

GAWDA

Winds of Change



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GAWDA Summary September 2018

Economic Rise for 2H18

US & Global expansion

Leading Indicator Signals are Mixed

How to track the leading indicators

Business Cycle Decline in 2019

Some industries hit harder than others

Global Issues Impacting Businesses

Tariffs and Trade

Inflation



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%

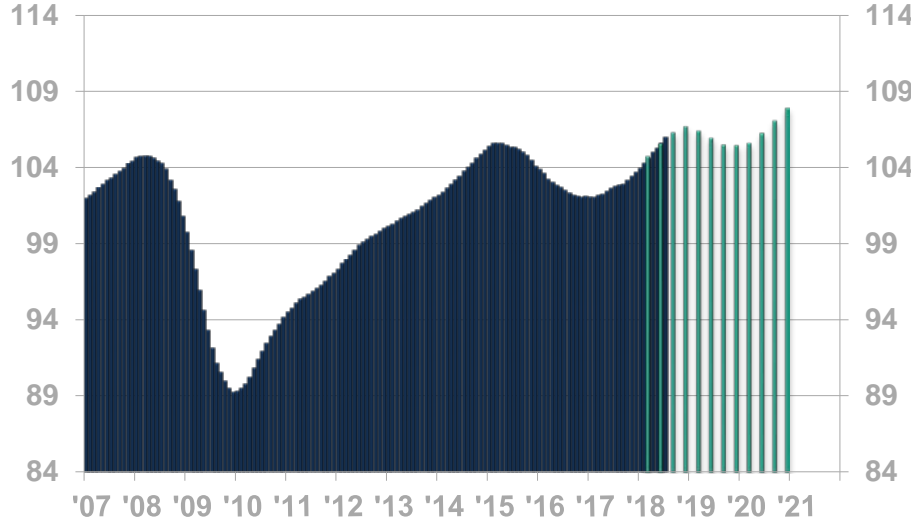
ITR Economics provides the best economic intelligence to reduce risk and drive practical and profitable business decisions.



