

# 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.



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## 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*



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## 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

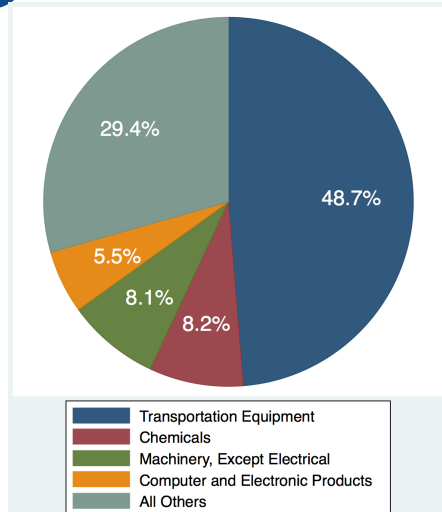
- Trades more than most states
- Mostly exports and imports cars and car parts
- Trades most with Canada and Mexico

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

By Value, \$bil.			By Average* Rank		Per GDP		
1	California	613	1	Michigan	1	Louisiana	40.1
2	Texas	528	2	Texas	2	Michigan	39.3
3	New York	205	3	Louisiana	3	Kentucky	38.5
4	Illinois	201	4	Illinois	4	Texas	32.1
5	Michigan	200	5	Kentucky	5	Tennessee	32.1
6	New Jersey	147	6	Tennessee	6	South Carolina	31.4
7	Florida	130	7	New Jersey	7	Indiana	26.2
8	Georgia	129	8	Indiana	8	Illinois	24.5
9	Washington	126	9	South Carolina	9	New Jersey	24.4
10	Pennsylvania	122	10	California	10	Washington	24.1

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

## Michigan Exports, by Product: 2017



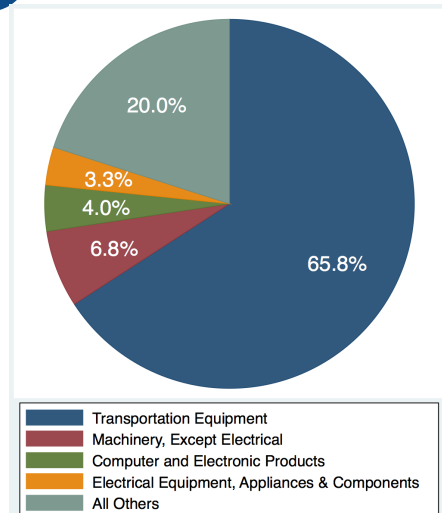
Product	Value (\$ B)
Transportation Equipment	\$29.2
Chemicals	\$4.9
Machinery, Except Electrical	\$4.9
Computer and Electronic Products	\$3.3
All Others	\$17.6
<b>Grand Total</b>	<b>\$59.9</b>

Source: International Trade Administration



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## 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



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# 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 (\$)

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
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?

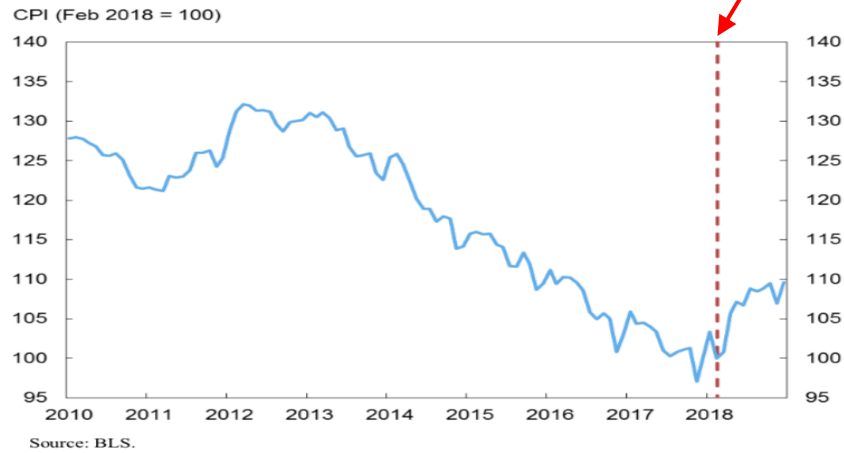
- Consumers
  - Washers (and dryers!) both increased in price by about 12% (per Flaaen et al. 2019)
    - Note that the tariff was levied on washers only, not dryers]
    - "consumers bore between 125 percent and 225 percent of the costs" (NYT 4/21/19)
  - US appliance prices (I don't have graph for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





# Tariffs on Washing Machines

Figure 2: Major Appliance CPI



Source: 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.



