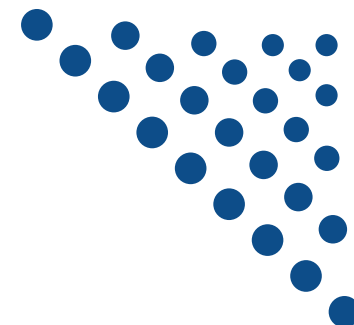


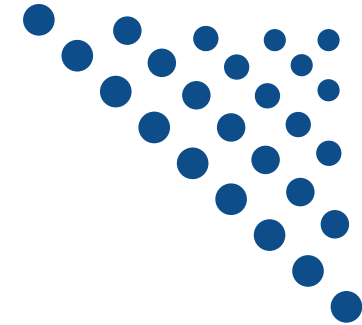


Tariffs and Their Effects

Alan V. Deardorff
University of Michigan

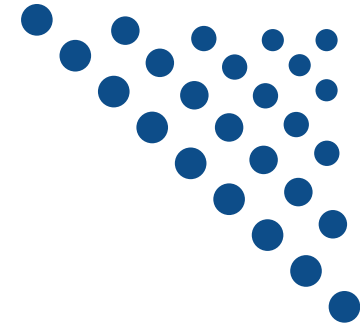
Presentation to Bradley University
February 26, 2025

What Is a Tariff?

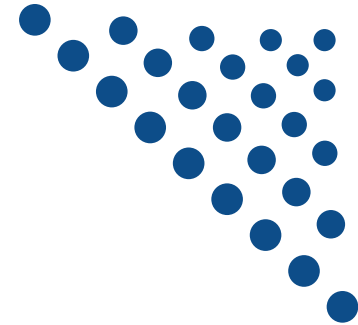


- **A tariff is a tax on imports.**
- **Much like, say, the 6% sales tax in Michigan,**
 - Whatever price the seller charges, the buyer pays an extra 6% that goes to the government.
- **A 10% tariff on all imports (such as Trump has proposed) would mean that**
 - Whatever the foreign exporter charges for a product,
 - US buyers will pay an extra 10% to the US government.
- **Might the seller charge a lower price because of the tariff?**
 - Perhaps, but when Trump used tariffs in 2018 on steel and China, they did not.

Outline

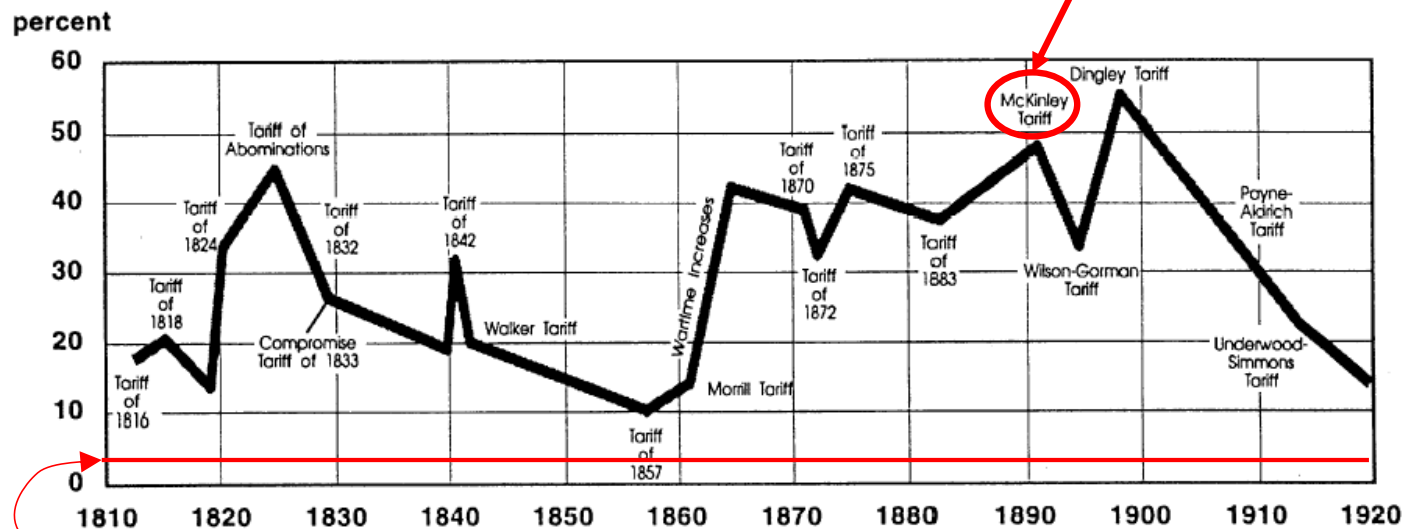


- **US Tariff History**
- **Trump I Tariffs**
- **Trump II Tariff Proposals**
- **Tariff Effects in General**
- **Effects of Trump II Tariffs**



US Tariff History

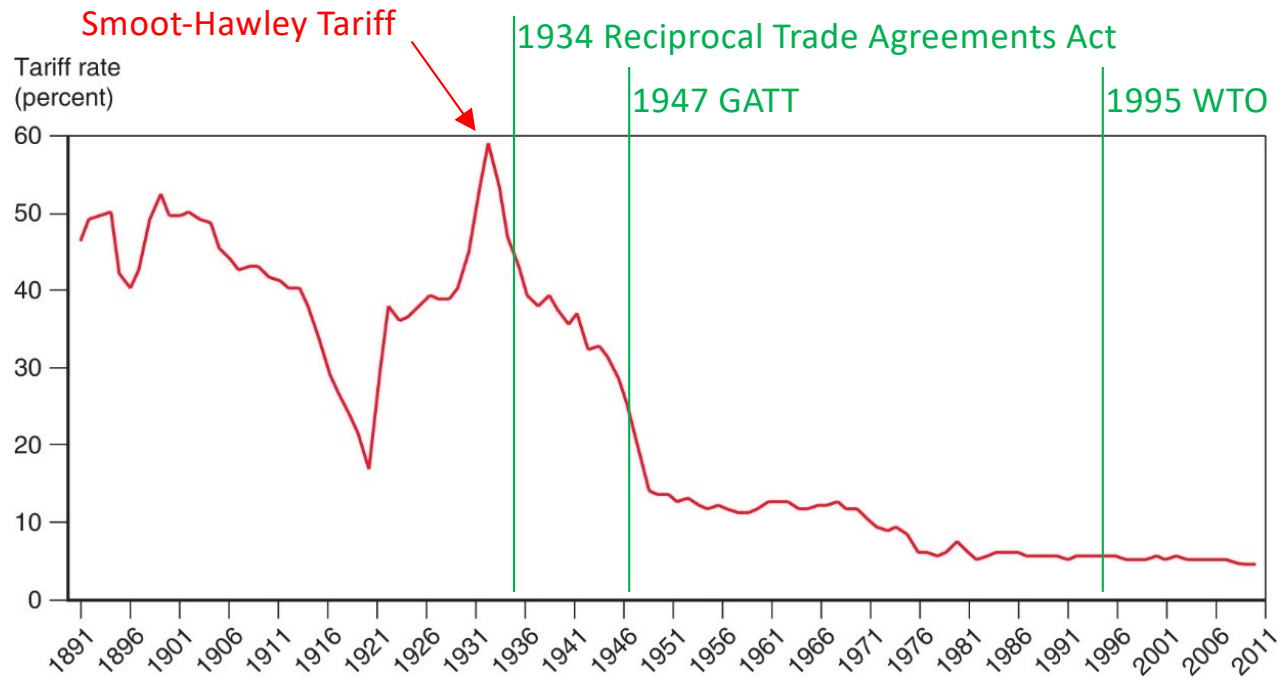
US Tariff History, 1810-1920



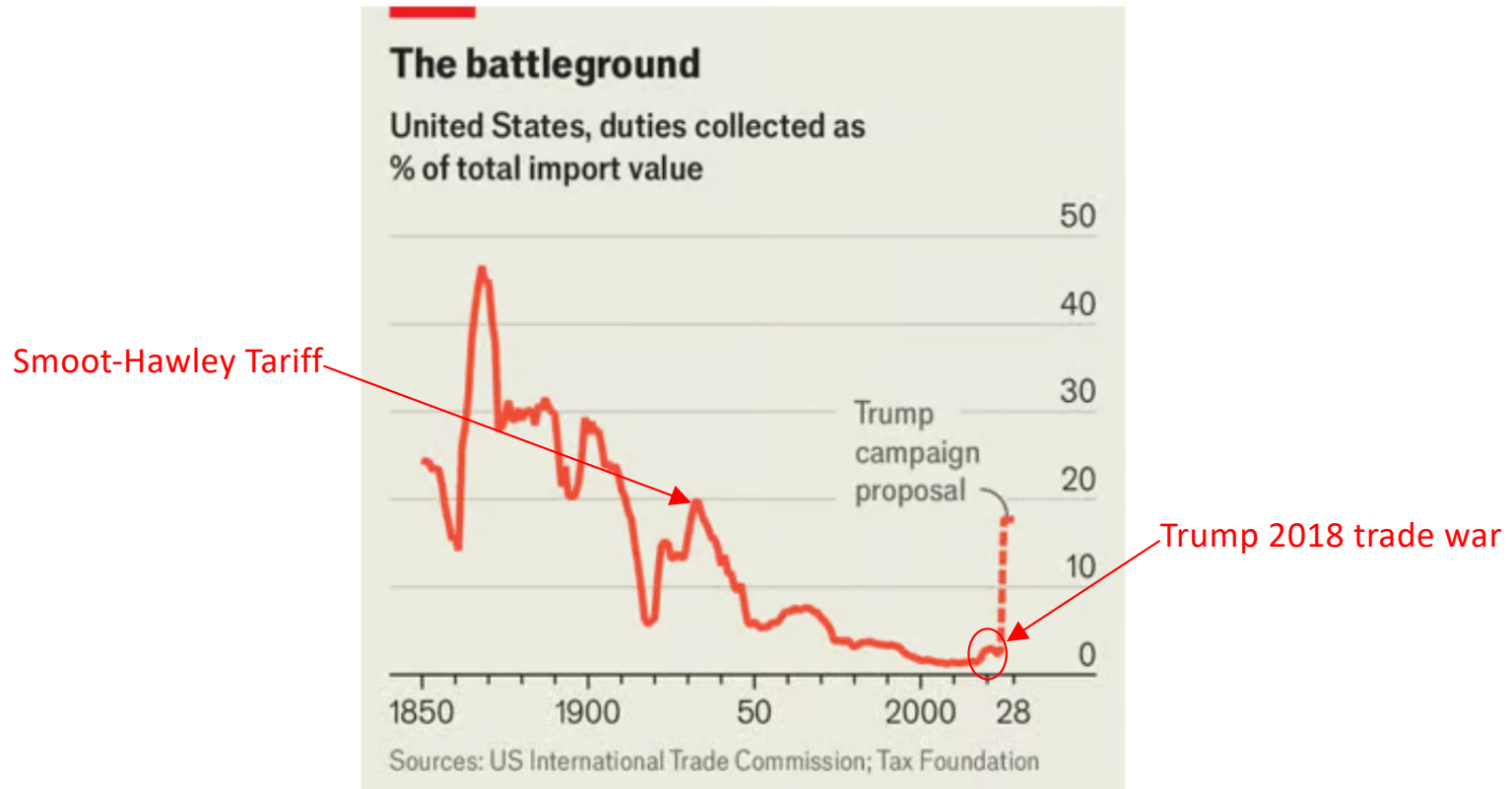
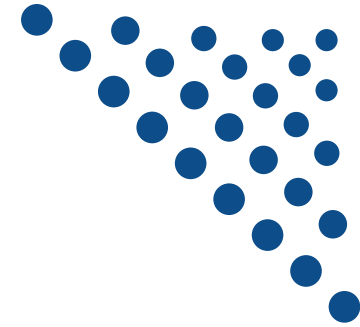
Trump points to this, and to President McKinley, as a good example.

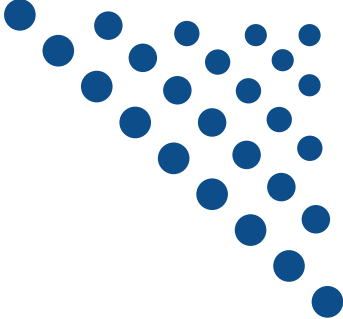
Today, pre-Trump

US Tariff History, 1891-2011



US Tariff History, 1850-2028?



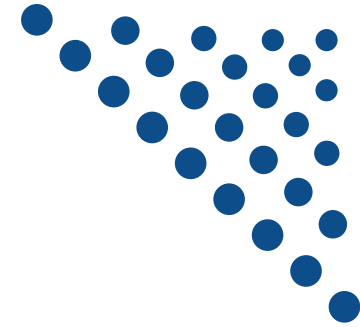


Trump I Tariffs and the Trade War



NATIONAL ECONOMIC
EDUCATION DELEGATION

Trump I Tariffs & Trade War

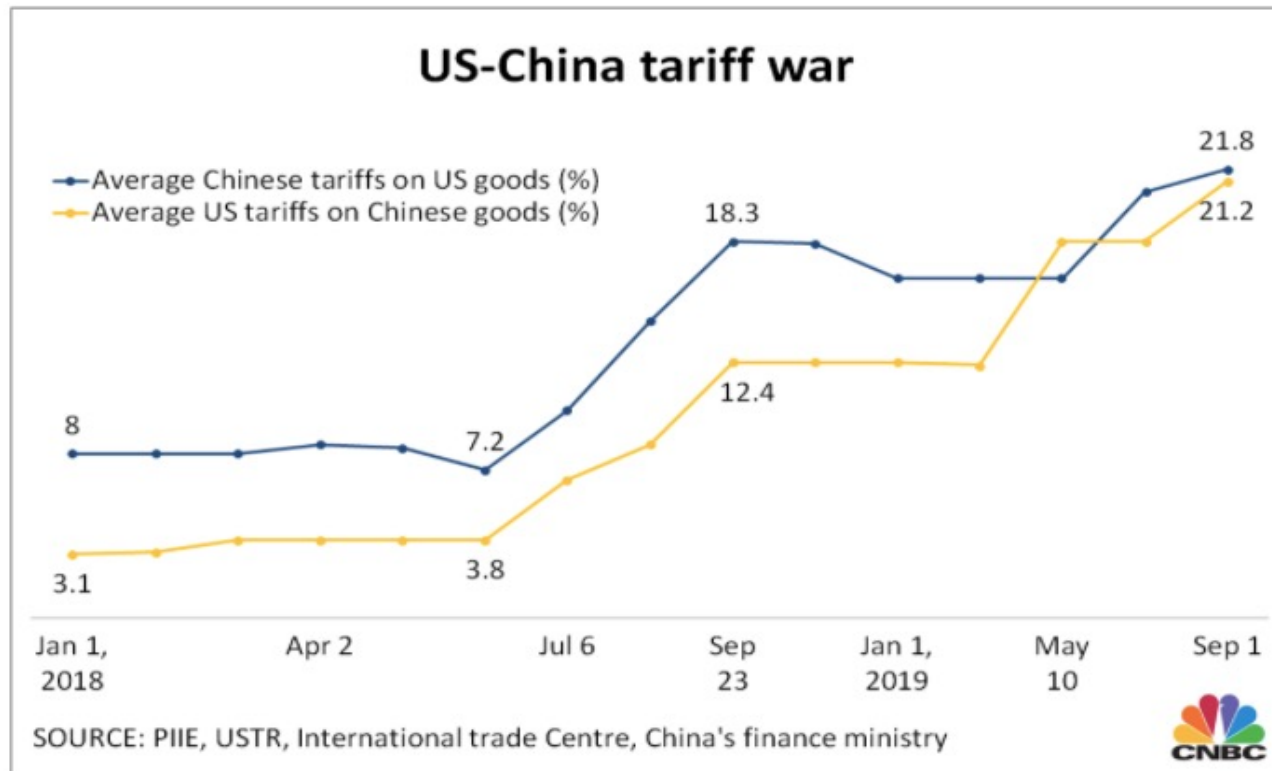


- **Summary**

- Trump placed tariffs of 25% on steel and 10% on aluminum
- Trump place multiple tariffs on China exports, covering at least $\frac{3}{4}$ of their exports to US
- On request, he exempted some products and firms
- Imports from China fell while imports from others rose
- US trade deficit did not shrink
- Data show no fall in foreign export prices, so tariffs were paid by US buyers



