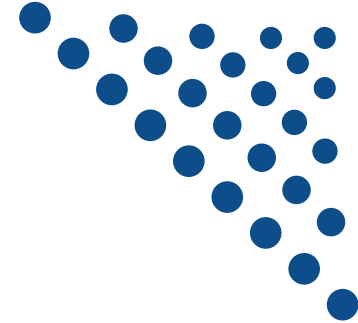




Michigan Trade and Trade Wars

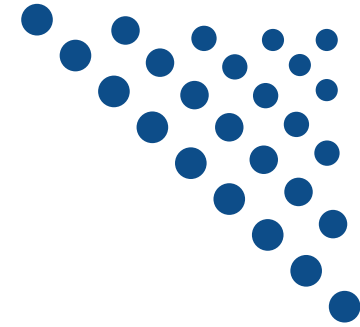
Alan V. Deardorff

University of Michigan

For presentation at the Ann Arbor Public Library

May 7, 2019

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.

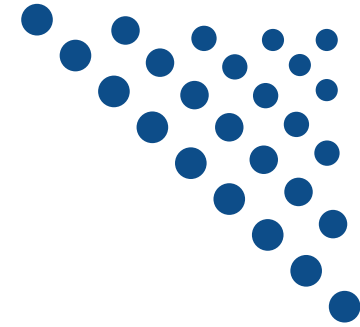
The Michigan Front in the Trade War: Michigan's Role in International Trade and Its Vulnerability to Recent Trade Policies



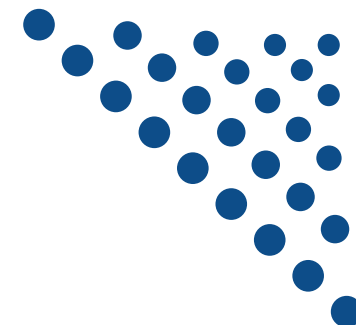
Alan V. Deardorff
University of Michigan

*For presentation at the Ann Arbor Public Library
May 7, 2019*

Outline

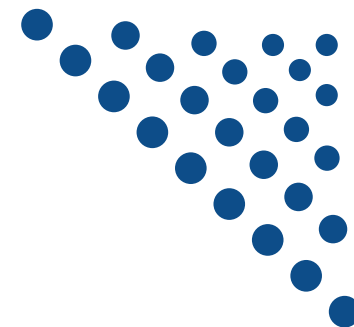


- **Features of Michigan's Trade**
- **President Trump's 2018 Trade Actions**
 - Trade War
 - ~~Solar Panels~~ and Washing Machines
 - Steel and Aluminum
 - Cars (threat)
 - China
 - Free Trade Agreements
 - ~~Korea US Trade Agreement Amended~~
 - NAFTA → USMCA



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)

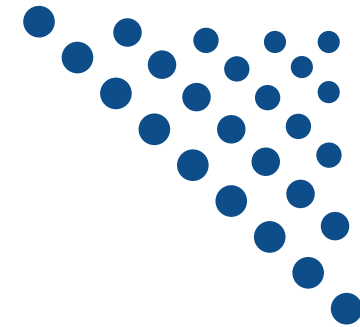


By Value, \$bil.		
1	California	613
2	Texas	528
3	New York	205
4	Illinois	201
5	Michigan	200
6	New Jersey	147
7	Florida	130
8	Georgia	129
9	Washington	126
10	Pennsylvania	122

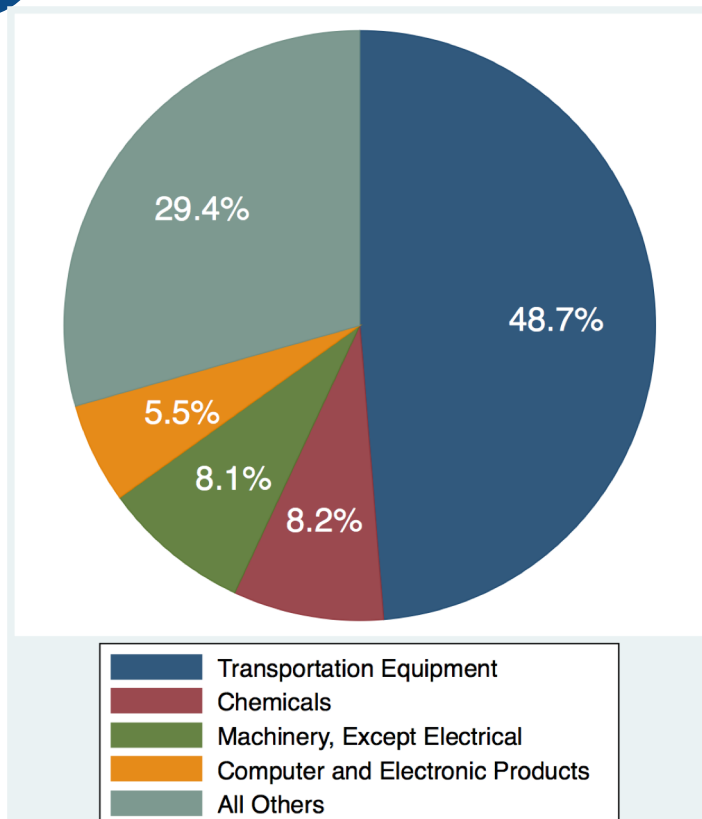
By Average* Rank	
1	Michigan
2	Texas
3	Louisiana
4	Illinois
5	Kentucky
6	Tennessee
7	New Jersey
8	Indiana
9	South Carolina
10	California

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

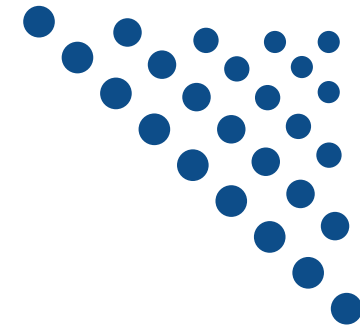


Michigan Exports, by Product: 2017

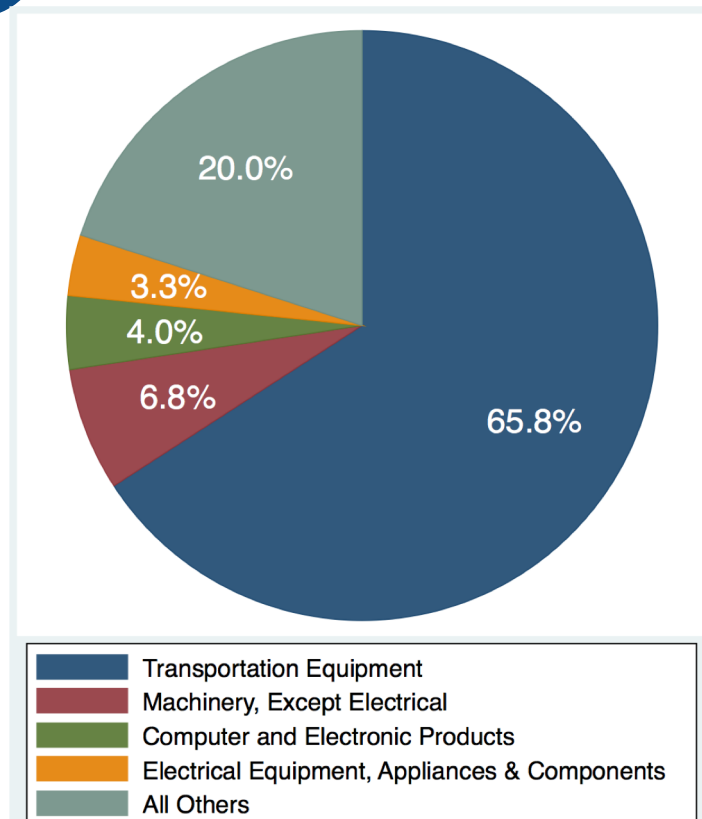


Product	Value (\$ B)
Transportation Equipment	\$29.2
Chemicals	\$4.9
Machinery, Except Electrical	\$4.9
Computer and Electronic Products	\$3.3
All Others	\$17.6
Grand Total	\$59.9

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
Grand Total	\$140.2

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

Imports	2	1
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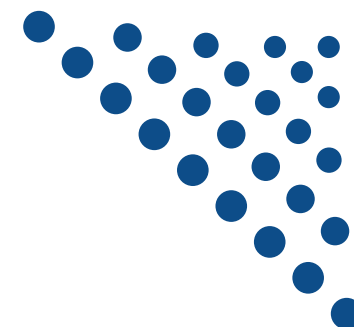
China	Value (\$B)	Per GDP
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Top 5 Importers from North America per GDP

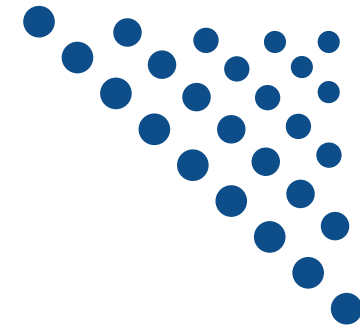
Michigan	19.7
Montana	8.0
Vermont	7.3
New Hampshire	7.2
Texas	6.6

Per GDP
11
20
Per GDP
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

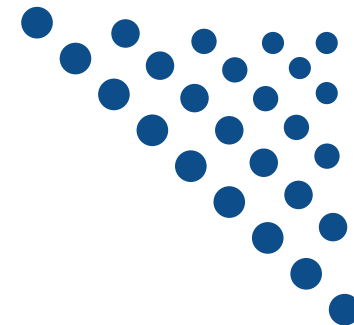
- **Normal effects of tariffs**

- 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.