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# Tariffs on Steel and Aluminum



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## 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?

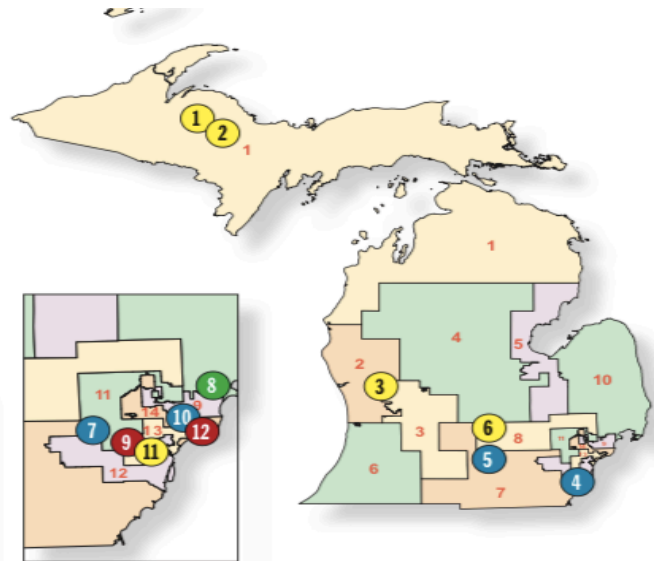
- US producers of steel and aluminum
  - Steel: AISI lists 12 producers in Michigan
    - AISI = American Iron & Steel Institute
  - Aluminum: Thomas lists 76 suppliers in Michigan

# Steel Produced in Michigan

<b>AISI MEMBER FACILITIES</b>	12
<b>JOBS 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

- 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?

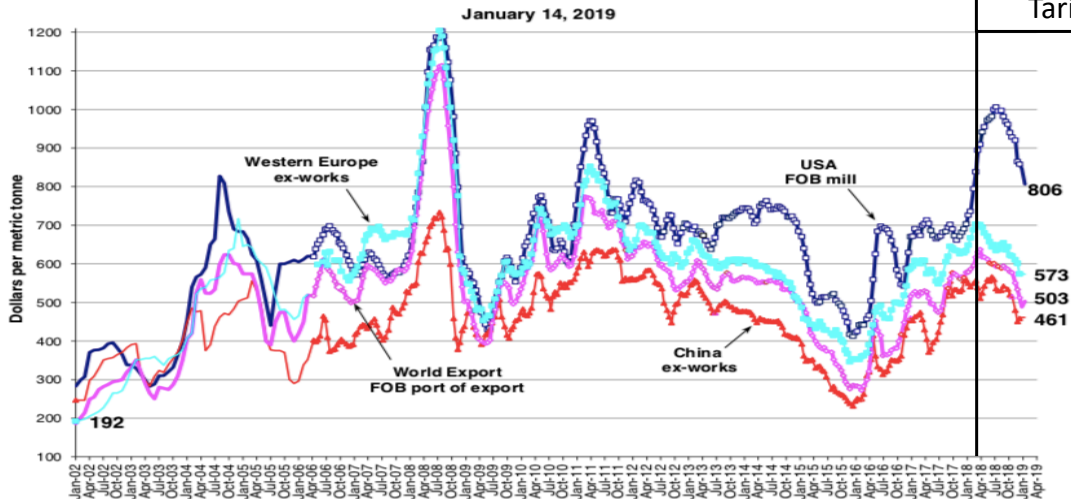
- US users of steel and aluminum pay higher prices
  - o Most obviously the car companies but many others

