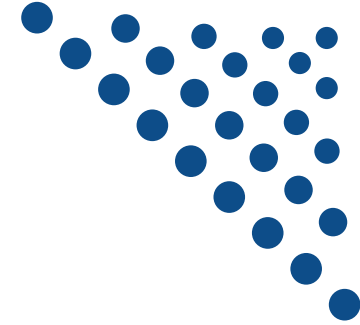


# National Economic Education Delegation



- **Vision**

- One day, the public discussion of policy issues will be grounded in an accurate perception of the underlying economic principles and data.

- **Mission**

- NEED unites the skills and knowledge of a vast network of professional economists to promote understanding of the economics of policy issues in the United States.

- **NEED Presentations**

- Are **nonpartisan** and intended to reflect the consensus of the economics profession.

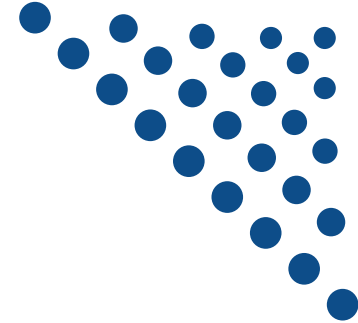


# The Michigan Front in the Trade War: Michigan's Role in International Trade and Its Vulnerability to Recent Trade Policies

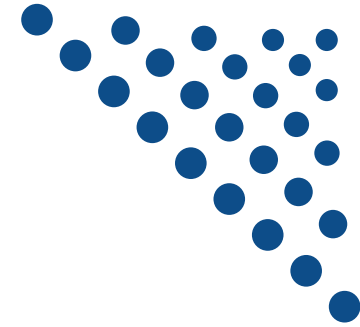
**Alan V. Deardorff**  
**University of Michigan**

*For presentation at Adult Learning Institute  
Oakland Community College  
April 30, 2019*

# Outline



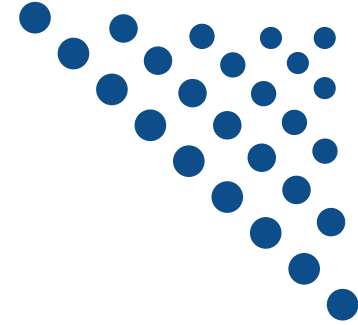
- **Features of Michigan's Trade**
- **President Trump's 2018 Trade Actions**
  - Trade War
    - ~~Solar Panels~~ and Washing Machines
    - Steel and Aluminum
    - Cars (threat)
    - China
  - Free Trade Agreements
    - ~~Korea US Trade Agreement Amended~~
    - NAFTA → USMCA



# Features of Michigan's Trade



# Features of Michigan's Trade



- **Michigan**

- Trades more than most states
- Mostly exports and imports cars and car parts
- Trades most with Canada and Mexico

# Top US Trading States: 2017 (Exports + Imports)

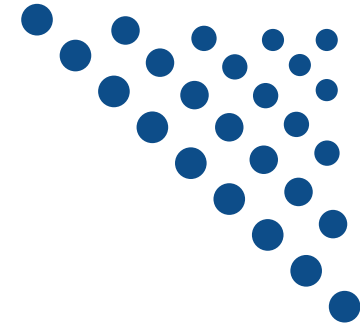


By Value, \$bil.		
1	California	613
2	Texas	528
3	New York	205
4	Illinois	201
5	Michigan	200
6	New Jersey	147
7	Florida	130
8	Georgia	129
9	Washington	126
10	Pennsylvania	122

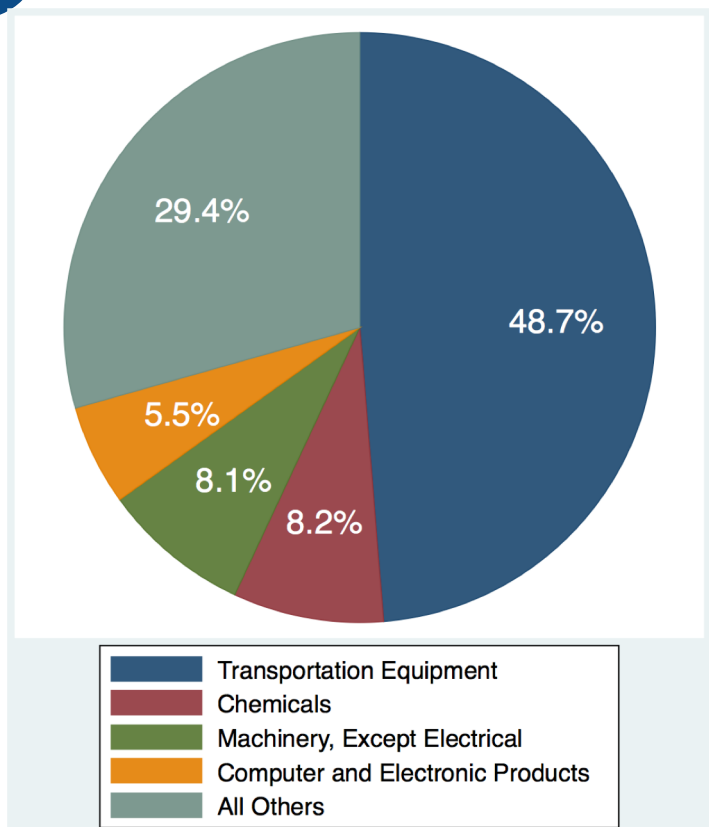
By Average* Rank	
1	Michigan
2	Texas
3	Louisiana
4	Illinois
5	Kentucky
6	Tennessee
7	New Jersey
8	Indiana
9	South Carolina
10	California

Per GDP		
1	Louisiana	40.1
2	Michigan	39.3
3	Kentucky	38.5
4	Texas	32.1
5	Tennessee	32.1
6	South Carolina	31.4
7	Indiana	26.2
8	Illinois	24.5
9	New Jersey	24.4
10	Washington	24.1

\*Weighted average, with weights 1/3 on Value and 2/3 on Per GDP

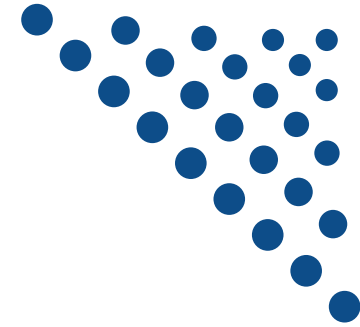


# Michigan Exports, by Product: 2017

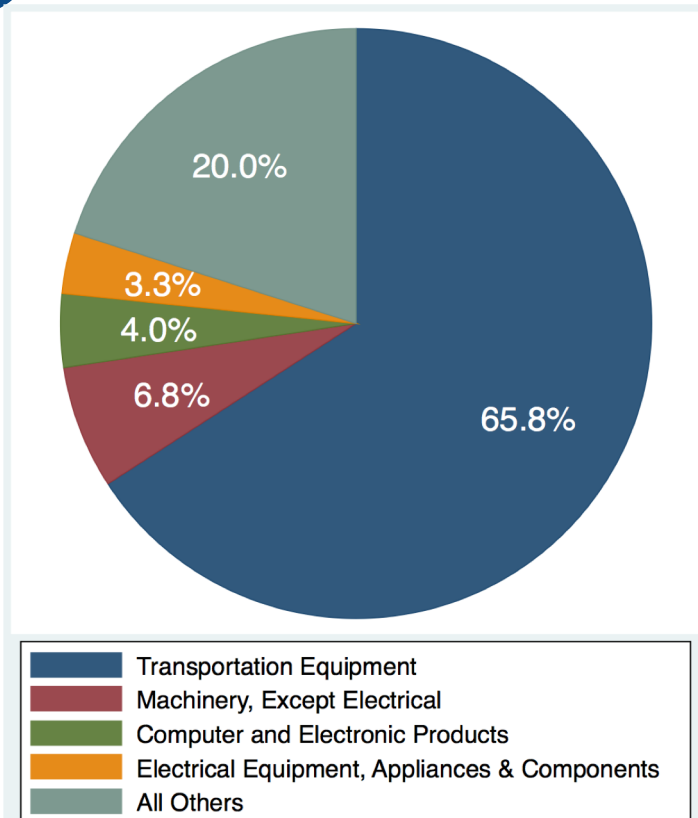


Product	Value (\$ B)
Transportation Equipment	\$29.2
Chemicals	\$4.9
Machinery, Except Electrical	\$4.9
Computer and Electronic Products	\$3.3
All Others	\$17.6
<b>Grand Total</b>	<b>\$59.9</b>

Source: International Trade Administration



# Michigan Imports, by Product: 2017



Product	Value (\$ B)
Transportation Equipment	\$92.3
Machinery, Except Electrical	\$9.5
Computer and Electronic Products	\$5.6
Electrical Equipment, Appliances & Components	\$4.7
All Others	\$28.1
<b>Grand Total</b>	<b>\$140.2</b>

Source: International Trade Administration



# Michigan's Rank in 2017 Trade with

## Top 5 Exporters to North America per GDP

North Dakota	9.8
Michigan	7.3
Texas	7.3
Indiana	5.2
Kentucky	4.9

Per GDP	
2	1

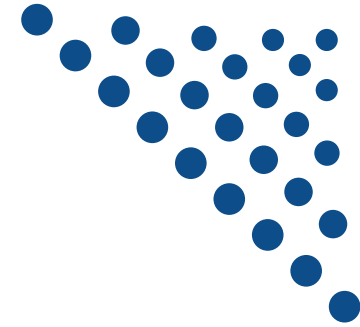
## China Value (billion) Per GDP

## Top 5 Importers from North America per GDP

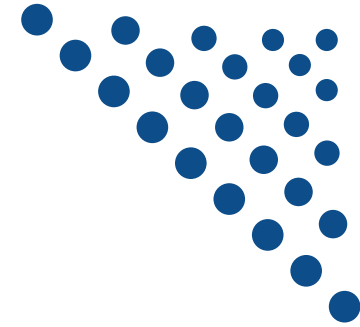
Michigan	19.7
Montana	8.0
Vermont	7.3
New Hampshire	7.2
Texas	6.6

Per GDP	
11	20
22	13

Rank by GDP: #14



# Trump's 2018 Trade Actions



# Trump's 2018 Trade Actions

- **Most were tariffs on imports**

- Taxes levied by US on imports from others
- Taxes levied by others (in retaliation) on US exports

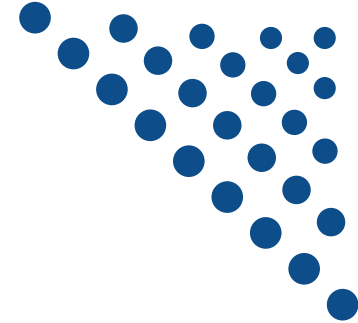
- **Normal effects of tariffs**

- Raise prices for importers
- Lower prices for exporters
- Cause substitution
  - o To other products
  - o To other countries (if not on all)

Net economic effect is almost always negative

Two recent studies of the 2018 Trade War found that exporter prices did not fall.

