

Osher Lifelong Learning Institute, Fall 2019
**What Economists Know About Important
 Policy Issues**

Lecture 3: Trade and Globalization

October 11, 2019

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 National Economic Education Delegation



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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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Who Are We?

- **Honorary Board: 44 members**

- 2 Fed Chairs: Janet Yellen, Ben Bernanke
- 6 Chairs Council of Economic Advisers
 - o Furman (D), Rosen (R), Bernanke (R), Yellen (D), Tyson (D), Goolsbee (D)
- 3 Nobel Prize Winners
 - o Akerlof, Smith, Maskin

- **Delegates: 367 members**

- At all levels of academia and some in government service
- All have a Ph.D. in economics
- Crowdsource slide decks
- Give presentations

- **Global Partners: 42 Ph.D. Economists**

- Aid in slide deck development

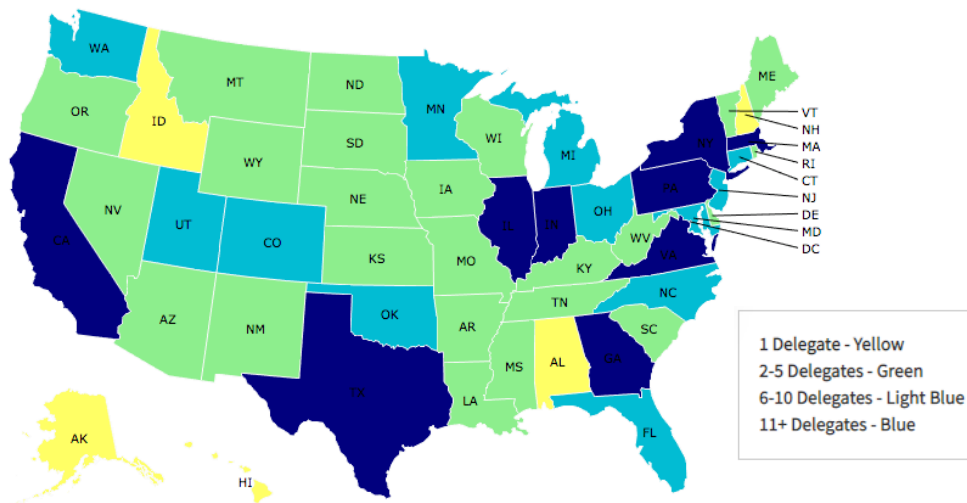


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Where Are We?



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Credits and Disclaimer

- **This slide deck was authored by:**

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- **Disclaimer**

- NEED presentations are designed to be nonpartisan.
- It is, however, inevitable that the presenter will be asked for and will provide their own views.
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Outline

- **Globalization**
- **International Trade**
- **Trade Deficit**
- **Trade Wars**



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What is Globalization?

- **The growing interdependence of the world's:**

- Economies
- Cultures
- Populations

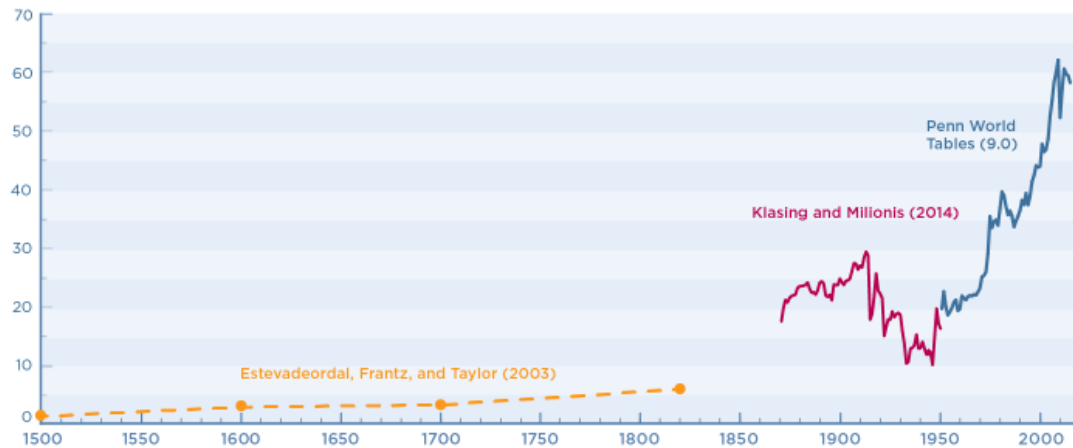
- **Brought about by cross-border flows of:**

- Goods and services
- Technology
- Investment
- People
- Information

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Trade has skyrocketed in the past century

World trade as percent of world GDP (1500-2014)



Note: This chart displays data from three sources. Data from 1500 to 1820 is the average of the upper and lower bound and only includes the years 1500, 1600, 1700, and 1820. Data not available from 1821-1869.

Sources: See chart, "Globalization over 5 centuries," at <https://ourworldindata.org/trade-and-globalization> for full citations.

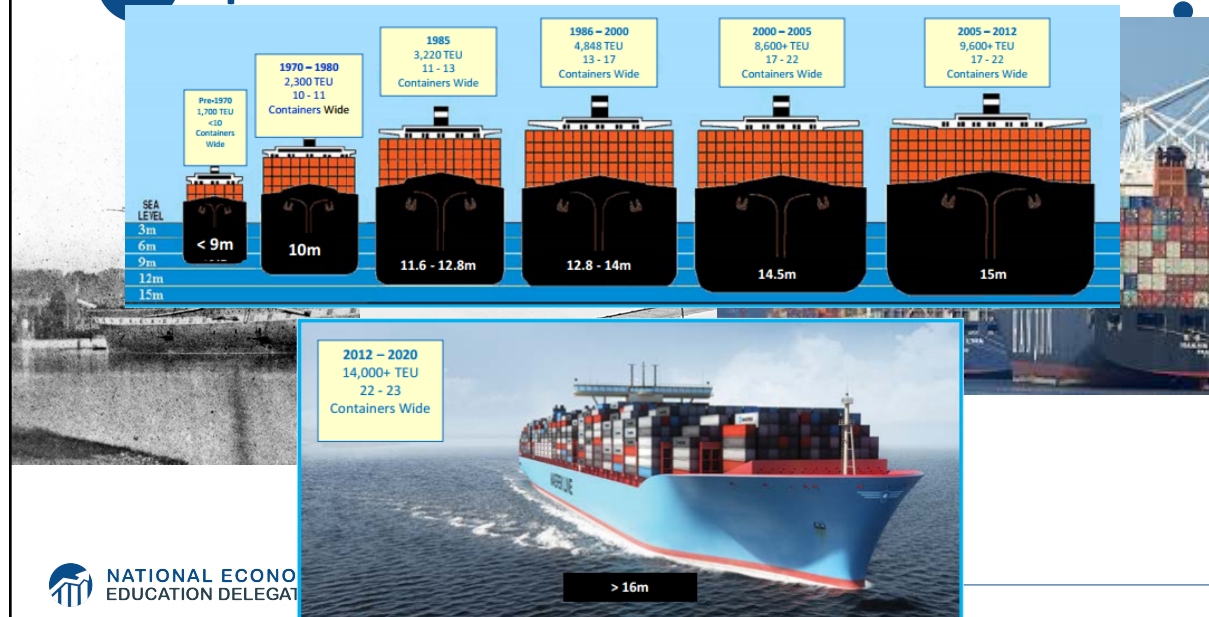
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What Drives Globalization?