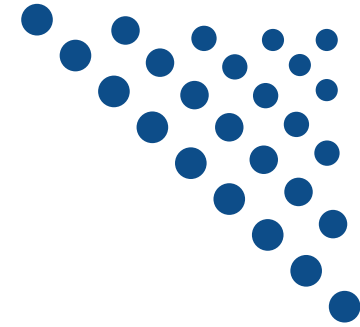
Trump's 2018 Trade Actions



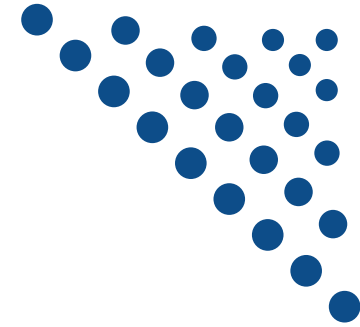
These slides will list only actions actually done.

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

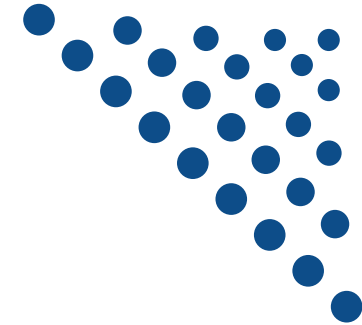
Trump's 2018 Trade Actions



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



Tariffs on Washing Machines

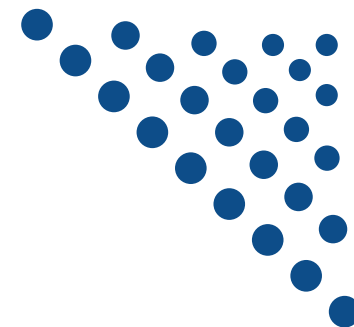


Tariffs on Washing Machines

- **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



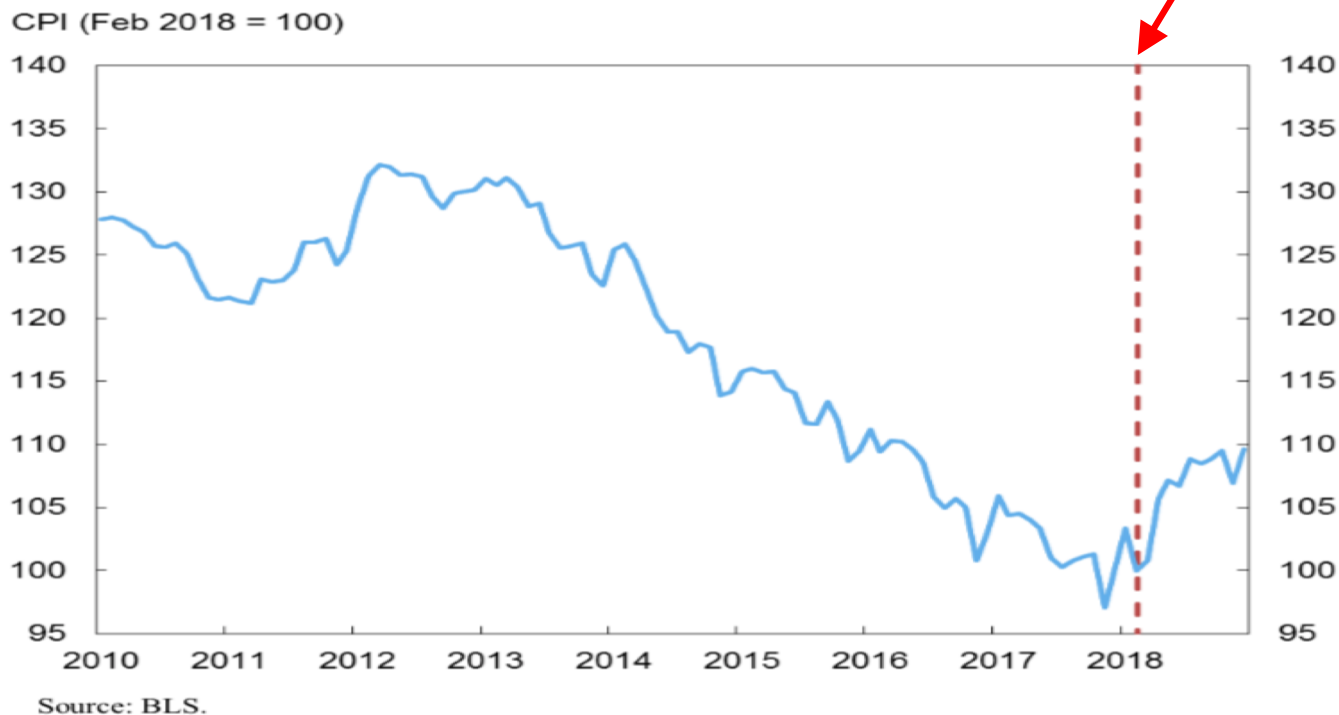
- **Who is hurt?**

- 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

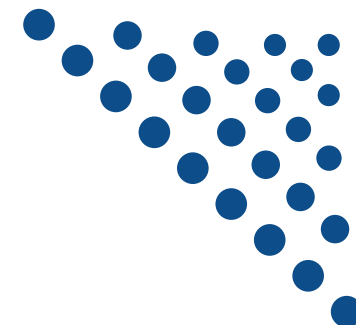
Figure 2: Major Appliance CPI



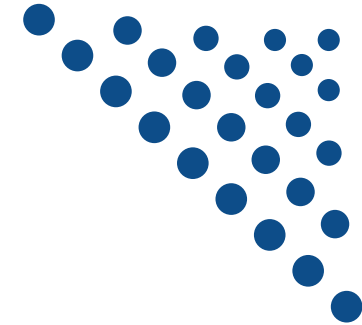
Source: Amiti, Redding, and Weinstein, "The Impact of the 2018 Trade War on U.S. Prices and Welfare," CEPR Discussion Paper DP13564, March 1, 2019.