# Trump's 2018 Trade Actions

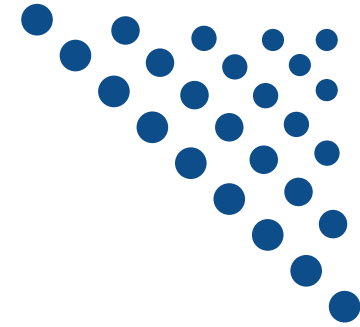


**These slides will list only actions actually done.**

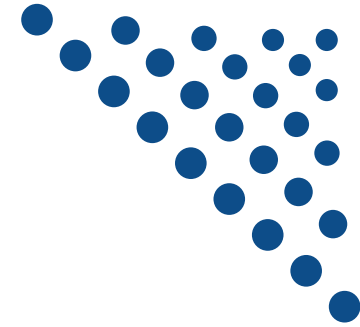
**Most had plans and threats announced in the days and weeks beforehand.**



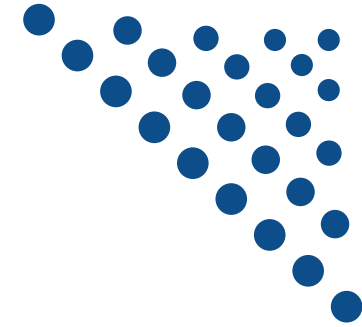
# Trump's 2018 Trade Actions



- **Jan 22, 2018: Safeguard tariffs**
  - 30% on solar panels
  - 50% on washing machines



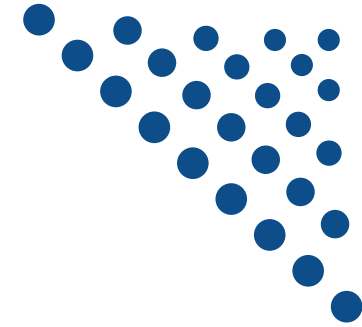
# Tariffs on Washing Machines



# Tariffs on Washing Machines

- **Who benefits?**

- Whirlpool, Benton Harbor, MI, which requested the tariffs
  - Whirlpool brands include Amana, Maytag, & more
- Other US manufacturers, such as GE, Electrolux and Frigidaire (Swedish), Equator, Speed Queen
- In 2017, Samsung and LG announced plans to build factories in South Carolina and Tennessee



# Tariffs on Washing Machines

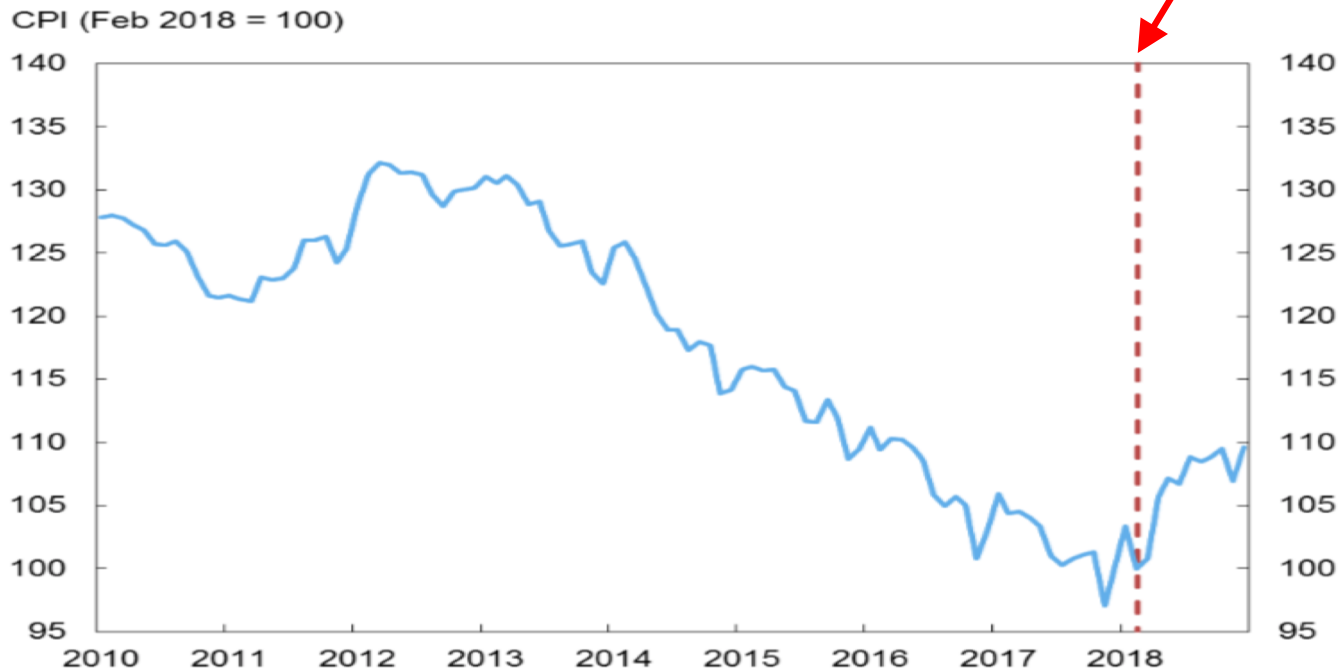
- **Who is hurt?**

- Consumers

- Washers (and dryers!) both increased in price by about 12% (per Flaaen et al. 2019)
      - Note that the tariff was levied on washers only, not dryers]
      - "consumers bore between 125 percent and 225 percent of the costs" (NYT 4/21/19)
    - US appliance prices (I don't have graph for washing machines alone) rose 8.1% over the 12 months to Nov 2018

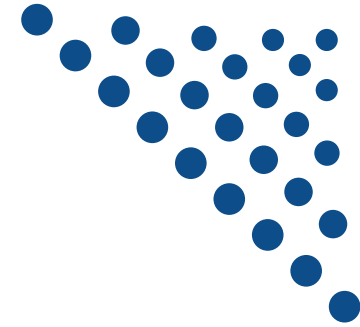
# Tariffs on Washing Machines

Figure 2: Major Appliance CPI

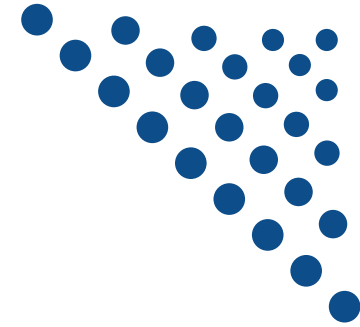


Source: BLS.

Source: Amiti, Redding, and Weinstein, "The Impact of the 2018 Trade War on U.S. Prices and Welfare," CEPR Discussion Paper DP13564, March 1, 2019.

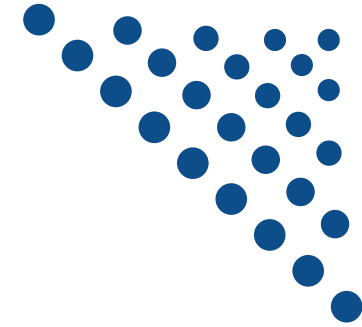


# Tariffs on Steel and Aluminum



# Trump's 2018 Trade Actions

- Jan 22, 2018: Safeguard tariffs
- **Mar 1, 2018: Announces “national-security” tariffs on steel and aluminum**
  - 25% on steel, 10% on aluminum
  - Announced for all countries
    - Some delayed (EU, Canada Mexico)
    - Others later exempted (S. Korea)

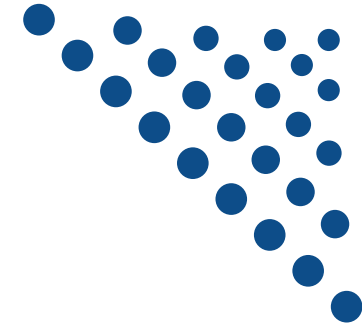


# Tariffs on Steel and Aluminum

- **Responses to metals tariffs**

- Retaliation by China, EU, Canada, & others
- WTO disputes
  - May-Aug: Complaints filed against US
  - Jul: Complaints filed by US





# Tariffs on Steel and Aluminum

- **Who benefits?**

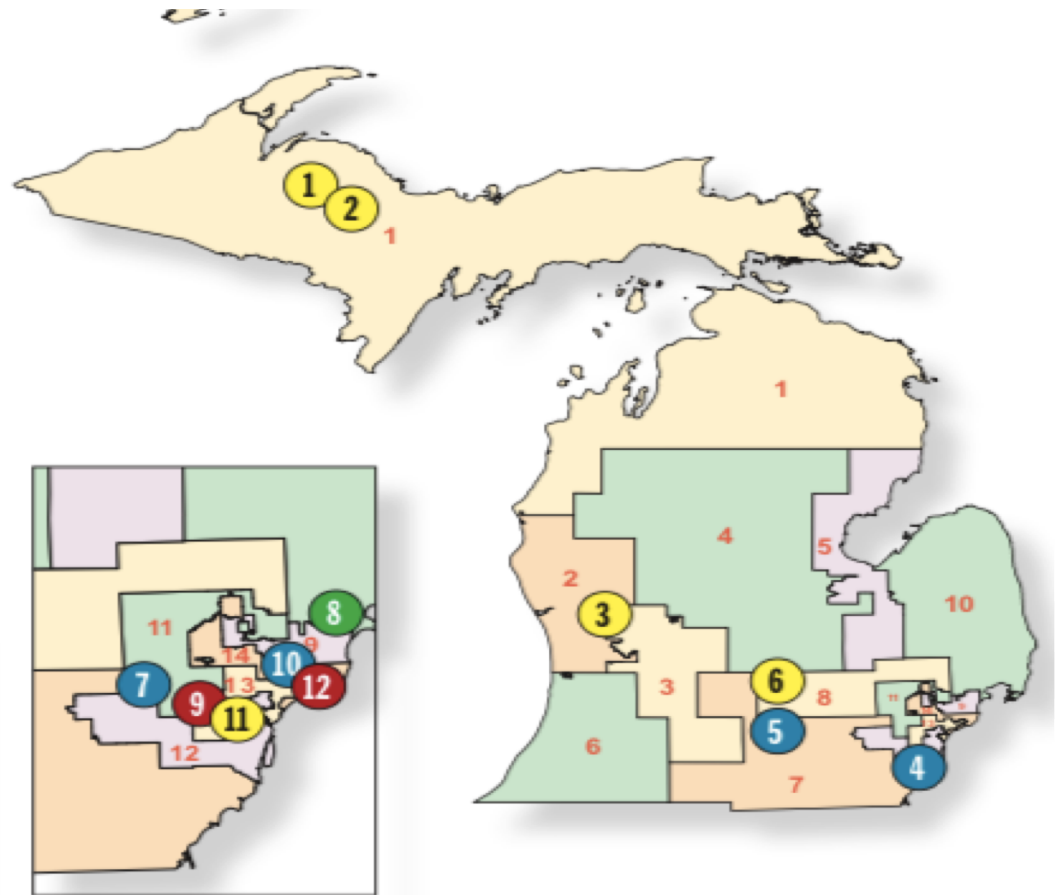
- US producers of steel and aluminum
  - Steel: AISI lists 12 producers in Michigan
    - AISI = American Iron & Steel Institute
  - Aluminum: Thomas lists 76 suppliers in Michigan