- Transportation
- Technology
- International Cooperation

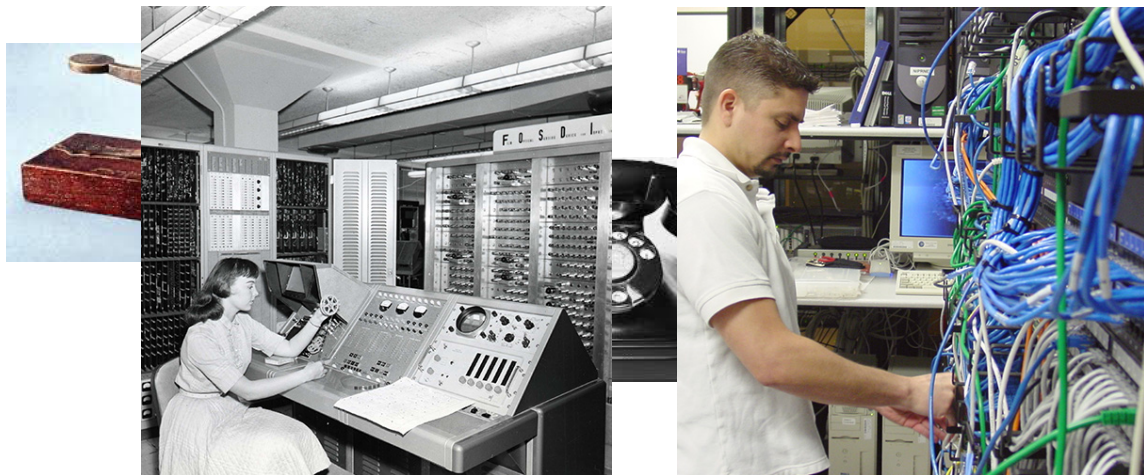
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Transportation



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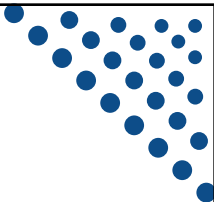
Technology



International Cooperation



1995
World Trade Organization (WTO)
The modern trading system governed by rules is established, replacing the GATT.



International Trade

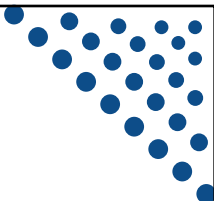
Exports and Imports



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Exports and Imports

- **Exports:** goods or services sold to another country
- **Imports:** goods or services bought from another country

US exports (2016 shares)				US imports (2016 shares)			
Goods		Services		Goods		Services	
Planes	4.5%	Bus/Fin/Ins	34%	Cars	8.2%	Bus/Fin/Ins	34%
Crude Petroleum	4.3%	Travel	27%	Crude Petroleum	4.7%	Travel	24%
Cars	4.2%	Royalties	17%	Computers	4.1%	Transport	19%



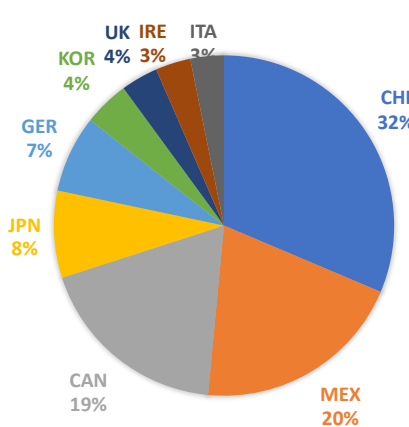
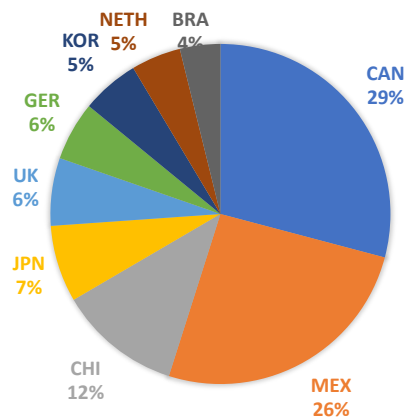
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Top US Trade Partners (Goods, 2018)

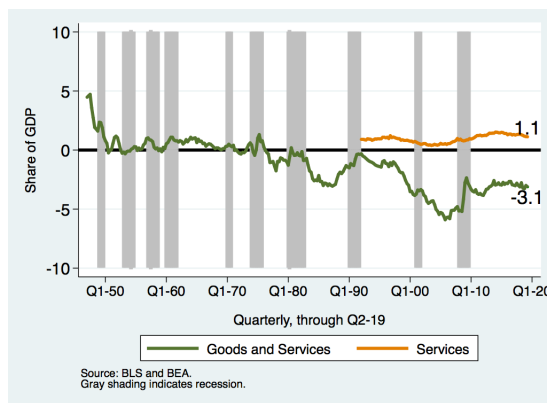
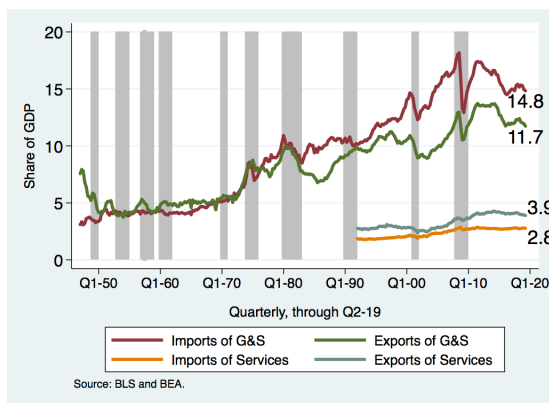
- Top 10 US export destinations
- Top 10 US import sources



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Importance of US Trade

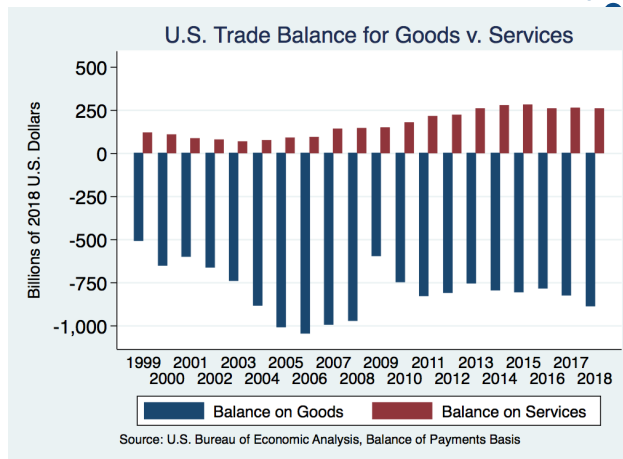
- US trade as % of GDP
- US trade balance as % of GDP



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U.S. Trade Deficits (2018)

- Overall, a nearly \$621 Billion trade deficit (3% of GDP)
- **GOODS**
 - trade deficit over \$891 Billion
- **SERVICES**
 - trade *surplus* of about \$270 Billion



Why Do Countries Trade?