US-China Tariff War – Tariff Rates



Source: CNBC.com

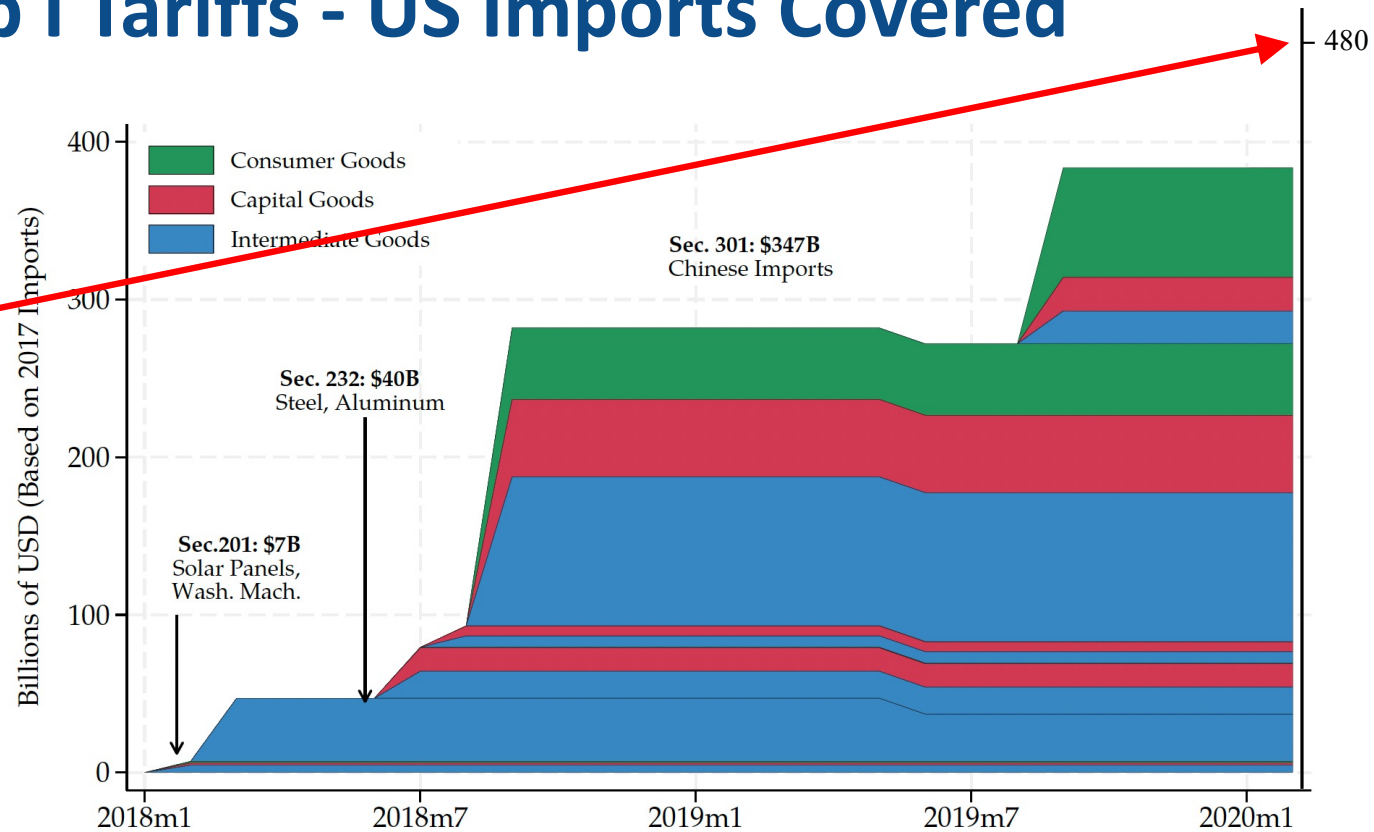
The first trade salvo was fired by the U.S. in early 2018, but the bilateral trade war between the U.S. and China really kicked into a higher gear in July 2018.



NATIONAL E
EDUCATION DELEGATION

Trump I Tariffs - US Imports Covered

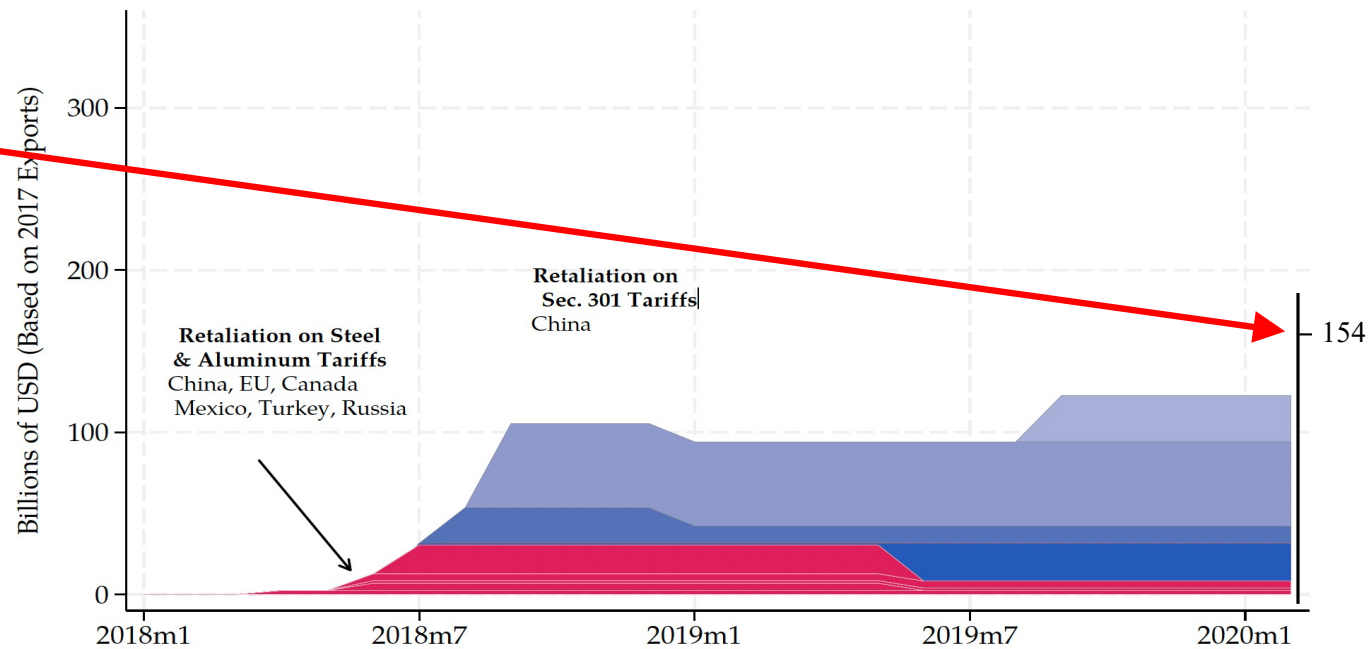
US imports
from China in
2017, per
World Bank:
\$480 billion



Source:
Flaen &
Pierce
2020

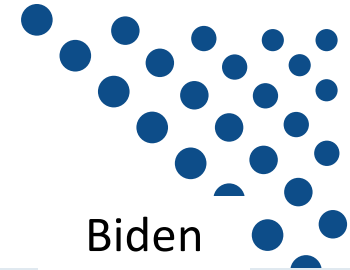
Trump I Tariff Retaliation - US Exports Covered

US exports to
China in 2017,
per World
Bank:
\$154 billion



Source:
Flaen &
Pierce
2020

US Trade Balance = Exports minus Imports



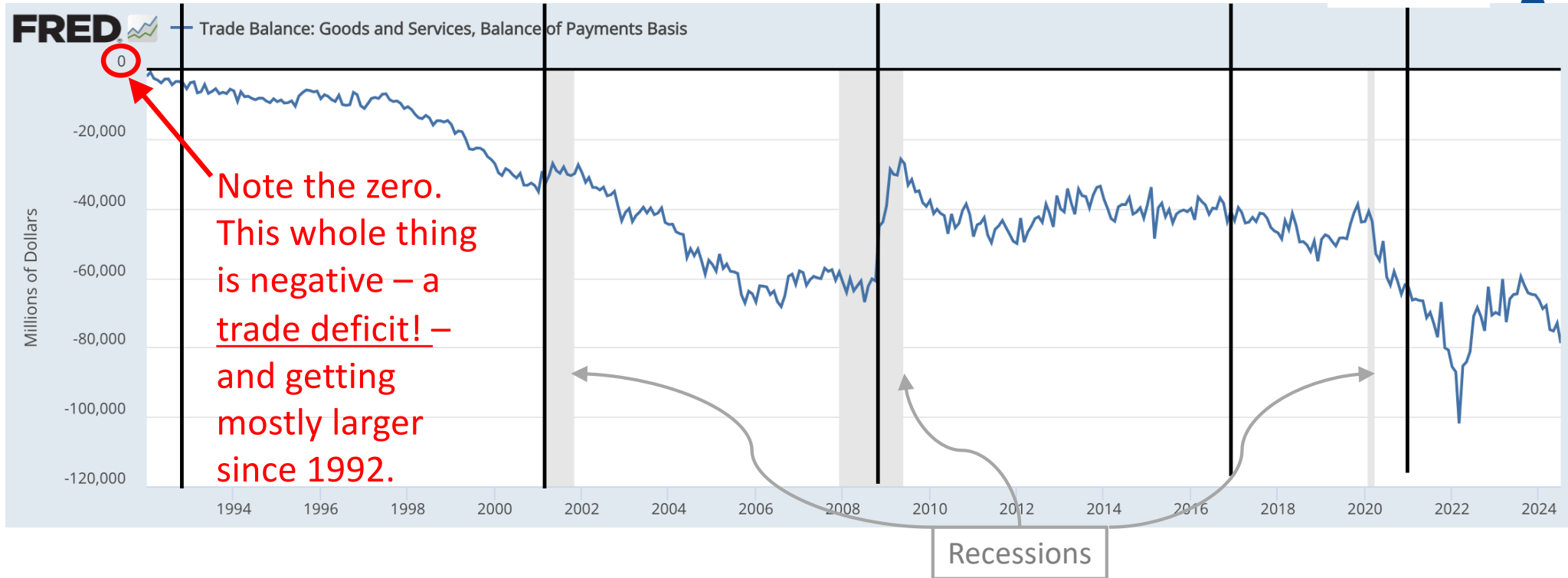
Clinton

Bush

Obama

Trump

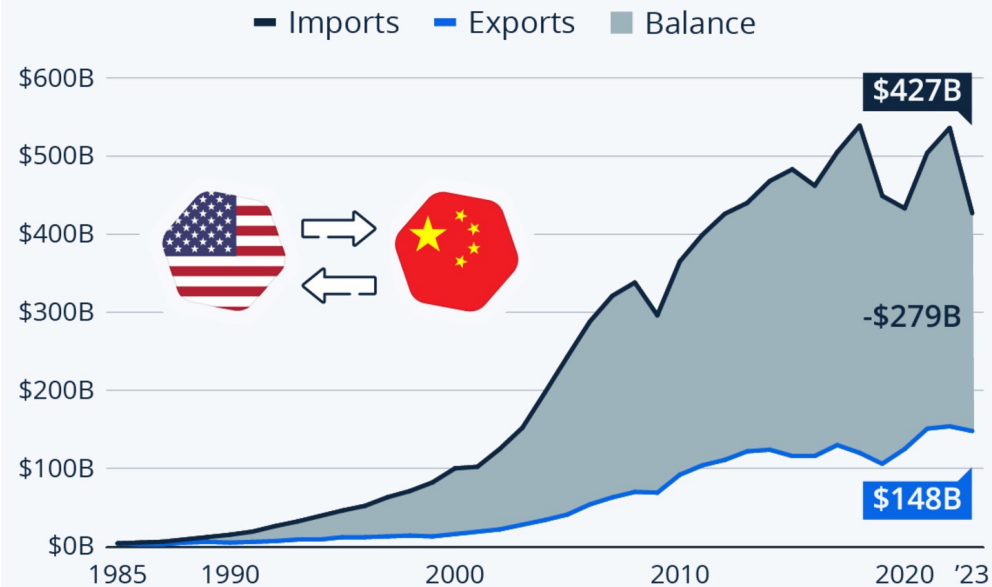
Biden



US Trade with China

U.S. Trade Deficit With China Narrows to Lowest Since 2010

U.S. trade in goods with China since 1985

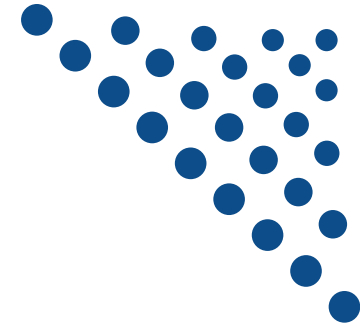


Source: U.S. Census Bureau



NATIONAL ECONOMIC
EDUCATION DELEGATION

US Trade Balance with China and the World



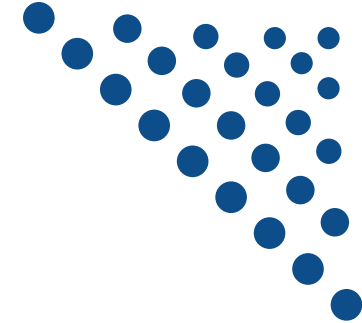
Deficit

Source:
FT 1/4/25

US Trade Balance with Vietnam



Trump Tariff Exemptions



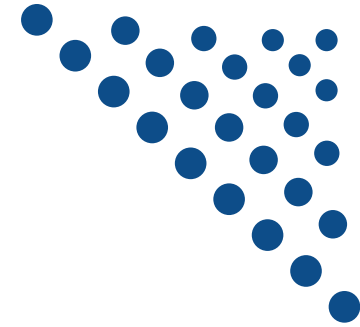
- September 18, 2018:

The Washington Post

Trump's tariffs won't bite Apple, illustrating Tim Cook's political sway

- "Clearly Tim Cook has been effective in his developing a relationship with the current administration, and this is probably one of the best examples of the fruits of that labor."