# Steel Produced in Michigan

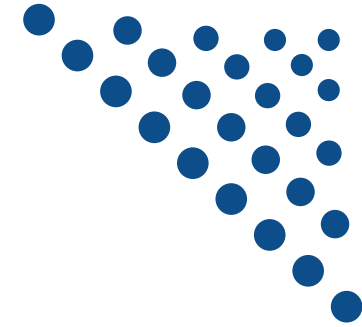
<b>AISI MEMBER FACILITIES</b>	12
<b>JOB S GENERATED</b>	7,291
<b>TOTAL JOBS SUPPORTED BY THE STEEL INDUSTRY</b>	49,600*
<b>POPULATION</b>	9,895,622
<b>GOVERNOR</b>	Rick Snyder (R)
<b>SENATORS</b>	Debbie Stabenow (D) Gary Peters (D)

\* Both steel and supported

Sources: BLS, 2015; Economic Impacts Report, 2012



Greater Detroit Area Districts



# Tariffs on Steel and Aluminum

- **Who is hurt?**

- US users of steel and aluminum pay higher prices
  - Most obviously the car companies but many others

# SteelBenchmarker™

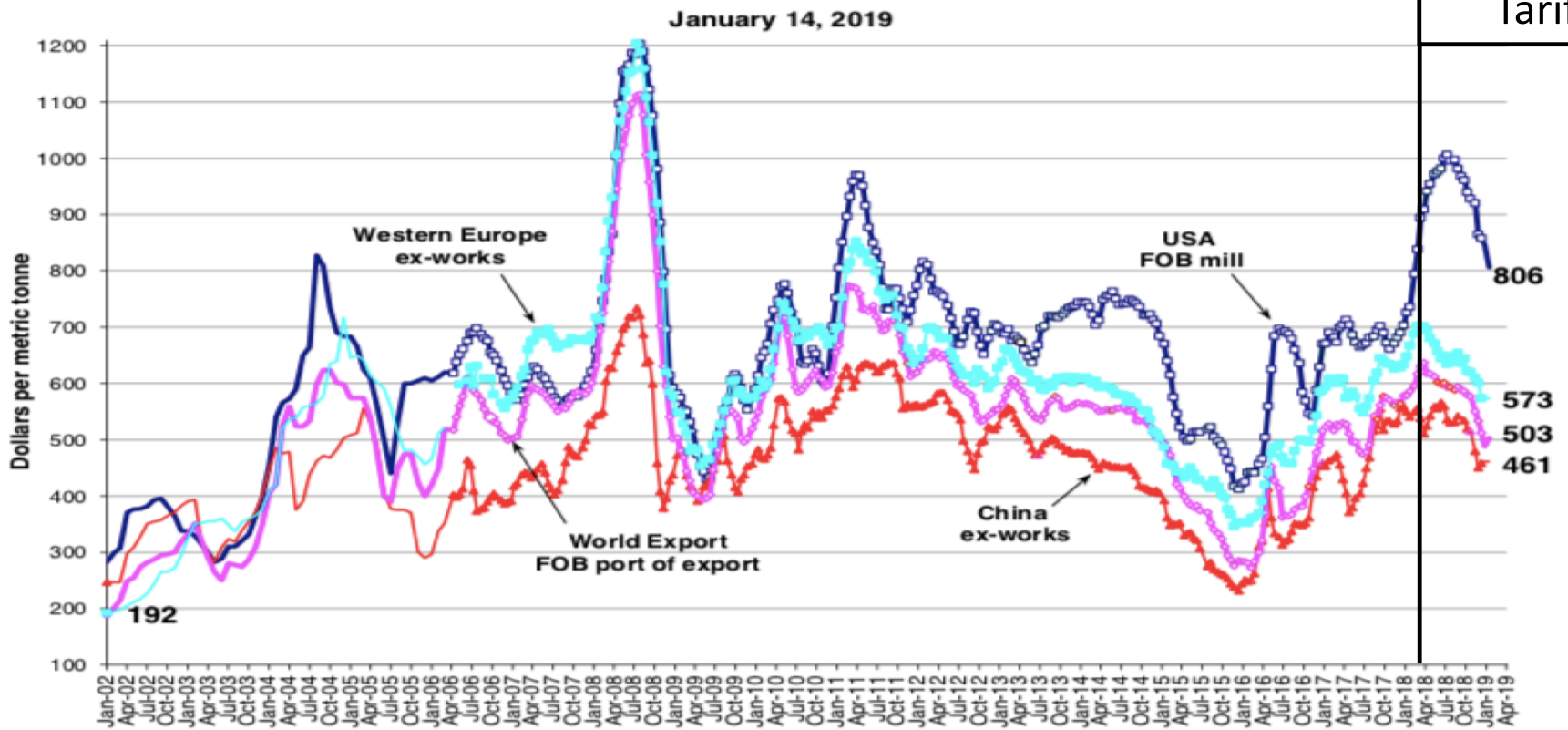
## Steel Prices

### SteelBenchmarker™ HRB Price

USA, China, Western Europe and World Export

Track data, Jan. 2002 - March 2006; SteelBenchmarker data begins April 2006)

US 25%  
Tariff





# Aluminum Price

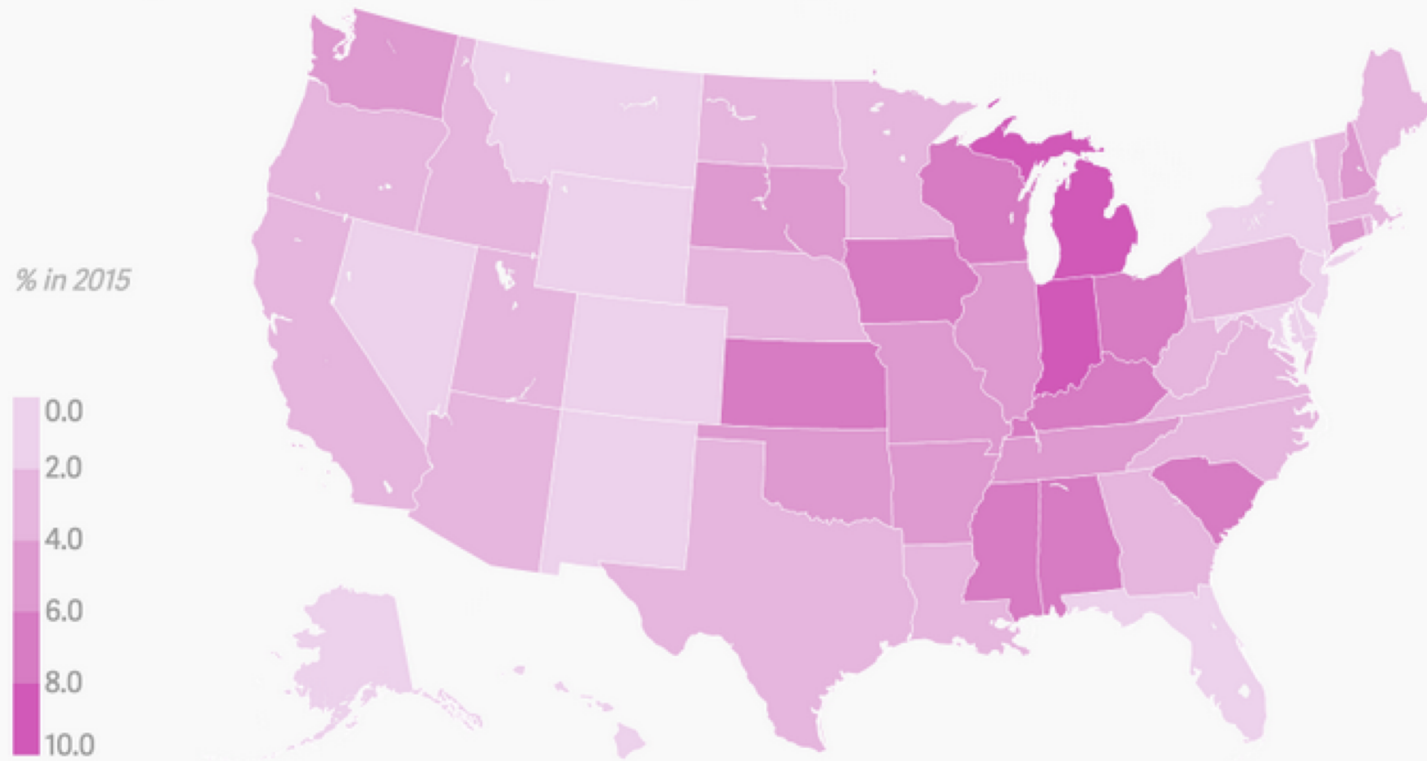
Historical Data API

US 10%  
Tariff

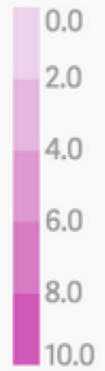


SOURCE: TRADINGECONOMICS.COM | OTC

### Share of jobs in in industries using metals (primarily steel and aluminum)



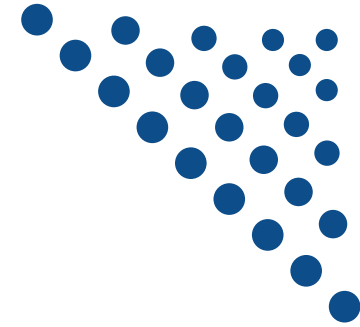
% in 2015



Quartz | qz.com

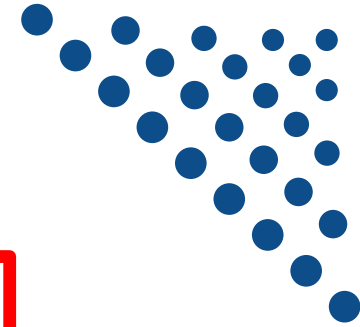
Data: Indeed Hiring Lab, Bureau of Labor Statistics

Source: Kopf (2018)



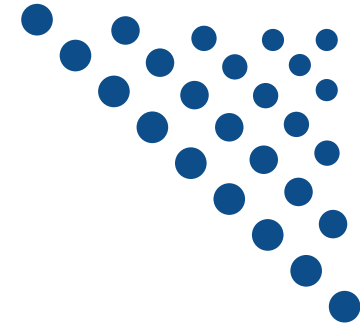
# Tariff on Cars and Car Parts

# Trump's Trade Actions



- Jan 22, 2018: Safeguard tariffs
- Mar 1, 2018: Announces tariffs on steel and aluminum
- **May 23, 2018: Initiates Commerce Dept investigation of car and car part imports**





# Tariff on Cars and Car Parts

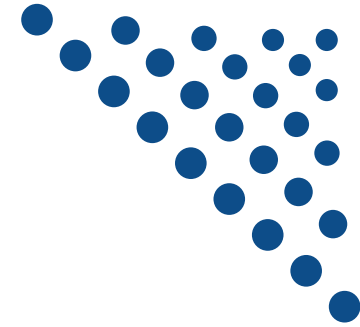
- **Who would benefit?**

- US car companies?