- Competition
- Varieties
- Efficiency

Why Might Efficiency Differ Across Countries?

- **Labor**
 - Skilled or unskilled
- **Technology**
 - Some countries have firms that produce some goods well
 - Other countries have firms that produce other goods well
- **Environment**
 - Cold/Warm Wet/Dry Sunny/Cloudy
- **Land**
 - Rocky, soil, fertile, barren
 - Tundra, desert, grasslands, forest



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Trade Contributes to Growth

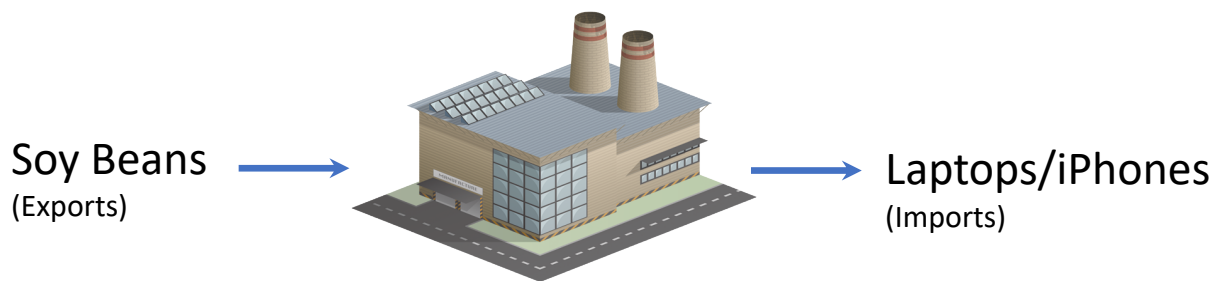
- **EFFICIENCY:**
 - Allocates production across countries efficiently so that countries can specialize in what they are best at producing.
- **VARIETIES:**
 - More choice for consumers.
 - Better inputs for our production.
- **COMPETITION:**
 - Brings in cheaper goods.
 - o Makes consumers better off.
- **ECONOMIES OF SCALE:**
 - Trade makes some industries bigger, more cost efficient. Lowers prices.



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How to Think About Imports

- Think about international trade as the introduction of a new technology.



What Does the Data Say? Trade Lowers Prices for Consumers

- **Effect of import surge from China: 2000-2007**
 - Prices would be about 10% higher without this import surge.
 - Benefits for U.S. consumers of \$100,000 per lost manufacturing job.
- **Do rich or poor benefit more from lower import prices?**
 - Evidence is mixed.

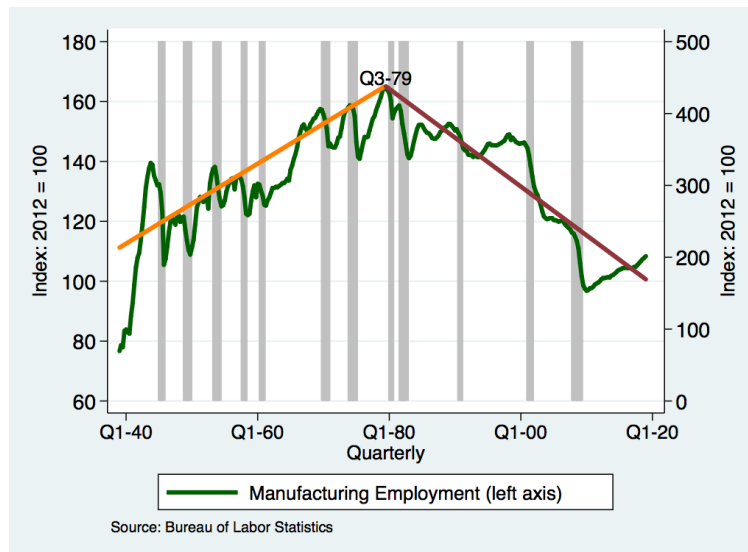


Why is the public turning against trade?

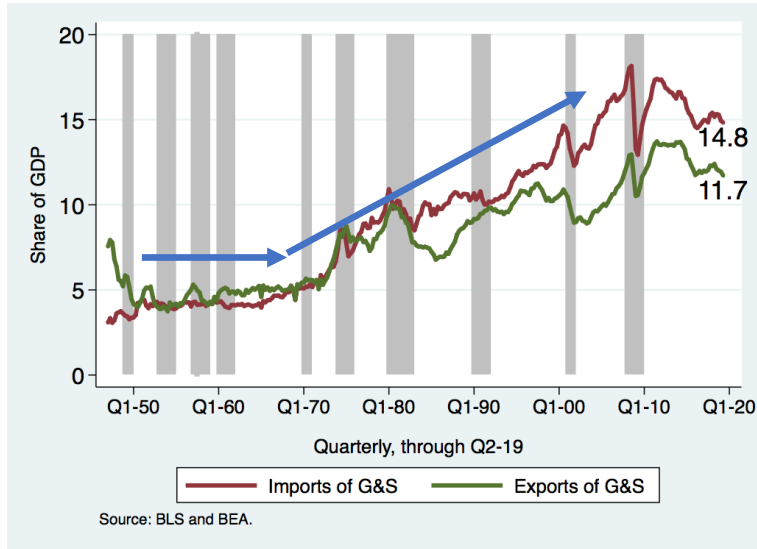
- **Gains from trade are very large for the economy, BUT**
 - Not always obvious to consumers. Why are prices lower at WalMart?
 - Not always that large per consumer: consumers might save \$50/year on some imported goods
 - For 300 million consumers, \$50/year would be \$15 billion per year savings to the country!
- **Costs of trade are very high for some workers and groups, and these costs have not been sufficiently appreciated or addressed by policymakers (or economists!)**



The Basic Issue: Inverted V of Jobs in Manuf.

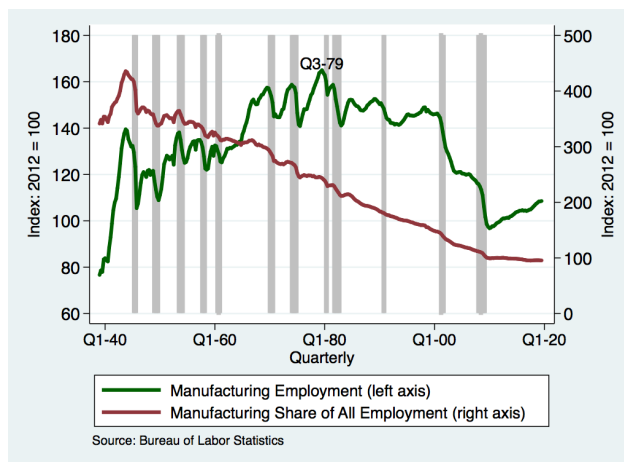


“International Trade is Surely a Contributor!”