NATIONAL ECONOMIC
EDUCATION DELEGATION



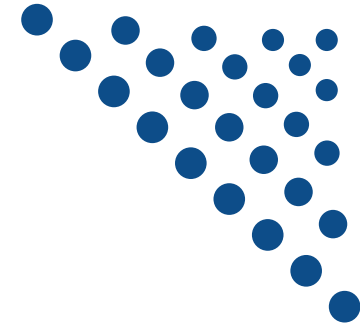
Tariffs on Steel and Aluminum



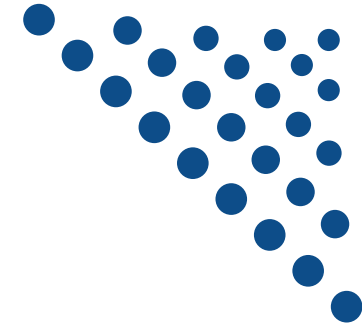
Trump's 2018 Trade Actions

- 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

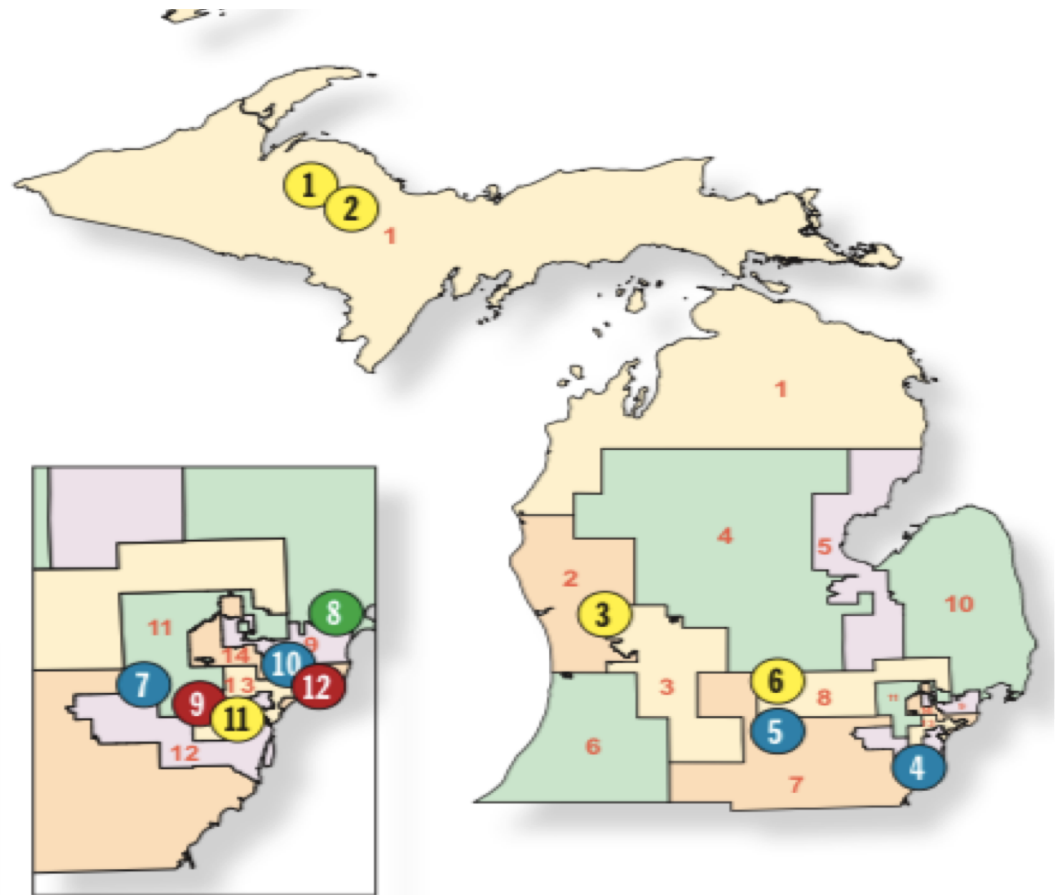
Steel Produced in Michigan

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

* Both steel and supported

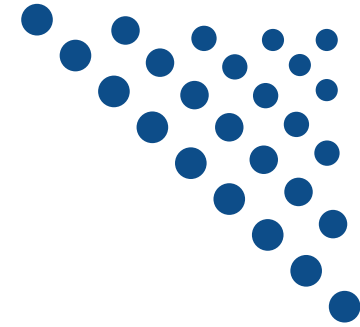
Sources: BLS, 2015; Economic Impacts
Report, 2012

- Raw Steel Facility
- Steel Mill Products
- Other Manufacturing/Mill Services
- Tech/R&D Facility
- ★ Member HQ



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

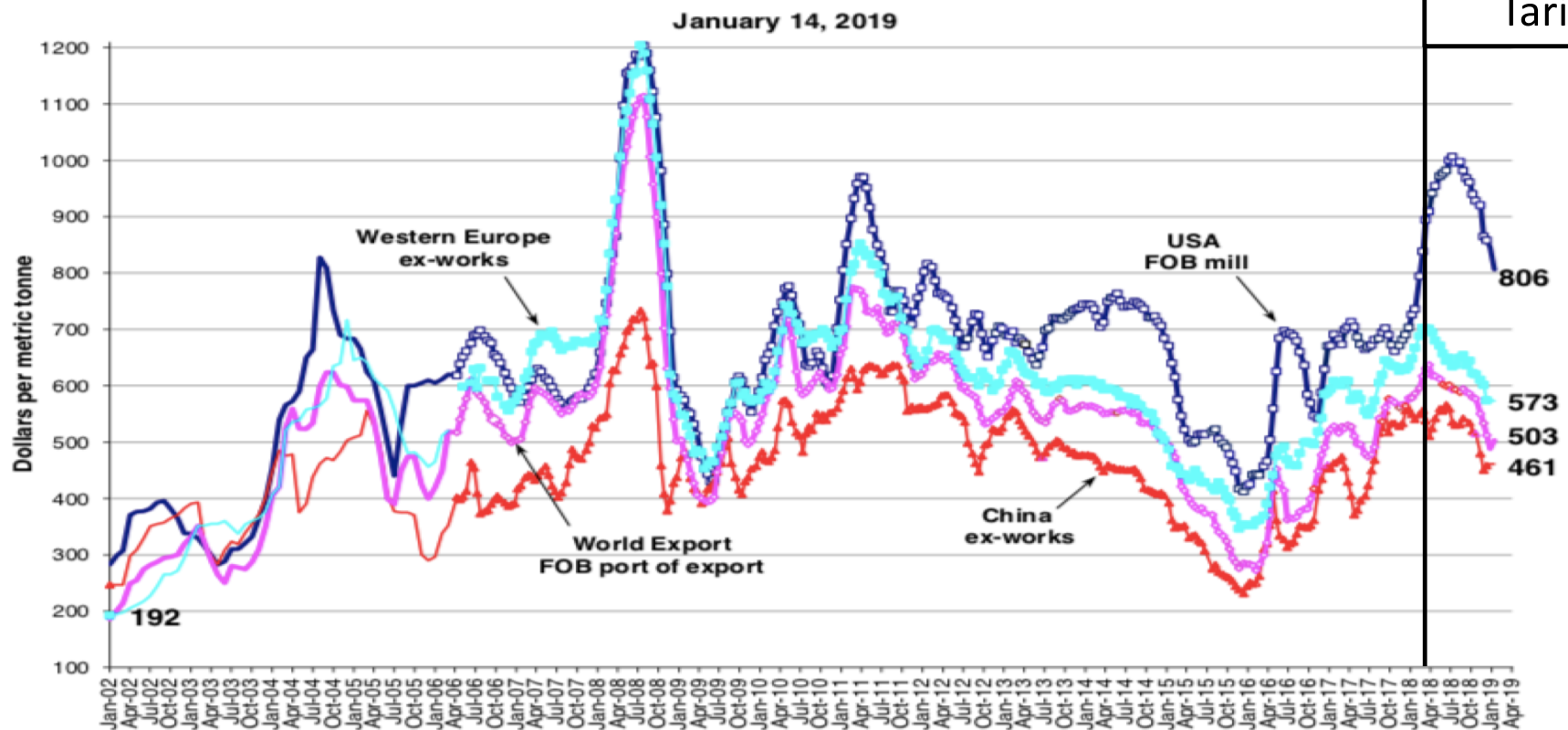
Steel Prices

SteelBenchmarker™ HRB Price

USA, China, Western Europe and World Export

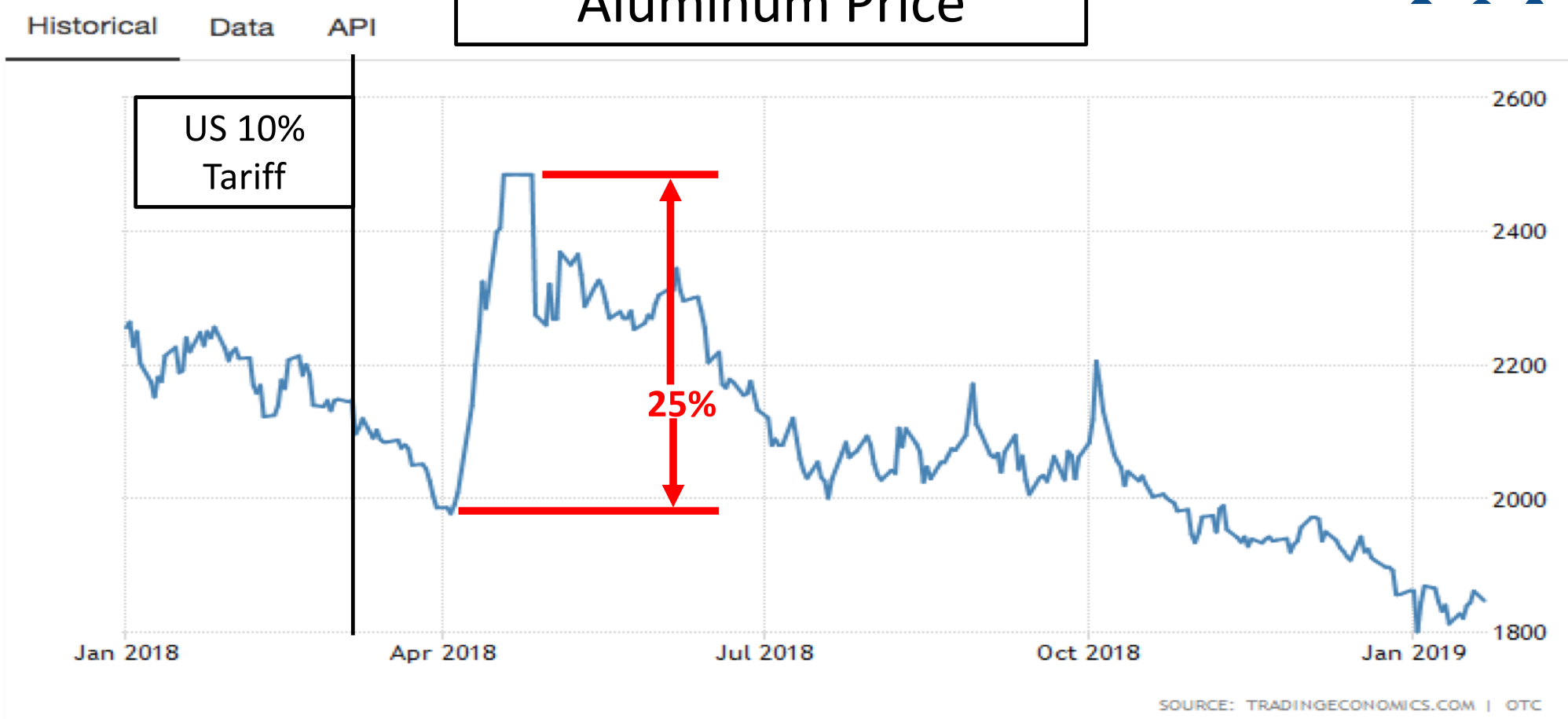
Track data, Jan. 2002 - March 2006; SteelBenchmarker data begins April 2006)