- Most (e.g., GM) are opposed
- I can't find objection from Ford, but others list Ford among those who object

- US auto workers?

- UAW has spoken in favor of “target measures” with with understanding that broad tariffs or quotas “could cause harm” including “mass layoffs for American workers.”



# Tariff on Cars and Car Parts

- **Who would be hurt?**

- Most car companies, including GM
- US car buyers

# Tariff on Cars and Car Parts

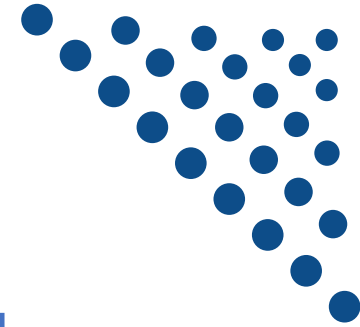


## Estimated Effects on Car Sales and Prices of 25% Tariff

Tariff on:	Sales impact (units)	Average Price Increases (\$/unit) on vehicles sold in US		
		All	US-assembled	Imported
All imports	-2.0 M	\$4,400	\$2,270	\$6,875
Canada & Mexico exempted	-1.2 M	2,450	1,135	3,980

Source: Center for Automotive Research

# Tariff on Cars and Car Parts

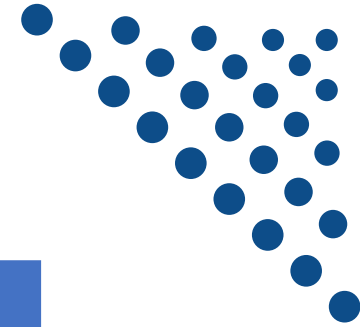


## Estimated Effects on Employment & GDP of 25% Tariff

Tariff on:	Total US Employment	US GDP
All imports	-714.7 K	-\$59.2 B
Canada & Mexico exempted	-197.2 K	-15.3B

Source: Center for Automotive Research

# Tariff on Cars and Car Parts

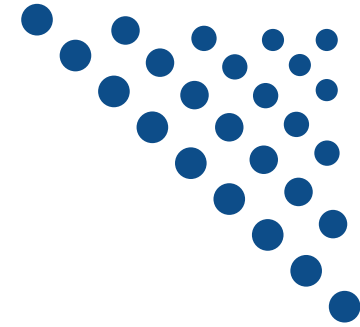


## Estimated Effects of a 25% Tariff on Revenue & Employment in New Car Dealerships

Tariff on:	Dealership Revenues		Dealership Employment	
	Total	Per D'ship	Total	Per D'ship
All imports	-66.5 B	-4.0 M	-117.5 K	-7
C & M exempted	-39.1 B	-2.3 M	-50.5 K	-4

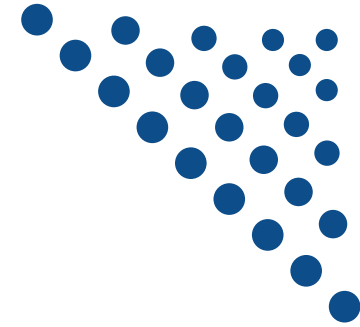
Source: Center for Automotive Research

# Tariff on Cars and Car Parts



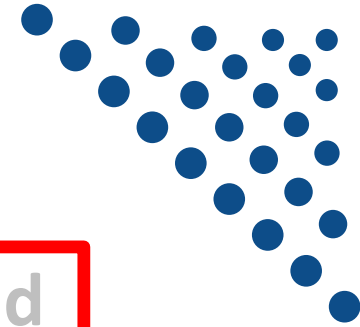
- **Where we stand:**

- Commerce Dept. sent report to Trump Feb 17
  - Not public, but said to include several options for tariffs
  - Trump has 90 days to decide
- FT Jan 22: “president was leaning towards slapping tariffs on automotive imports, in the hope of forcing Brussels to further open the EU market to American farm products.”



# China

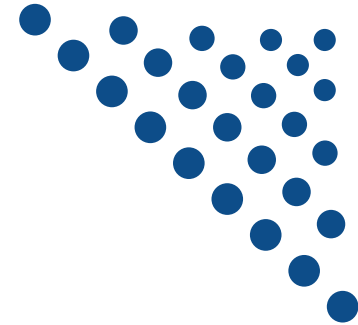
# Trump's Trade Actions



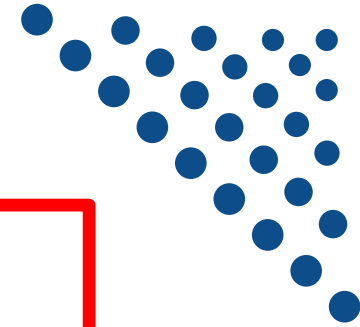
- Mar 1, 2018: Announces tariffs on steel and aluminum
- May 23, 2018: Initiates Commerce Dept investigation of car and car part imports
- **Jul 6, 2018: First tariffs on China, \$34 billion**
  - On \$34 billion of China exports to US
  - Based on unfair trade practices in intellectual property (IP)



# China



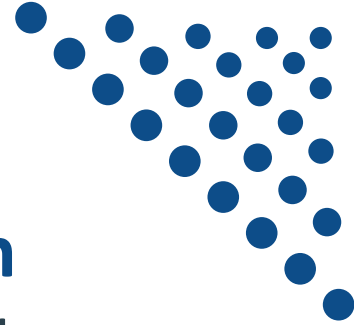
- **Concerns about China's IP practices pre-existed Trump**
  - Theft of technology secrets
  - Forcing investors in China into joint ventures and sharing technology
- **Prior to Trump, complaints had been voiced by US and EU, but nothing had been done**
- **US initiated investigation under Section 301 of US trade law (unfair trade practices)**
  - Aug 18, 2017: Investigation initiated
  - Mar 22, 2018: Report finds unfair trade and recommends tariffs
- **Since then, Trump has announced and then implemented multiple rounds of tariffs**



## Trump's Trade Actions

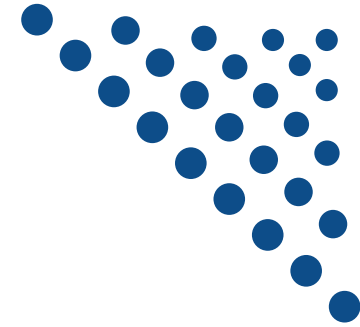
- Mar 1, 2018: Announces tariffs on steel and aluminum
- May 23, 2018: Initiates Commerce Dept investigation of car and car part imports
- Jul 6, 2018: First tariffs on China , \$34 billion
- **Aug 23, 2018: Second tariffs on China, \$16 billion**
- **Sep 24, 2018: Third tariffs on China, \$200 billion**

# China



- **This is a “Trade War”: Tariffs and retaliation**

- US tariffs on \$34 billion Jul 6 were matched that day by China tariffs on \$34 billion of US exports
- US tariffs on \$16 billion Aug 23 were matched that day by China tariffs on \$16 billion of US exports
- US tariffs on \$200 billion Sep 24 were less-than-matched by China on \$60 billion of US exports
- Trump said he’d use tariffs on still more (\$267 billion), approaching all of China’s exports to US
  - Did not do that; delayed for China-US trade talks



# China

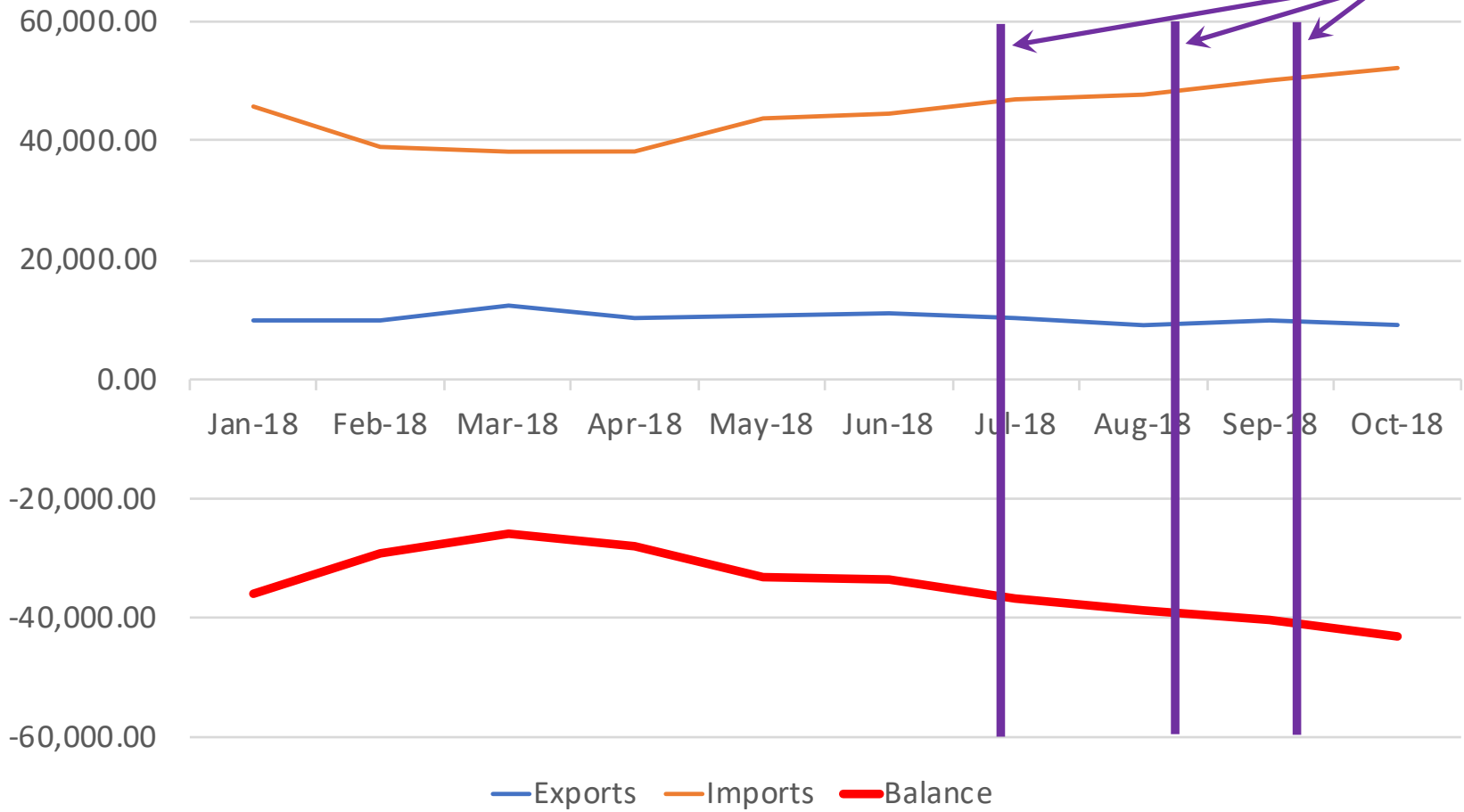
- **What's the point?**

- To get China to stop its IP practices?
- To reduce the US bilateral trade deficit with China?
- To stop China's rise as an economy and as a world power?