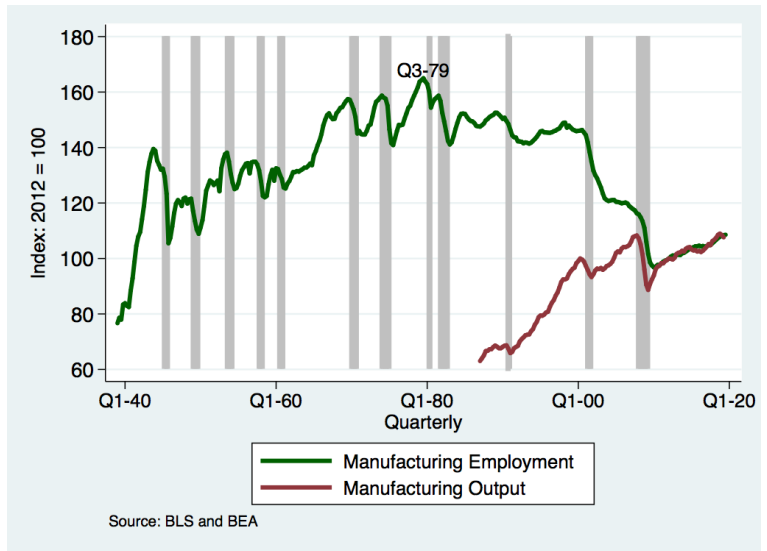
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But There is No V in the Fraction of Jobs in Manufacturing



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And Manufacturing Output Keeps on Growing



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Not That Trade Has Been Absolved of all Ills: DISTRIBUTIONAL IMPACTS

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Intuition on Distributional Impacts

• Jobs

- U.S. imports more of some goods
 - Reduces jobs on those industries
- U.S. exports more of other goods
 - Creates jobs in those industries
- ***Are there different kinds of workers in these different industries?***
- ***Creates adjustment costs***

• Prices

- LOWERS the price on imported products
- RAISES the price on exported products
- ***Who buys which products?***



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What Does the Data Say? Trade Benefits Some Workers

• Trade liberalization raises wages at “most globalized” firms

- Wages higher because
 - lower tariffs on imported inputs used by firm
 - lower tariffs on products sold by exporting firms



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What Does the Data Say? Trade Hurts Some Workers

- **Some parts of US highly exposed to import competition.**
 - Workers tend to be “stuck” in these locations and/or industries.
 - So they suffer
- **Effects of Chinese import competition: 1990-2007**
 - Higher unemp, lower labor force participation & wages in exposed locations
 - Accounts for nearly 25% of manuf employment decline
- **Effects of NAFTA-led US tariff cuts on Mexico**
 - For workers without a college degree
 - Up to 8% point lower 1990s wage growth in highly exposed *locations*
 - Up to 17% point lower 1990s wage growth in highly exposed *industries*

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Costs of Trade

- We have known for almost 80 years that trade with low-wage countries will lower the earnings of low-wage workers as a group in the U.S.A. (Stolper-Samuelson 1941)
- Perhaps more importantly, however, is that the adjustment costs, or what some call transition costs, are much larger than previously thought. People do not like to move, and getting laid off can be very traumatic.
- Recent economics studies have estimated the costs of trade across many different groups.
 - Inequality
 - Adjustment costs



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Understanding Adjustment Costs

• FIRMS

- Searching for new workers
- Training
- Adjusting to the new employees/integration
- Firing costs/severance pay



• WORKERS

- Psychological costs of leaving a job, friends
- Loss of firm-specific or industry-specific skills
- Search costs for a new job
- Relocation costs (e.g. moving to a new location)



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Estimates of Adjustment Costs

• FIRMS

- Estimates from developed countries suggests that costs are high.
- High adjustment costs cause firms to hire and fire in large groups, rather than gradually.
- Estimates from developing countries suggest that firm-level adjustment costs are much lower than in developed countries.

• WORKERS

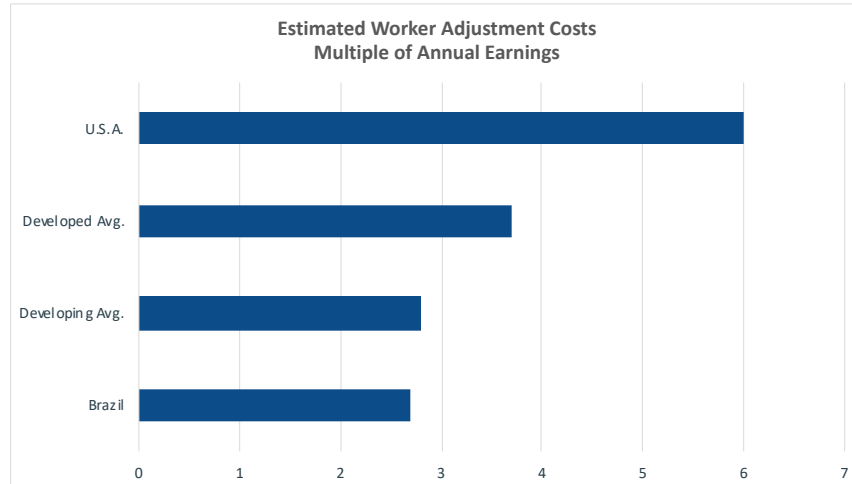
- New estimates in the last 10 years.
- Estimate costs by looking at wage differences and how many workers do NOT move. Adjustment costs must be at least that high.



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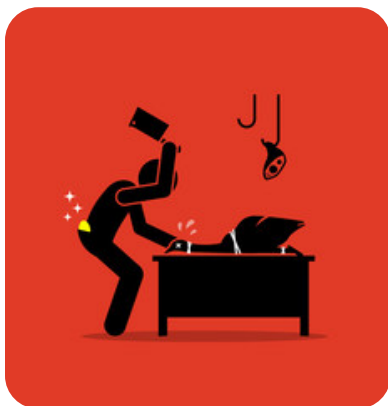
Estimated Costs to Workers of Changing Jobs



Characteristics of Adjustment Costs

- **Some regions get hit especially hard when imports increase**
 - Production of some goods is highly concentrated geographically.
 - USA: Detroit (autos), El Paso (apparel), South Carolina (Textiles).
 - Local unemployment rates can be very high, even when national rates are low.
- **Term “adjustment costs” understates impact on affected workers**
 - “Adjustment” may take a generation or more. Kids may take different jobs than parents.
 - For affected workers, the effect may be permanent:
 - Wages are never recovered.
 - Psychic costs of job loss can be very long-lasting and affect families .
- **Adjustment costs can reduce gains from trade significantly.**

Why Adjustment Costs Matter



- Undermine popular support for trade...
- ...which threatens to “kill the goose that lays the golden egg”.
- Adjustment costs reduce welfare.
- Adjustment costs suggest potential for efficiency gains through adjustment assistance.