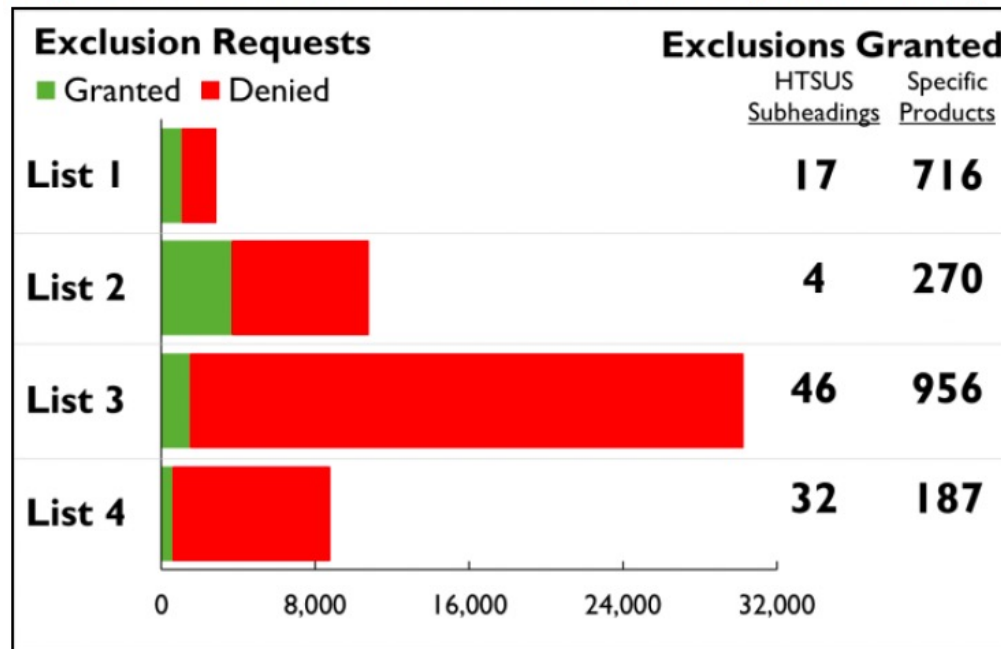
Trump Tariff Exemptions



- **Both the metals tariffs and the China tariffs permitted certain products and product categories to be exempted, through an application process to Commerce (metals) and USTR (China), if certain criteria are satisfied.**
 - Whether tariffs would impose significant harm on American business interests
 - Whether substitute products were available outside China
 - Whether the products were “strategically important” to China”

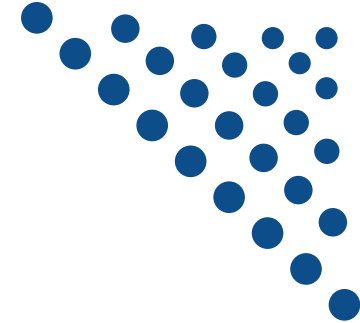
Trump Tariff Exemptions

Figure 1. Section 301 Exclusions (Through Jan. 2020)



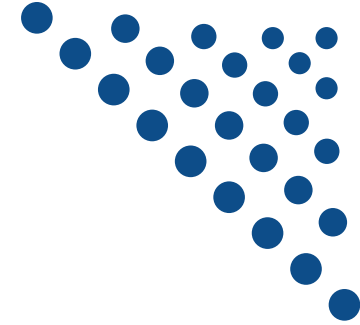
Source: CRS with information from the Office of the USTR.

Trump Tariff Exemptions



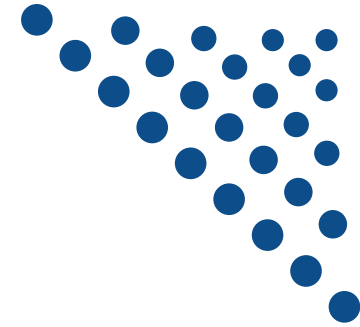
- **Requests for exemption**
 - Metals tariffs: “Commerce Department received nearly 500,000 exclusion requests”
 - China tariffs: USTR “fielded more than 50,000 requests”
- **“He has also suggested targeting particular companies or industries.”**
- **Lobbying Congress on trade issues increased once Mr. Trump took office**
- **Biden maintained Trump’s tariffs, but it**
 - gradually wound down the exclusions for China tariffs
 - continued to grant them for tariffs on steel and aluminum.

Trump Tariff Exemptions



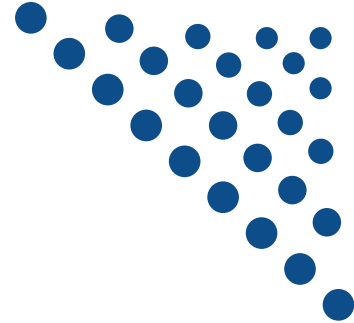
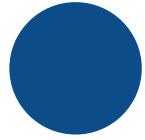
- **Trump administration's decisions on exclusions were mysterious and arbitrary.**
 - "Tariff exemptions were given
 - to Bibles but not to textbooks,
 - to salmon but not to pollock,
 - to children's car seats but not to baby cribs.
 - The decisions were not subject to appeal."

Trump Tariff Exemptions



- **Issues with the exemptions**

- “Firms hiring lobbyists were less likely to have steel tariff exemptions approved.”
- Study found:
 - Contributions to Republicans made China exemptions more likely
 - Contributions to Democrats made China exemptions less likely
 - Author quoted as saying the exclusion process was “a very effective spoils system”
- Renewal of exemptions were uncertain and came late enough to create uncertainty.

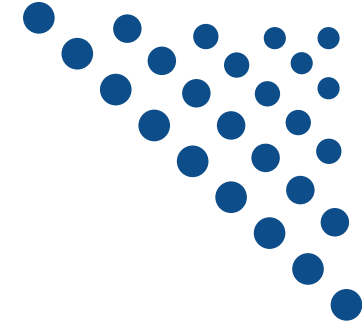


Trump II Tariffs



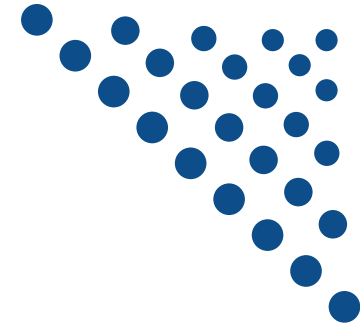
NATIONAL ECONOMIC
EDUCATION DELEGATION

Trump II Tariff Plans



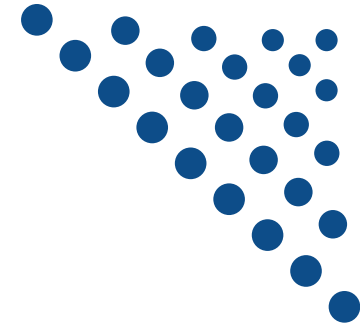
- **“To me the most beautiful word in the dictionary is ‘tariff’”**
- **During campaign he said he will**
 - Place a tariff of 10% or 20% on all imports from all countries.
 - Place even higher tariffs (60%) on imports from China.
 - Raise our tariffs on countries to match what they charge on our exports.
 - “Reciprocal Trade Act”
 - (And lower those where they charge less?)
 - Raise tariffs on countries that don’t use the US dollar for international transactions.
 - Place tariffs on Mexico, violating his own USMCA trade agreement
 - 25% on everything if they don’t stop US immigration
 - 100% on cars to get production in US

Trump II Tariff Plans



- **After the election he said he threatened:**
 - Nov 26: New tariffs unless they stop people and drugs crossing border
 - 25% on Mexico and Canada
 - Extra 10% on China
 - Nov 30: 100% Tariffs on Brics if they undermine the US dollar
 - Brics = Brazil, Russia, India, China and South Africa
 - Expanded to include Iran, United Arab Emirates, Egypt and Ethiopia
 - A proposal for a Brics currency was introduced at last year's summit in South Africa.
 - Jan 7: Tariffs on Denmark if it doesn't allow US to buy Greenland

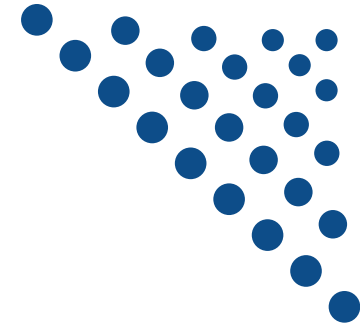
Trump II Tariff Actions



- **After inauguration, as President he:**

- Jan 16: Threatened tariffs on Colombia if it doesn't allow his deportation flights to land
 - They first threatened retaliatory tariffs, but then permitted flights to land and Trump retracted the threat

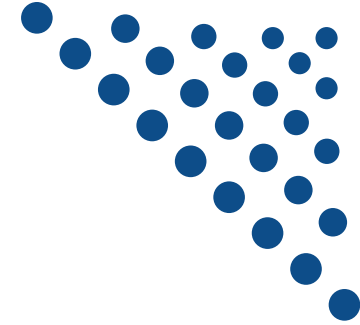
Trump II Tariff Actions



- **After inauguration, as President he:**

- Feb 1: Announced tariffs of 25% on Canada and Mexico and 10% on China if they didn't stop flows of illegal people and drugs across the borders
 - After talks with leaders he postponed the tariffs on Canada and Mexico for one month
 - On Feb 24 he said he is "he said he is 'going forward' with the tariffs next week.
 - The 10% additional tariff on China
 - Went into effect Feb 4
 - China retaliated with more tariffs on US

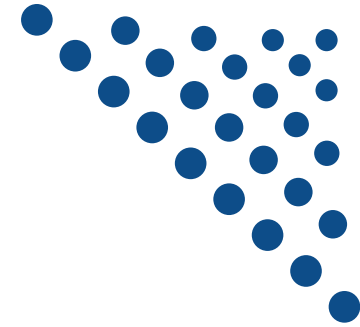
Trump II Tariff Actions



- **After inauguration, as President he:**

- Feb 1: Announced repeal of “de minimis” tariff-free policy on imports from China
 - For years, imports under \$800 have entered US tariff free
 - Feb 7: Paused the repeal as packages piled up at customs

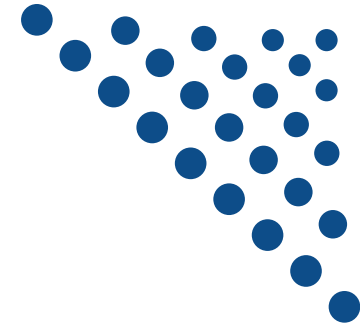
Trump II Tariff Actions



- **After inauguration, as President he:**

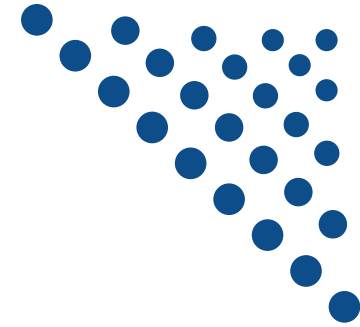
- Feb 3: Trump “hinted” that EU would be next
 - "They don't take our cars, they don't take our farm products, they take almost nothing and we take everything from them. Millions of cars, tremendous amounts of food and farm products," he told journalists. [BBC]

Trump II Tariff Actions



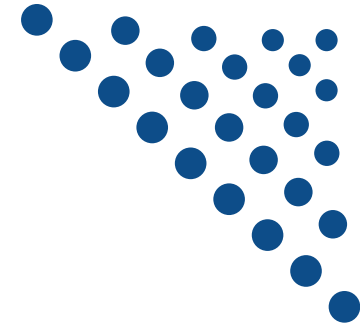
- **After inauguration, as President he:**
 - Feb 9: Trump announced new 25% tariffs on steel and aluminum from all countries, to take effect on March 12. [NYT]
 - Like last time, who will actually be covered remains to be seen.

Trump II Tariff Actions



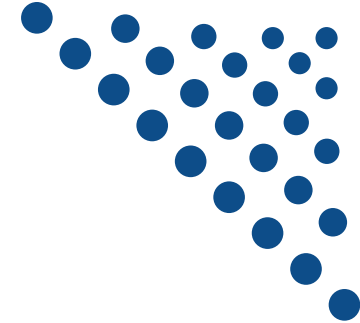
- **After inauguration, as President he:**
 - Feb 13: Trump starts work on “reciprocal tariffs”
 - “Trump Says He’ll Rework Global Trading Relations With ‘Reciprocal’ Tariffs” [NYT]

Trump II Tariff Actions



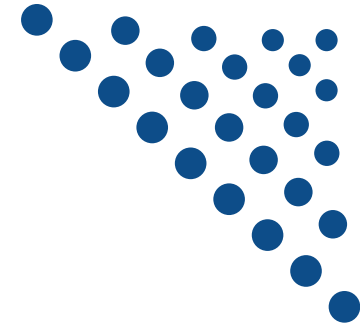
- **After inauguration, as President he:**
 - Feb 18: Trump threatens tariffs of 25% or more on cars, drugs, and chips.

Trump II Tariff Actions



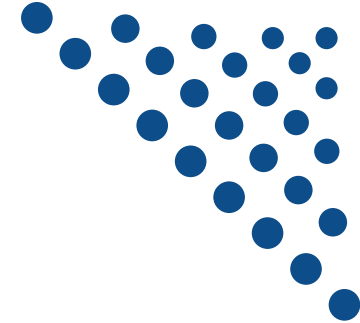
- **After inauguration, as President he:**
 - Feb 21: “Donald Trump is considering tariffs on countries that levy digital services taxes against American companies”

Trump II Tariff Actions



- **After inauguration, as President he:**
 - Feb 24: Directed Commerce Department to investigate need for tariffs on copper, as threat to national security

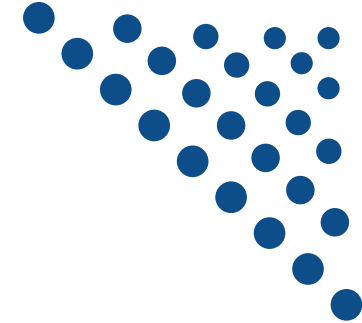
Trump II Tariff Plans



- **What will Trump actually do?**

- Beattie in FT 11/18/24: “trade policy in his first administration emerged from fierce internal battles like a **victorious but bloodied rat crawling out of a sack of rodent corpses**, with Trump’s caprice determining which idea survived.”
- He will surely do some of the things on this list
- But not on everybody. He’ll use threats to negotiate “deals”
 - For the benefit of the country (?)
 - For the benefit of himself (!)