General Economic Outlook

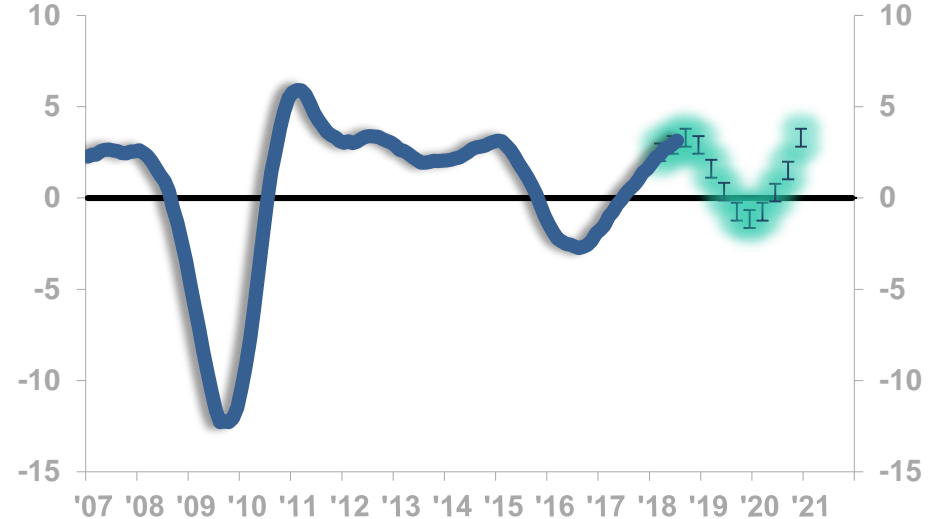
US Industrial Production Index

US Industrial Production Index
12-Month Moving Average



- Annual Trend: 105.6
- Phase: B
- Year-over-Year: 2.9%

Year-over-Year Growth Rate
12/12 Rate-of-Change



ITR 
Outlook

2018: 2.9%

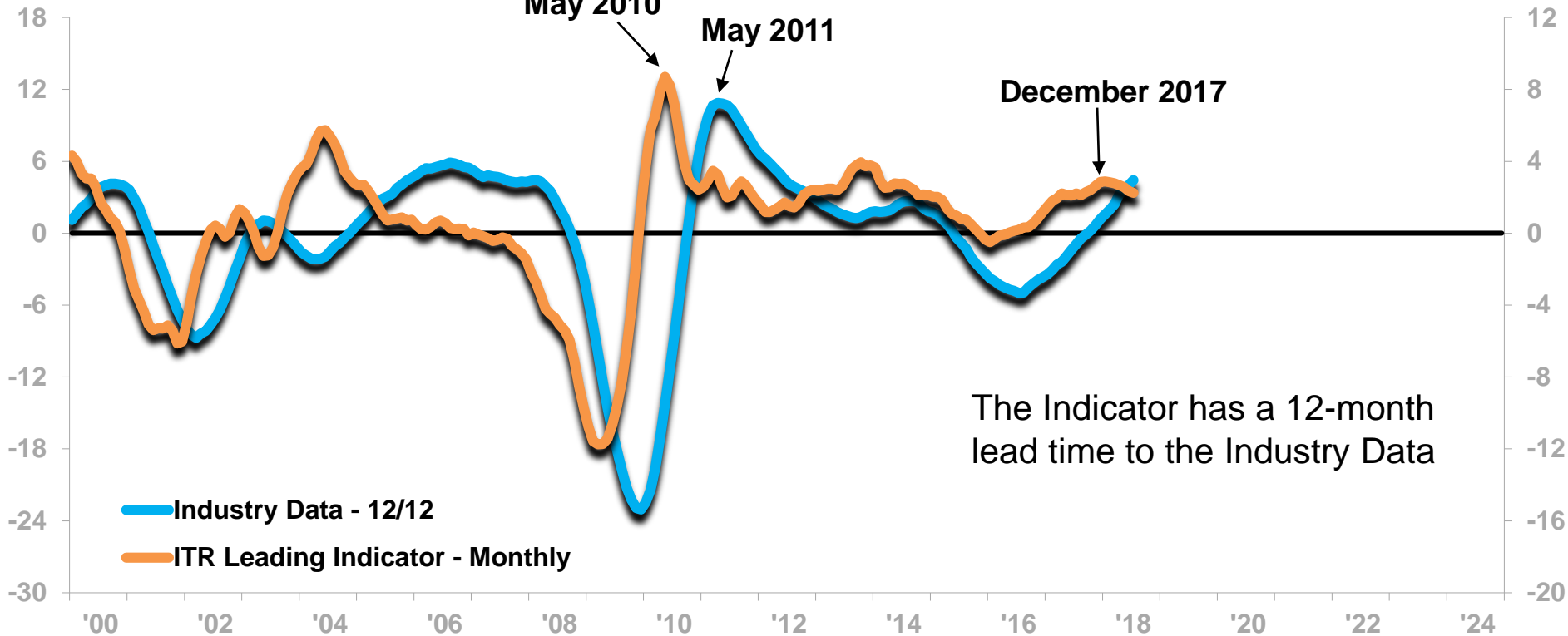
2019: -1.2%

2020: 2.3%

Leading Indicators

Industry Data

Leading Indicator

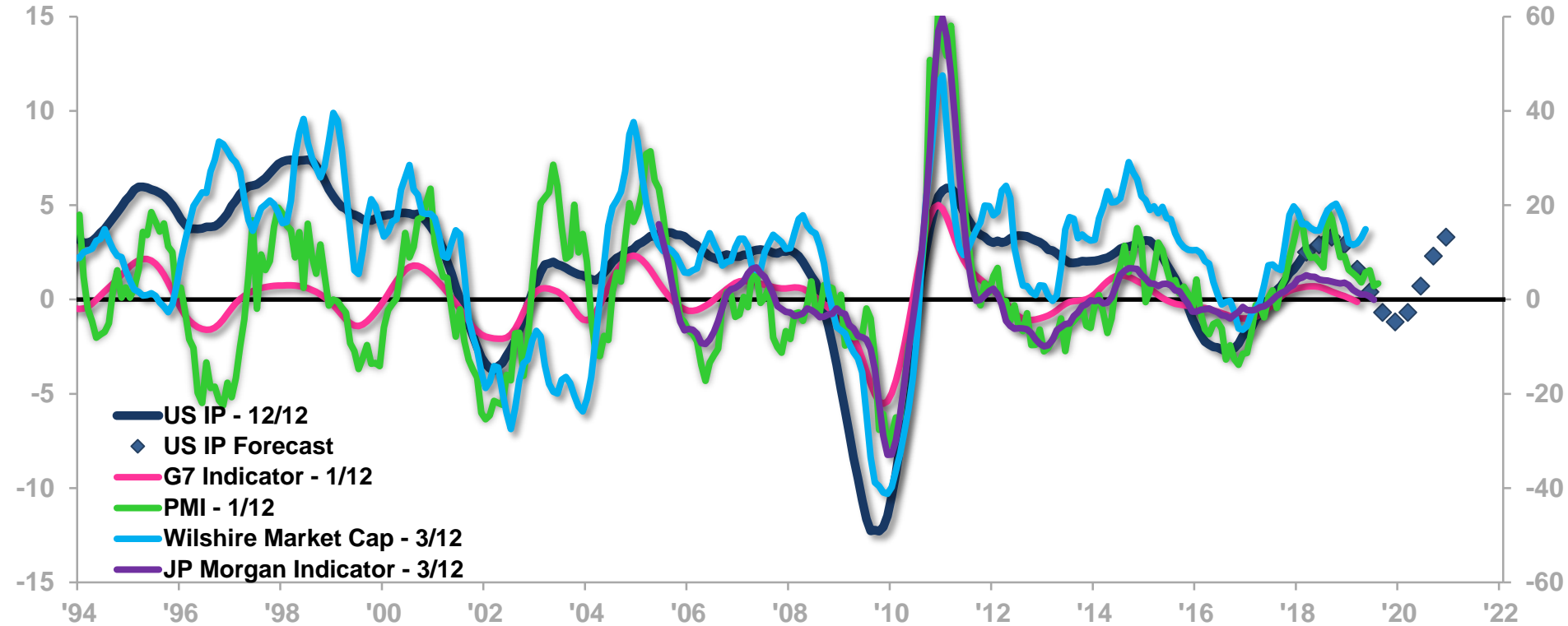


Leading Indicator System as a Powerful Tool

US Industrial Production Index to Leading Indicators

US IP, JP Morgan

PMI, Wilshire, Profits, G7





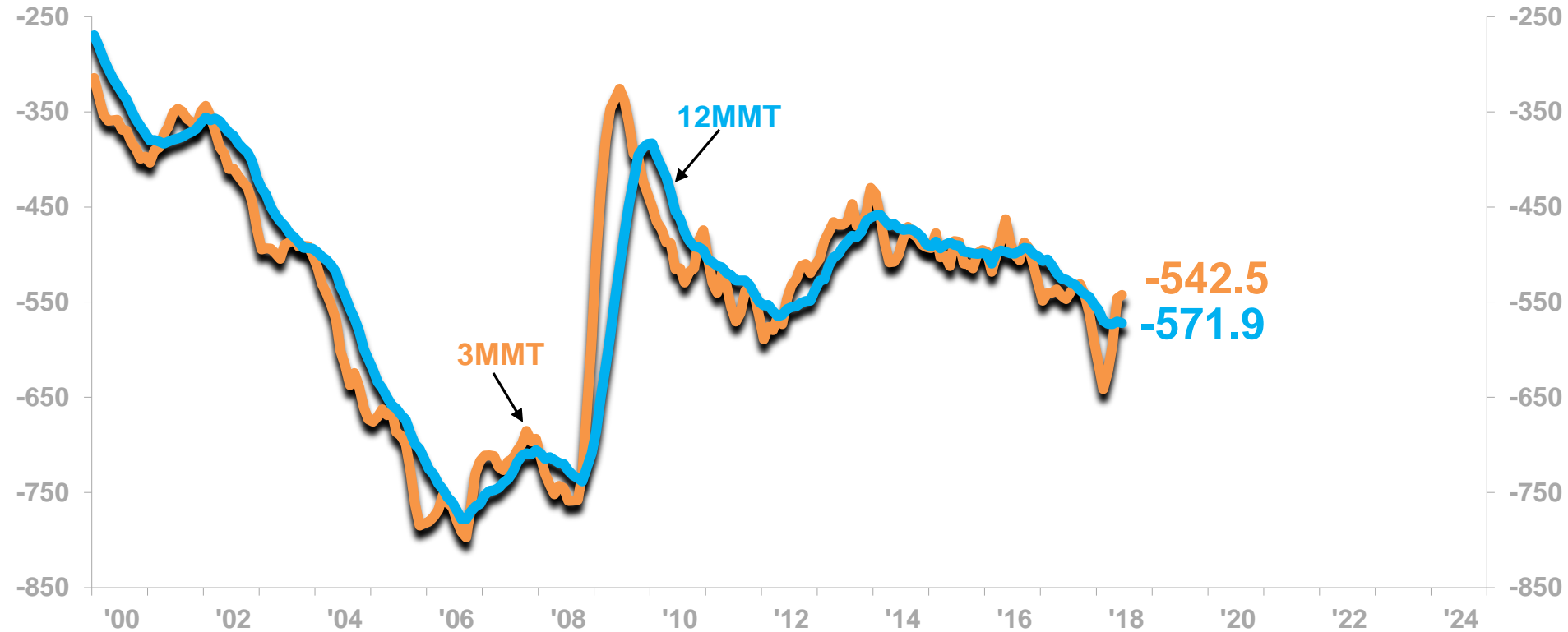
It is not enough to do your best; you must know what to do, and then do your best.