US 25%
Tariff

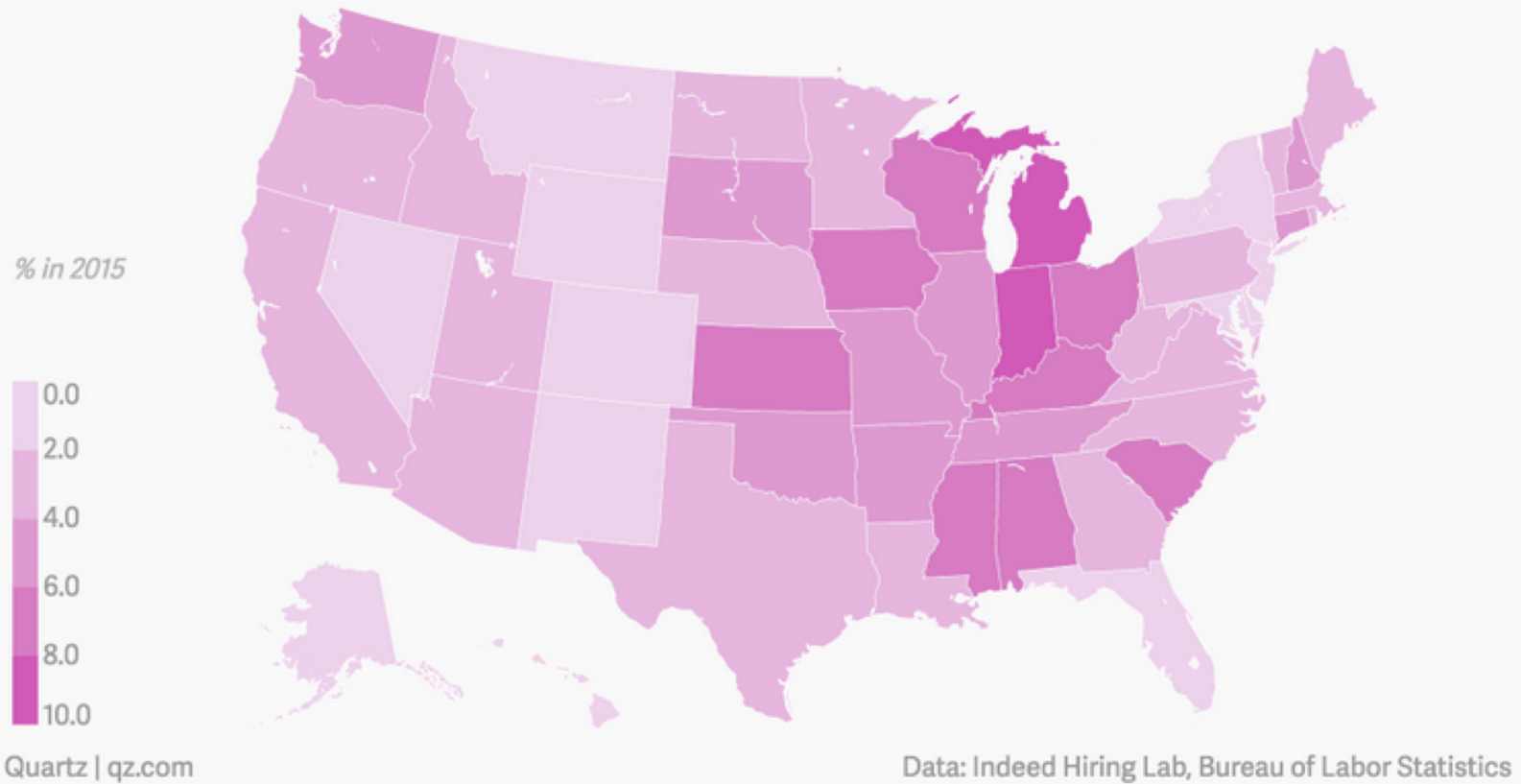




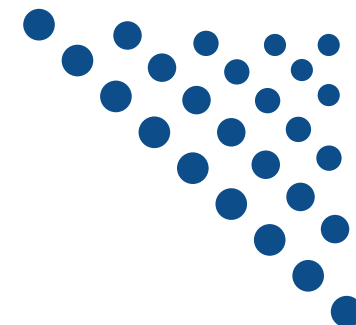
Aluminum Price



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

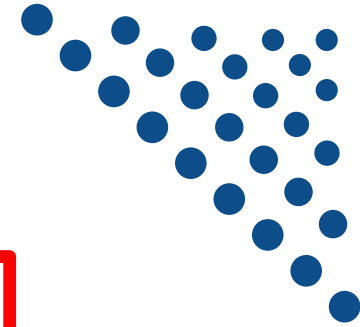


Source: Kopf (2018)

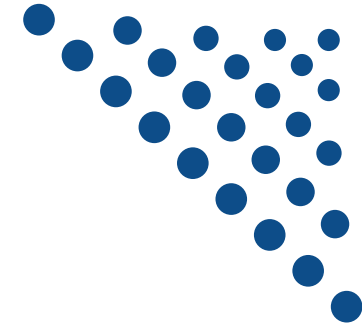


Tariff on Cars and Car Parts

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

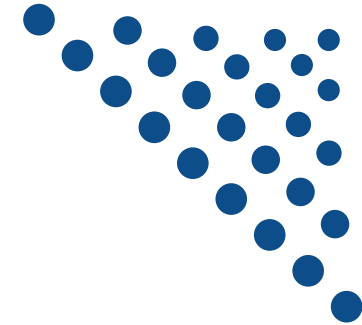
- **Who would benefit?**

- 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 lay-offs 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

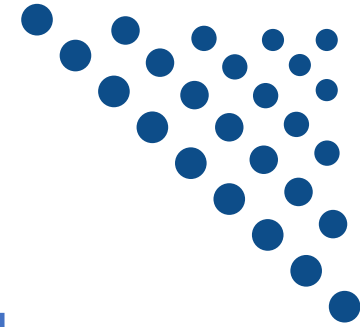


Estimated Effects on Car Sales and Prices of 25% Tariff

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

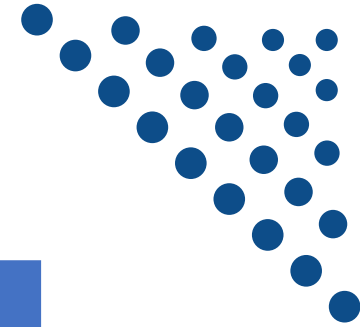
Tariff on Cars and Car Parts



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

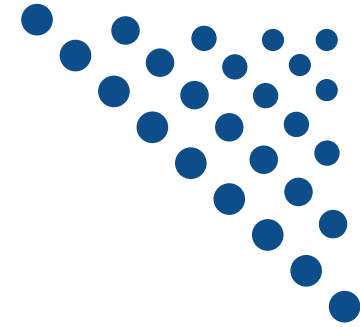


Estimated Effects of a 25% Tariff on Revenue & Employment in New Car Dealerships

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

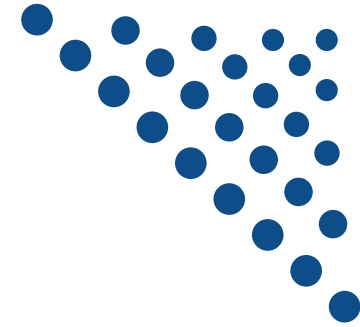
Source: Center for Automotive Research

Tariff on Cars and Car Parts

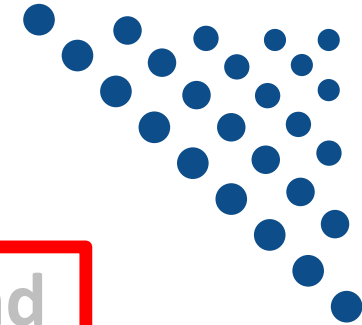


- **Where we stand:**

- 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.”