- **Who will "win"?**

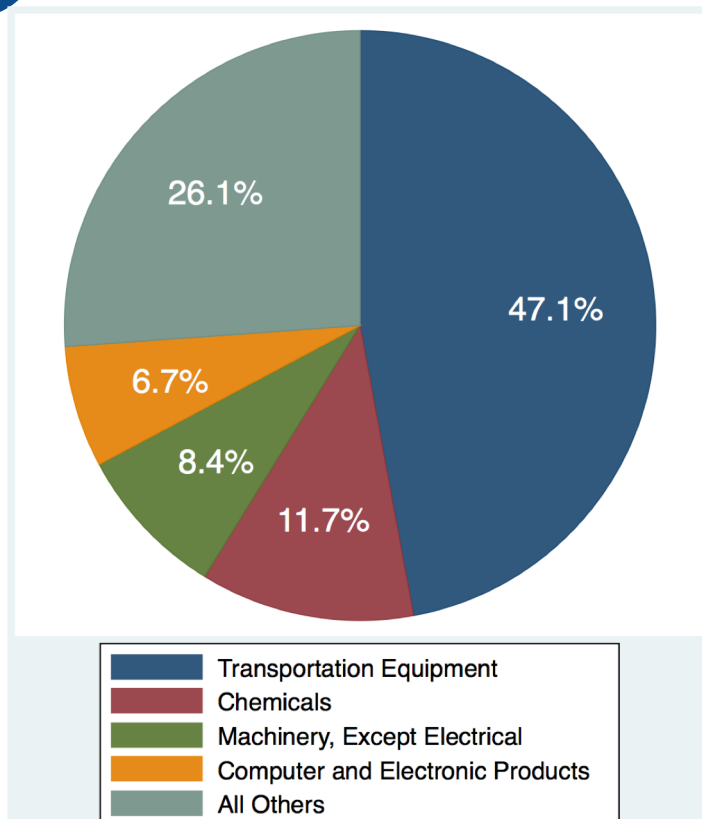
- Nobody! Everybody loses from tariffs
- Trump says it's "easy to win" because he measures success from trade deficit

### US Trade in Goods with China 2018



Tariffs

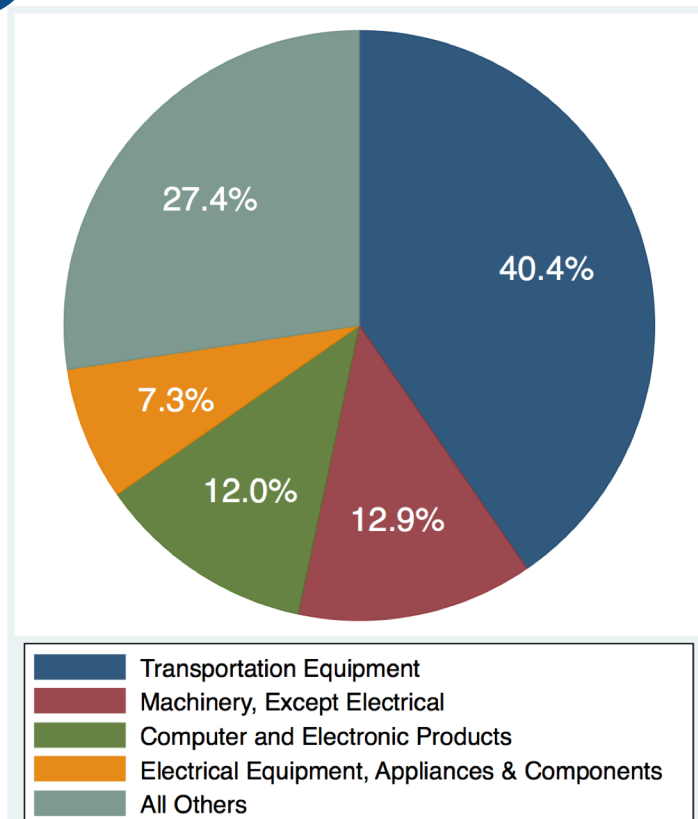
# Michigan Exports to China, by Product: 2017



Product	Value (\$ B)
Transportation Equipment	\$1.7
Chemicals	\$0.4
Machinery, Except Electrical	\$0.3
Computer and Electronic Products	\$0.2
All Others	\$1.0
<b>Grand Total</b>	<b>\$3.7</b>

Source: International Trade Administration

# Michigan Imports from China, by Product: 2019



Product	Value (\$ B)
Transportation Equipment	\$3.9
Machinery, Except Electrical	\$1.2
Computer and Electronic Products	\$1.1
Electrical Equipment, Appliances & Components	\$0.7
All Others	\$2.6
<b>Grand Total</b>	<b>\$9.6</b>

Source: International Trade Administration

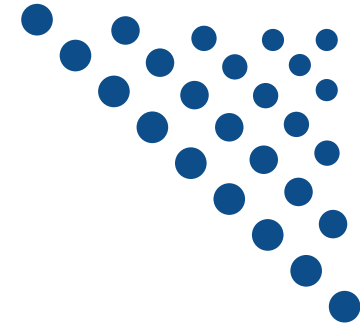


# China

- **Bottom line for Michigan**

- Trade war with China does not appear to hurt Michigan any more than most states
- Michigan's exports to China won't respond much to China's tariffs
  - (Compare to soybean exporters, who compete with Brazil)
- Michigan's imports from China are mostly similar to other states'
  - Some can be bought from other countries

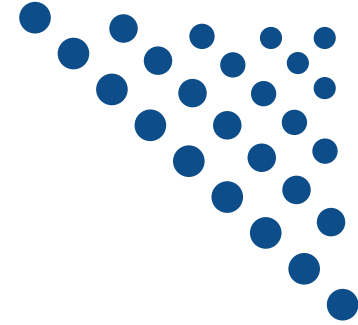




# Trade War

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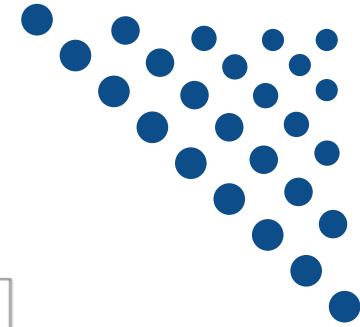
# Trade War



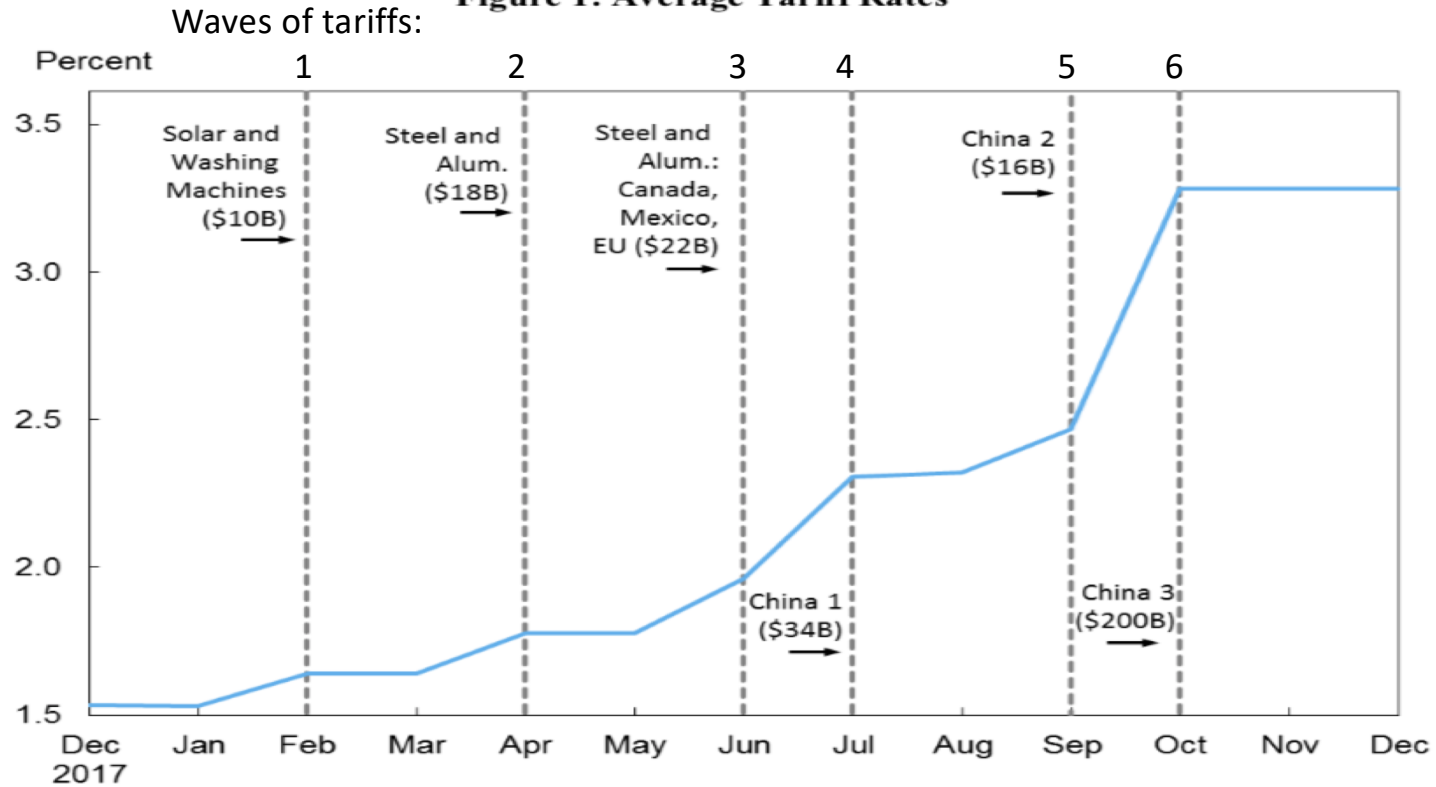
- **Effects of the 2018 Trade War**
  - US average tariffs rose, in 6 waves
  - Prices of imports in US rose
  - Quantity of imports fell
  - Number of imported varieties fell

Source: Amiti, Redding, and Weinstein, “The Impact of the 2018 Trade War on U.S. Prices and Welfare,” CEPR Discussion Paper DP13564, March 1, 2019.