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Not That Trade Has Been Absolved of all Ills:

TRADE DEFICIT



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Another Problem: Trade Deficit

- **Massive Trade Deficit**
 - 2.9% of US GDP
 - \$893 Billion in 2018 for goods
- **Massive Trade Deficit with China**
 - 2/3 of US Trade Deficit



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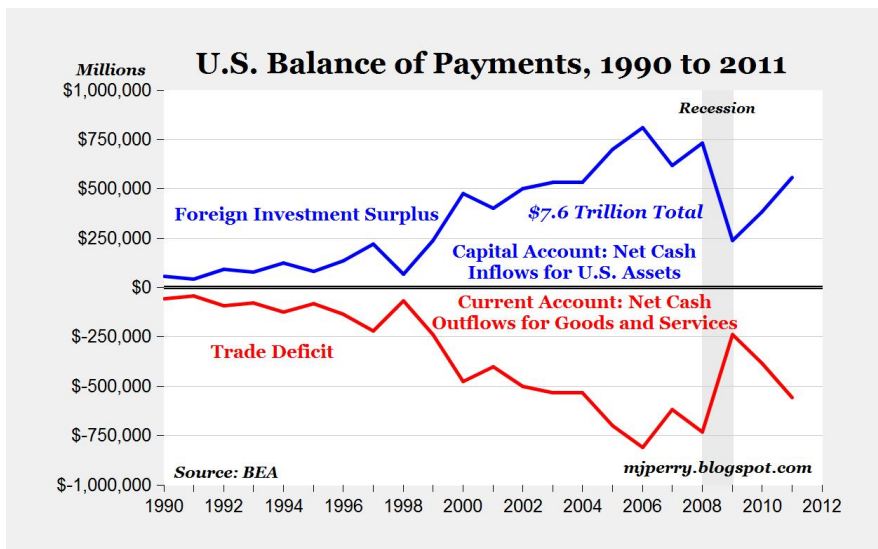
How to Think About the Trade Deficit

- **A trade deficit is when:**
 - VALUE of imports exceeds the VALUE of exports.
- **Why does this happen?**
- **International transactions include:**
 - Imports and exports of goods and services
 - ALSO: imports and exports of assets (investments)
 - Current Account
 - Capital Account
- **The TRADE DEFICIT only looks at the Current Account**



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Trade and Investment Flows Balance Out



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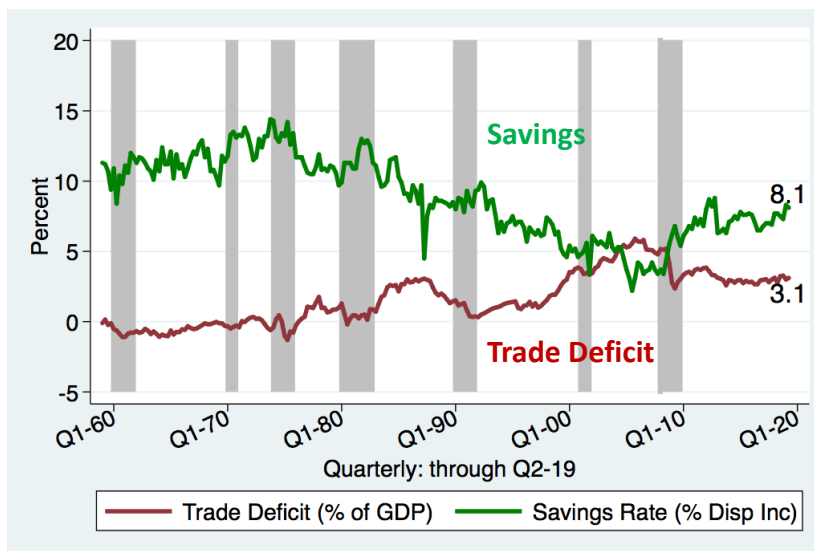
Balanced Budgets & Increased Savings

- Reducing federal borrowing would reduce pressure on trade deficits.
- More savings would mean more domestic investment and less borrowing from abroad.



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US Savings and the Trade Deficit

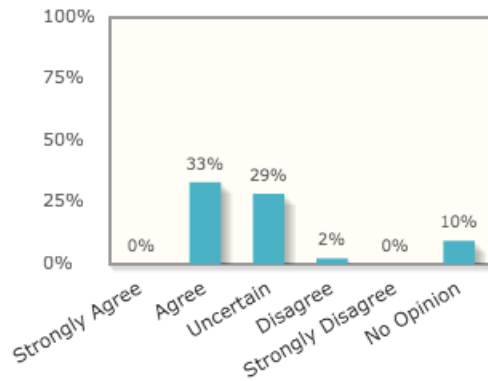


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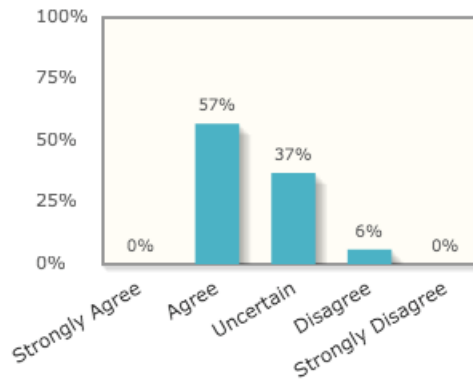
General Agreement Among Economists

If the US reduced its fiscal deficit, then its trade deficit would also shrink.

Responses



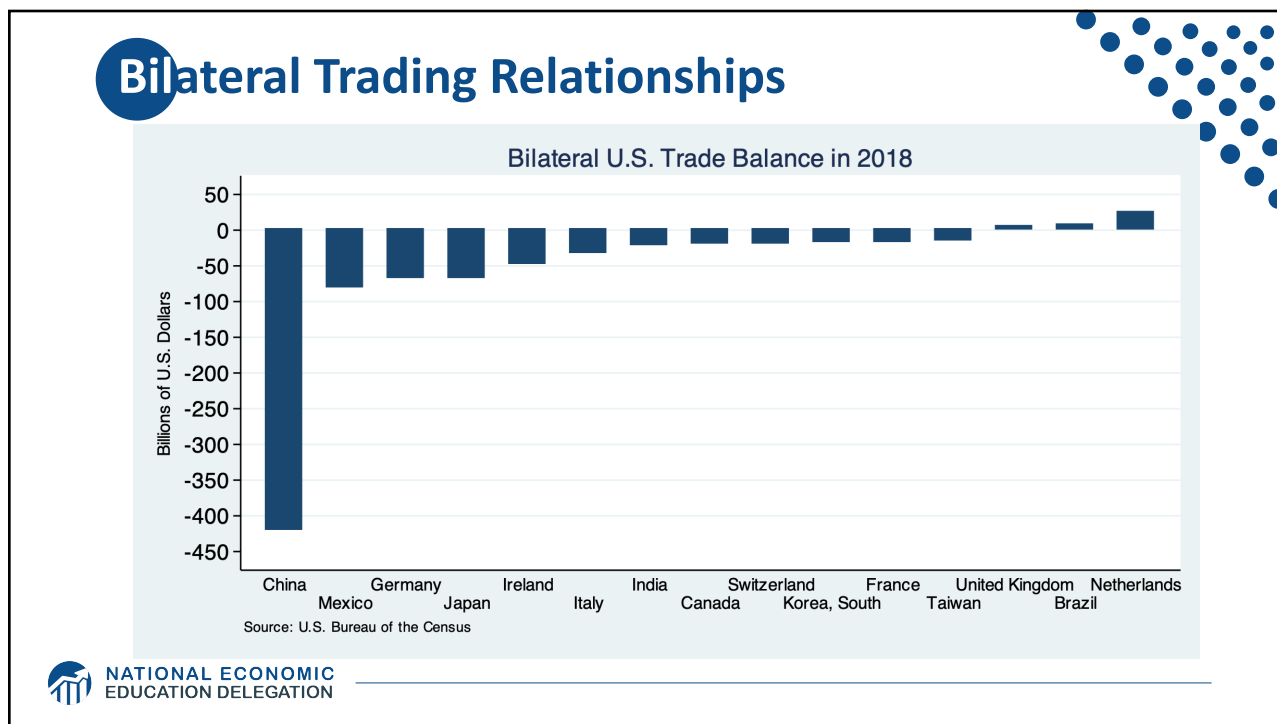
Responses weighted by each expert's confidence



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Tariffs

- Tariffs temporarily reduce imports of particular goods.
- Tariffs raise prices:
 - Final goods (consumers)
 - Intermediate goods (producers who use imported inputs)
 - Rising prices distort consumption and production decisions
- Tariffs invite retaliation, lowering demand for our exports.
- In the long run, the exchange rate adjusts to offset the tariffs because of the effects of borrowing: Tariffs, therefore, cannot correct a trade deficit.
- Tariffs lower overall welfare, while generating very large gains for small groups (e.g. A cost of 100 to many for a gain of 80 for a few).
- Tariffs are generally considered to be an inefficient way to help those people who are hurt by trade.