W. Edwards Deming

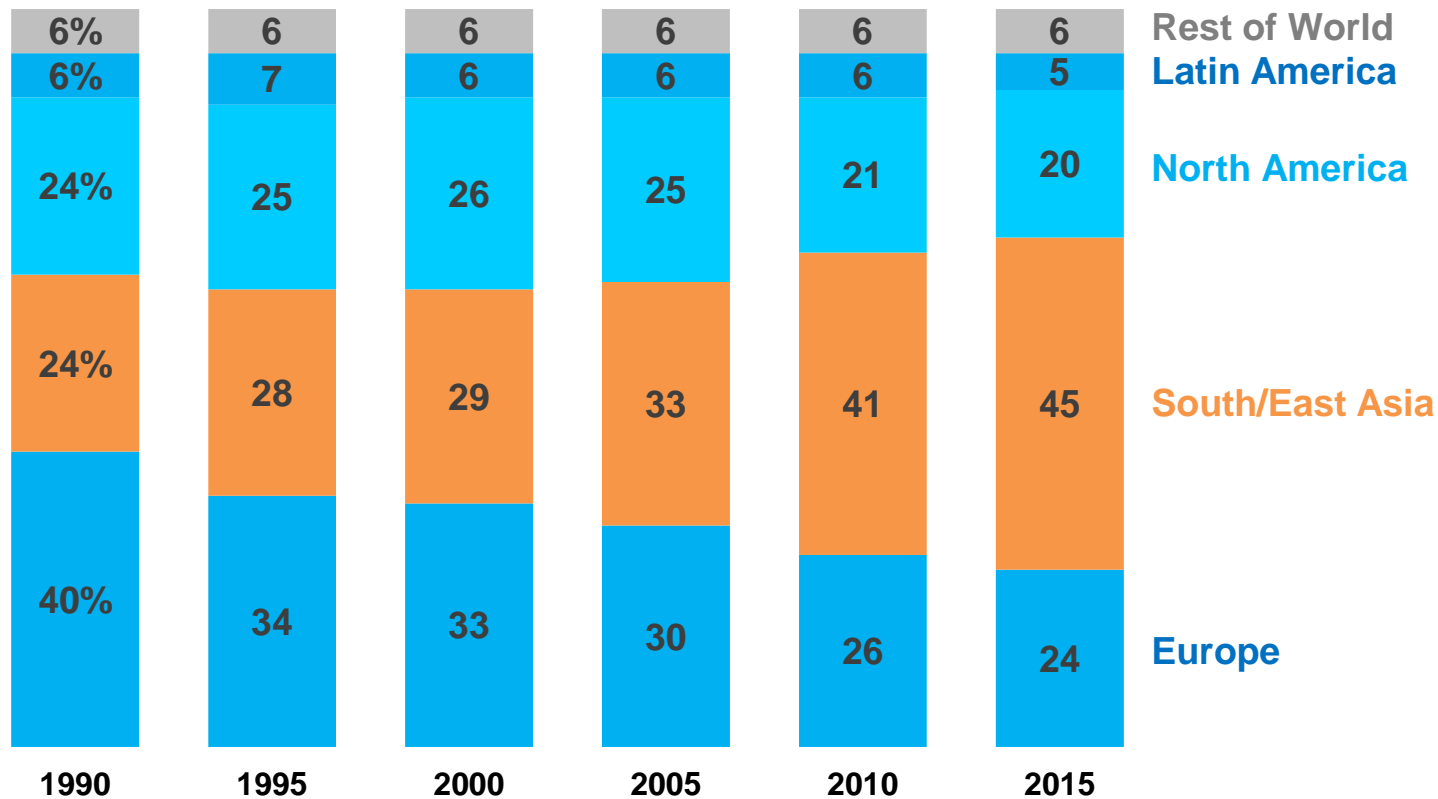


Trade & Tariffs

US Trade Balance for Goods and Services



Manufacturing Increasingly Takes Place in Asia



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

2004: 15 Percentage Point Advantage

The China Advantage?

2016: Only 1 Percent Point Difference

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

Moving Forward 2004: 15 Percentage Point Advantage

Robotics Protectionism Politics & Economic Stability

The China Advantage?

2016: Only 1 Percent Point Difference

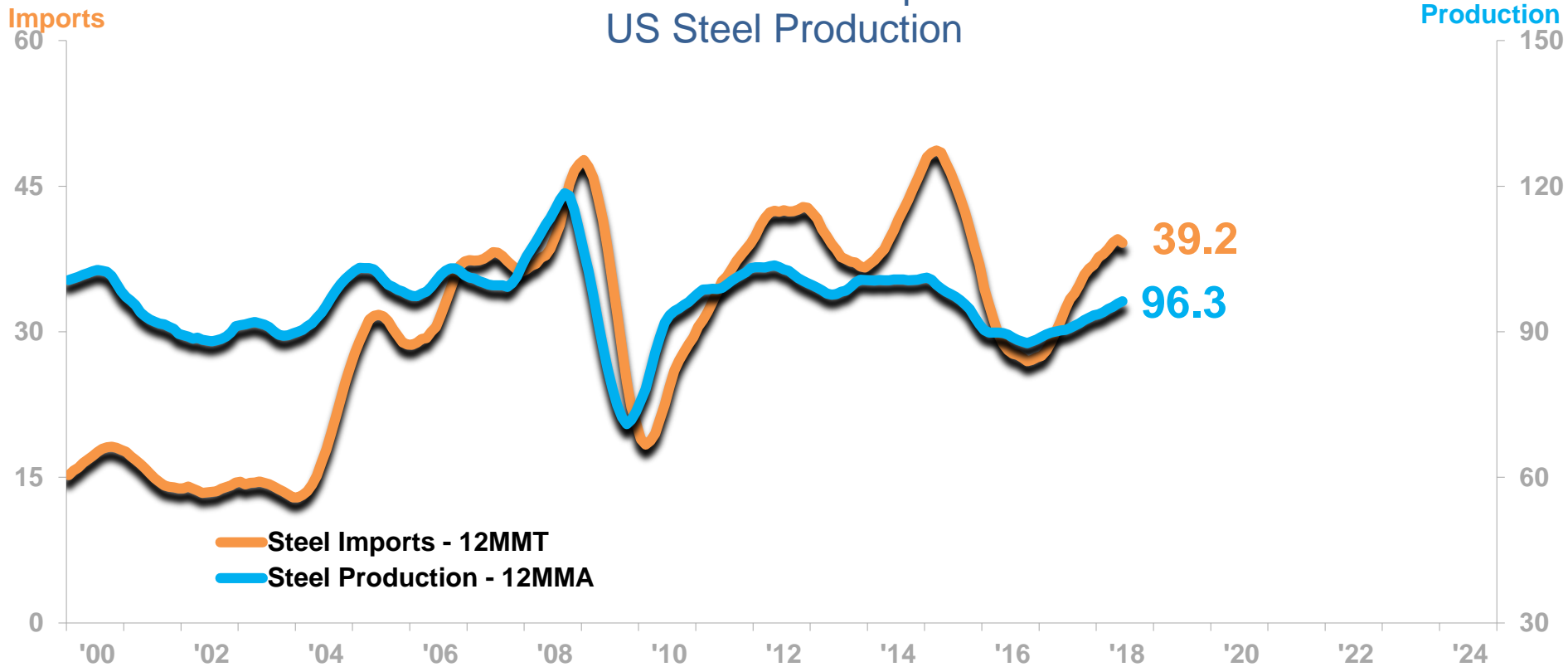
Ease of Doing Business



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

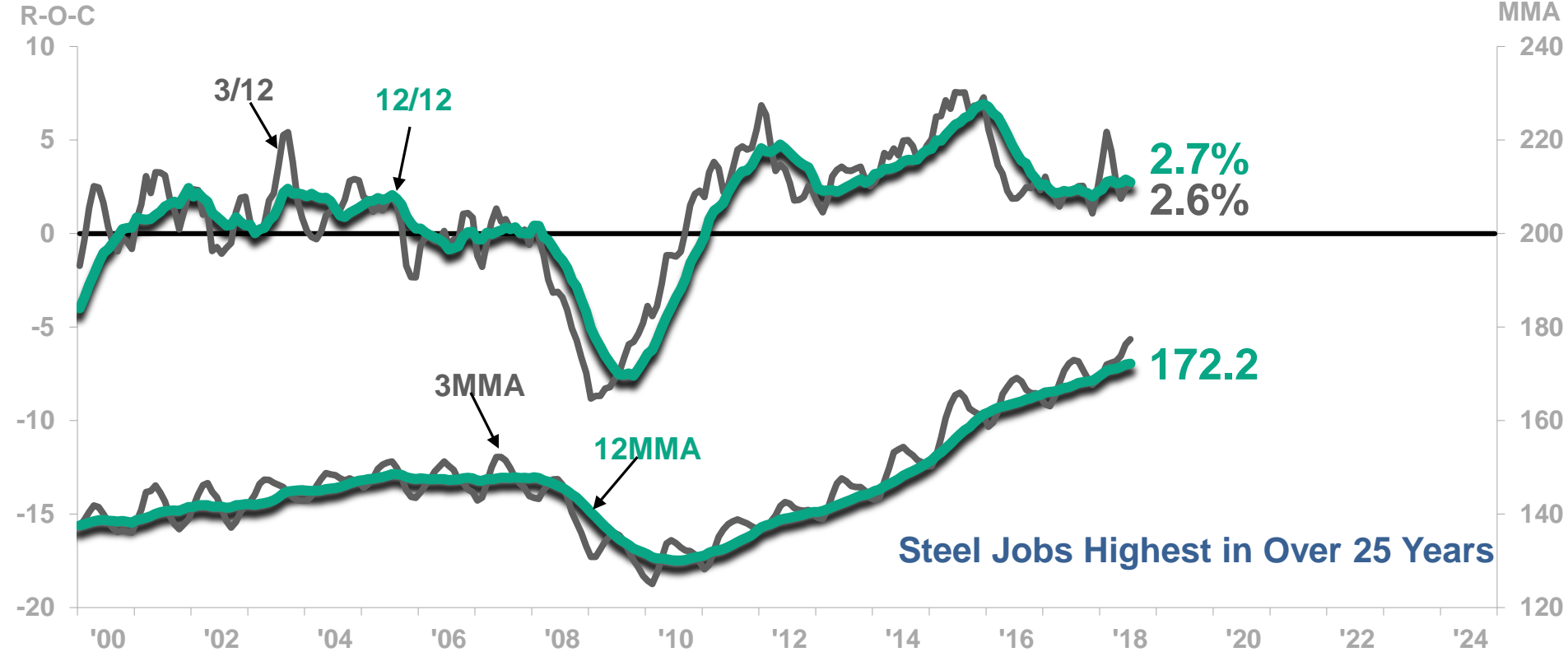
Import Share Pre and Post the Great Recession