# Trade War



**Figure 1: Average Tariff Rates**

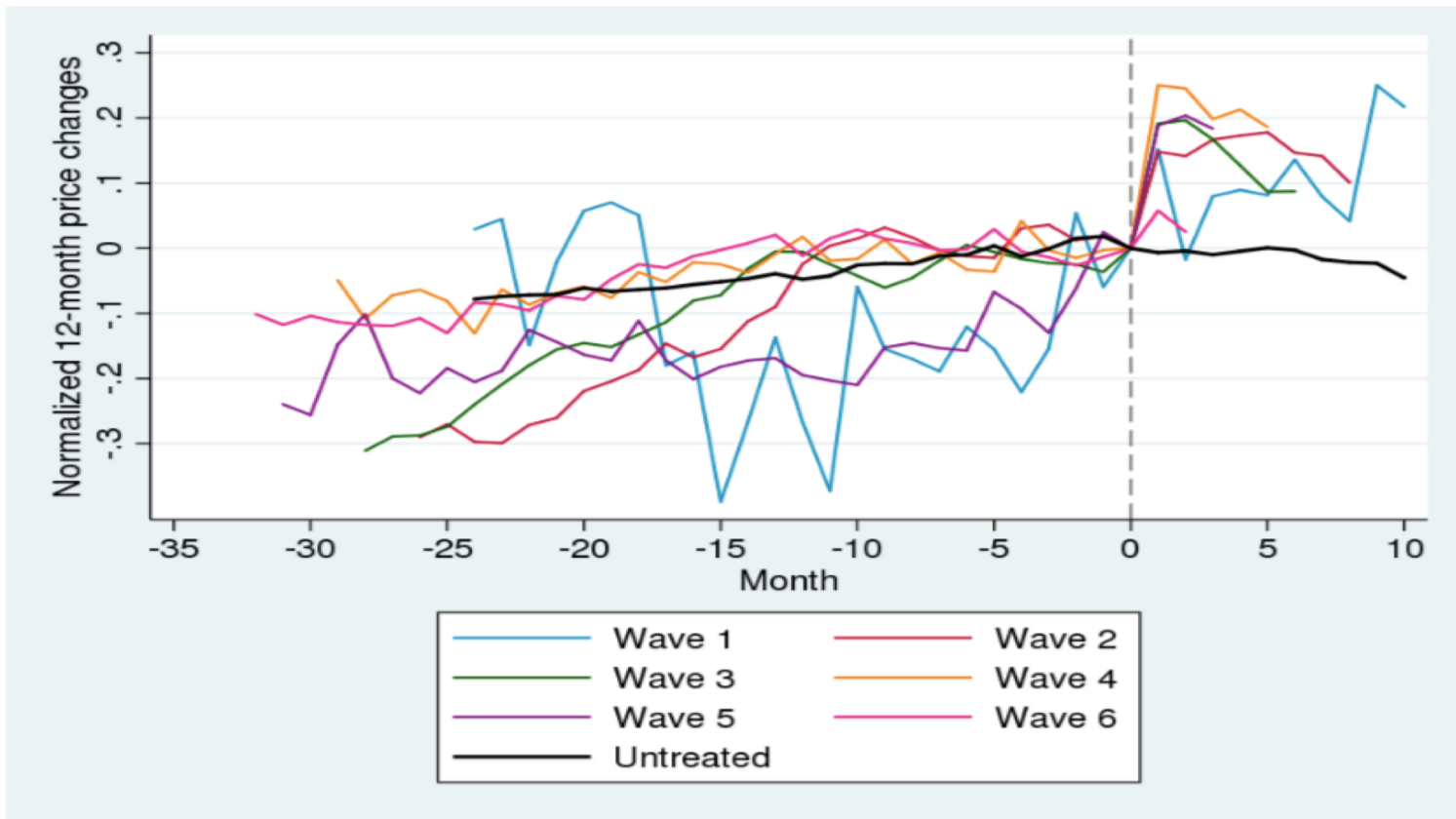


Source: US Census Bureau; USTR; USITC; authors' calculations.

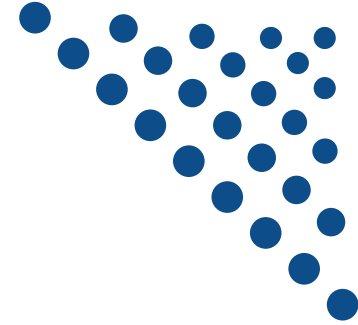
Source: Amiti, et al. 2019.

# Trade War

Figure 3: 12-month Proportional Change in Import Prices by Tariff Wave



# Trade War



## • Effects of the 2018 Trade War

- Effects varied across US

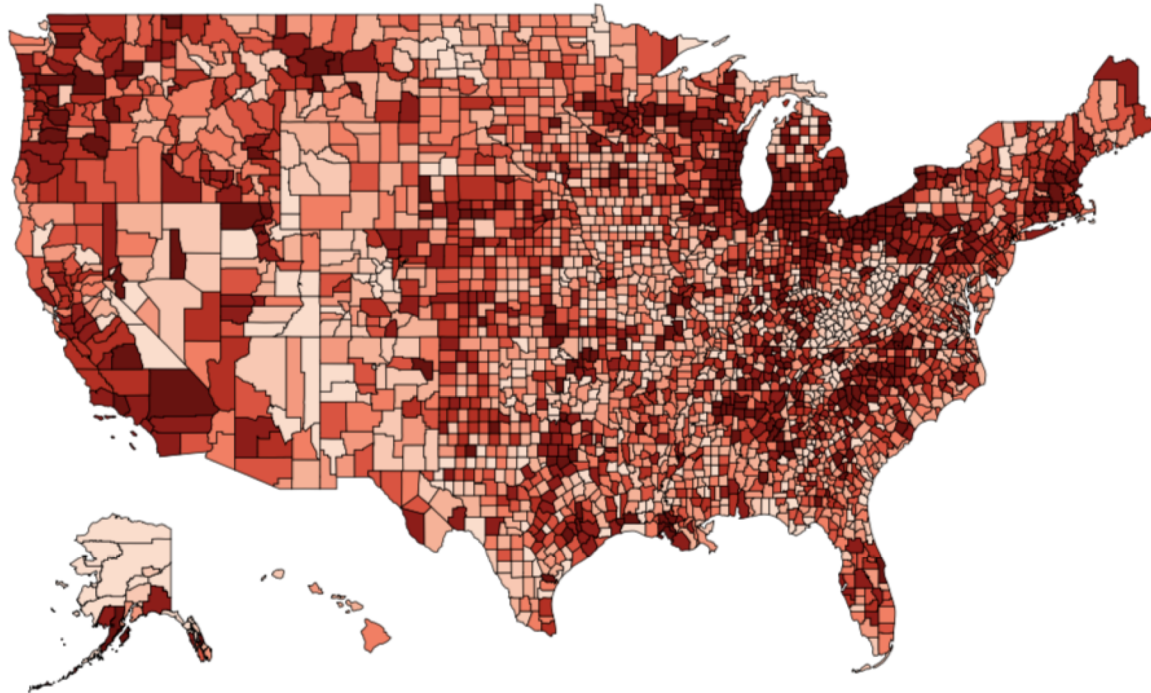
- US tariffs hit Michigan, hard
- Foreign tariffs did not hit Michigan hard
- Real wages fell most in states other than Michigan

Source: Fajgelbaum, Goldberg, Kennedy, and Khandelwal,  
“The Return to Protectionism,” March 3, 2019.

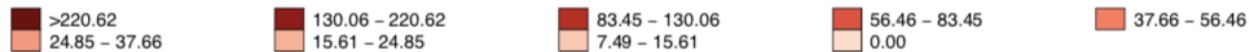
# Trade War

## Tariff Increase on US Imports

Weighted by Variety-Level US Import Share and County-Level 2016 Total Sector Employee Wage Bill



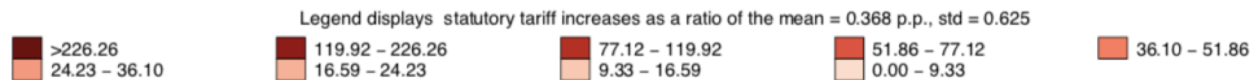
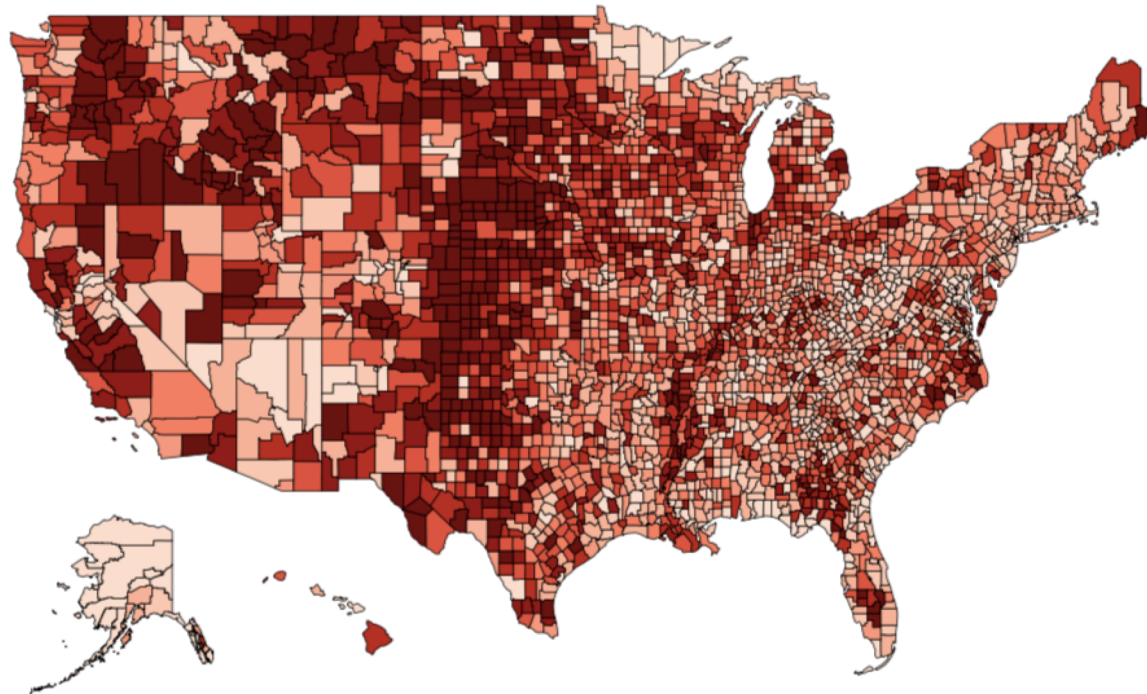
Legend displays statutory tariff increases as a ratio of the mean = 0.106 p.p., std = 0.201