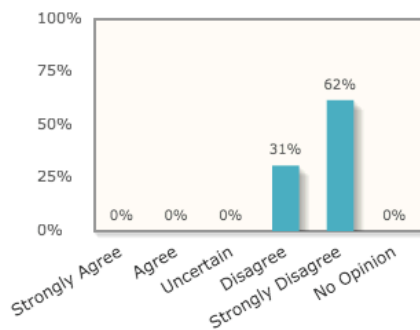


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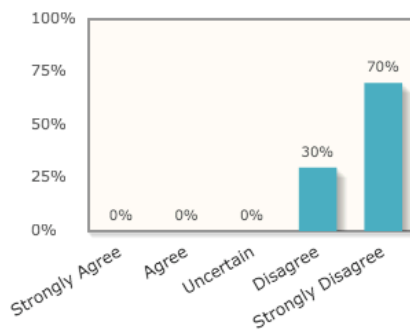
General Consensus of Economists on Tariffs

Adding new or higher import duties on products such as air conditioners, cars, and cookies — to encourage producers to make them in the US — would be a good idea.

Responses



Responses weighted by each expert's confidence



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Trade Summary

- Trade and growth are positively related.
- Gains from trade can be widespread (lower prices for consumers).
- Losses from trade can be highly concentrated.
- Tariffs reduce trade overall, thus imposing widespread losses to both producers (who use imported inputs) and consumers (who buy lower-priced imported goods).
- More direct policies can be more efficient and save gains from trade.



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U.S. Trade Policy: China, et al.



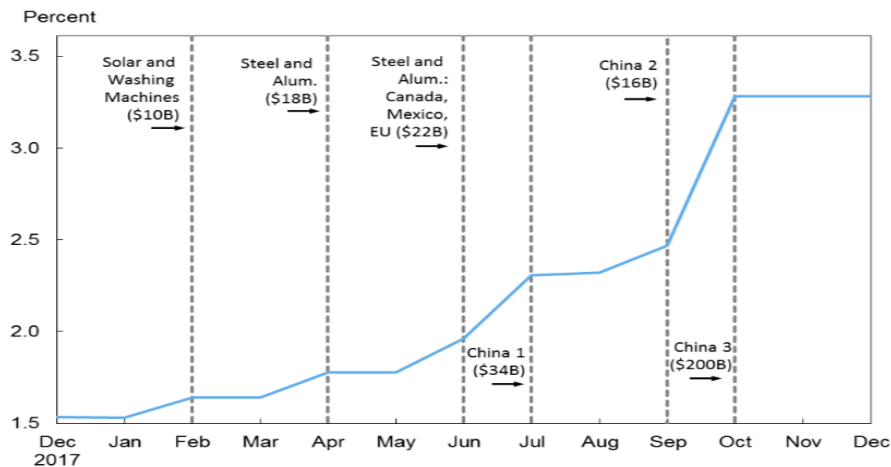
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Policies Have Been Raising U.S. Tariffs

Figure 1: Average Tariff Rates



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

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Trump's Trade Strategy

- **Trump objects to**
 - US trade deficits (bilateral and multilateral)
 - Loss of US manufacturing due to trade
 - Other countries' trade barriers
 - Other countries' (esp. China's) unfair practices
- **His strategy seems to be**
 - Threaten and then use tariffs to hurt others
 - Get them to negotiate changed behavior

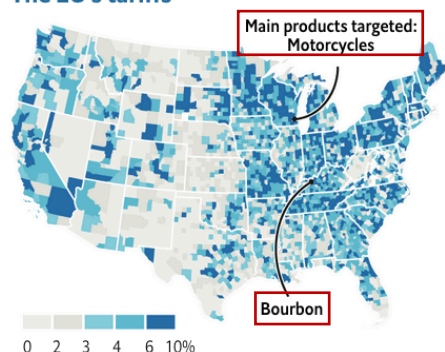
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Tariff Increases on U.S. Exports: EU vs China

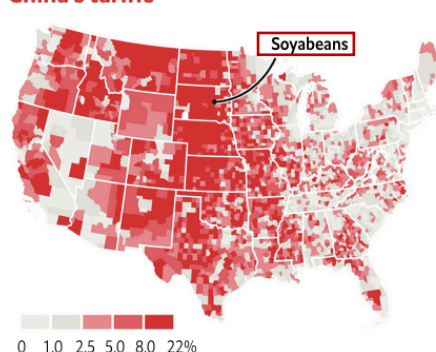
America's trading rivals have aimed tariffs at Trump voters: Europe in the Rust Belt, China in the Great Plains

Share of counties' exports affected by retaliatory tariffs, %

The EU's tariffs



China's tariffs



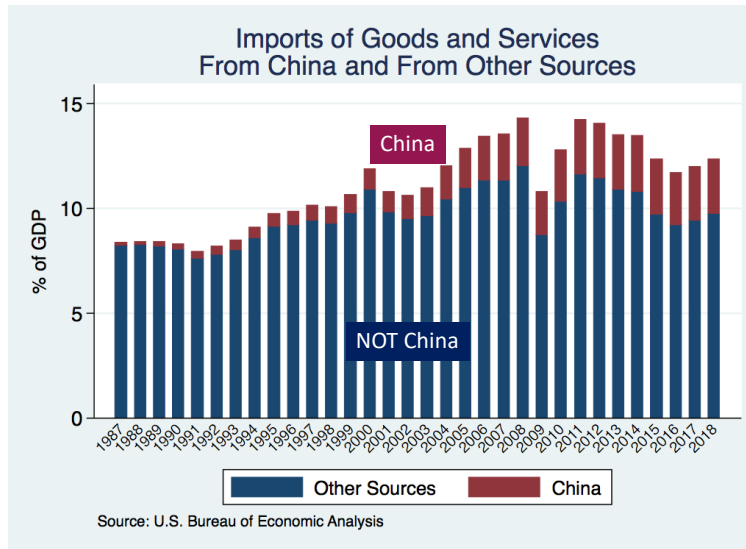
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The China Problem



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China: The Problem? The Solution?