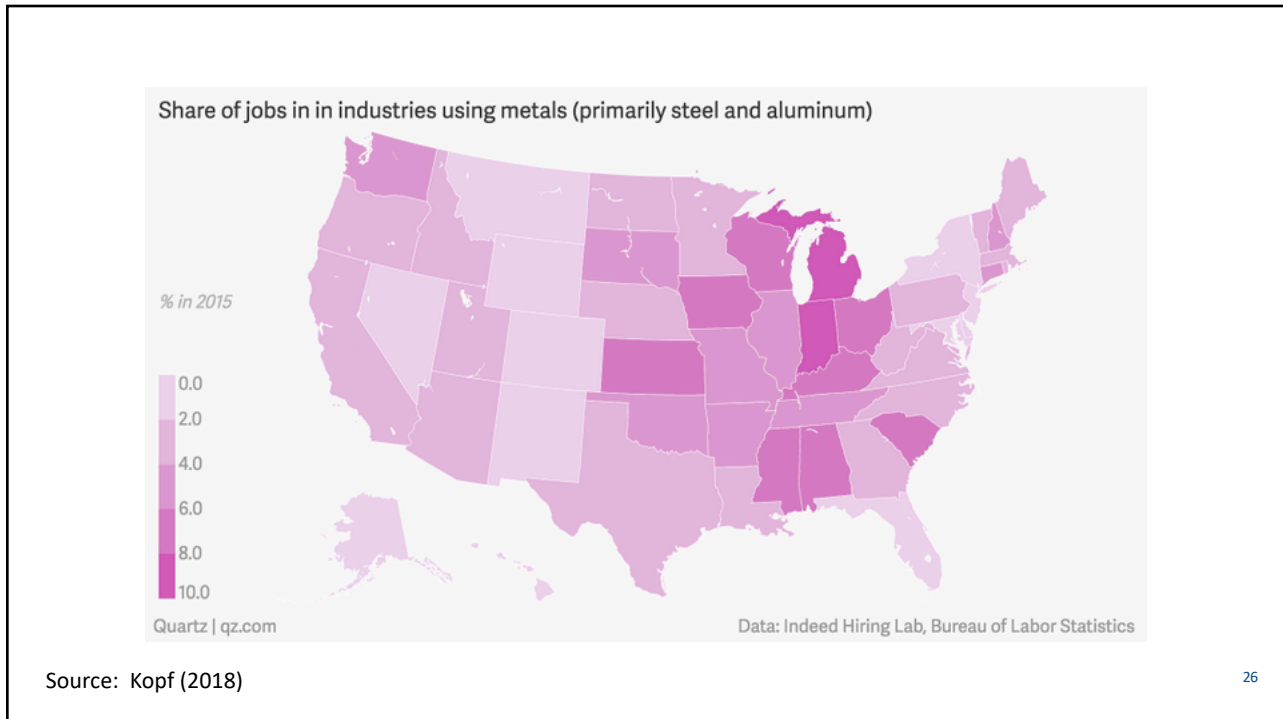
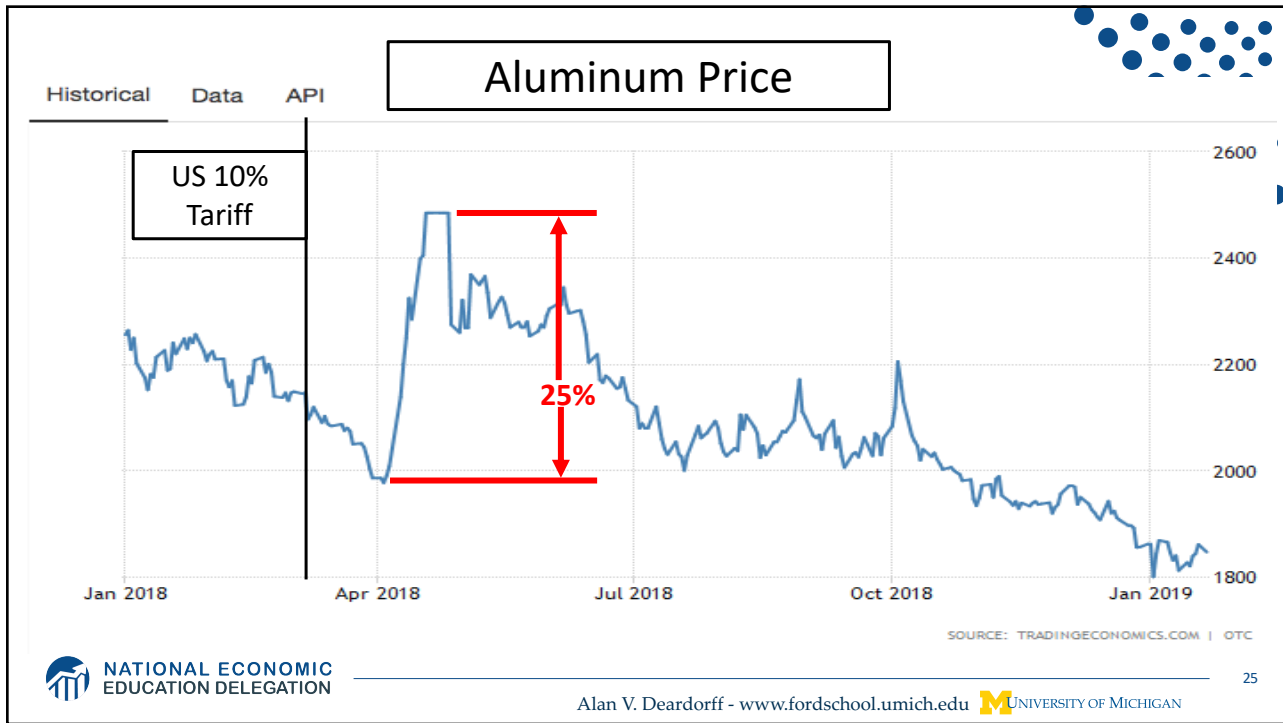
# SteelBenchmarker™