US Iron and Steel Imports to
US Steel Production



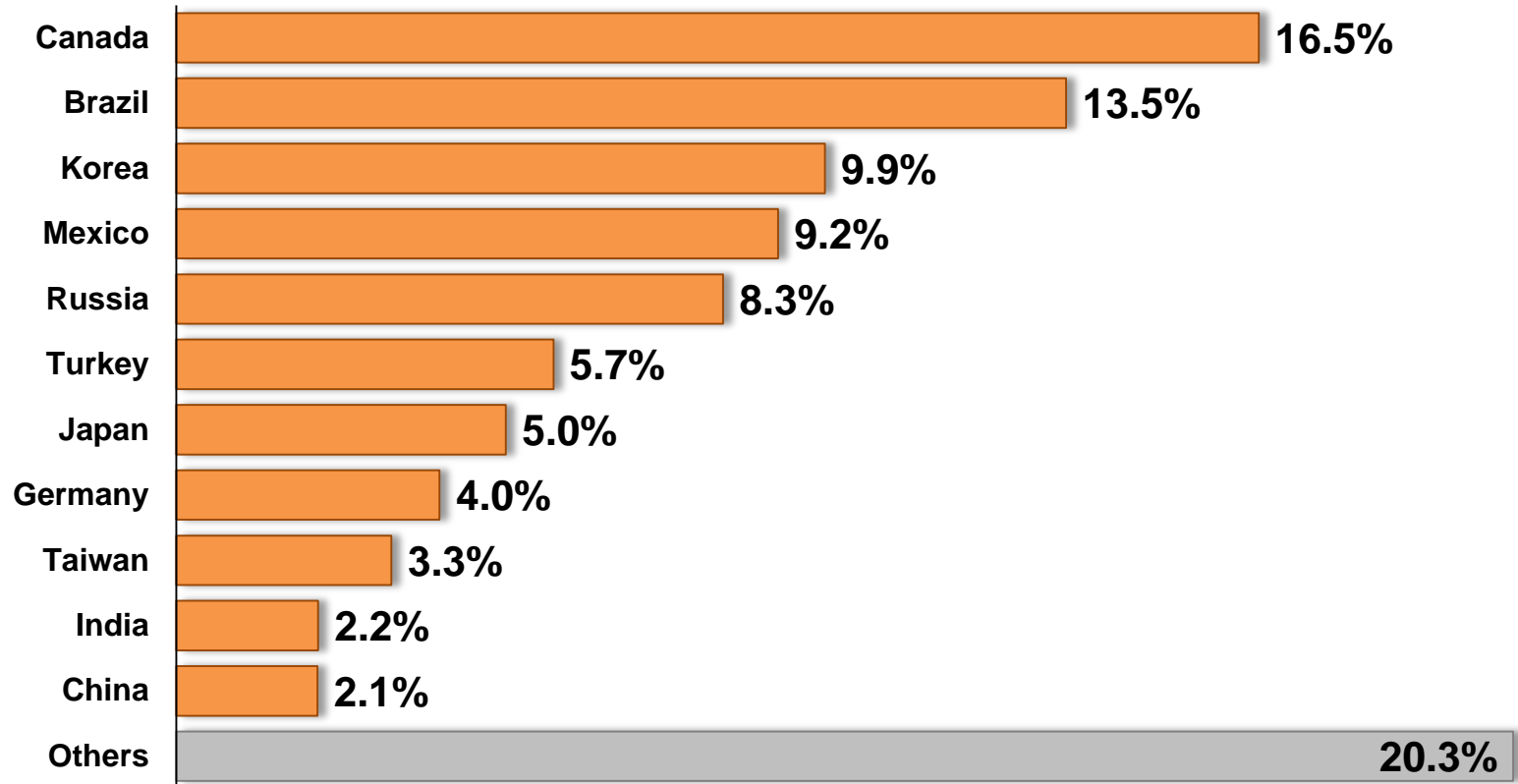
Where Are We Going To Find the People?

US Steel Mill Employment



Steel Jobs Highest in Over 25 Years

Share of US Steel Imports by Country, 2017



~~\$50~~ Billion of Goods Subject to Tariffs Aimed at China

\$250

The US is China's Biggest Customer

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

Exports from China to the US are a **record high \$436.9bn**, or **3.8%** of China GDP.

Slowing exports to the US will hurt their economy more than ours
but it is not risk free.

Inflation

Downstream
Production

Job & Profit
Loss in Export
Supply Chain

(to China)

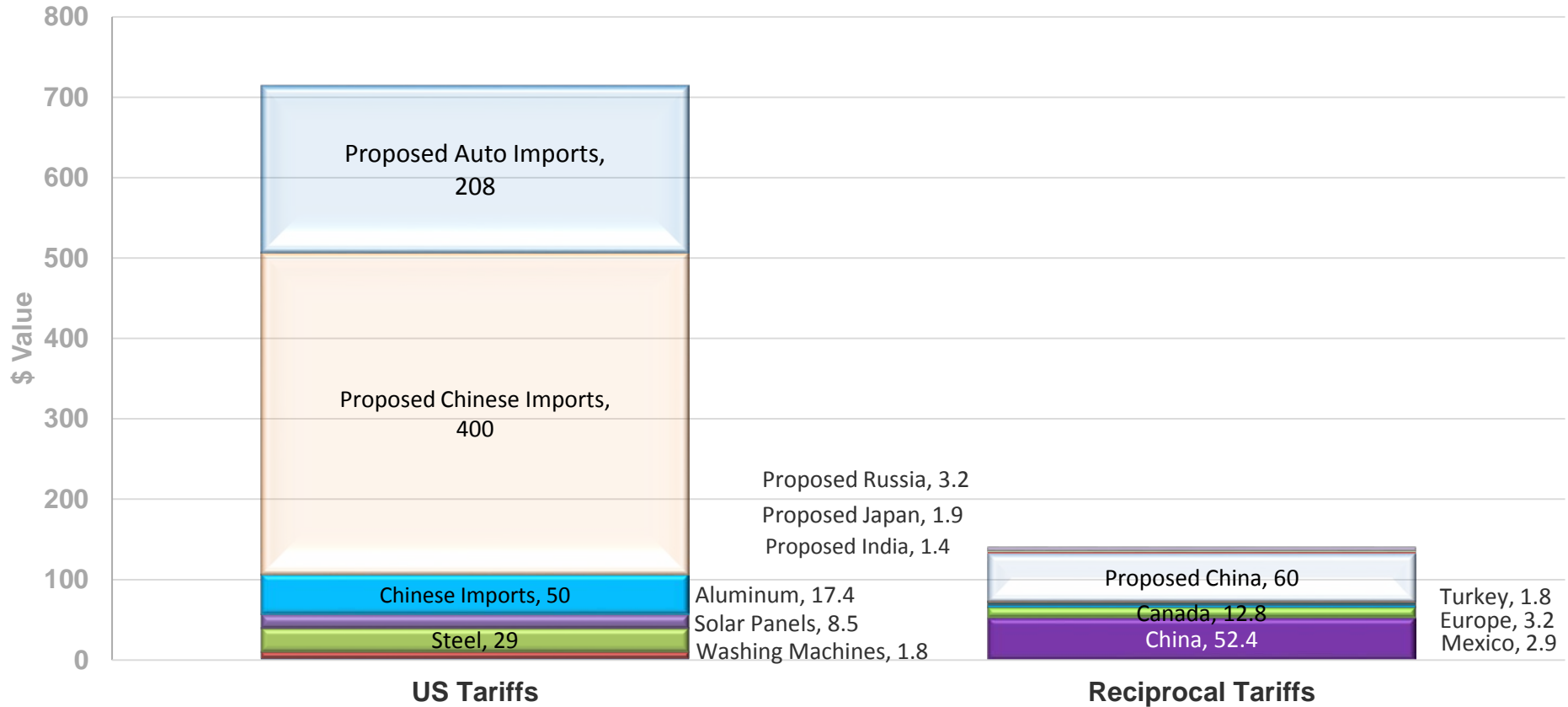
<u>Industry Exports</u>	<u>US \$ bn</u>
Aerospace	\$ 16.3
Soybeans	\$ 12.4
Motor Vehicles	\$ 10.0
Semiconductors	\$ 6.9
Oil & Gas	\$ 6.9
Waste & Scrap	\$ 5.6
Ctrl Instruments	\$ 5.6
Synthetic Rubbers	\$ 3.9
Pharmaceuticals	\$ 3.4
Ind'l Machines	\$ 3.3

US Top Goods Export by State

The map displays the top export good for each state in the United States. The goods are categorized by color: Aerospace (blue), Zinc (grey), Computer Processors (teal), Cigarettes (orange), Crude Oil (light blue), Medical Supplies (purple), Brewery Waste (light orange), Corn (yellow), Beef (brown), Disodium Carbonate (light grey), Trucks (green), Gasoline (tan), Medicine (pink), Coal (dark orange), Diesel/Fuel Oil (olive), Ammunition (light purple), Medical Equipment (light pink), Cars (light green), and Lobster (red).