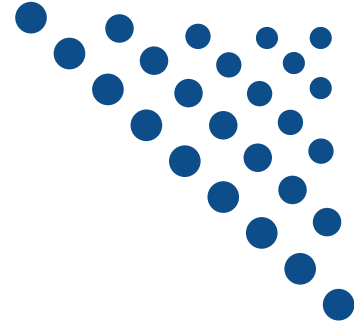
China



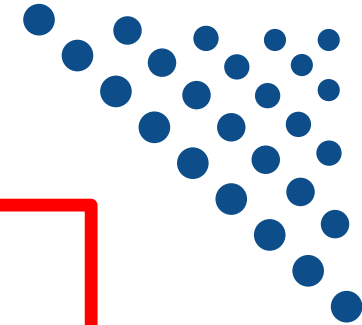
Trump's Trade Actions

- 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**

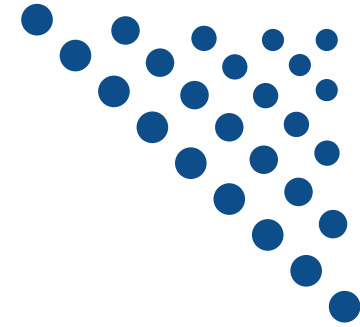




- **This is a “Trade War”: Tariffs and retaliation**

- 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?**

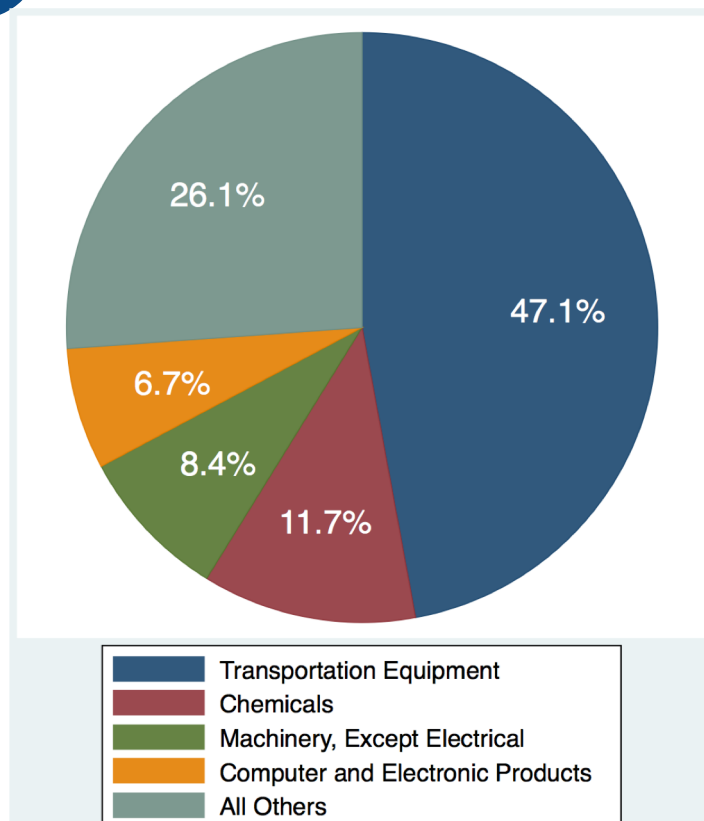
- To get China to stop its IP practices?
- To reduce the US bilateral trade deficit with China?
- To stop China's rise as an economy and as a world power?

- **Who will “win”?**

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



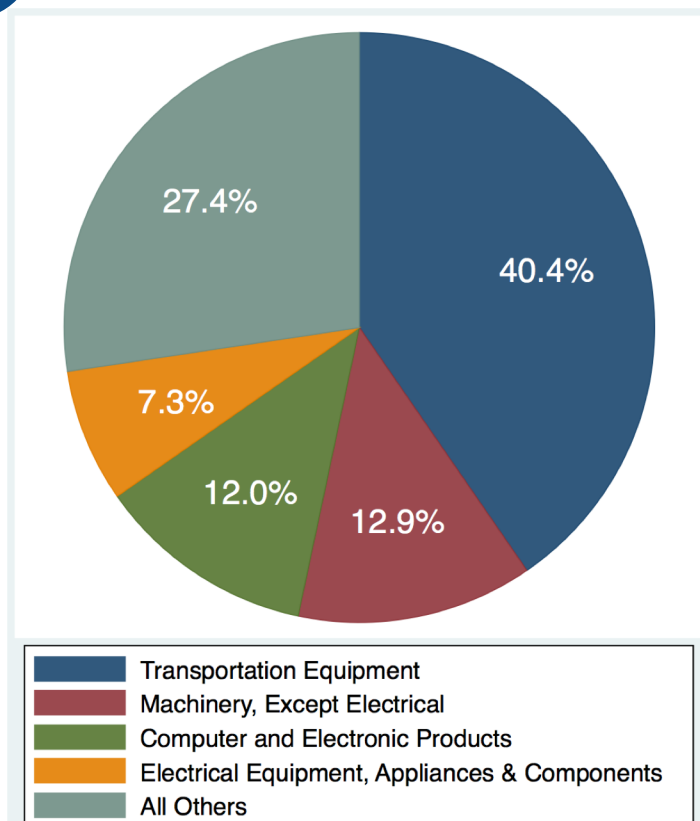
Michigan Exports to China, by Product: 2017



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
Grand Total	\$3.7

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
Grand Total	\$9.6

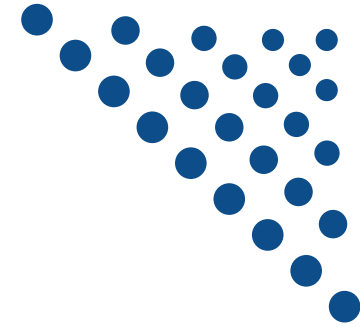
Source: International Trade Administration



China

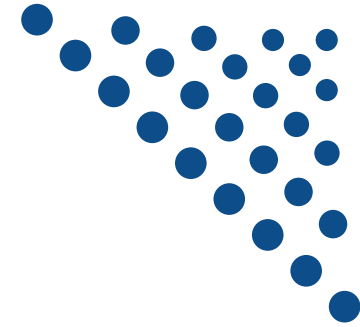
- **Bottom line for Michigan**

- 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

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

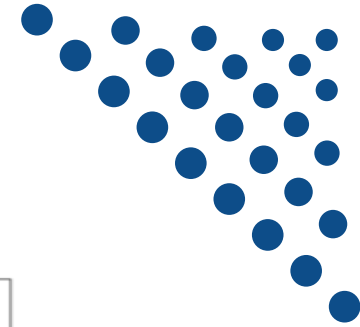
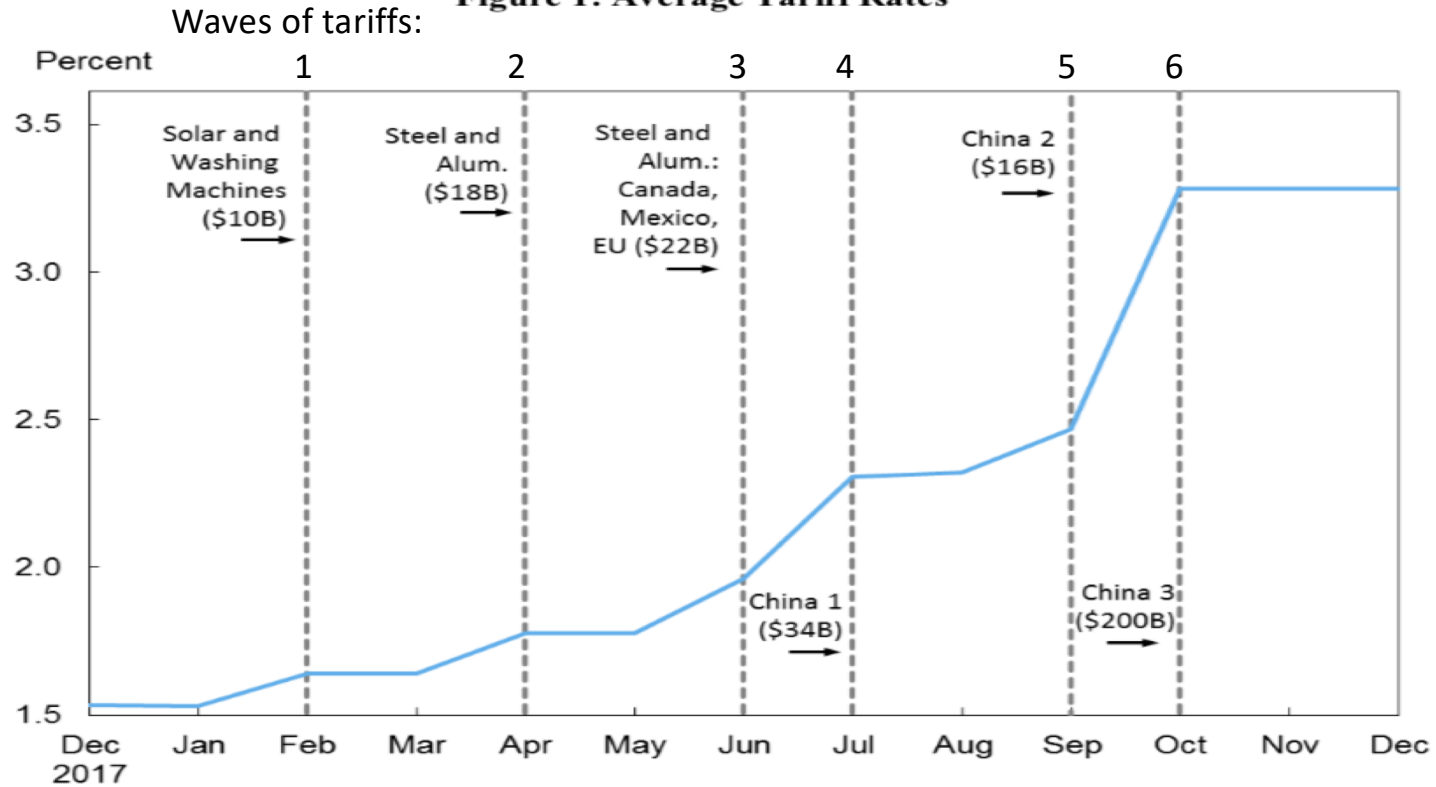