## Steel Prices

### SteelBenchmarker™ HRB Price

USA, China, Western Europe and World Export  
Track data, Jan. 2002 - March 2006; SteelBenchmarker data begins April 2006





# 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



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## 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



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## 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



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## 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.”



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# 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

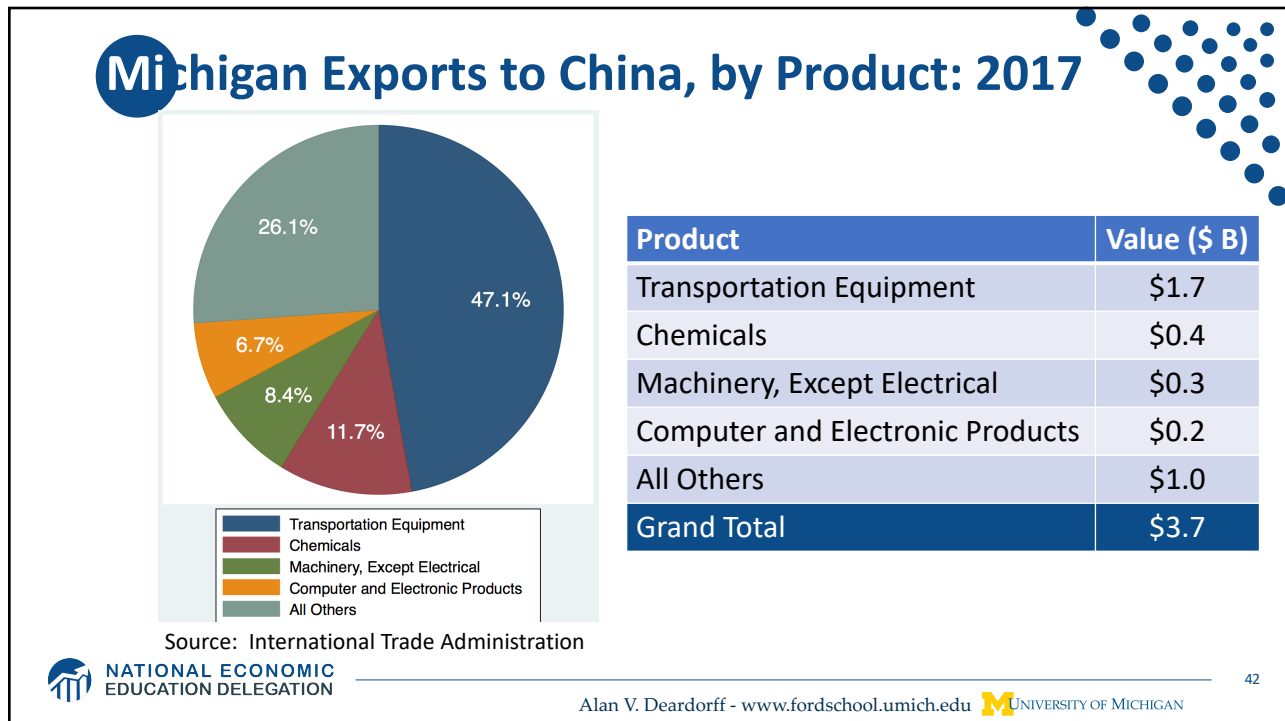
## China

### • What’s the point?

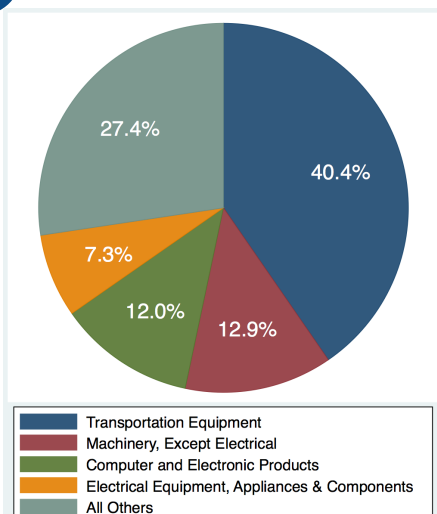
- To get China to stop its IP practices?