State	Top Export Good
Alaska	Zinc
Alabama	Aerospace
Arizona	Aerospace
Arkansas	Aerospace
California	Aerospace
Colorado	Cigarettes
Connecticut	Computer Processors
Delaware	Aerospace
Florida	Aerospace
Georgia	Aerospace
Hawaii	Aerospace
Idaho	Computer Processors
Illinois	Trucks
Indiana	Trucks
Iowa	Corn
Kansas	Beef
Kentucky	Beef
Louisiana	Diesel/Fuel Oil
Maine	Lobster
Maryland	Aerospace
Massachusetts	Computer Processors
Michigan	Aerospace
Minnesota	Medical Supplies
Mississippi	Diesel/Fuel Oil
Missouri	Trucks
Montana	Beef
Nebraska	Corn
Nevada	Gold
New Hampshire	Computer Processors
New Jersey	Computer Processors
New Mexico	Computer Processors
New York	Computer Processors
North Carolina	Aerospace
North Dakota	Crude Oil
Ohio	Trucks
Oklahoma	Beef
Oregon	Computer Processors
Pennsylvania	Computer Processors
Rhode Island	Computer Processors
South Carolina	Aerospace
South Dakota	Crude Oil
Tennessee	Trucks
Texas	Diesel/Fuel Oil
Utah	Computer Processors
Vermont	Computer Processors
Virginia	Aerospace
Washington	Aerospace
West Virginia	Coal
Wisconsin	Trucks
Wyoming	Crude Oil