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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
 - Removal on restrictions on Huawei

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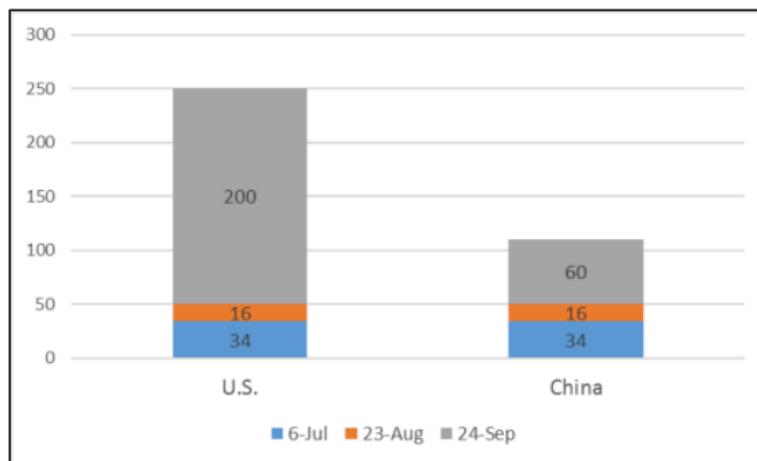
China Tariffs

What happened?

- **Aug 18, 2017:** USTR investigates “unfair trade practices” by China, mostly intellectual property violations
- **Apr 3 – Jul 6, 2018:** Tariff threats and counter threats, plus some negotiations.
- **Jul 6, 2018:** Round 1 of tariffs on \$34 billion exports
- **Aug 23, 2018:** Round 2 of tariffs on \$16 billion
- **Sep 24, 2018:** Round 3 of tariffs on \$200 billion (by US) and \$60 billion (by China)
- **Dec 1, 2018 – Aug 1, 2019:** Truces and negotiations, on and off
- **May 10, 2019:** Round 3 tariffs raised from 10% to 25%
- **Sep 1, 2019:** Round 4 of tariffs, on part of \$300 billion
- **Oct 15, 2019:** Raising some existing tariffs on \$250B from 25% to 30%.
- **Dec 15, 2019:** The rest of Round 4 of tariffs planned

Three Rounds of Tariff Hikes in 2018

Total Products Affected (\$ in billions) and Effective Dates



Source: USTR and Chinese Ministry of Commerce.

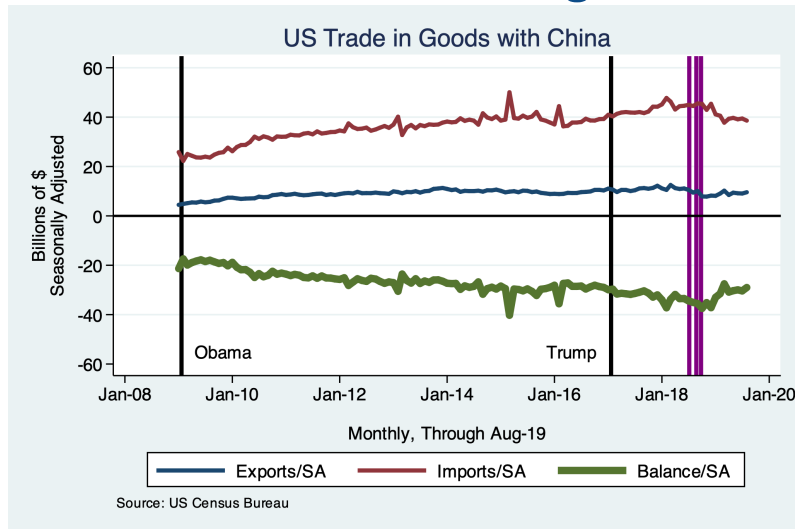
China Tariffs

Did it work?

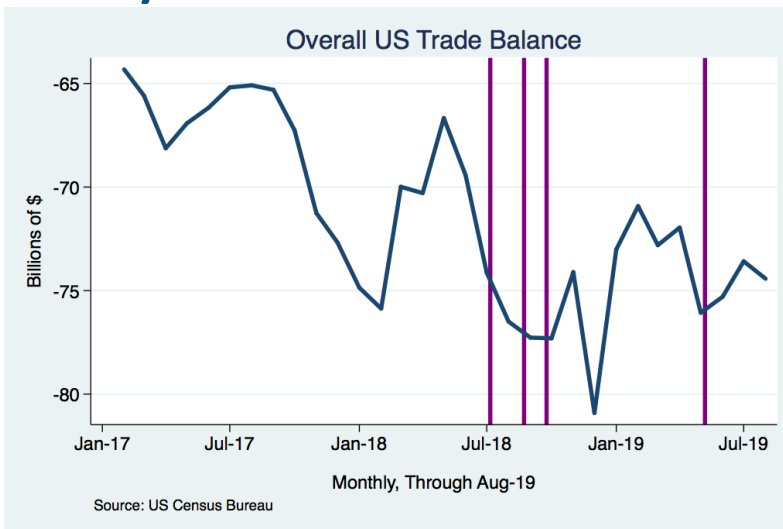
- Certainly not yet

- So far he's gotten only very minor concessions from China.
- Even the talks have faltered.
- But Prices are rising!

Trade Deficit Effects: It's Working!



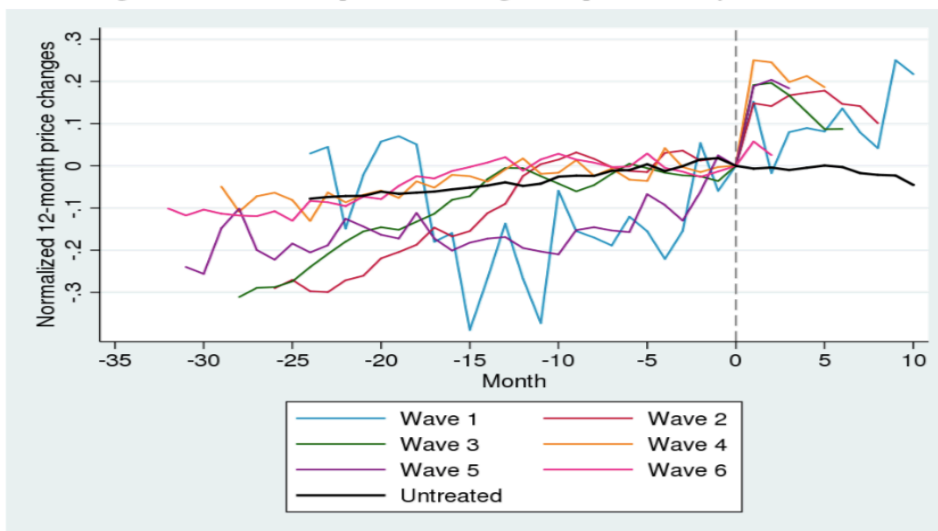
Maybe....Maybe Not...