- To reduce the US bilateral trade deficit with China?
- To stop China’s rise as an economy and as a world power?

### • Who will “win”?

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



## Michigan Imports from China, by Product: 2017



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



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## 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
  - o (Compare to soybean exporters, who compete with Brazil)
- Michigan's imports from China are mostly similar to other states'
  - o Some can be bought from other countries



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# Trade War



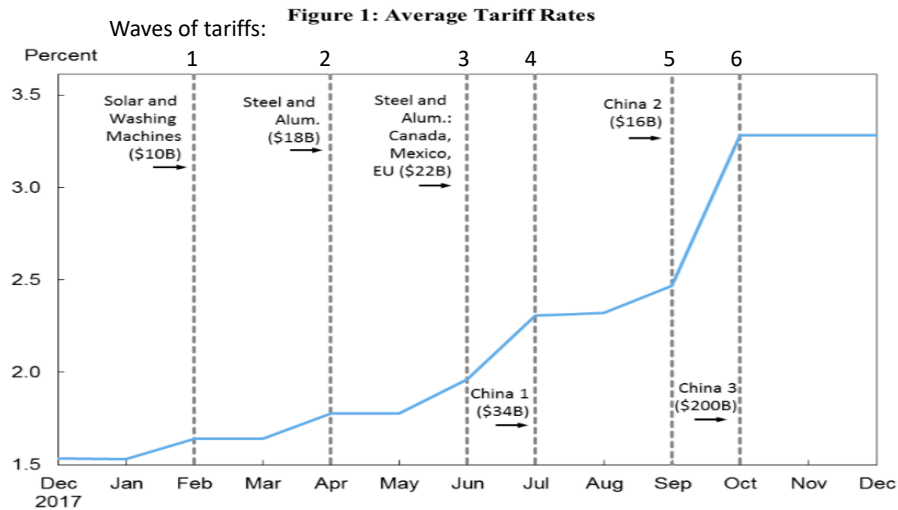
## Trade War

### • 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



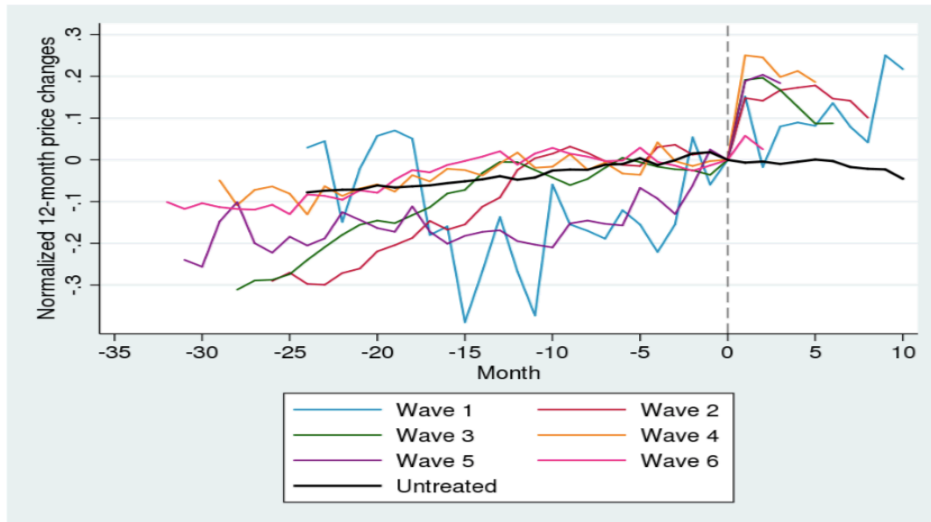
Source: US Census Bureau; USTR; USITC; authors' calculations.