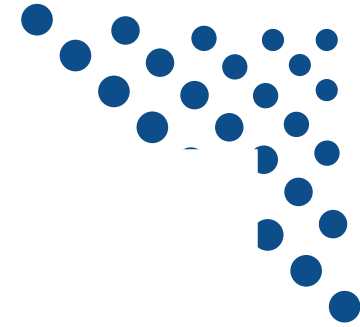


# Trade War

## Tariff Increase on US Exports

Weighted by Variety-Level US Export Share and County-Level 2016 Total Sector Employee Wage Bill





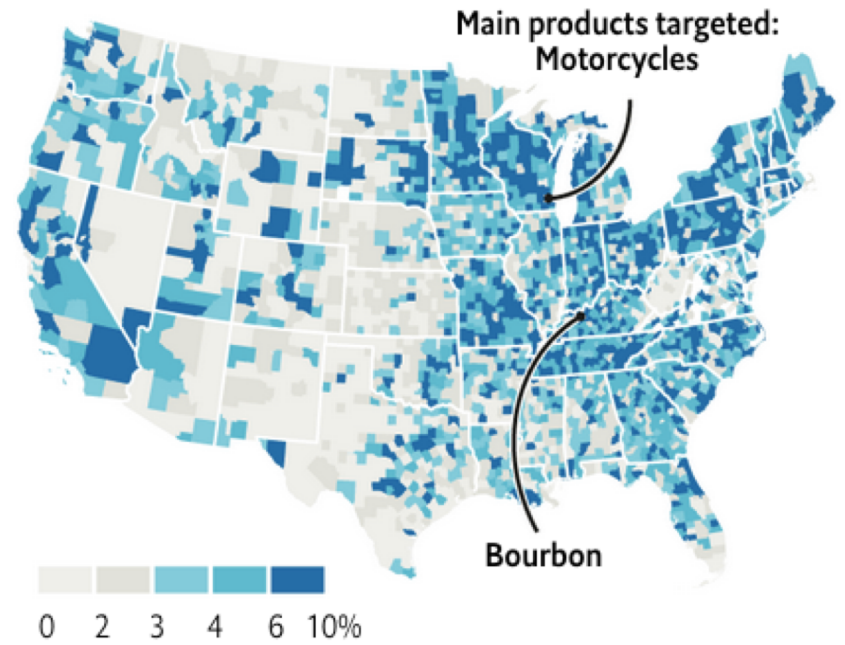
# Trade War

## Tariff Increases on US Exports: EU vs China

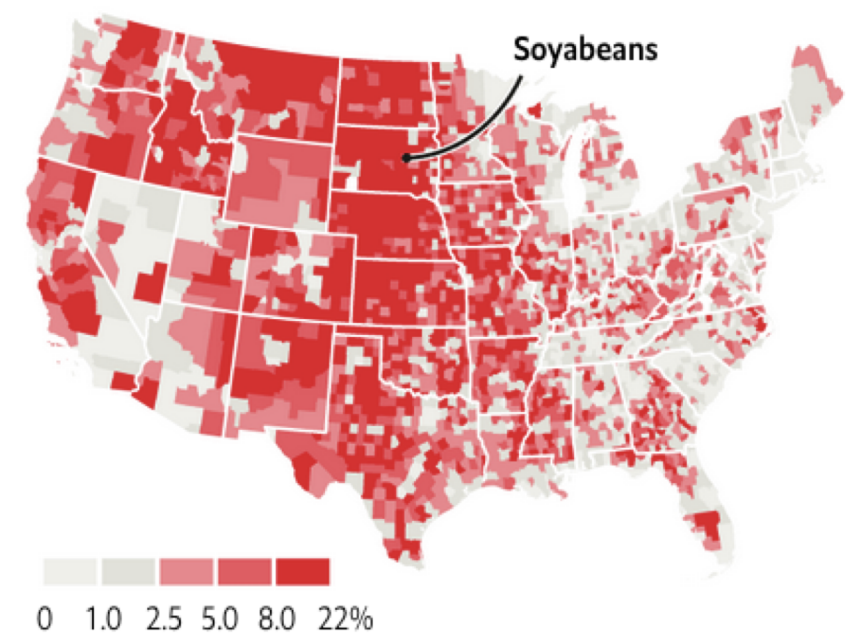
**America's trading rivals have aimed tariffs at Trump voters: Europe in the Rust Belt, China in the Great Plains**

Share of counties' exports affected by retaliatory tariffs, %

### The EU's tariffs



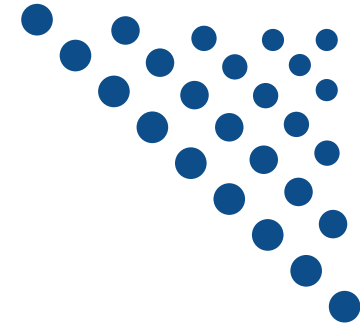
### China's tariffs



Source: *Economist* 4/27/19

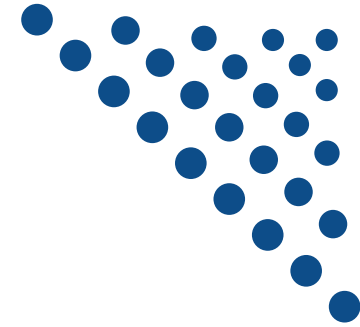
Alan V. Deardorff - [www.fordschool.umich.edu](http://www.fordschool.umich.edu)  UNIVERSITY OF MICHIGAN





# Trade Talks

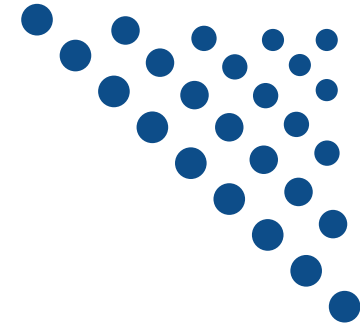
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# Trade Talks

- **China-US Trade Talks, I**

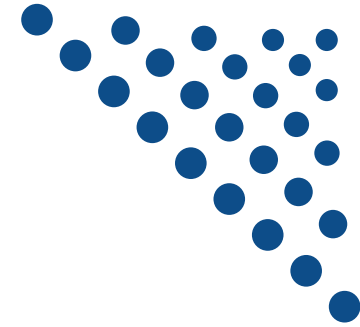
- Talks began in May 2018, in response to Trump's threat of tariffs
  - China promised to import more from US and allow more foreign investment
  - Said to have "averted trade war"
  - But then talks broke off in early June
- Trade war with China Jul, Aug, Sep 2018



# Trade Talks

## • China-US Trade Talks II

- Oct 2018: US and China postured about renewing trade talks
- Nov 1, 2018: New round of talks began with phone call from Trump to Xi
- Dec 2, 2018: G20 Summit dinner agrees truce: No more tariffs while talks continue
- Talks are still underway, but said to be approaching a deal



# Trade Talks

## • China-US Trade Talks II: Calendar

- Nov 9: He & Mnuchin talk by phone
- Jan 7-9: Talks in Beijing
- Jan 30-31: Talks in DC
- Feb 11-15: Talks in Beijing
- Feb 21-24: Talks in DC
- Mar 28-29: Talks in Beijing
- Apr 3-5: Talks in DC
- Apr 23-?: Talks in Beijing
- May 8-?: Talks in DC

Source:

Trade talks  
open

Exploring deal

Accord is near

Closer to  
final trade  
agreement

'Miles' from  
a trade deal

Talks could stretch  
for 'months'

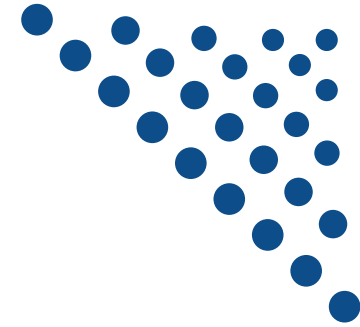
Trade deal  
nearing

Little sign  
of progress

Anticipation of a completed trade deal

## China-US Trade Talks II: Headlines

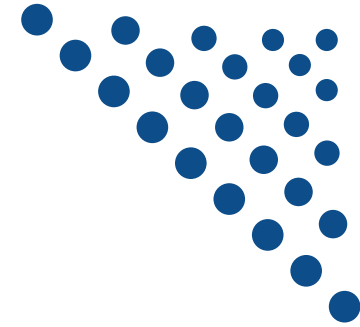
- Nov 29, WSJ: U.S., China Exploring Deal
- Dec 4, WSJ: Trump Names Lighthizer as Trade Representative
- Dec 30, FT: China and US hail 'positive' start to trade talks
- Jan 7, WP: Trade talks open in Beijing as U.S.-China dispute deepens
- Jan 9, FT: China and US still far from a deal after talks offer few details
- Jan 22, FT: US and China start preparatory trade talks
- Jan 24, FT: US says US 'miles' from a trade deal with China
- Jan 29, WSJ: Big Divides Remain as U.S.-China Trade Talks Resume
- Jan 31, WSJ: China trade talks 'going well'
- Feb 6, NYT: U.S.-China Trade Deal Nearing
- Feb 13, WSJ: U.S. outlines a trade deal
- Feb 15, FT: US-China trade talks end with little sign of progress
- Feb 16, WSJ: Chinese, U.S. Trade Negotiators Inch Toward a Broad Agreement
- Feb 21, FT: A potential new snag in the U.S.-China trade talks
- Feb 23, WSJ: China Trade Talks Extended to Close the Deal
- Feb 28, WSJ: U.S. Drops Threat of 25% Tariffs on Goods in Sign That Accord Is Near
- Mar 4, WSJ: U.S., China Close In on Trade Deal
- Mar 18, NYT: Trade Fight with China Enters Overtime, With Tariffs a Costly Sticking Point
- Mar 28, FT: US-China trade talks could stretch for 'months' - Kudlow
- Apr 3, FT: US and China draw closer to final trade agreement
- Apr 14, NYT: Mnuchin Says China Trade Deal Nearing Final Round
- Apr 26, NYT: Trump Says Xi Jinping of China Will Visit Soon, Stirring Anticipation of a Completed Trade Deal