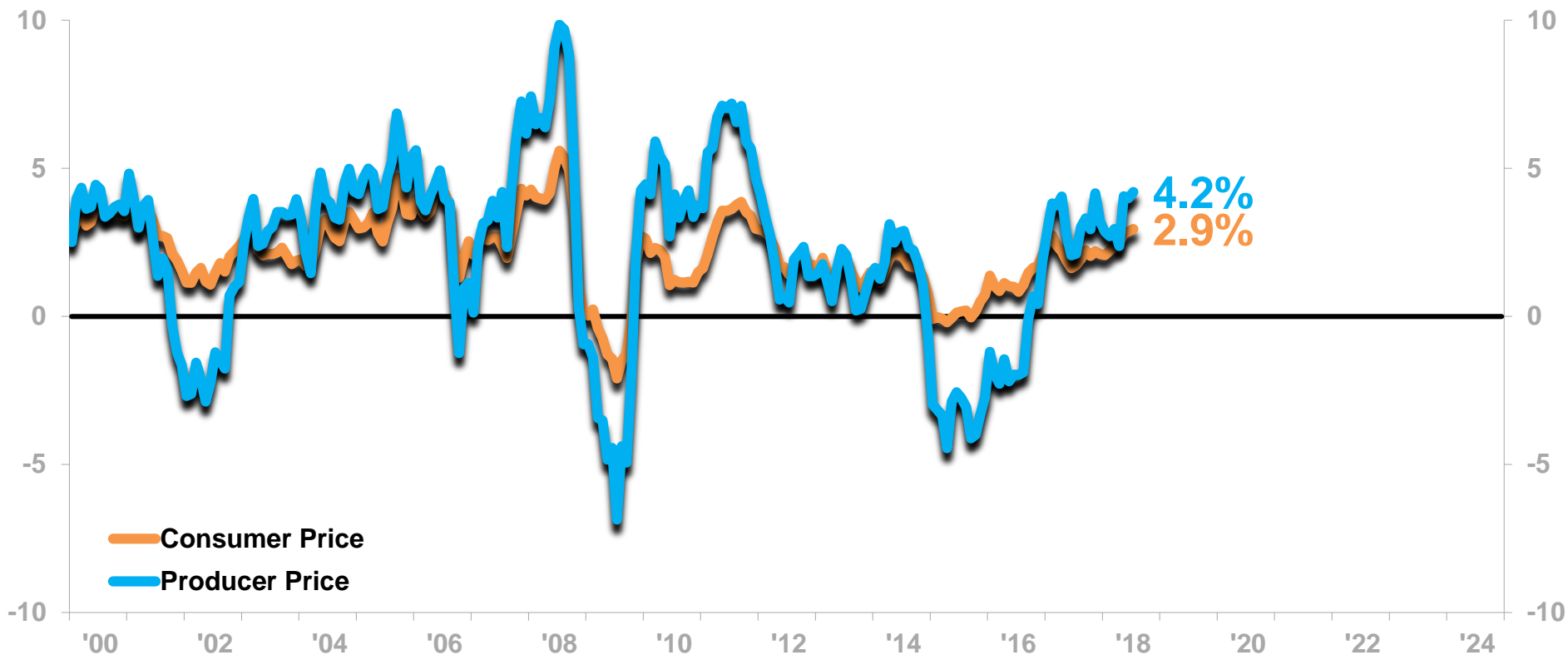
Tariffs



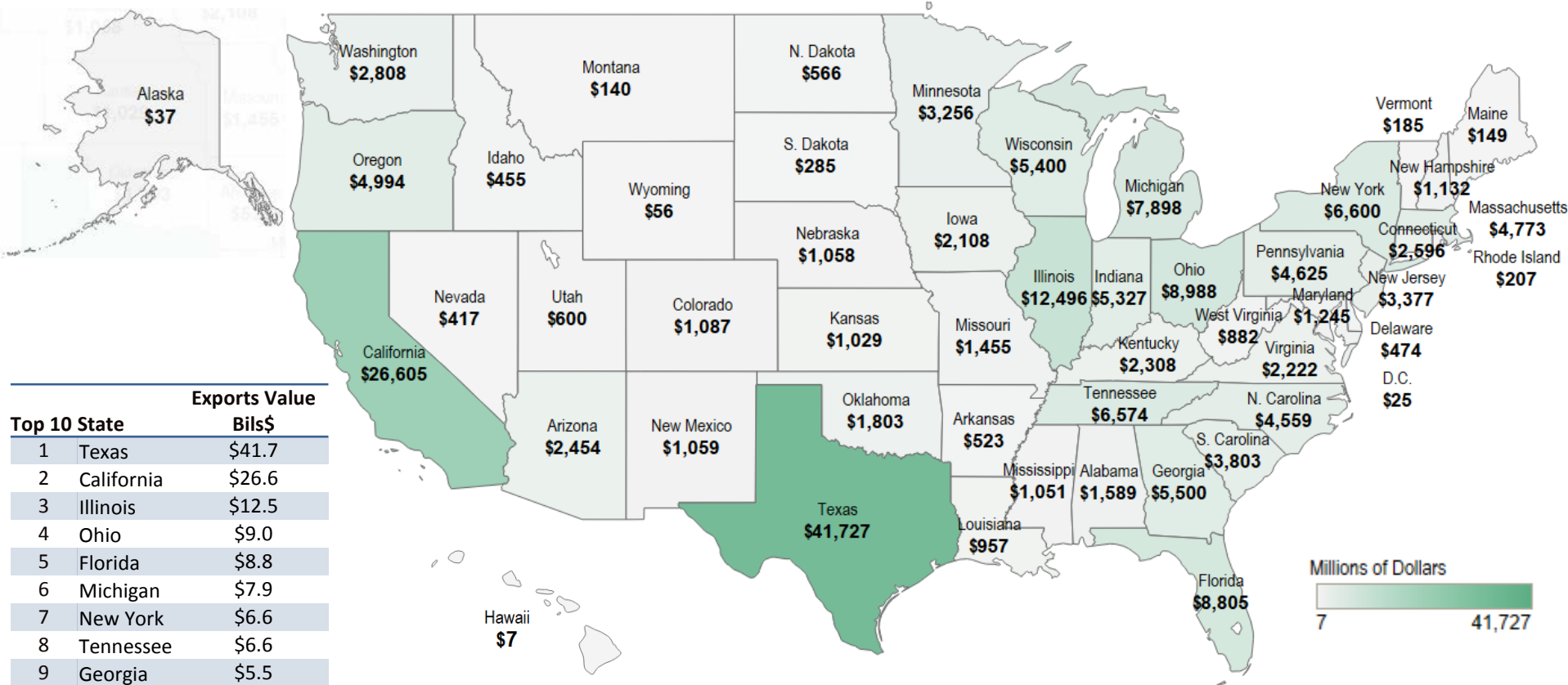
Commodity Prices



US Consumer Price Index to US Producer Price Index

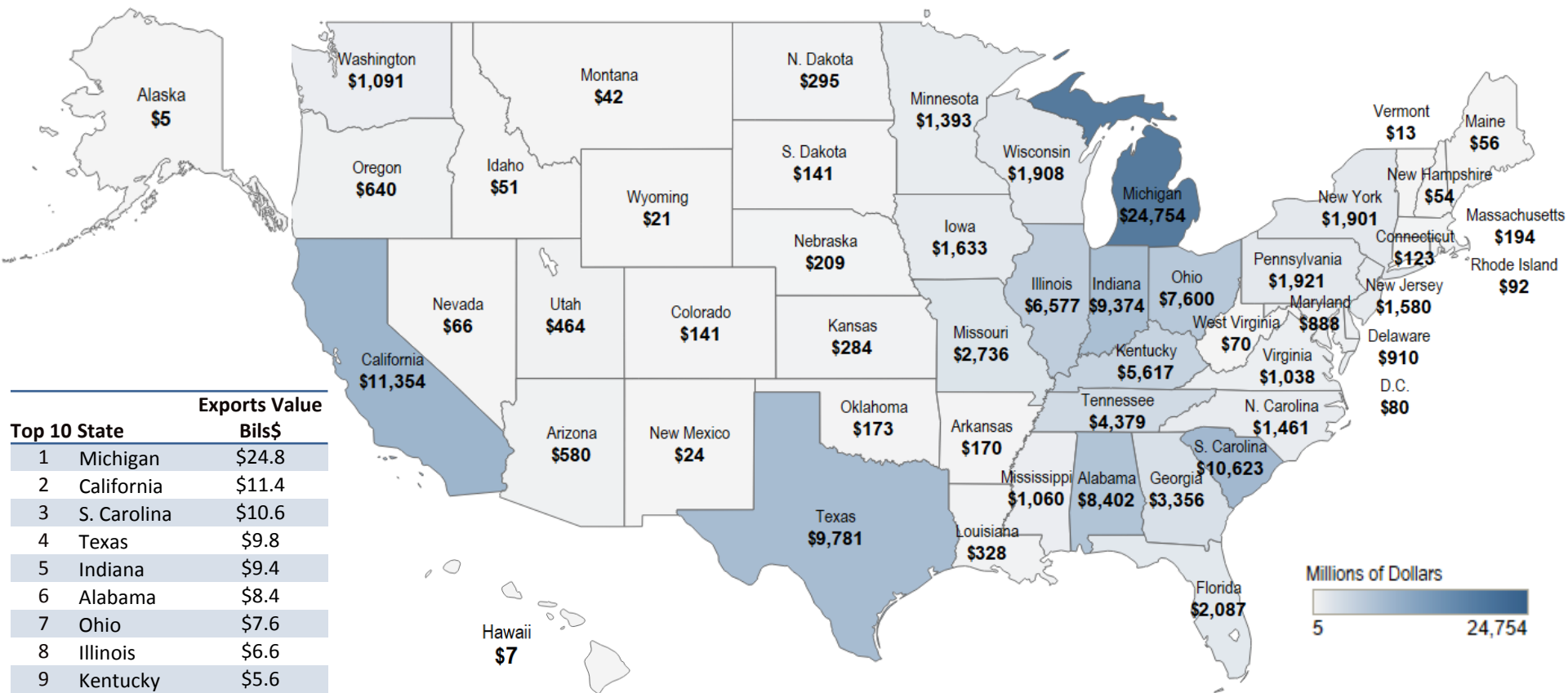


US Machinery Exports by State



		Exports Value
Top 10 State		Bils\$
1	Texas	\$41.7
2	California	\$26.6
3	Illinois	\$12.5
4	Ohio	\$9.0
5	Florida	\$8.8
6	Michigan	\$7.9
7	New York	\$6.6
8	Tennessee	\$6.6
9	Georgia	\$5.5
10	Wisconsin	\$5.4

US Vehicle Exports by State



Top 10 State Exports Value		
		Bils\$
1	Michigan	\$24.8
2	California	\$11.4
3	S. Carolina	\$10.6
4	Texas	\$9.8
5	Indiana	\$9.4
6	Alabama	\$8.4
7	Ohio	\$7.6
8	Illinois	\$6.6
9	Kentucky	\$5.6
10	Tennessee	\$4.4