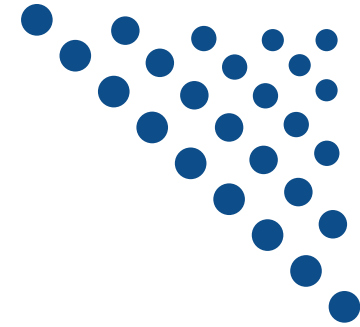
Trump II Tariff Plans



- **What will Trump be able do?**

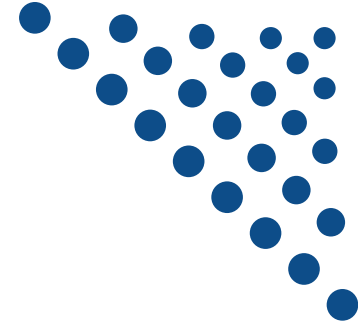
- The US Constitution gives power over tariffs only to Congress, not the President
- But Congress has passed laws delegating that power to the President in certain circumstances:
 - Section 201 of 1974 Trade Act: Safeguards, used for washing machines
 - Section 232 of 1962 Trade Act: National security, used for steel
 - Section 301 of 1974 Trade Act: Unfair trade, used for China tariffs
 - International Emergency Economic Powers Act of 1977,
 - Did not use in his first term
 - But threatened against Mexico in 2018 over migration
 - Did use on Feb 1 for tariffs on Canada, Mexico, and China
- For his tariffs on all imports, he may need to get Congress to act, but Beatie in FT disagrees
- Reciprocal Trade Act would have to be by Congress

Trump II Tariff Plans



- **Use of International Emergency Economic Powers Act**
 - Posted by White House Feb 1, 2025:

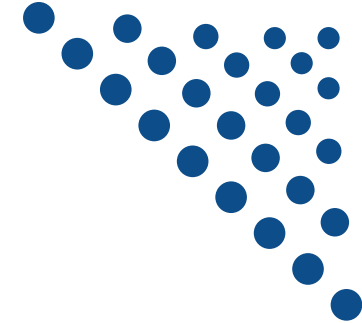
ADDRESSING AN EMERGENCY SITUATION: The extraordinary threat posed by illegal aliens and drugs, including deadly fentanyl, constitutes a national emergency under the International Emergency Economic Powers Act (IEEPA).



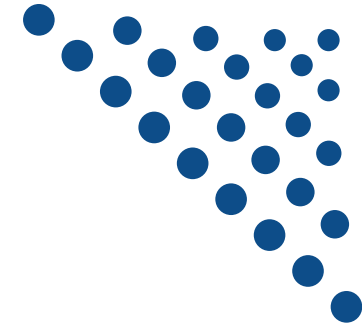
Effects of Tariffs in General



Economic effects of a tariff

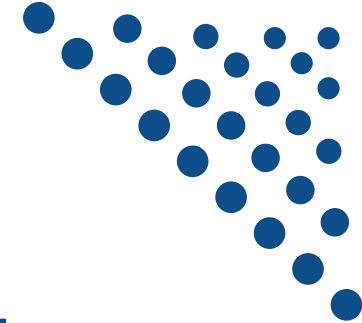


- **A tariff is a tax on imports. It causes**
 - A rise in the price of the imported good in the importing country
 - A fall in the price of the imported good in the exporting country
 - The quantity imported to fall
 - Revenue for the tariff-levying government
- **Almost always: the rise at home is much larger than the fall abroad**
 - That's especially true if importing country is small
 - But it's also true if importing country is as large as the U.S.
 - We learned this from Trump's tariffs in 2018.
 - Example: Trump's tariffs caused US prices to rise, with hardly any perceptible fall in prices abroad.



Effects of a tariff

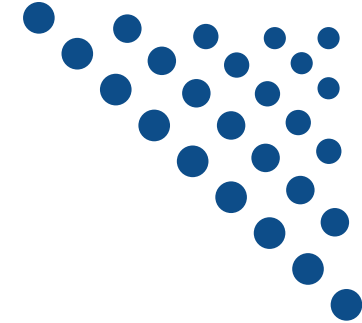
- **The rise in price in the importing country causes**
 - A rise in price of competing goods produced there
 - Benefits to those producers
 - Harm to buyers of both the import and the competing goods
 - Including producers that use the higher-priced goods as inputs
 - Their prices also rise, hurting their buyers
 - Employment changes:
 - Increase in the protected industry
 - Decrease in industries that use the protected product as inputs
 - Example: Trump's 25% tariff on steel
 - Helped US steel firms and their workers
 - Hurt US auto firms and workers
 - and many other industries that use steel
 - Study found it cost more jobs lost outside steel than gained inside



Effects of a tariff

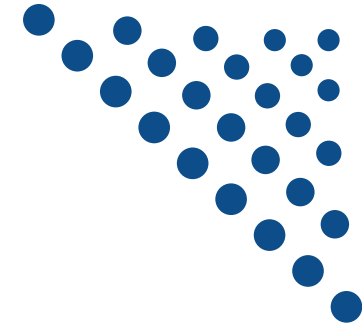
- **Economists' cost-benefit analysis quantifies these and shows that**
 - Unless there are market distortions, the costs of a tariff always exceed the benefits
 - Even when distortions give potential for tariff to be net beneficial
 - It is just as likely to be net harmful
 - And there does exist another policy, not a tariff, that would be better
 - But
 - Costs of tariffs are spread over many buyers, and are small for each
 - Benefits of tariffs are concentrated for domestic producers and are large for each
 - That's often why we
 - Get tariffs
 - Find them very hard to remove

Effects of a tariff



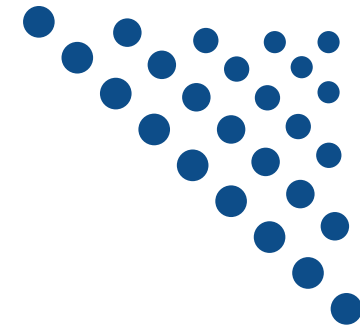
- **Politics of tariffs**

- Political forces favor tariffs
- Tariffs were reduced during 1934-1995 only by slow reciprocal negotiation among countries



Effects of a tariff

- **If a tariff is on exports of only one country (e.g., China), then**
 - Some imports shift to another country
 - Price rises by less, to that other country's higher cost
 - Example: See next slide for Christmas Lights

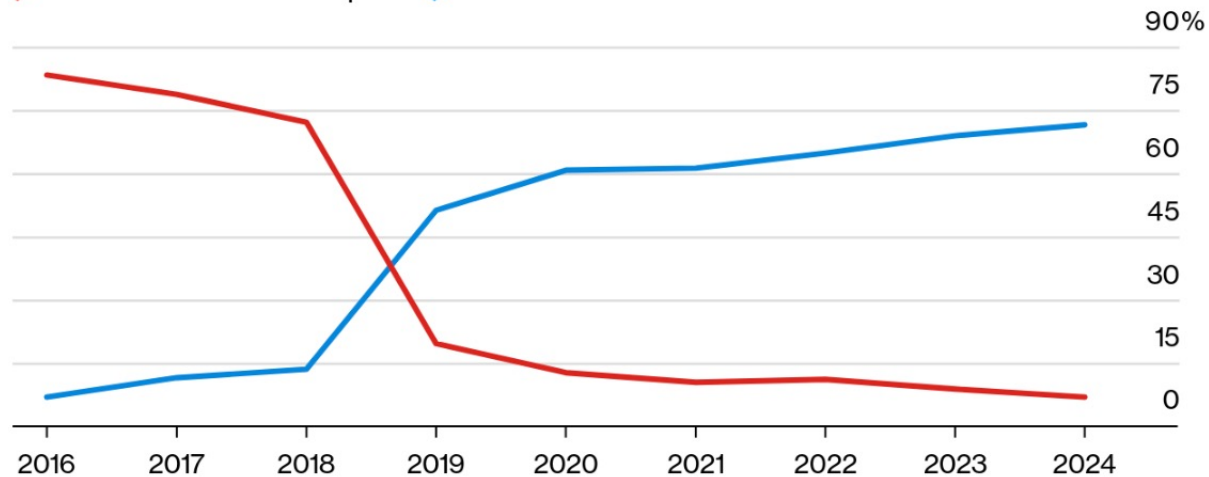


Effects of Trump I on Christmas Lights

Cambodia Passed China as Top US Supplier of Christmas Lights

After tariffs on China took effect, production move to Cambodia

China's share of total imports Cambodia's share

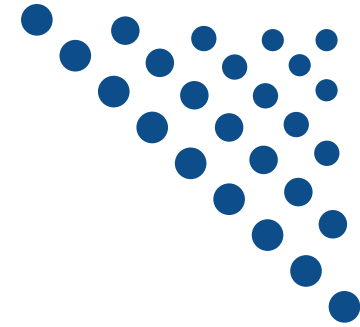


Source: Xeneta, US Census Bureau

Bloomberg

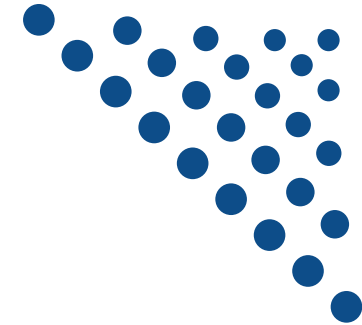
A few key things are unclear in the case of Christmas lights that Xeneta analyzed, like whether the production actually moved from China or whether the goods were merely diverted and then packaged in Cambodia by Chinese affiliates.

Effects of a tariff



- **Do tariffs reduce a trade deficit?**

- Trump thinks so, but the US deficit grew under him (see above)
- A trade deficit equals **Expenditure minus Income**
- There is no reason for tariffs to reduce expenditure
- And unless in a recession, also no reason for tariffs to raise income
- So NO!

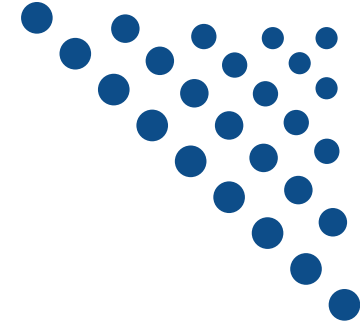


Effects of a tariff

- **Government revenue**

- Could Trump's proposed tariffs replace the US income tax?
- NO!
- If imports did not fall (they would!), his tariffs would have collected in 2023:
 - 60% on US goods imports from China, $0.6 \times \$0.43\text{tr} = \0.26tr
 - 20% on US goods imports from non-China, $0.2 \times \$3.40\text{tr} = \0.68tr
 - Total: \$0.94tr
- US federal income tax revenue in 2023 was \$2.18tr
- So his tariffs would collect AT MOST less than half of the income tax

Other effects of a tariff



- **Income distribution**

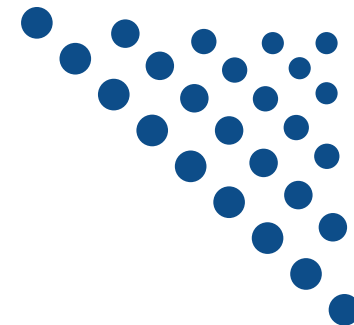
- Tariffs, especially on China, raise prices of the products disproportionately bought by low-income consumers, hurting them more than high-income consumers

- **Retaliation**

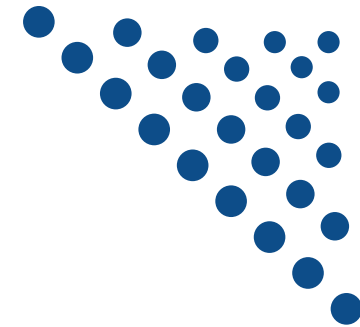
- Other countries place tariffs on US exports
- Trade war that started in 2018 continues and gets worse

- **Corruption**

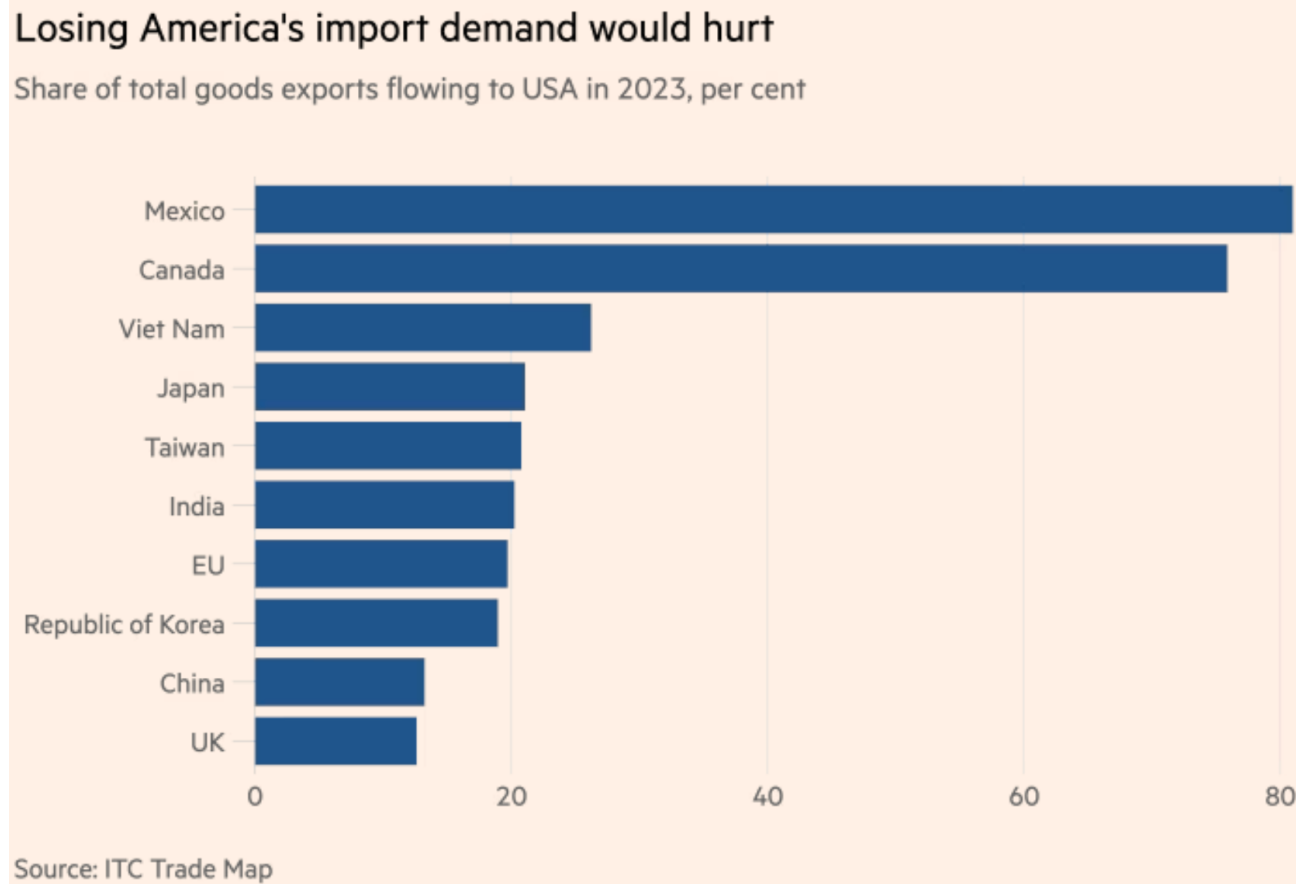
- Historically, tariffs prompted both smuggling and bribes to customs officers
- Today, in the US, those are less likely.
- But requests for exemptions from tariffs may be accompanied by favors or political contributions



Effects of Trump II Tariffs



What Countries will Be Hurt?