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Raising Import Prices

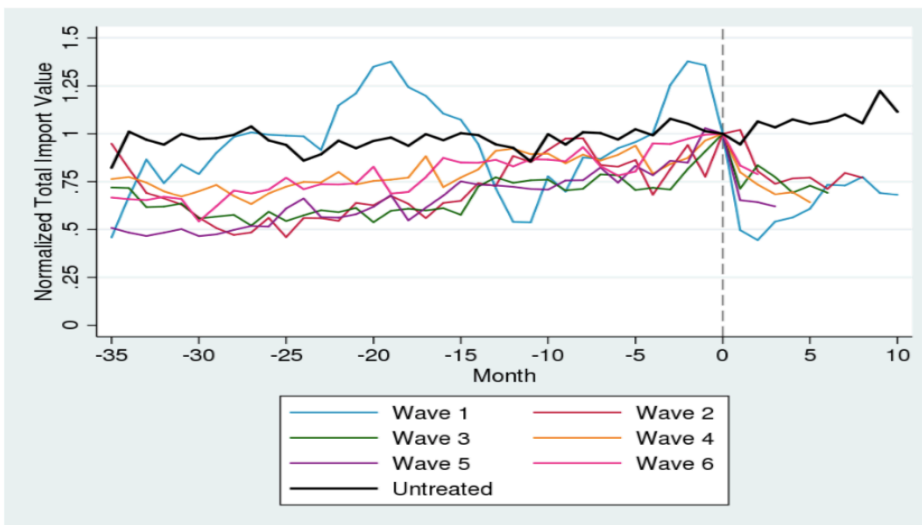
Figure 3: 12-month Proportional Change in Import Prices by Tariff Wave



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Reducing Imports

Figure 4: Total Import Values by Tariff Wave



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Unintended Consequences: Falling Exports

US Exports of Goods and Services



Source: US Census Bureau

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Why Are US Exports Declining?

- **Retaliation**

- Chinese tariffs on US exports
- Other forms of retaliation
 - o E.g., week long quarantine of cherries

- **Exchange rate changes**

- Fewer imports raises the value of the U.S. dollar
 - o Makes U.S. exports more expensive



Chinese Retaliation

- ***US tariffs on \$34 billion Jul 6***

- matched that day by China tariffs on \$34 billion of US exports

- ***US tariffs on \$16 billion Aug 23***

- matched that day by China tariffs on \$16 billion of US exports

- ***US tariffs on \$200 billion Sep 24***

- less-than-matched by China on \$60 billion of US exports

- **Other impediments have also been put in place**



Tariffs on Solar Panels



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Tariffs on Solar Panels

• Why?

- Increased imports from China had driven US companies out
- Anti-dumping duties had failed to help, as companies moved production to other non-China and non-US locations



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Tariffs on Solar Panels

• Who benefits?

- Who requested

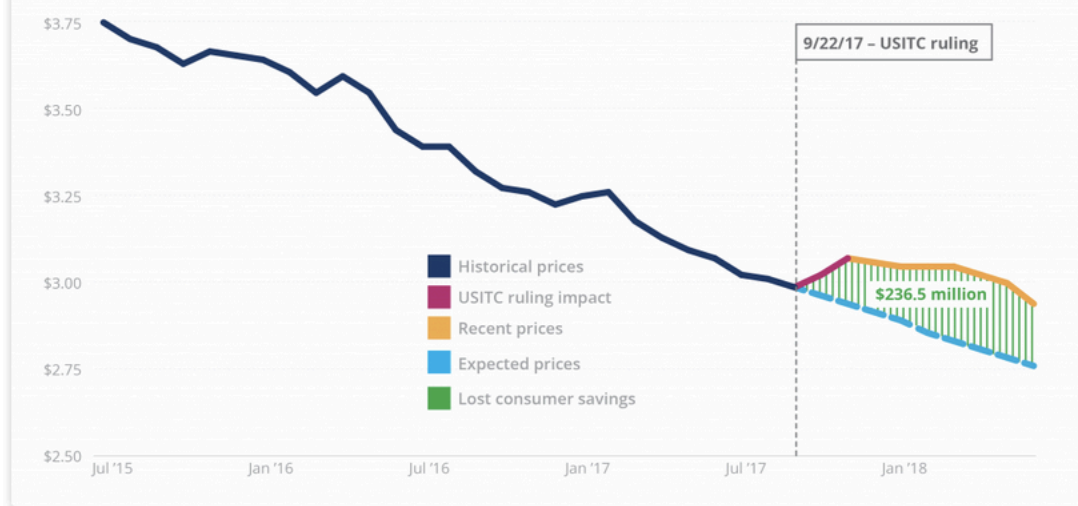
- Suniva, Chinese owned, manufactures in Georgia and in Saginaw, MI
- SolarWorld, was German owned but now French,

- 14 US manufacturers

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Impact of Solar Tariff on Residential Prices (in Dollars per Watt)

energysage



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Tariffs on Solar Panels

• Who is hurt?

- Consumers
- Solar panel installers, led by Solar Energy Industry Association
 - They estimate that the 30% tariff “would cause the loss of 23,000 in 2018, as well as the delay or cancellation of billions of dollars of investments in solar energy.”

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Tariffs on Washing Machines

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Tariffs on Washing Machines

• Why?

- From 2012 to 2016, imports increased dramatically from two Korean firms LG and Samsung
- Anti-dumping duties failed to stop this, as production moved to Thailand and Vietnam



Tariffs on Washing Machines

• Who benefits?

- Whirlpool - 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

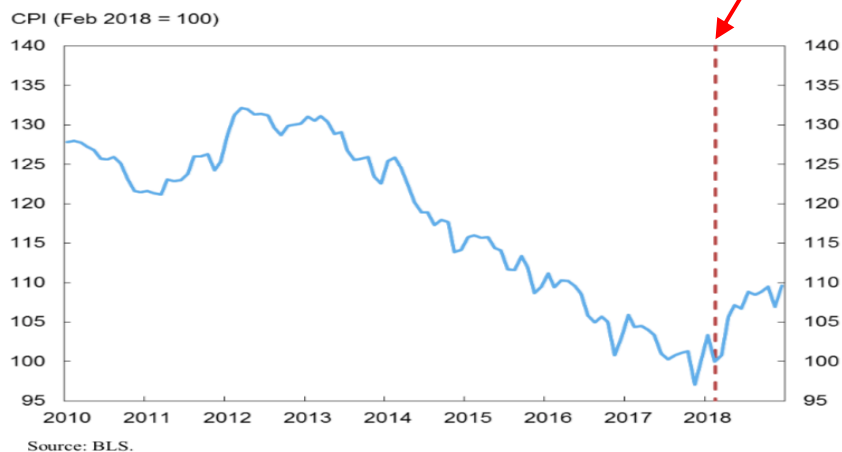
• Who is hurt?

- 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.



Tariff on Cars and Car Parts



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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."



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Tariff on Cars and Car Parts

- **Who would be hurt?**
 - Most car companies, including GM
 - US car buyers



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Tariff on Cars and Car Parts

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

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

- **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.”
- Summer/19: President defers making a decision.



Summary

- **International trade brings significant benefits.**
 - But it comes with some costs, which are best dealt with in order to sustain the benefits.
- **International trade has the same effects as technological change.**
- **Trade deficits are not in and of themselves a problem.**
 - They result from other problems.
- **Trade wars are no way to deal with a bilateral trade deficit.**
 - There is no good way to deal with them, they are generally irrelevant.
 - They come with lots of baggage, including retaliation.
 - Permanent loss of access to foreign markets.
 - Permanent alteration of supply chains.



Thank you!

Any Questions?

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