Figure 1: Average Tariff Rates

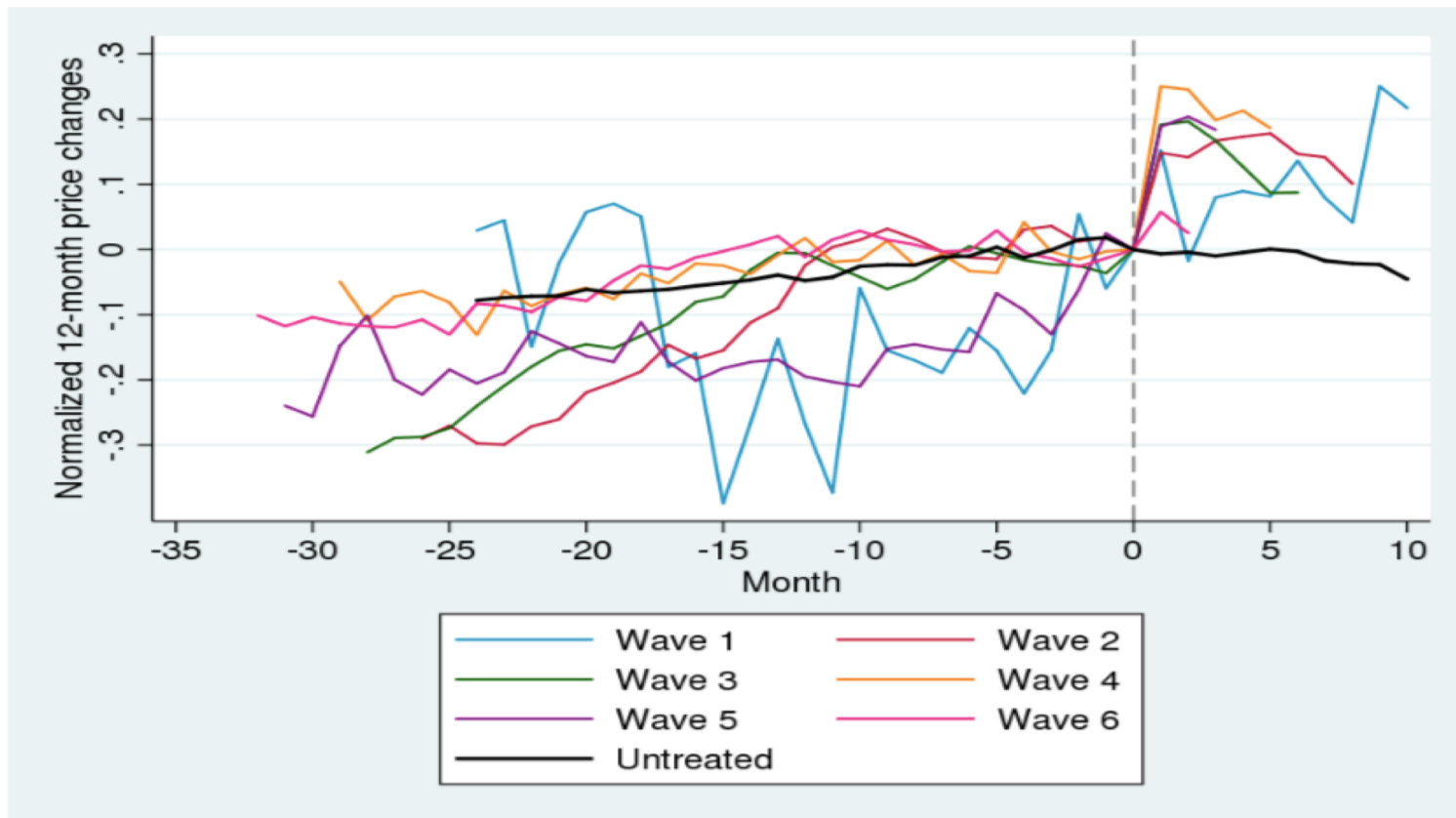


Source: US Census Bureau; USTR; USITC; authors' calculations.

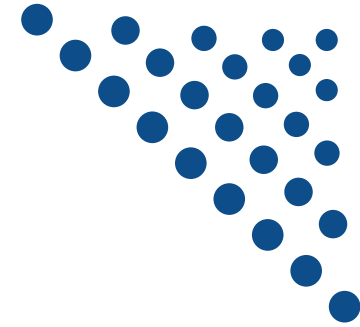
Source: Amiti, et al. 2019.

Trade War

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



Trade War



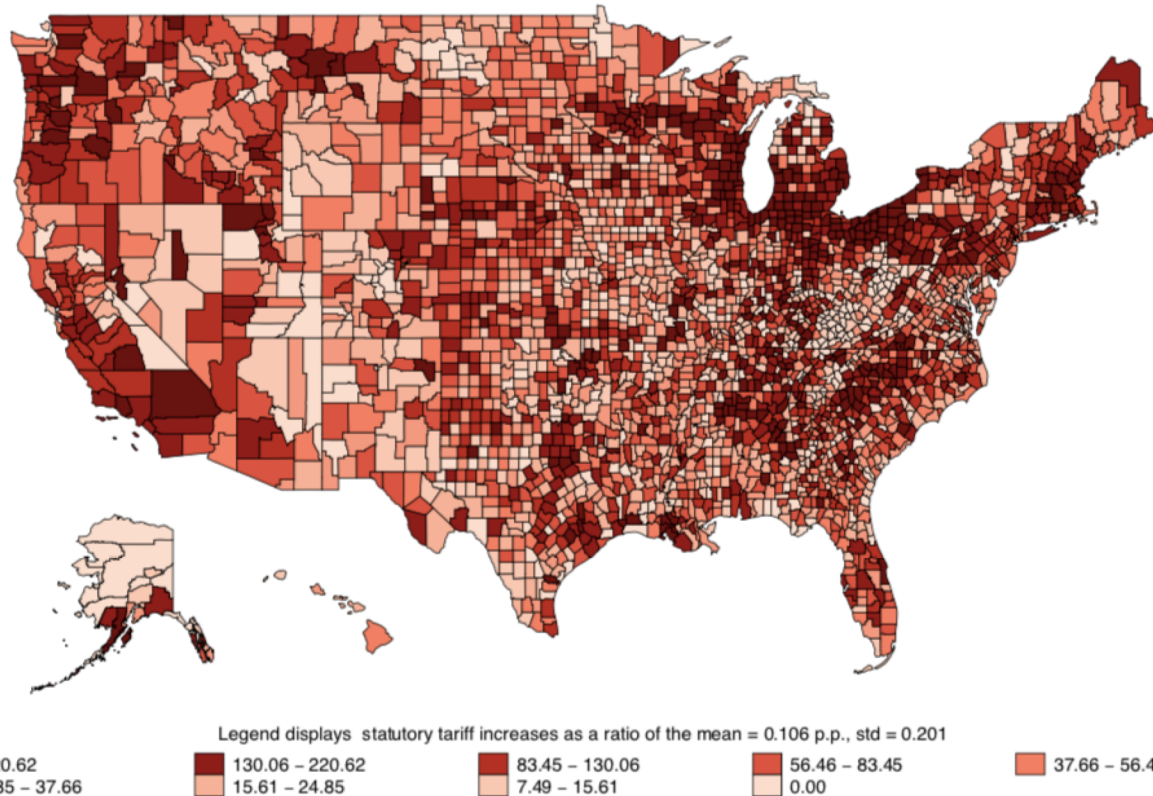
- **Effects of the 2018 Trade War**
 - Effects varied across US
 - US tariffs hit Michigan, hard
 - Foreign tariffs did not hit Michigan hard
 - Real wages fell most in states other than Michigan