Source: Amiti, et al. 2019.



# Trade War

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



Source: Amiti, et al. 2019.





# 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.



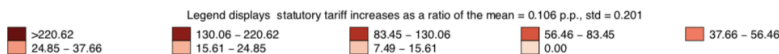
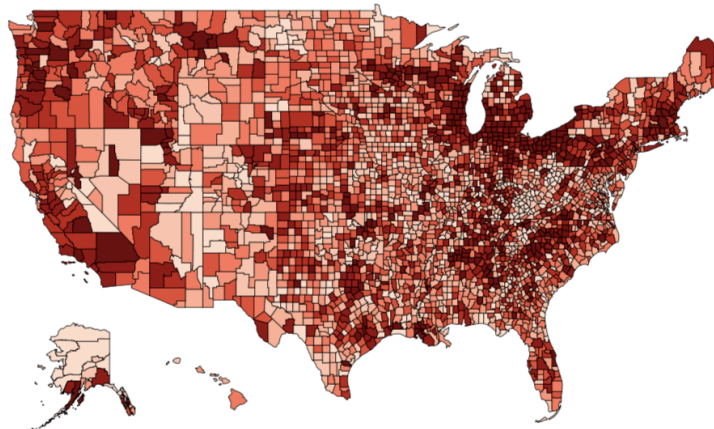
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# Trade War

## Tariff Increase on US Imports

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



Source: Fajgelbaum, et al. 2019.



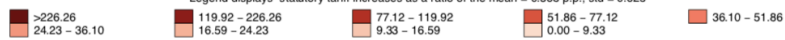
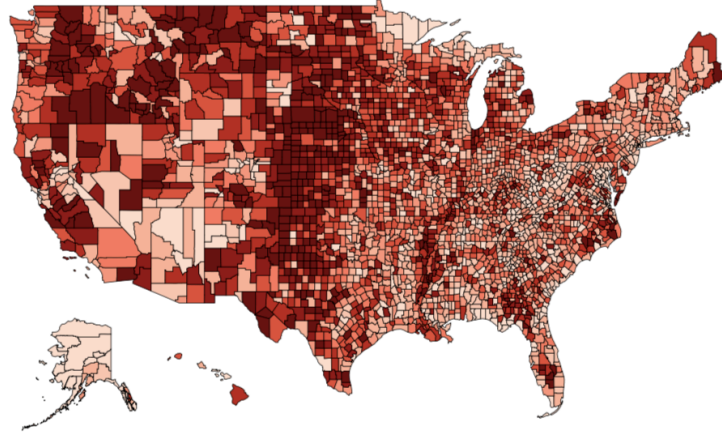
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# Trade War

## Tariff Increase on US Exports

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



Source: Fajgelbaum, et al. 2019.

# 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:



## China-US Trade Talks II: Headlines

- Nov 29, WSJ: U.S., China Exploring Preparatory Trade Talks
- 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 set to resume trade talks after talks in Beijing 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 US-China Trade Talks Resume
- Jan 31, FT: US-China trade talks 'going well'
- Feb 6, FT: US-China Trade Deal Nearing
- Feb 13, FT: US-China Trade Deal Nearing
- 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'
- 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, Sturring Anticipation of a Completed Trade Deal

**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**



## 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
  - o Reimpose tariffs, or
  - o Leave them in place



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## Trade Talks

### • What Might a China-US Trade Deal Include?

- US wants (per FT, 3/25/19):
  - o Huge Chinese purchases of US exports, to reduce US trade deficit
  - o Liberalization of market access for US goods and services
  - o 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:
  - o Removal of US tariffs



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# 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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