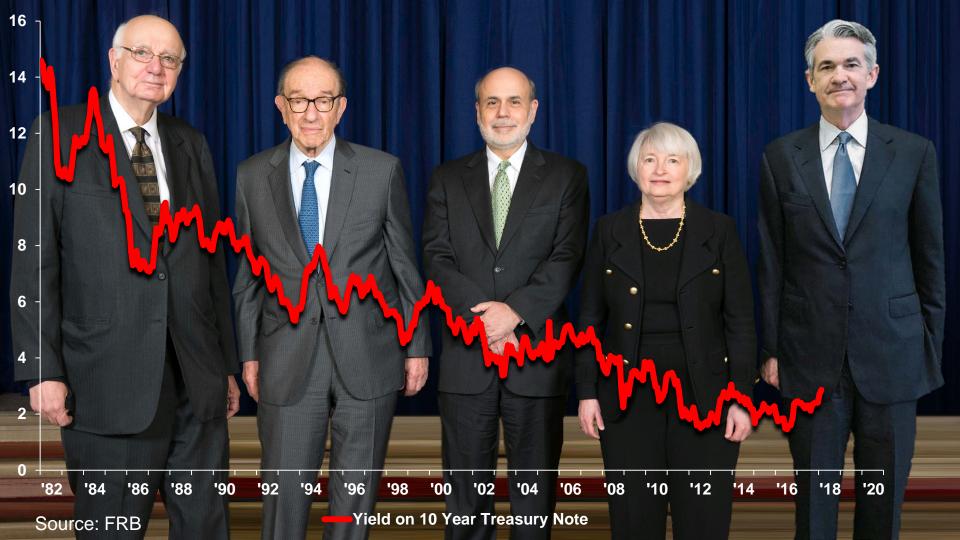
I Can^et Adult Today.

Please Don't Make Me Adult.