Source:
Keynes, FT,
11/15/24

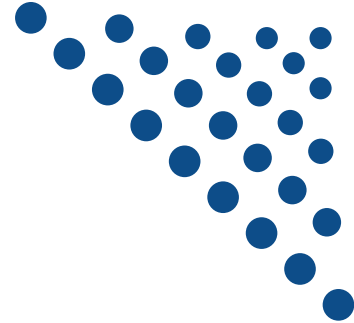
Effects of Trump II Tariffs



- **Source:** Warwick McKibbin, Megan Hogan, and Marcus Noland, “The International Economic Implications of a Second Trump Presidency,” Working Paper 24-20, Peterson Institute of International Economics, September 2024
 - They use a large computer model of both microeconomics and macroeconomics to calculate effects of
 - Deportation of 8.3 million unauthorized immigrant workers
 - Tariffs
 - 10% on all imports
 - 60% on imports from China
 - Erosion of Federal Reserve independence
 - Results below only for the 2 sets of tariffs

Effects of Trump Proposed Tariffs

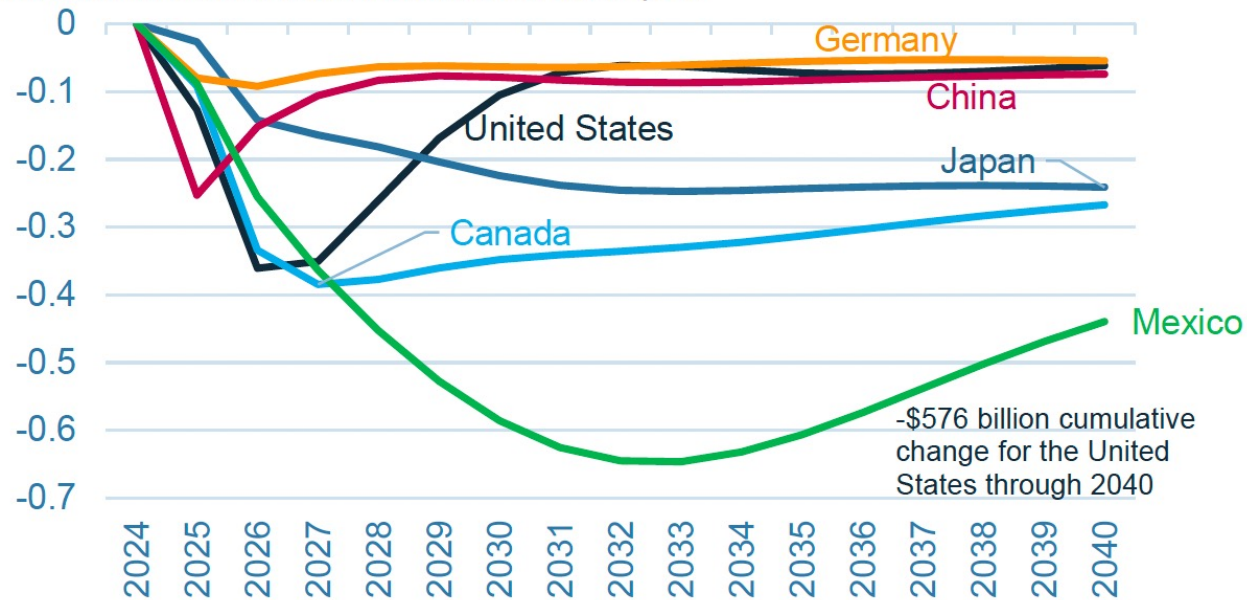
on GDP

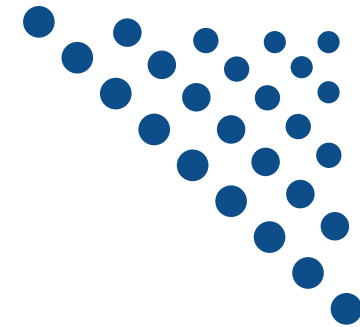


Effects of 10% Tariff on All US Imports

Real GDP

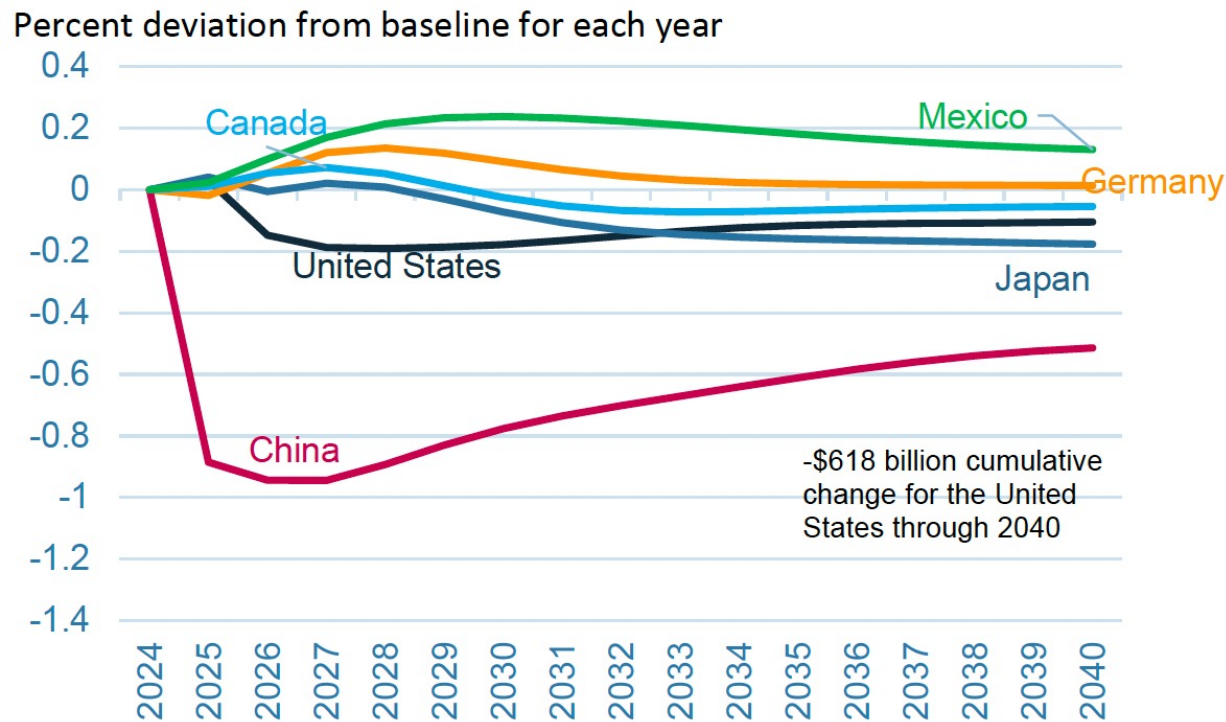
Percent deviation from baseline for each year





Effects of 60% Tariff on China Exports

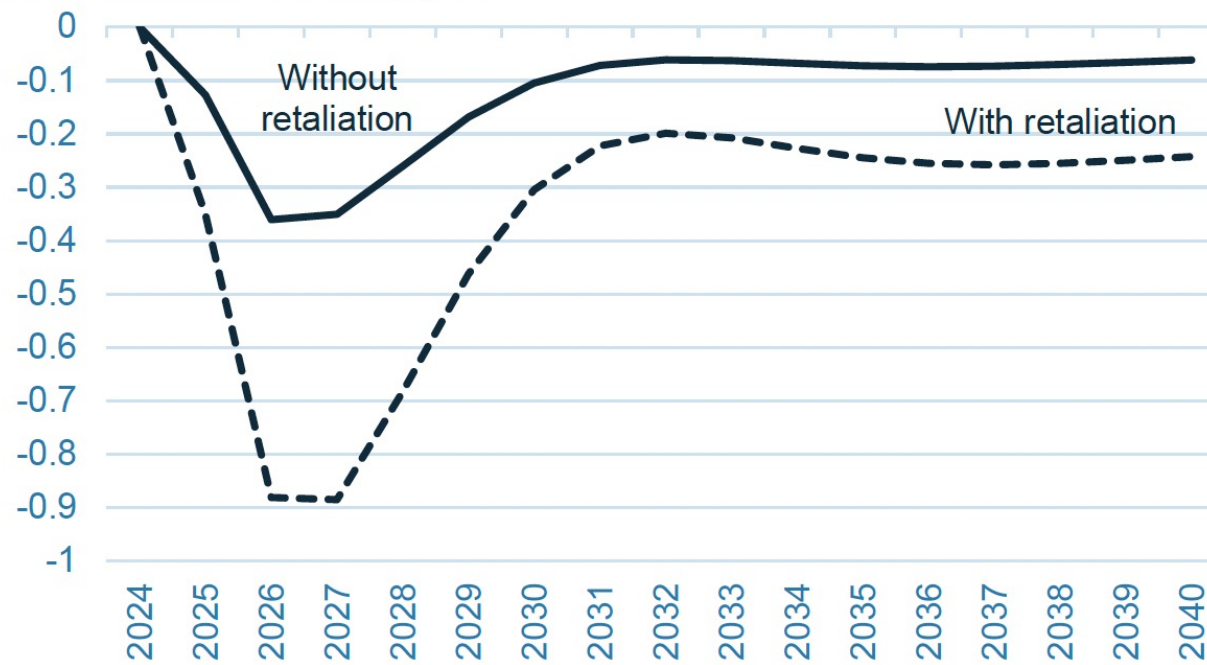
Real GDP

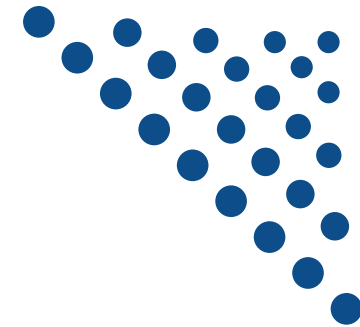


Effects of 10% Tariff on All US Imports

US GDP with and without Retaliation

Percent deviation for each year

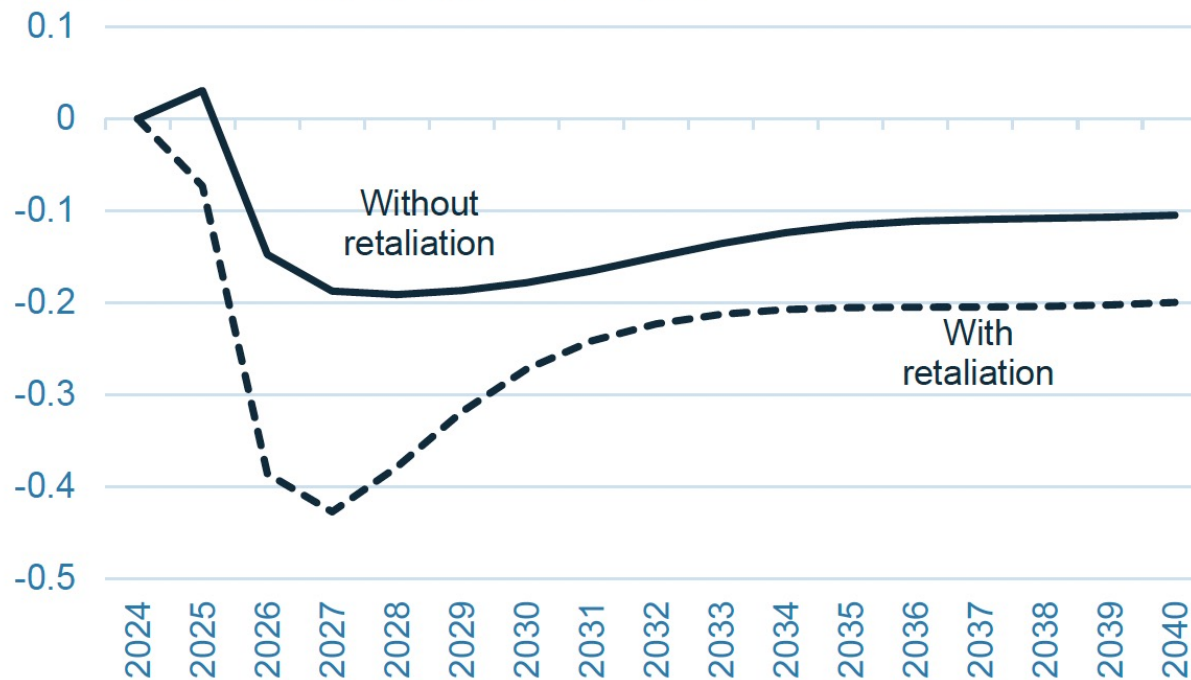




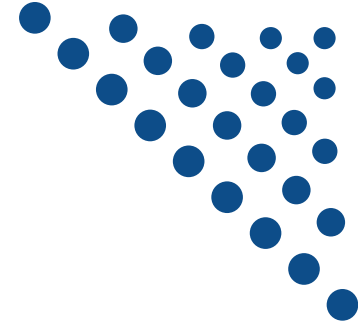
Effects of 60% Tariff on China Exports

US GDP with and without Retaliation

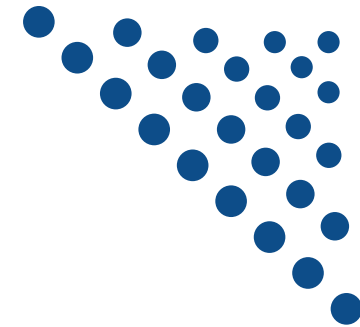
Percent deviation from baseline for each year