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

Trade War

Tariff Increase on US Imports

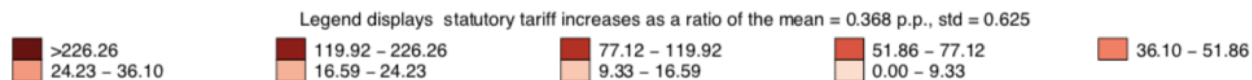
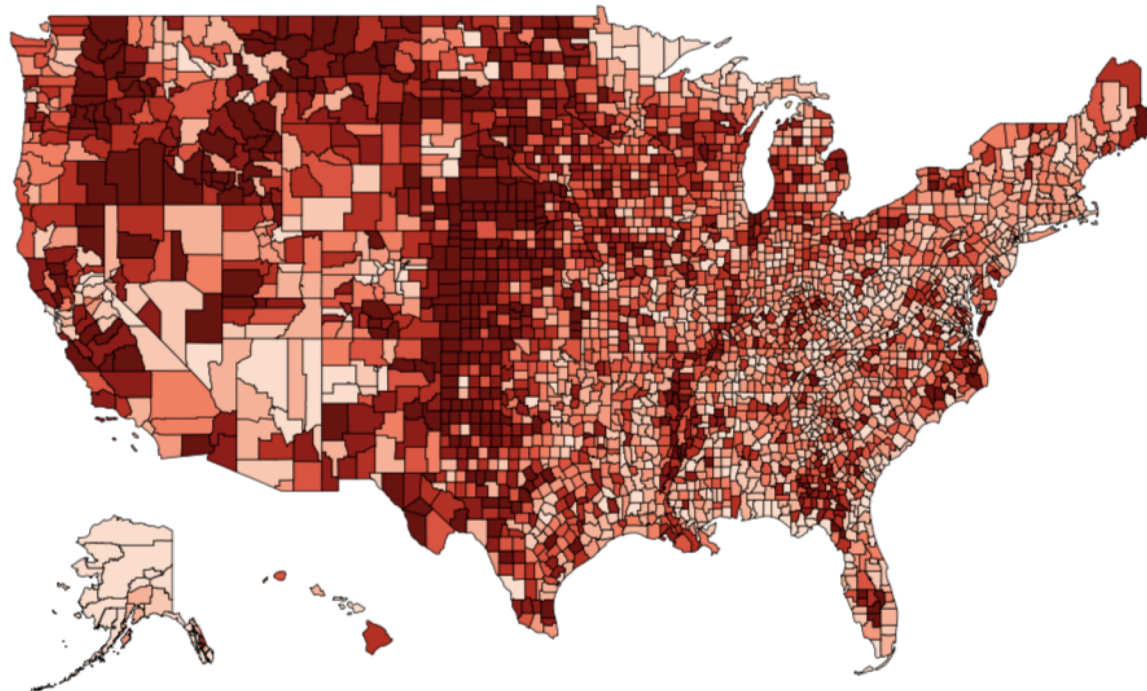
Weighted by Variety-Level US Import Share and County-Level 2016 Total Sector Employee Wage Bill

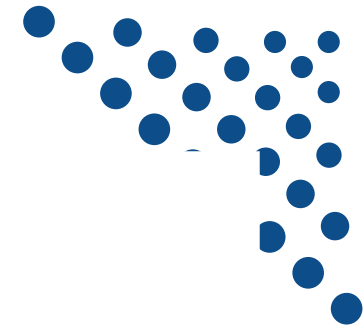


Trade War

Tariff Increase on US Exports

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





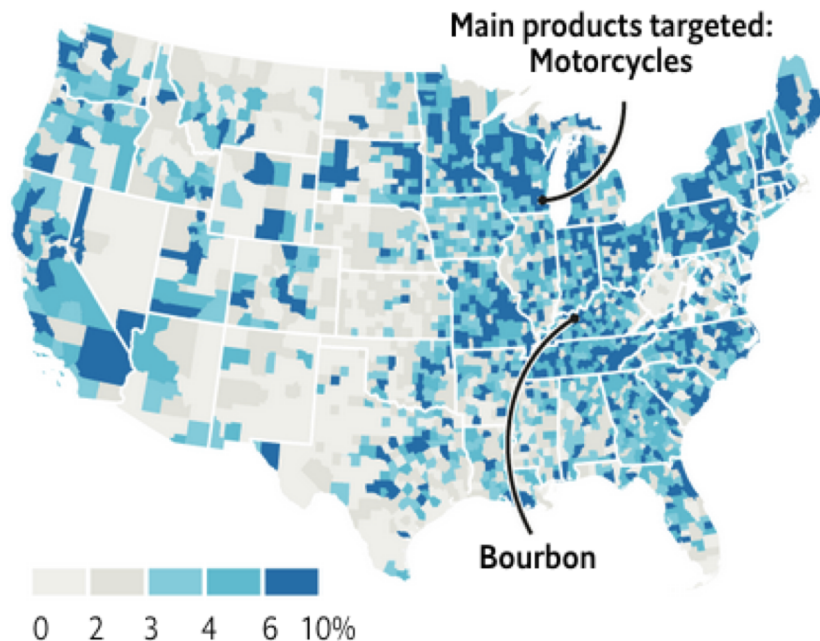
Trade War

Tariff Increases on US Exports: EU vs China

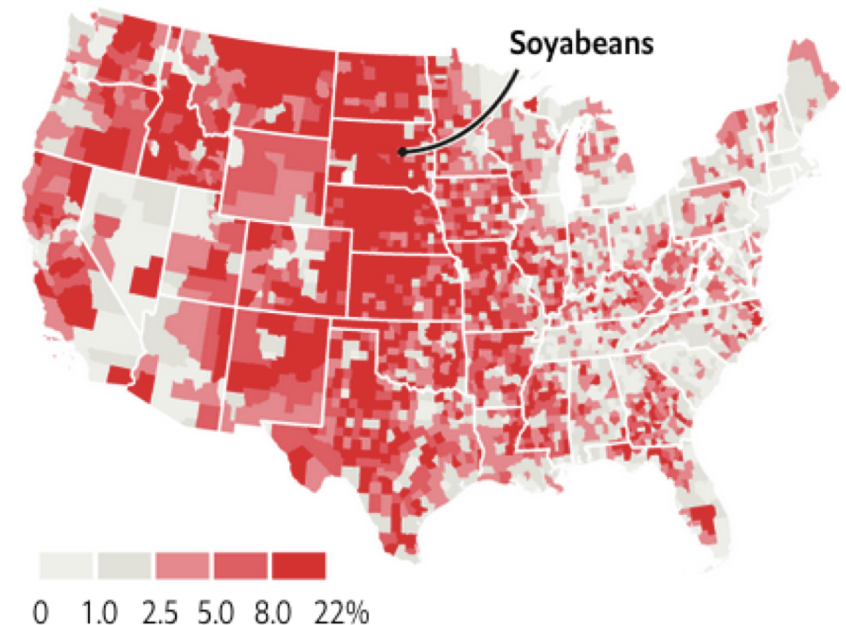
**America's trading rivals have aimed tariffs at Trump voters:
Europe in the Rust Belt, China in the Great Plains**

Share of counties' exports affected by retaliatory tariffs, %

The EU's tariffs

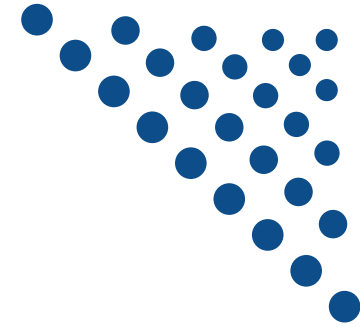


China's tariffs

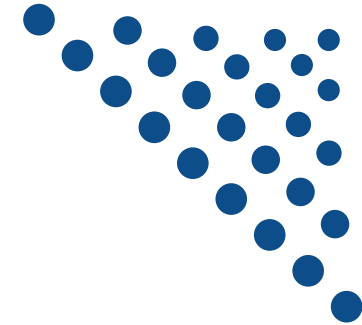


Source: *Economist* 4/27/19

Alan V. Deardorff - www.fordschool.umich.edu  UNIVERSITY OF MICHIGAN



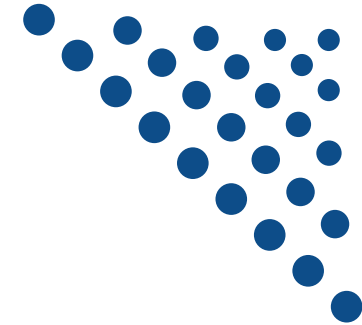
Trade Talks



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

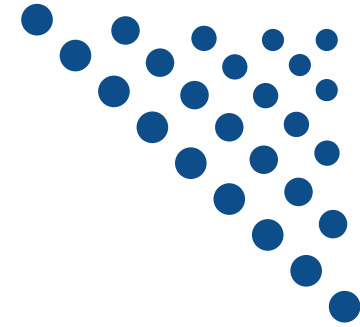


Trade Talks

• 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

Trade deal
nearing

Talks could stretch
for 'months'