Millions of Dollars

5 24,754

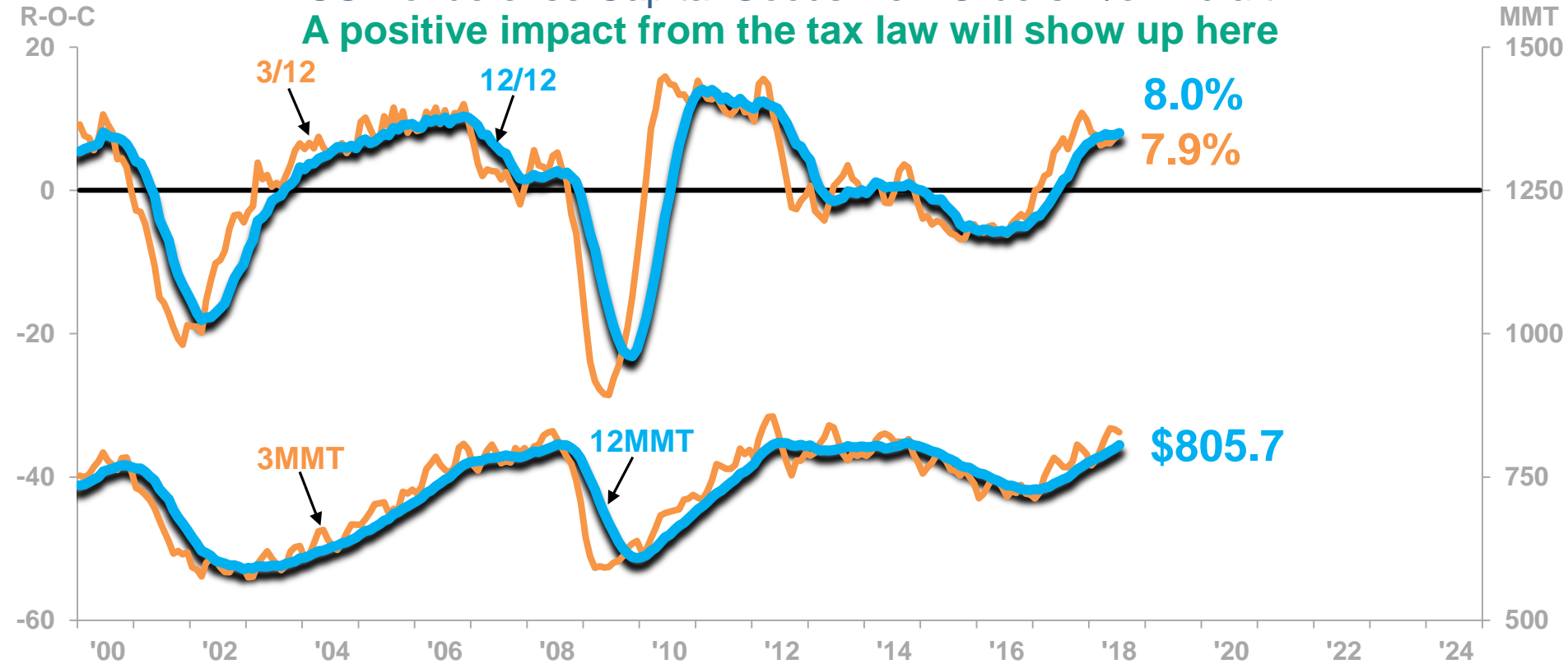


Industry Drivers

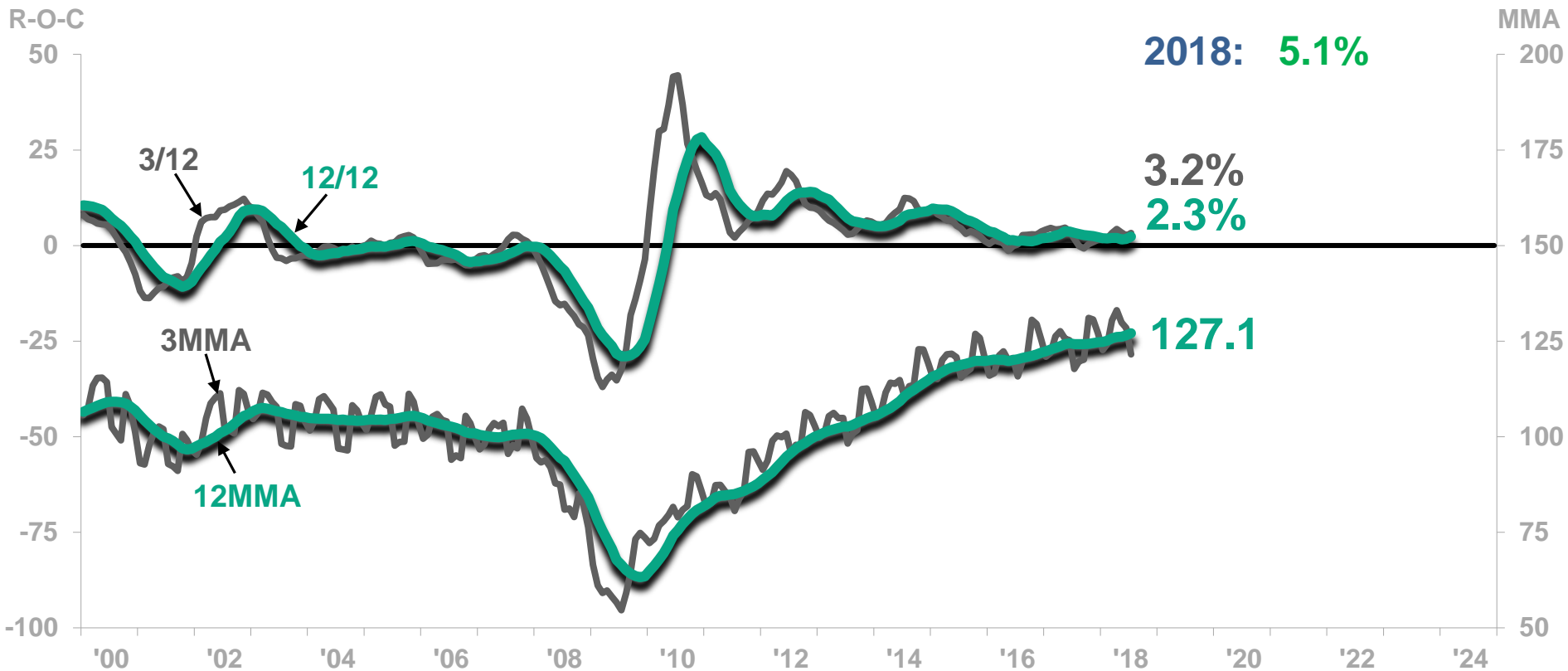
Favorable CAPEX Trend

US Nondefense Capital Goods New Orders w/o Aircraft

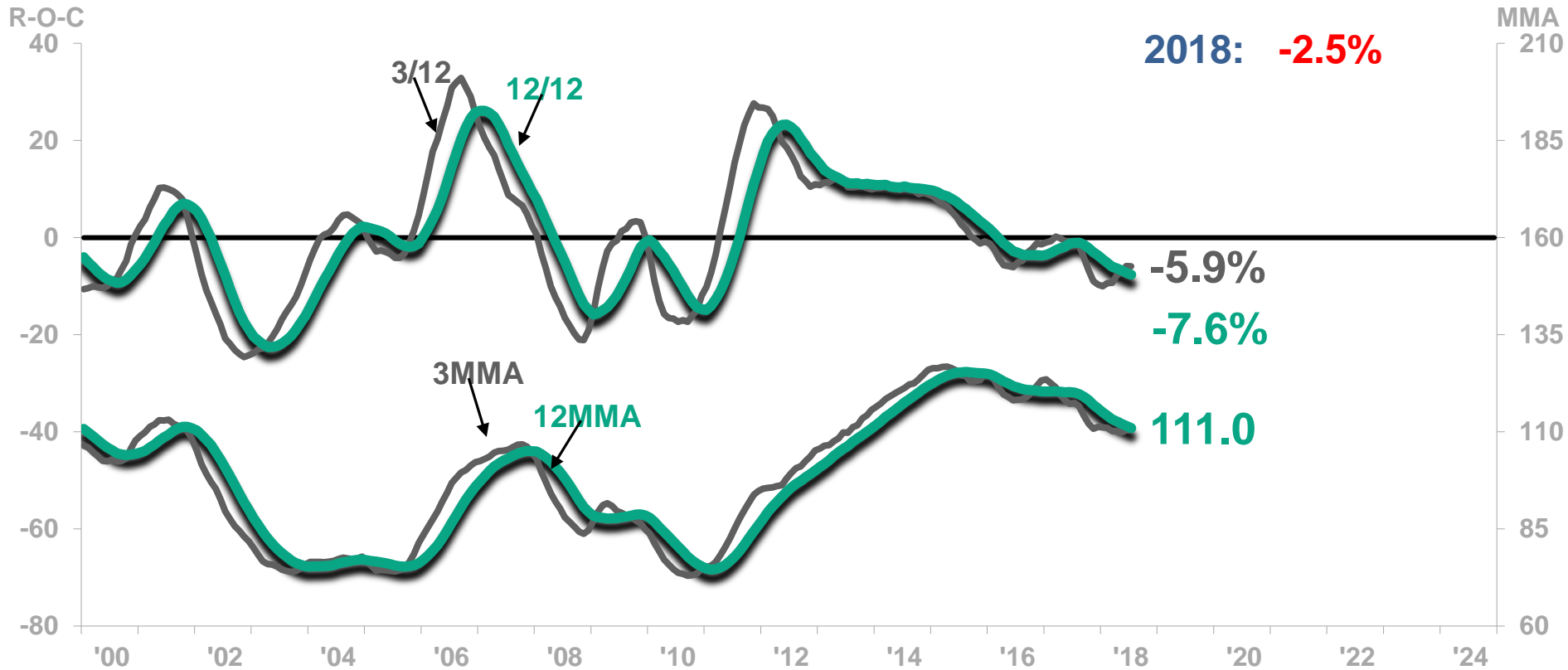
A positive impact from the tax law will show up here