Effects of Trump Proposed Tariffs



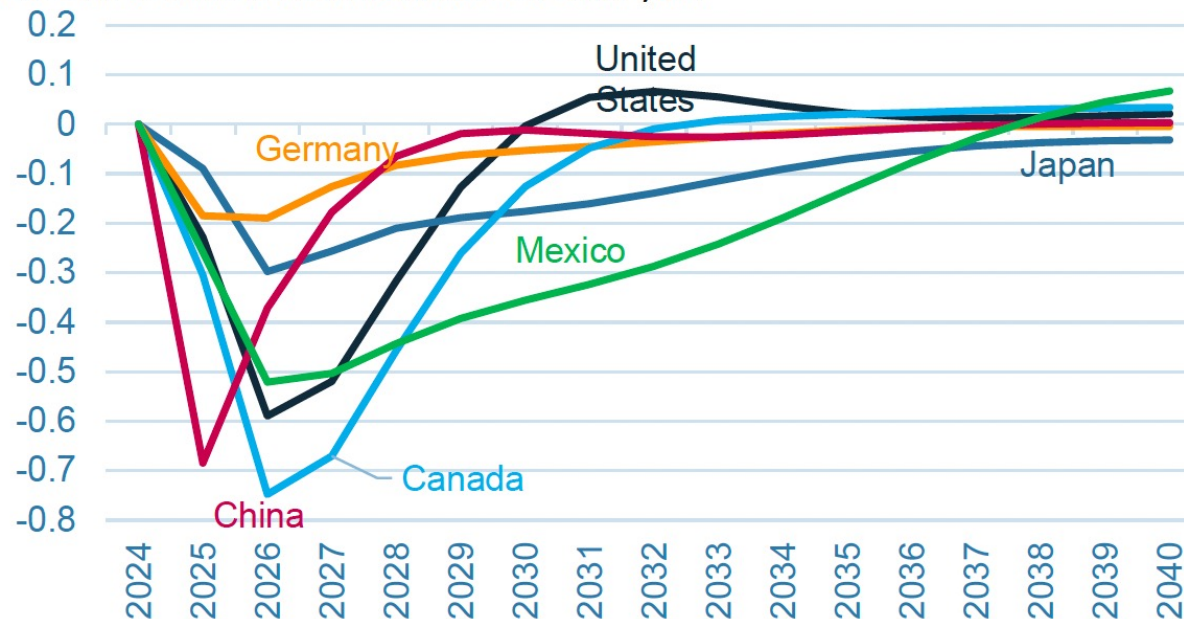
on Employment

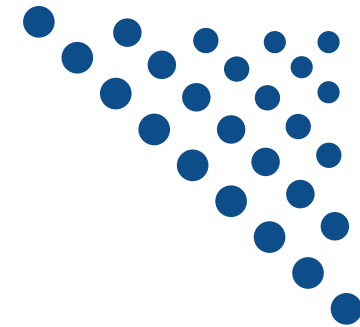


Effects of 10% Tariff on All US Imports

Employment

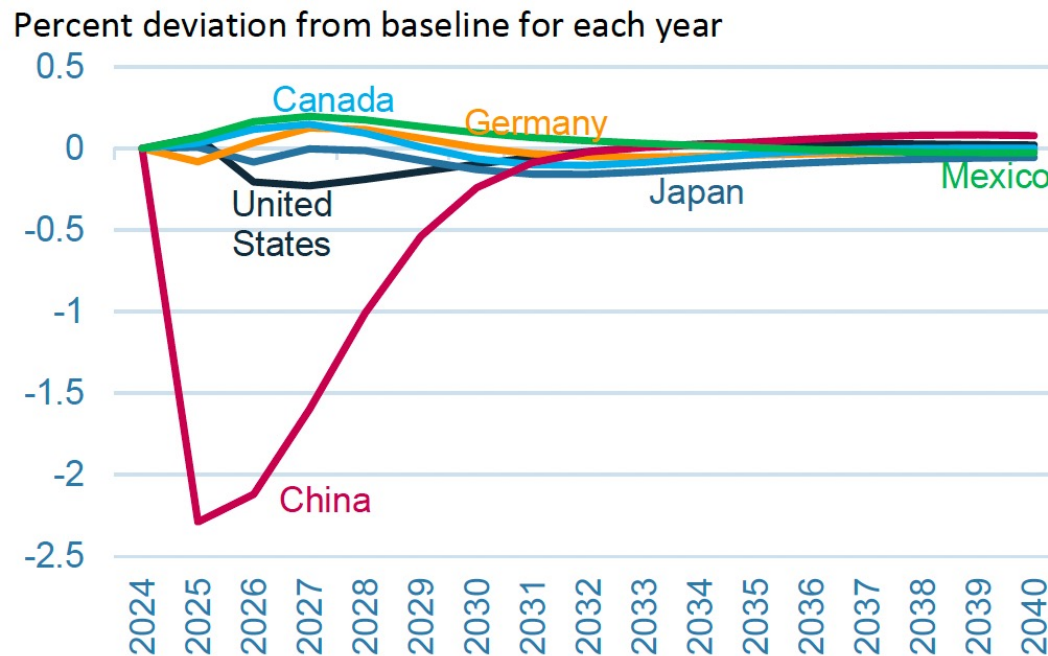
Percent deviation from baseline for each year



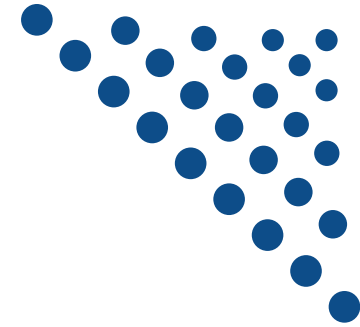


Effects of 60% Tariff on China Exports

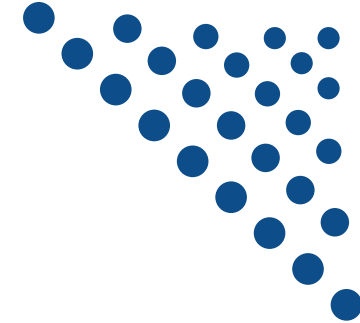
Employment



Effects of Trump Proposed Tariffs



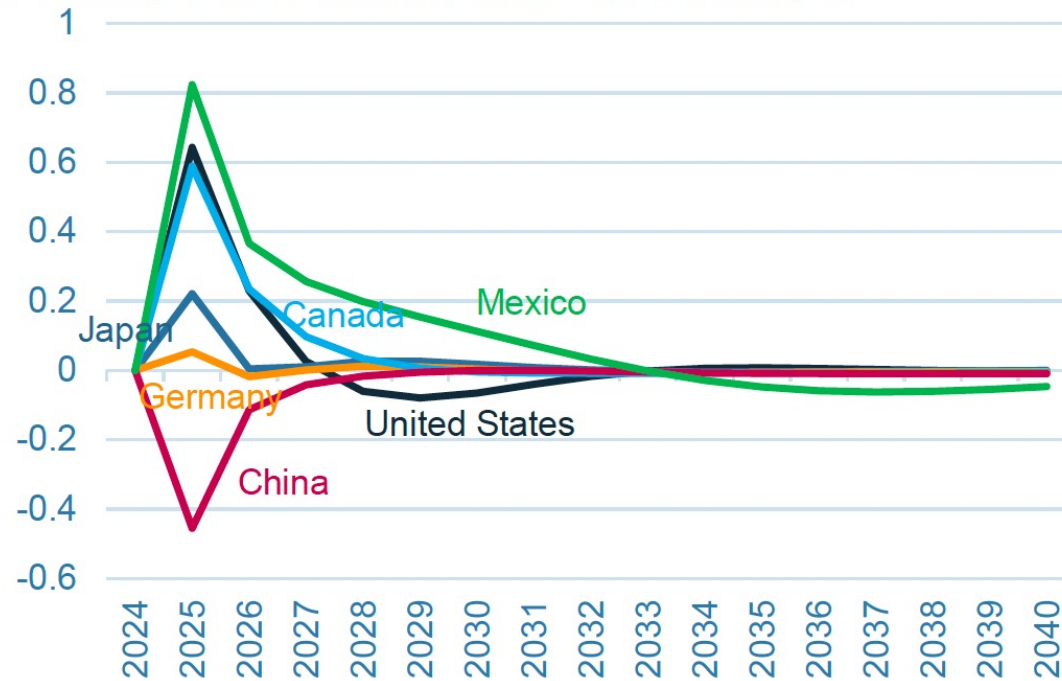
on Inflation

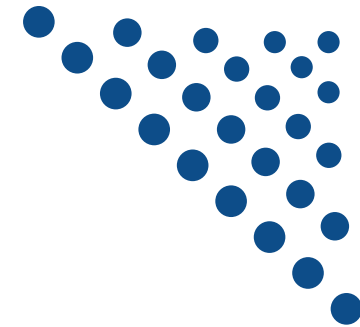


Effects of 10% Tariff on All US Imports

Inflation

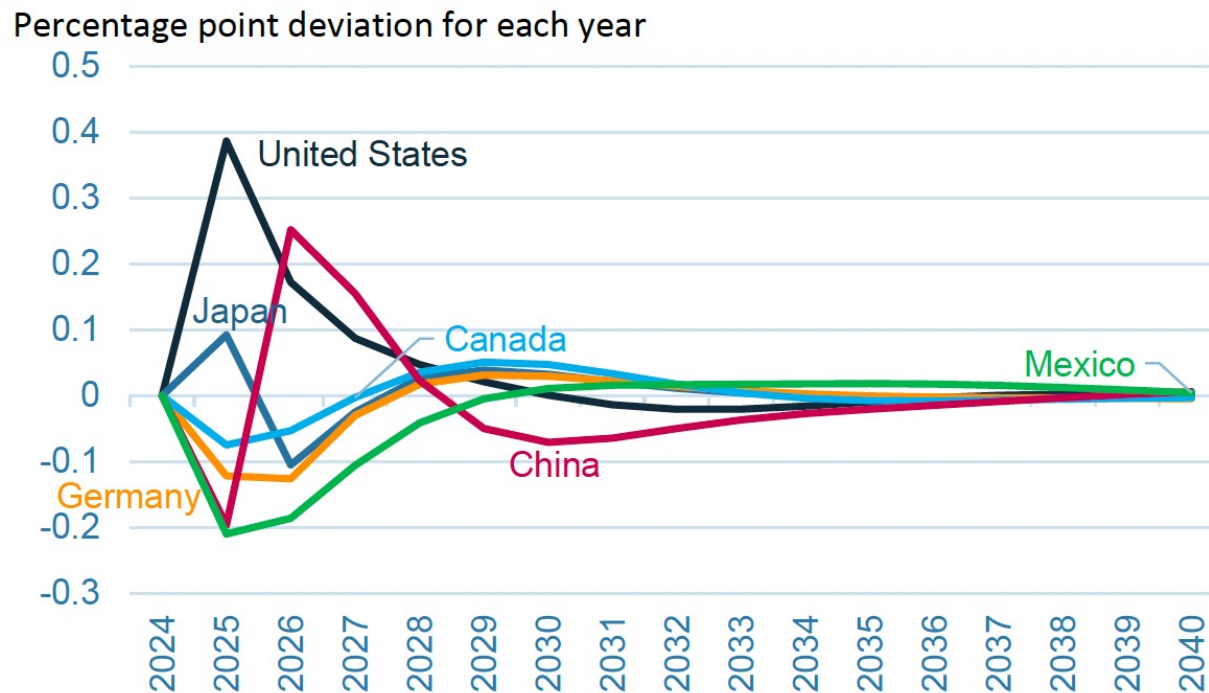
Percentage point deviation from baseline for each year