US Consumer Price Index to US Producer Price Index

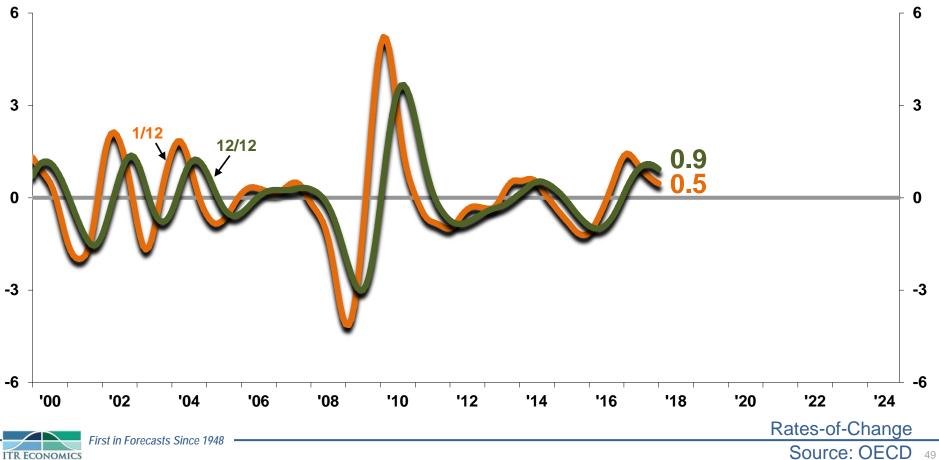


ITR ECONOMICS

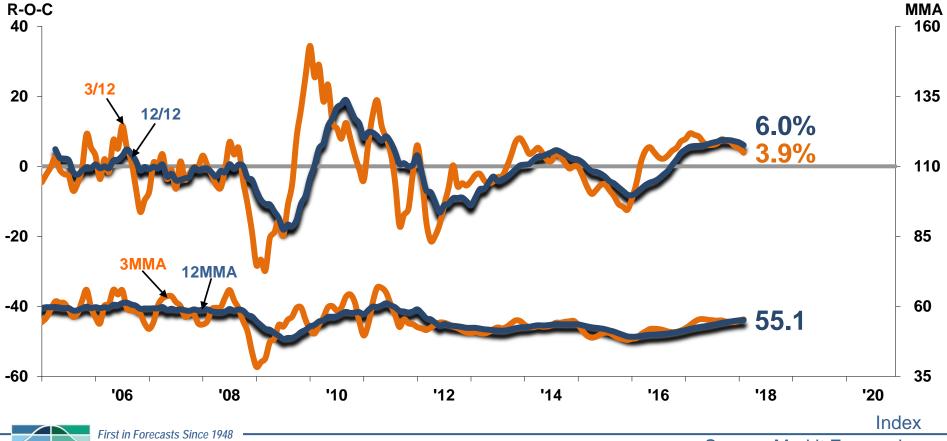


OUR NEIGHBOR

Canadian Leading Indicator



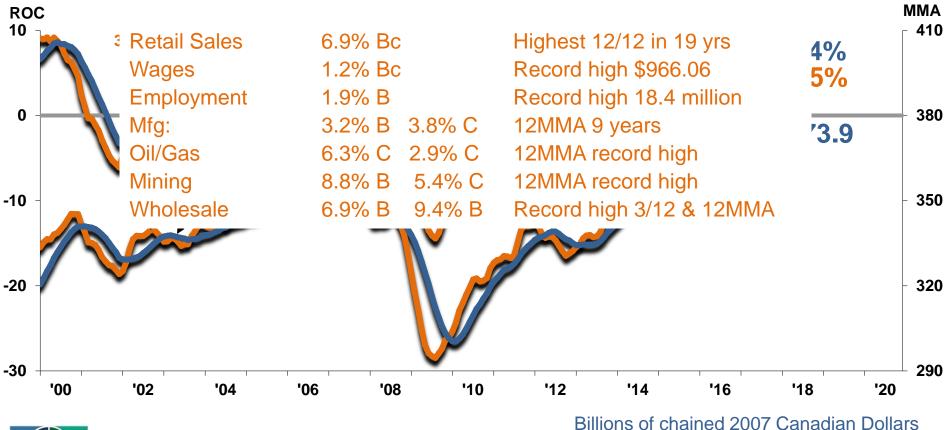
Canada Purchasing Managers Index



ITR ECONOMICS

Source: Markit Economics 50

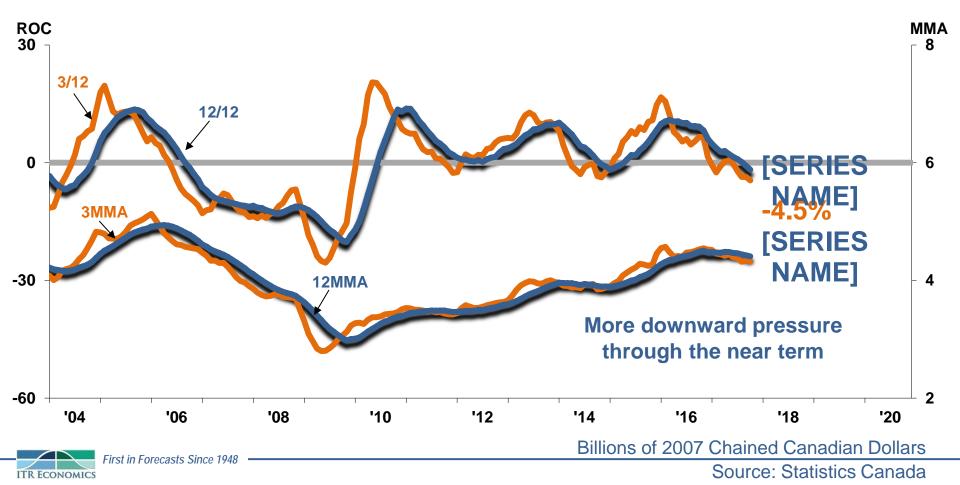
Canada Industrial Production



First in Forecasts Since 1948

Source: Statistics Canada 51

Canada Sawmills and Wood Preservation



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