# Trade Talks

- **China-US Trade: Issues of Negotiation**

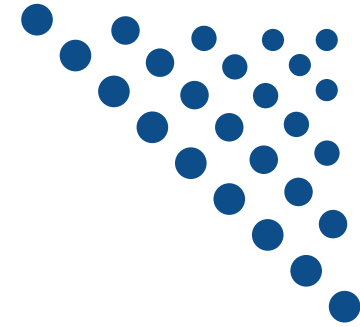
- Government subsidies to state-owned companies
- Chinese purchases of U.S. farm and energy products and services
- China's market-opening efforts in sectors such as financial services and manufacturing
- Improving its protection of U.S. intellectual-property rights
- Pressure on U.S. companies to share technology
- Industrial policies that favor state-controlled companies
- Currency stability
- Regulatory relief for foreign companies in China
- How to enforce any agreements on the above
  - Reimpose tariffs, or
  - Leave them in place



# Trade Talks

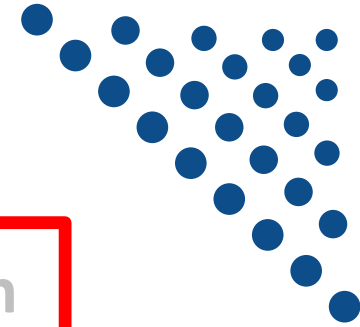
- **What Might a China-US Trade Deal Include?**

- US wants (per FT, 3/25/19):
  - Huge Chinese purchases of US exports, to reduce US trade deficit
  - Liberalization of market access for US goods and services
  - Reform of Chinese industrial policy, especially “forced transfers” of IP
  - US permitted to use punitive tariffs if these are violated, without China retaliating or complaining to WTO
- China wants:
  - Removal of US tariffs



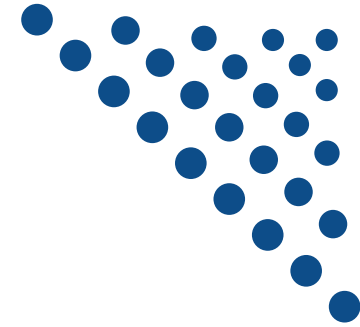
# NAFTA → USMCA





# Trump's Trade Actions

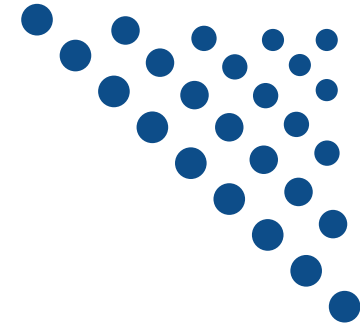
- Aug 23, 2018: Second tariffs on China, \$16 billion
- Sep 24, 2018: Third tariffs on China, \$200 billion
- Sep 24, 2018: Amended KORUS signed
- **Sep 30, 2018: USMCA agreed**
  - NAFTA renegotiation had completed previously with Mexico
  - Now Canada signed on, and name changed (by Trump) to USMCA
  - USMCA: U.S.-Mexico-Canada Trade Agreement



# NAFTA → USMCA

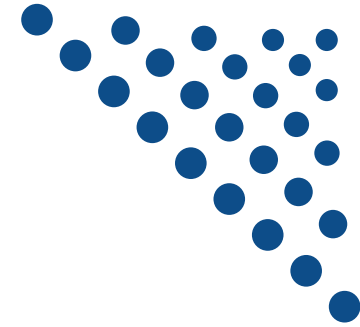
- **NAFTA is**

- Free Trade Agreement (FTA)
  - Zero tariffs on goods traded by US, Canada, Mexico
  - Only if they satisfy Rules of Origin (ROOs)
- Additional provisions regarding many things
  - Services trade
  - Foreign direct investment
  - Intellectual property rights
  - Dispute settlement
  - Government procurement



# NAFTA → USMCA

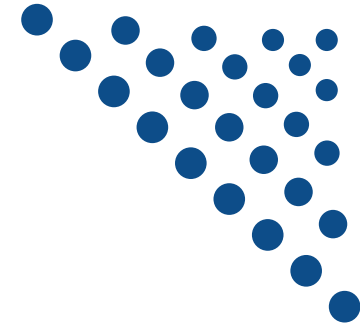
- **USMCA will be (if approved)**
  - FTA with stricter ROOs
  - Some changes in NAFTA's additional provisions
  - New rules for environment, labor, financial services, digital trade
  - Weakening of Canada's dairy barriers
  - Discouragement of trade with China
  - Provision for renegotiation (sunset)



## NAFTA → USMCA

- **Most important for Michigan: Tighter ROOs for cars and car parts**

- North American content increased from 62.5% to 75%
  - Intended to reduce inputs from outside N. America, likely benefiting Mexico
- New requirement that 40-45% of content must be from labor paid \$16/hr or more (but does not rise with inflation)
  - Intended to reduce inputs from low-wage Mexico, benefiting US and Canada

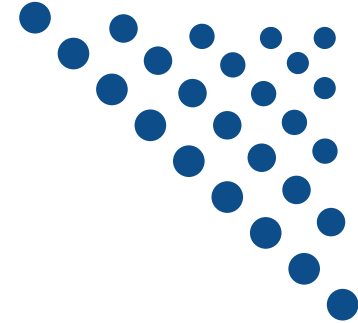


# NAFTA → USMCA

## • Effects of tighter ROOs

- If ROOs are
  - Satisfied: Higher costs of production
  - Not satisfied: Tariffs on traded inputs and final products
- Either way
  - Prices rise
  - Demand falls
  - Products become less competitive internationally
- Effects on demands for labor ambiguous throughout

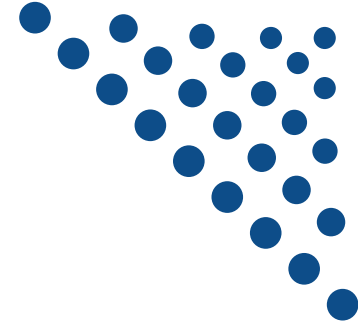
# NAFTA → USMCA



- **Will USMCA be ratified?**

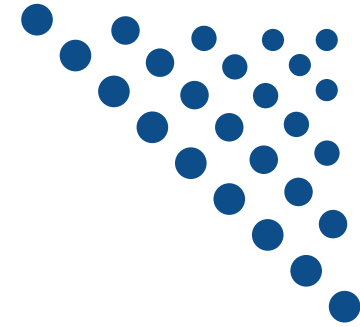
- Needs ratification in all three countries
- In US, there are problems
  - Democrats want changes
    - Stronger enforcement of labor provisions
    - Remove tariffs on steel and aluminum
  - Approval requires a report from USITC, delayed by government shutdown, but was issued Apr 18
- Trump threatens to issue six-month withdrawal notice from NAFTA

# NAFTA → USMCA



- **USITC Report Main Findings**

- Positive impact on US real GDP and employment
  - Raise GDP by 0.35%
  - Raise employment by 0.12 %
- Most significant effects from
  - Reduced uncertainty in digital trade
  - Rules of origin in auto sector
- Auto sector
  - Increase in US production
  - Small increase in prices and reduced demand



# NAFTA → USMCA

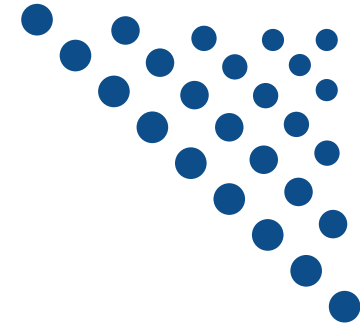
- **News from Michigan**

- April 24, MLive:

**Trump's trade deal wins big praise from Michigan's Big Three automakers**

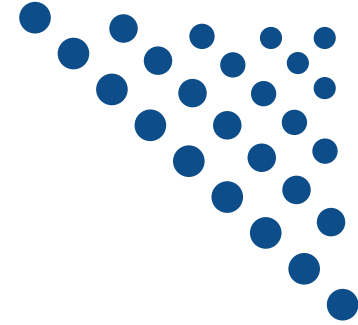






# Conclusion

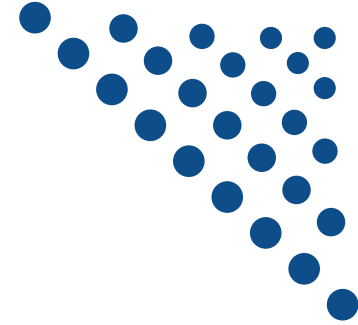
# Conclusion



## • Trump's trade actions in 2018

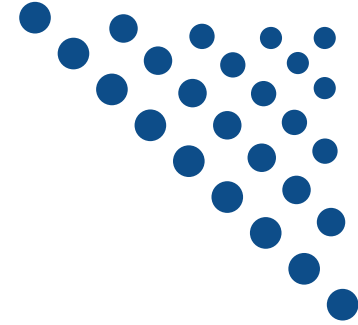
- In all states, but especially Michigan
  - Raise prices to consumers
  - Raise costs to producers
- Alienate other countries

# Conclusion



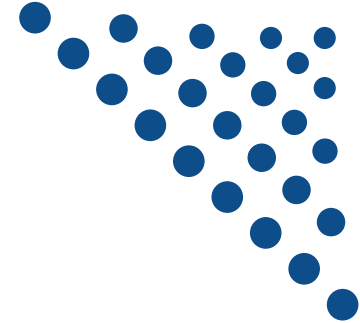
- **May they serve any purpose?**
  - Not to reduce trade deficit(s)
    - Tariffs may reduce both exports and imports
    - They do not change overall trade balance
    - Mar 6, 2019, NYT:
      - “The United States trade deficit in goods ballooned to its largest level in history, reaching \$891.3 billion in 2018, despite President Trump’s repeated promise to reduce that figure.”

# Conclusion



- **May they serve any purpose?**
  - Perhaps to motivate other countries to change policies for the better
    - US is negotiating with
      - China, to change their IP policies and increase imports from US
      - EU and Japan to open to more imports of agricultural goods from US

**Thank you!**



# Any Questions?

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