Little sign
of progress

Anticipation of a completed trade deal

China-US Trade Talks II: Headlines

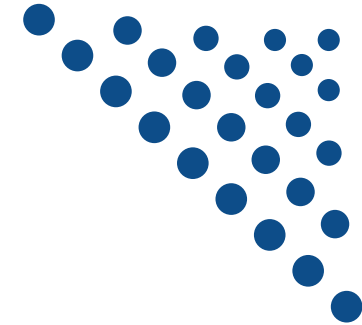
- Nov 29, WSJ: U.S., China Exploring Deal
- Dec 4, WSJ: Trump Names Lighthizer as Trade Representative
- Dec 30, FT: China and US hail 'positive' start to trade talks
- Jan 7, WP: Trade talks open in Beijing as U.S.-China dispute deepens
- Jan 9, FT: China and US still far from a deal after talks offer 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 China Trade Talks Resume
- Jan 31, WSJ: China trade talks 'going well'
- Feb 6, WSJ: U.S.-China Trade Deal Nearing
- Feb 13, WSJ: Outline of a 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 US-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**

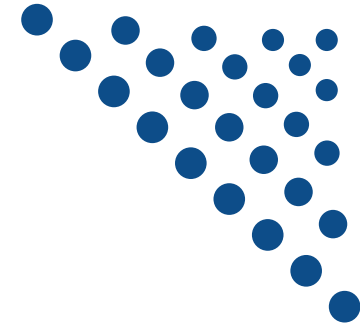
- Government subsidies to state-owned companies
- Chinese purchases of U.S. farm and energy products and services
- China's market-opening efforts in sectors such as financial services and manufacturing
- Improving its protection of U.S. intellectual-property rights
- Pressure on U.S. companies to share 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

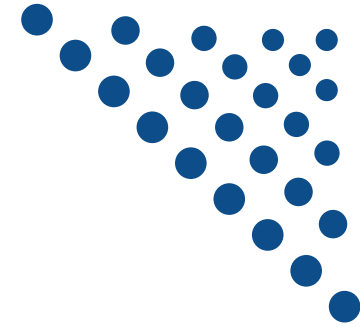
- **What Might a China-US Trade Deal Include?**
 - US wants (per FT, 3/25/19):
 - Huge Chinese purchases of US exports, to reduce US trade deficit
 - Liberalization of market access for US goods and services
 - Reform of Chinese industrial policy, especially “forced transfers” of IP
 - US permitted to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

Trade Talks

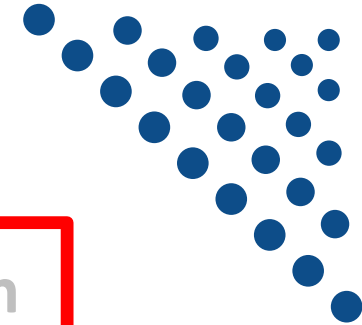


• Latest News

- On Sunday May 4, Trump tweeted that he would
 - o Raise tariffs on Friday from 10% to 25% on the \$200 billion from last year
 - o Impose 25% tariffs on the rest of China exports if China does not accept his demands
 - o Reason: China backtracking on promise to reduce subsidies
- China's negotiators are coming to DC anyway



NAFTA → USMCA



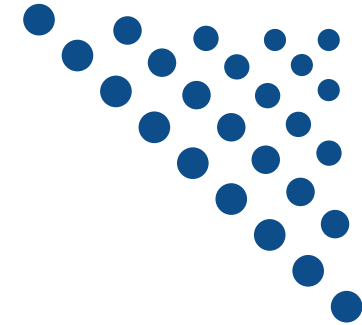
Trump's Trade Actions

- 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

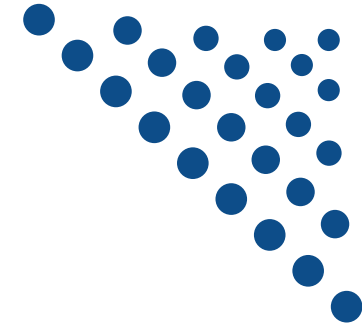
- **NAFTA is**

- 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)

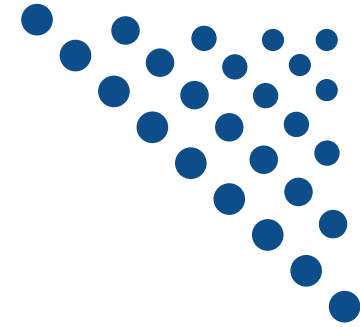


NAFTA → USMCA

- **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

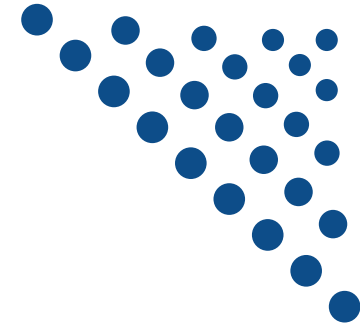
NAFTA → USMCA



• 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

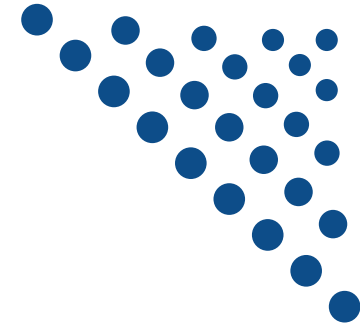
NAFTA → USMCA



- **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

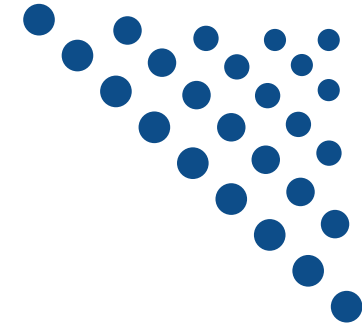
NAFTA → USMCA



- **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

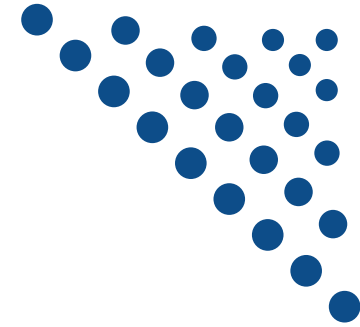


- **News from Michigan**

- April 24, MLive:

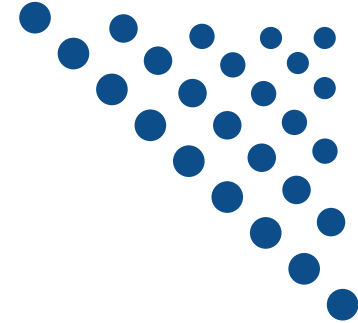
Trump's trade deal wins big praise from Michigan's Big Three automakers





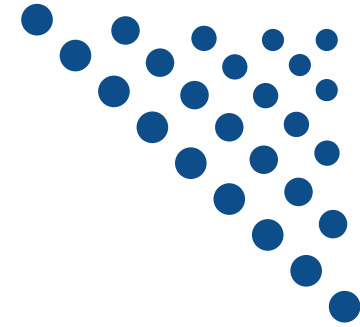
Conclusion

Conclusion



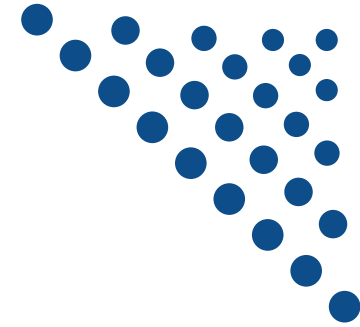
- **Trump's trade actions in 2018**
 - In all states, but especially Michigan
 - Raise prices to consumers
 - Raise costs to producers
 - Alienate other countries

Conclusion



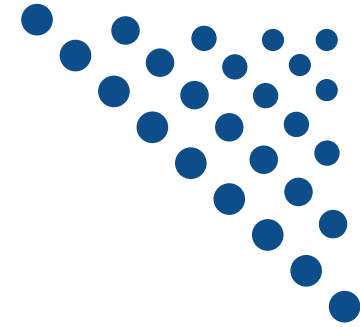
- **May they serve any purpose?**
 - Not to reduce trade deficit(s)
 - Tariffs may reduce both exports and imports
 - They do not change overall trade balance
 - Mar 6, 2019, NYT:
 - “The United States trade deficit in goods ballooned to its largest level in history, reaching \$891.3 billion in 2018,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