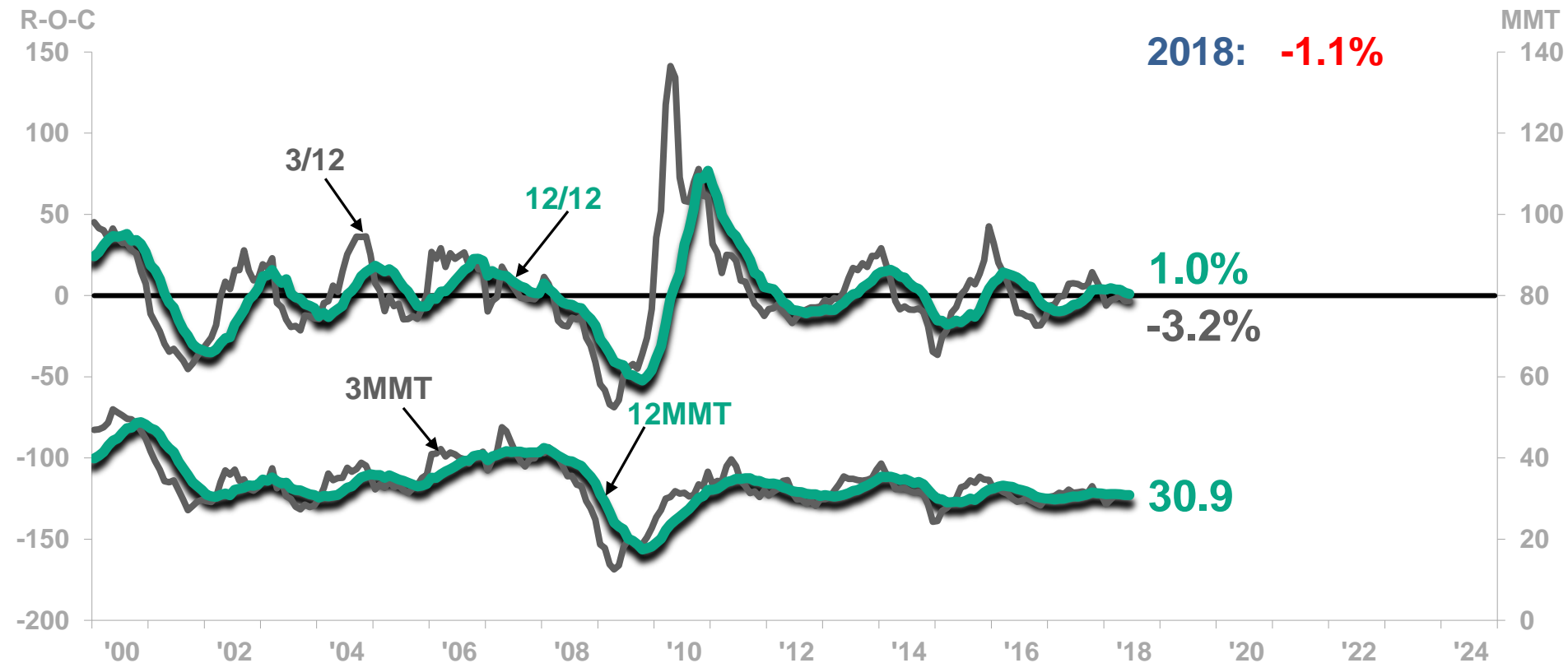
US Motor Vehicle Parts Production Index



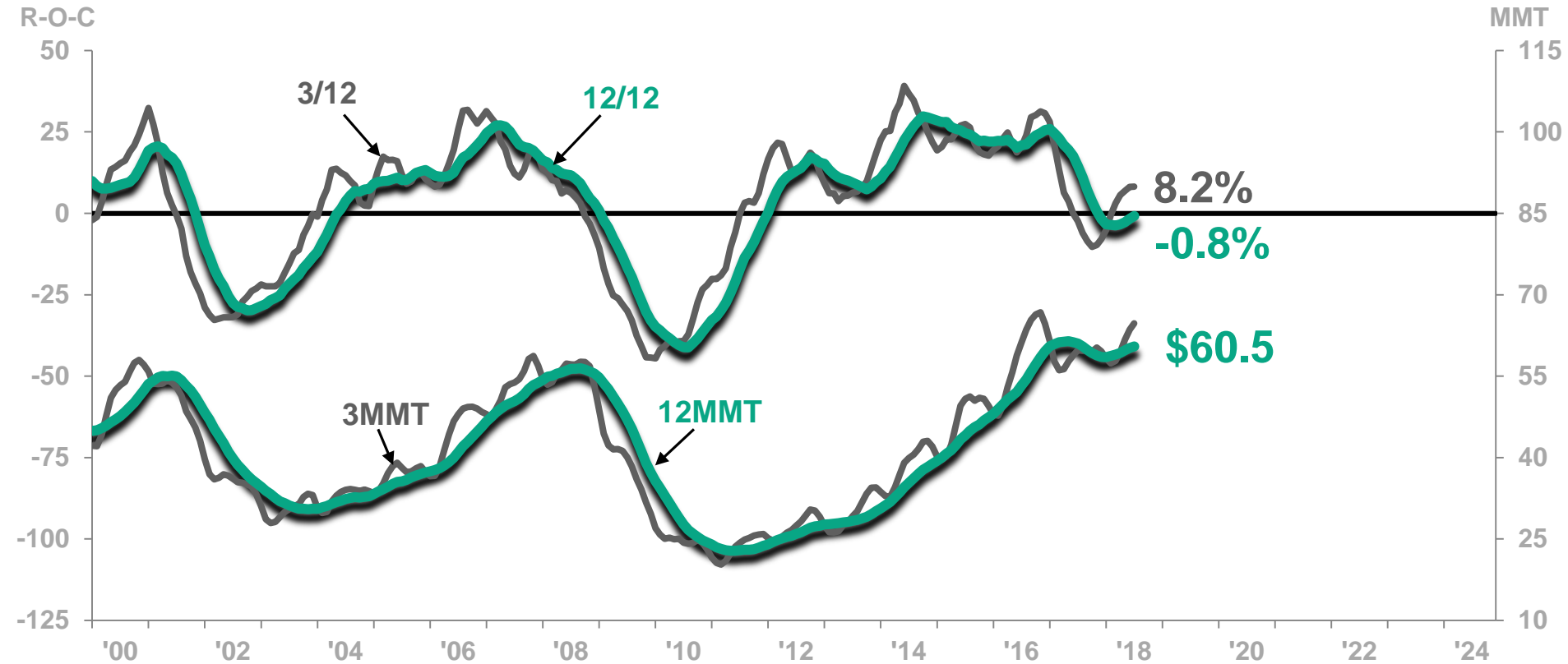
US Civilian Aircraft Equipment Production



US Industrial Machinery New Orders



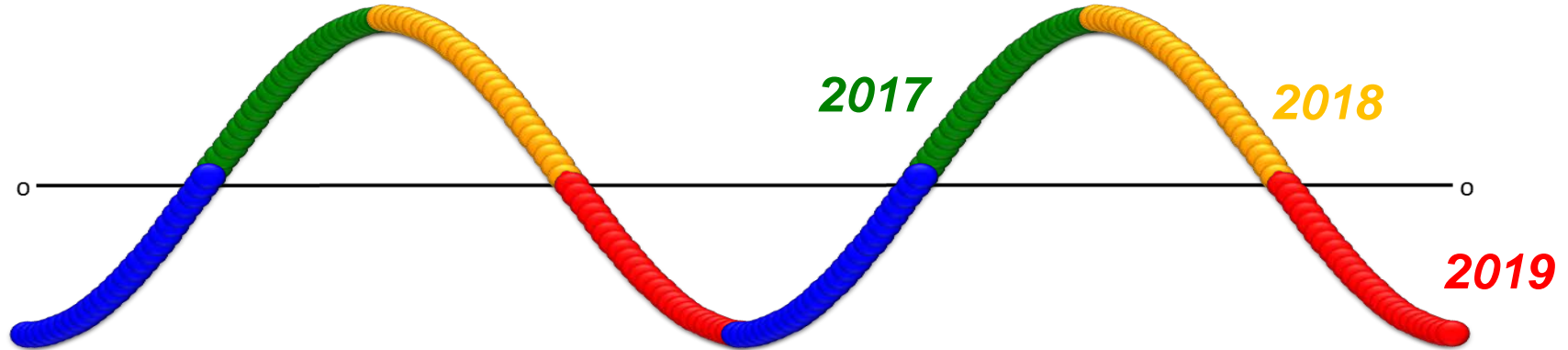
US Office Buildings Construction





Summary

Business Cycles



Phase A - Recovery

Annual Sales are **BELOW** Year-Ago Levels, but the Rate-of-Divide 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.

Things to Pay Attention to in 2018 and Beyond



Tariffs and Trade

Strengthening Dollar and Interest Rates

Inflationary Pressures

Right-sizing the business for 2019 and beyond



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