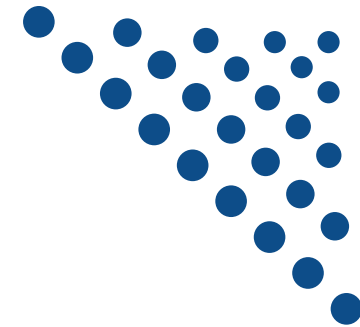




Effects of 60% Tariff on China Exports

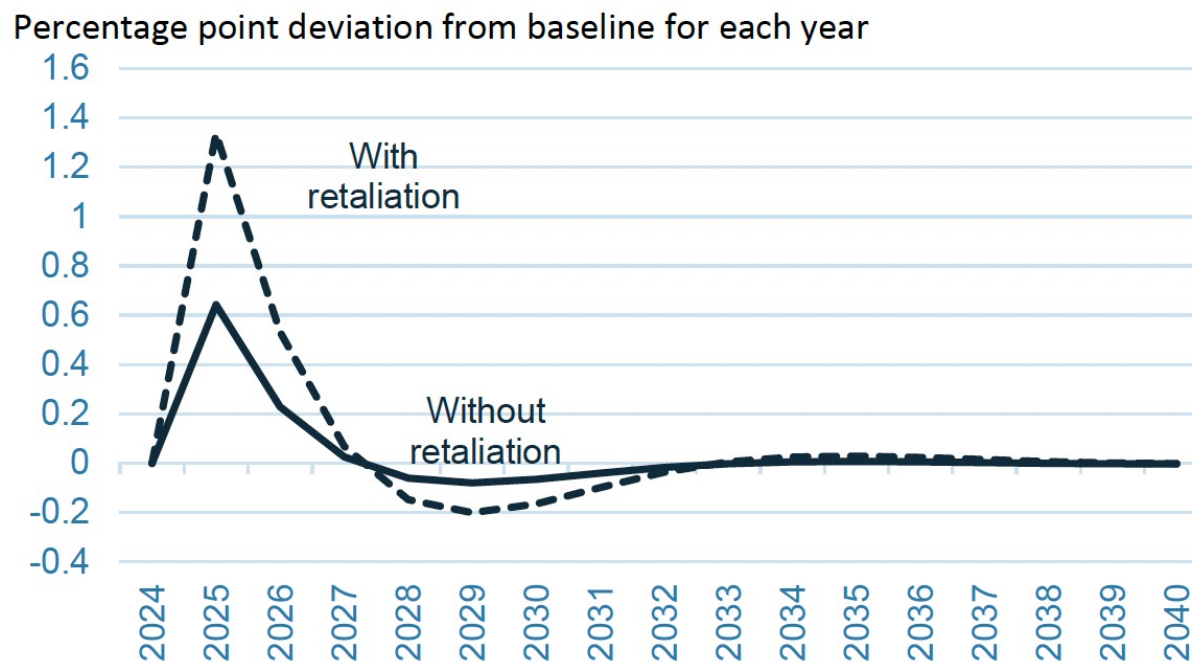
Inflation

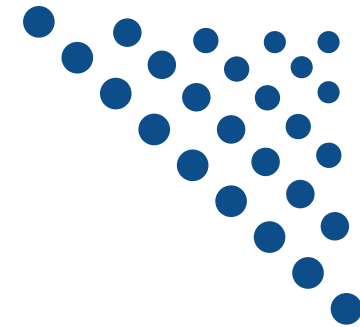




Effects of 10% Tariff on All US Imports

US Inflation with and without Retaliation

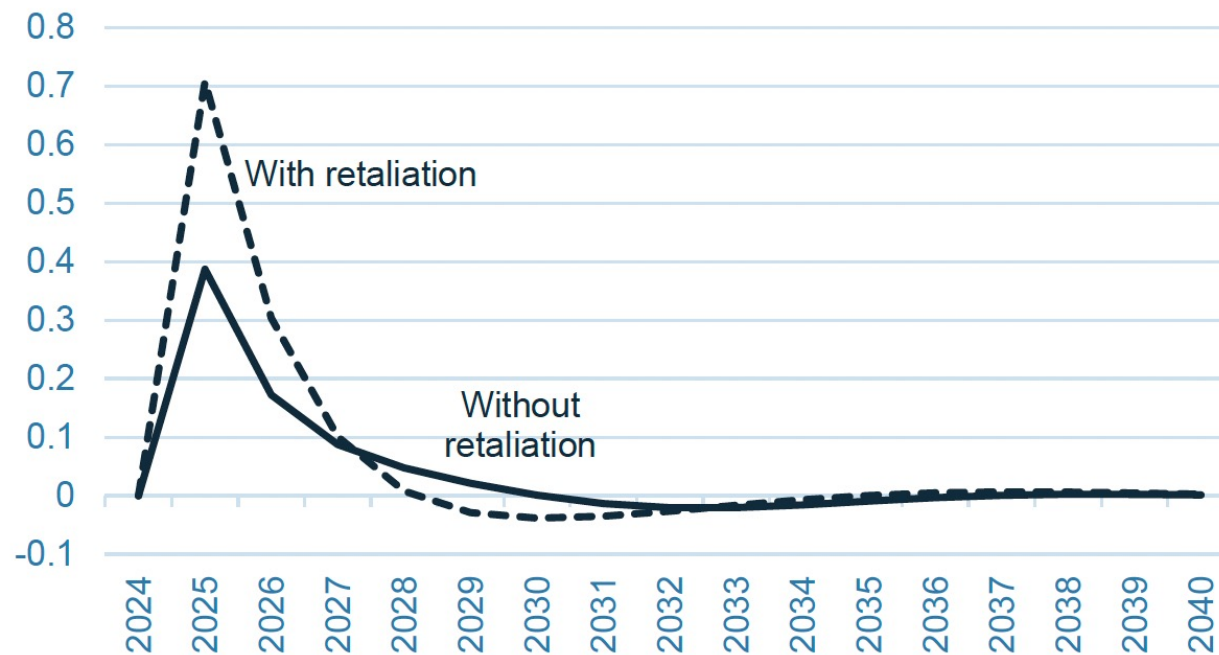




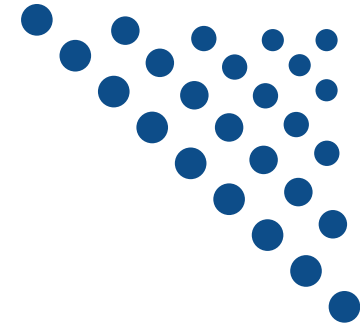
Effects of 60% Tariff on China Exports

US Inflation with and without Retaliation

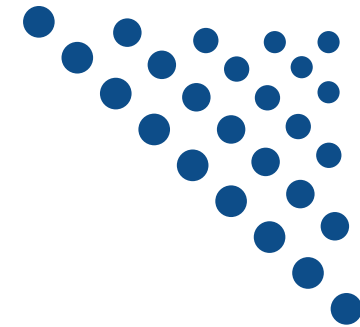
Percentage point deviation from baseline for each year



Effects of Trump Proposed Tariffs



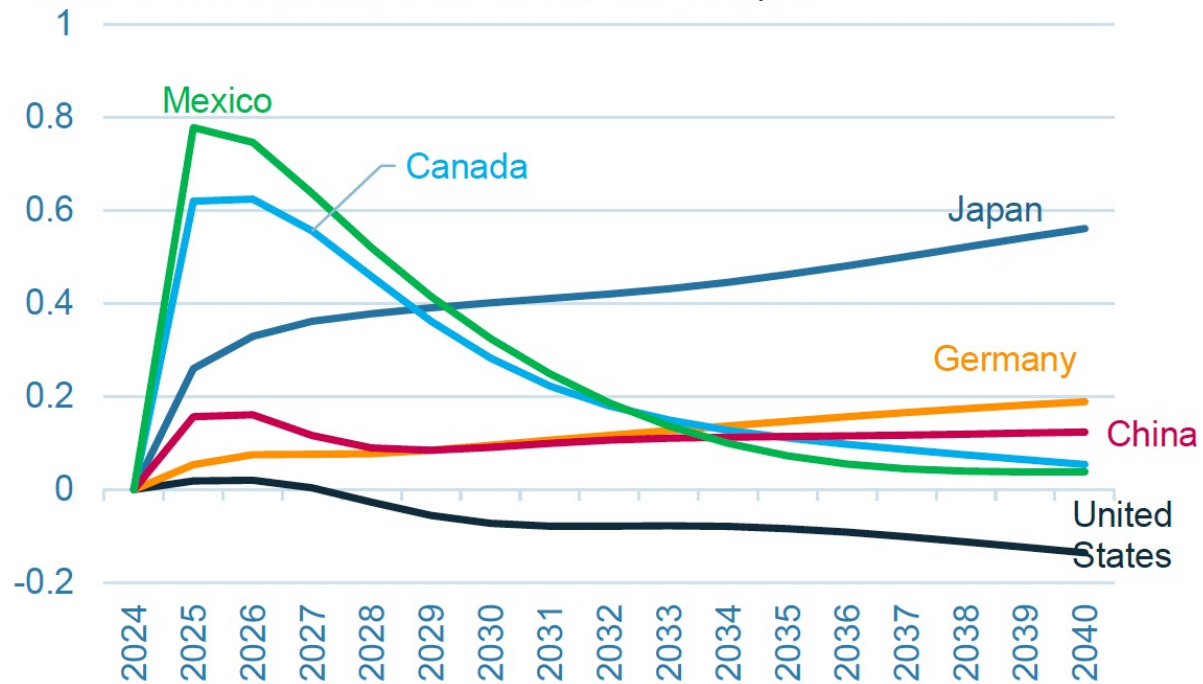
on Trade Surplus

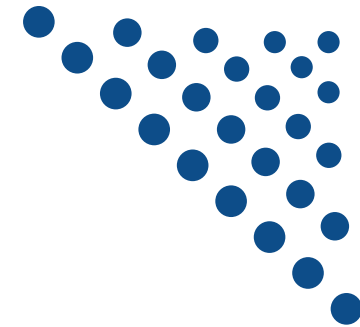


Effects of 10% Tariff on All US Imports

Trade Surplus

Percent of GDP deviation from baseline for each year

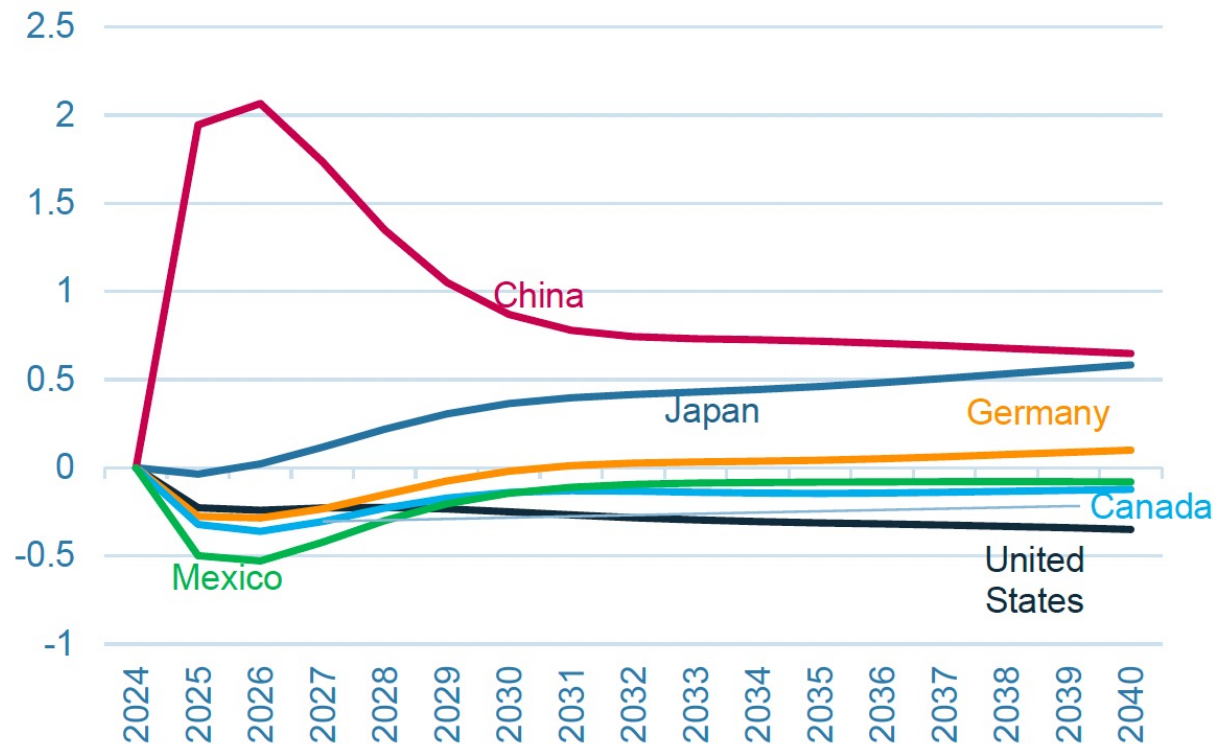




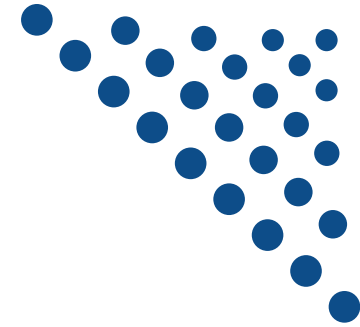
Effects of 60% Tariff on China Exports

Trade Surplus

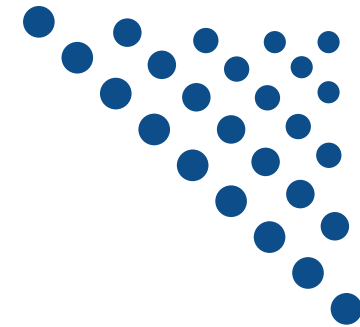
Percent of GDP deviation from baseline for each year



Effects of Trump Proposed Tariffs



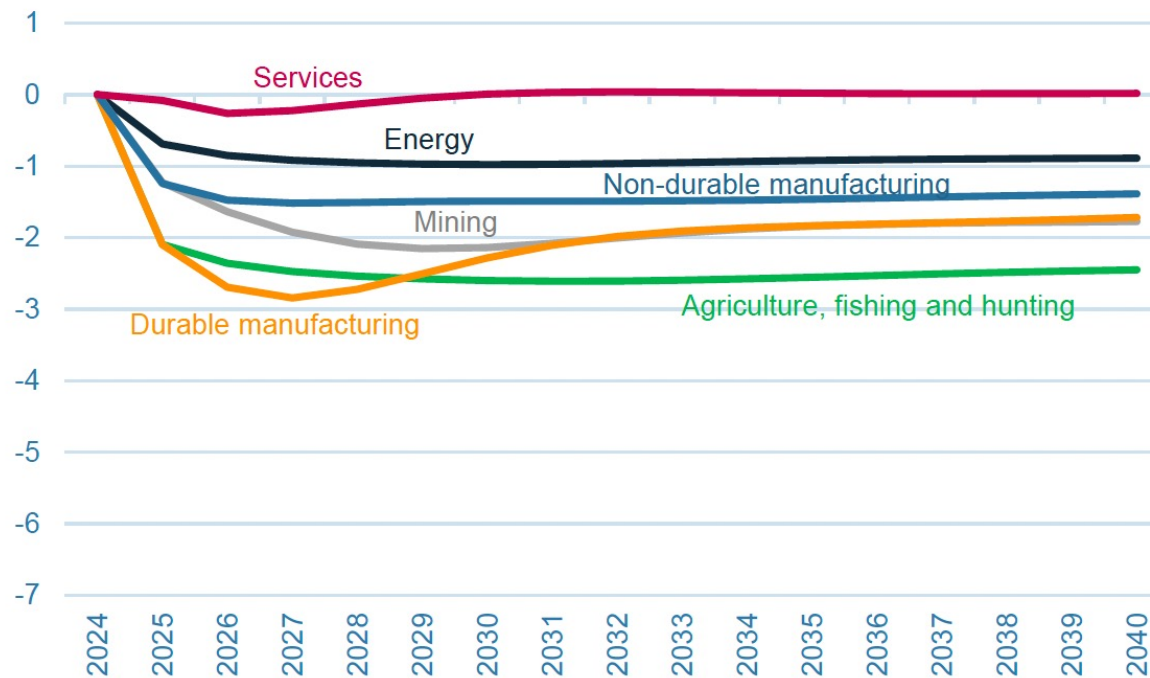
on Sectoral Production

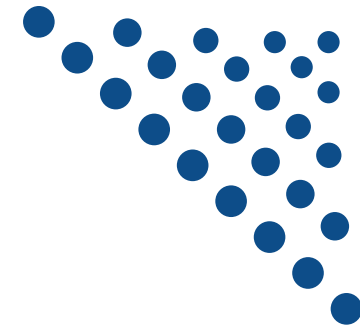


Effects of 10% Tariff on All US Imports

US Sectoral Production

Percent deviation from baseline for each year

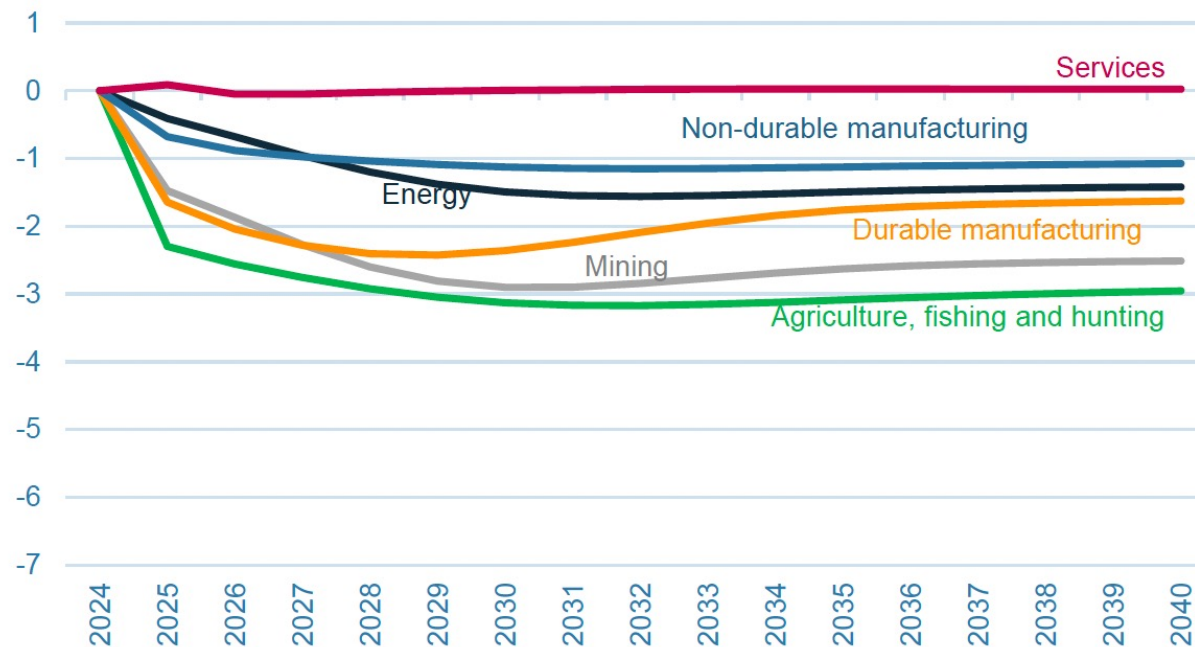




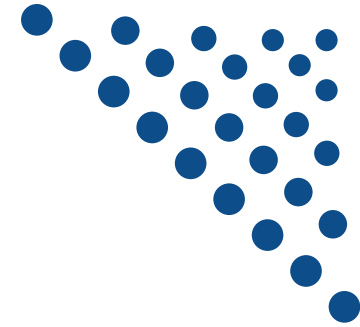
Effects of 60% Tariff on China Exports

US Sectoral Production

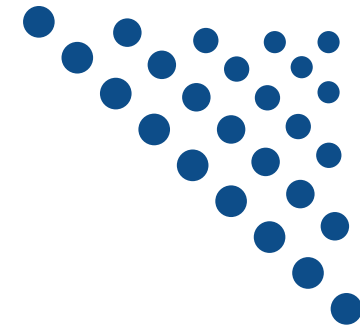
Percent deviation from baseline for each year



Effects of Trump Proposed Tariffs



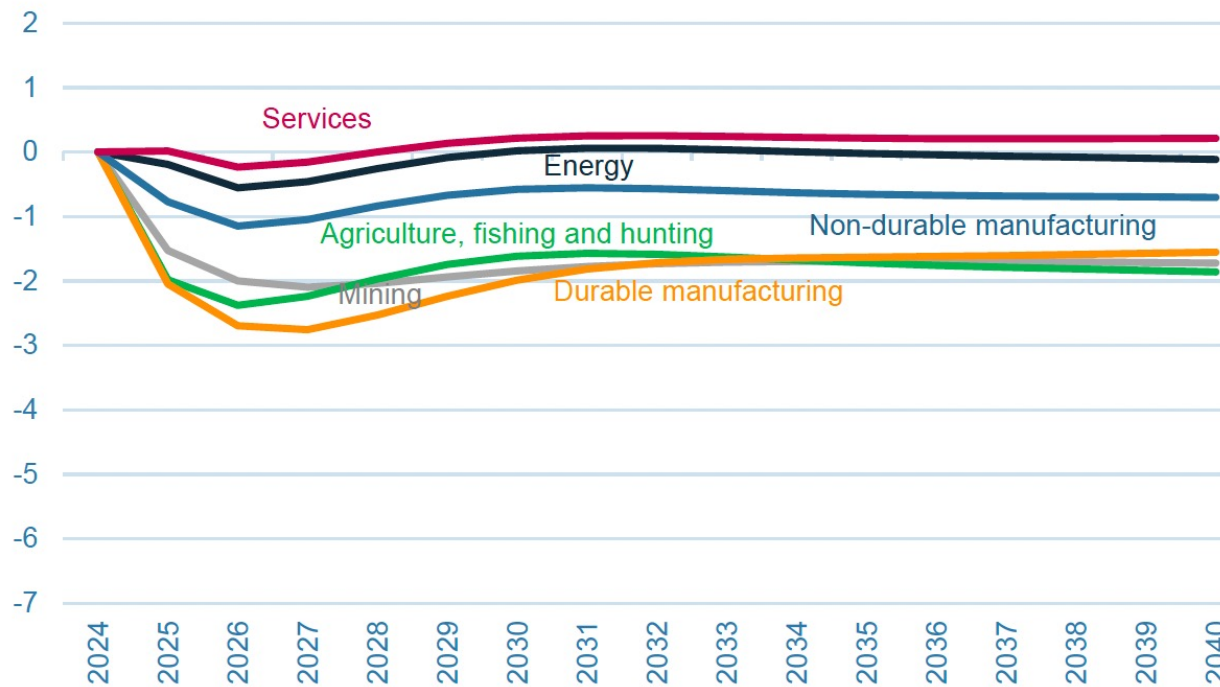
on Sectoral Employment

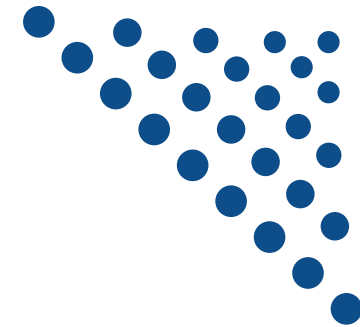


Effects of 10% Tariff on All US Imports

US Sectoral Employment

Percent deviation from baseline for each year

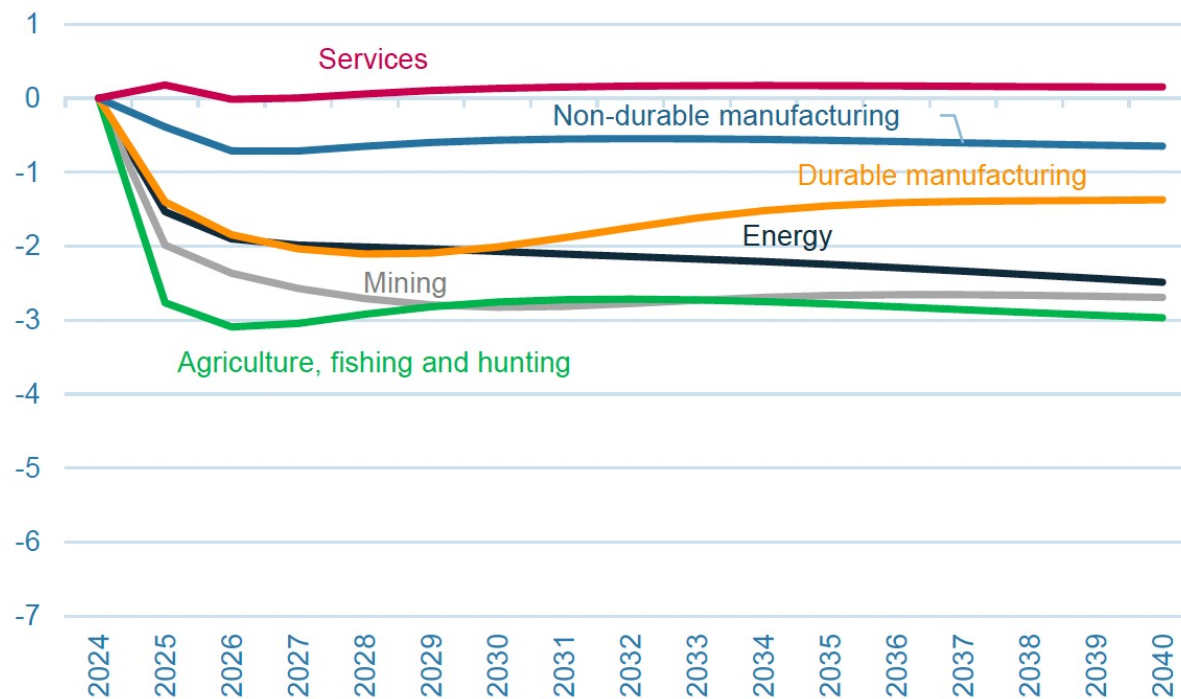




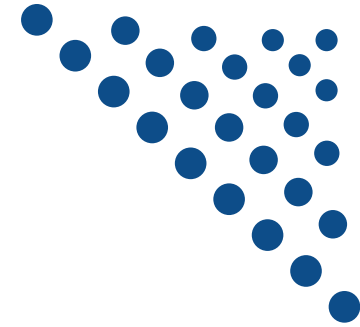
Effects of 60% Tariff on China Exports

US Sectoral Employment

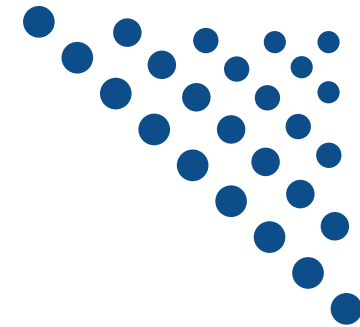
Percent deviation from baseline for each year



Effects of Trump Proposed Tariffs



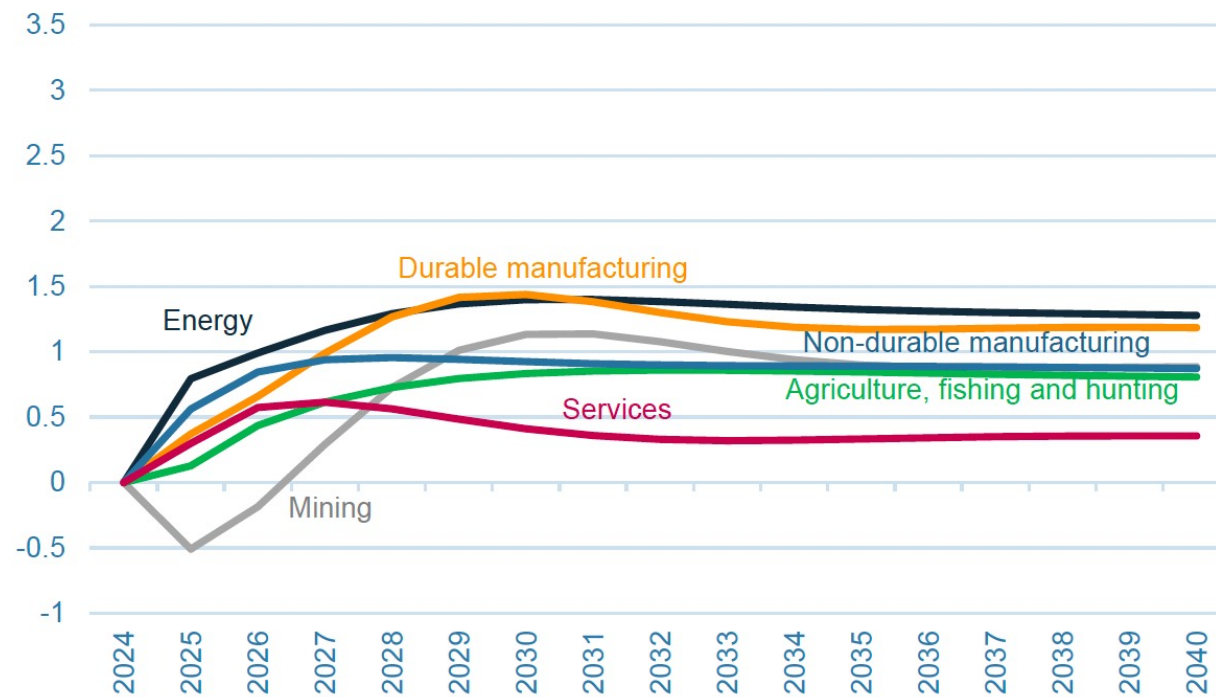
on Sectoral Prices

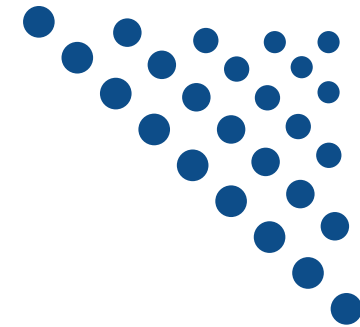


Effects of 10% Tariff on All US Imports

Sectoral Prices

Percent deviation from baseline for each year

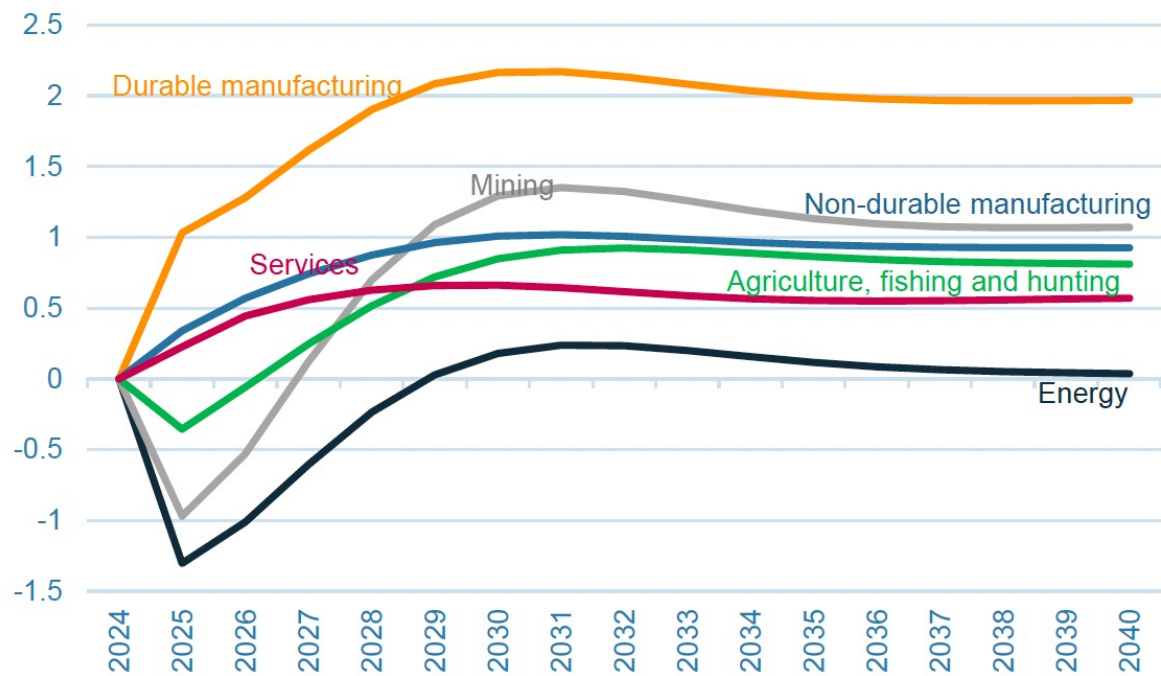




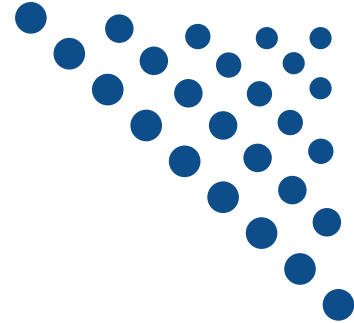
Effects of 60% Tariff on China Exports

US Sectoral Prices

Percent deviation from baseline for each year

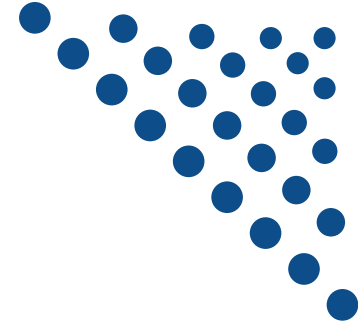


Effects of Trump Proposed Tariffs



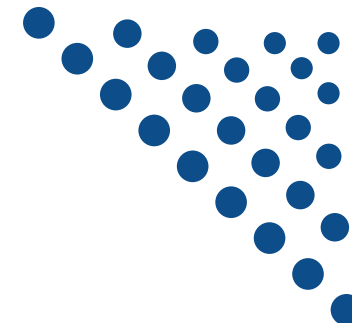
Which products come from which countries?

Source P. Luis Melgar and Rachel Lerman, “See which products Trump’s tariffs could make more expensive,” Washington Post, December 5, 2024.

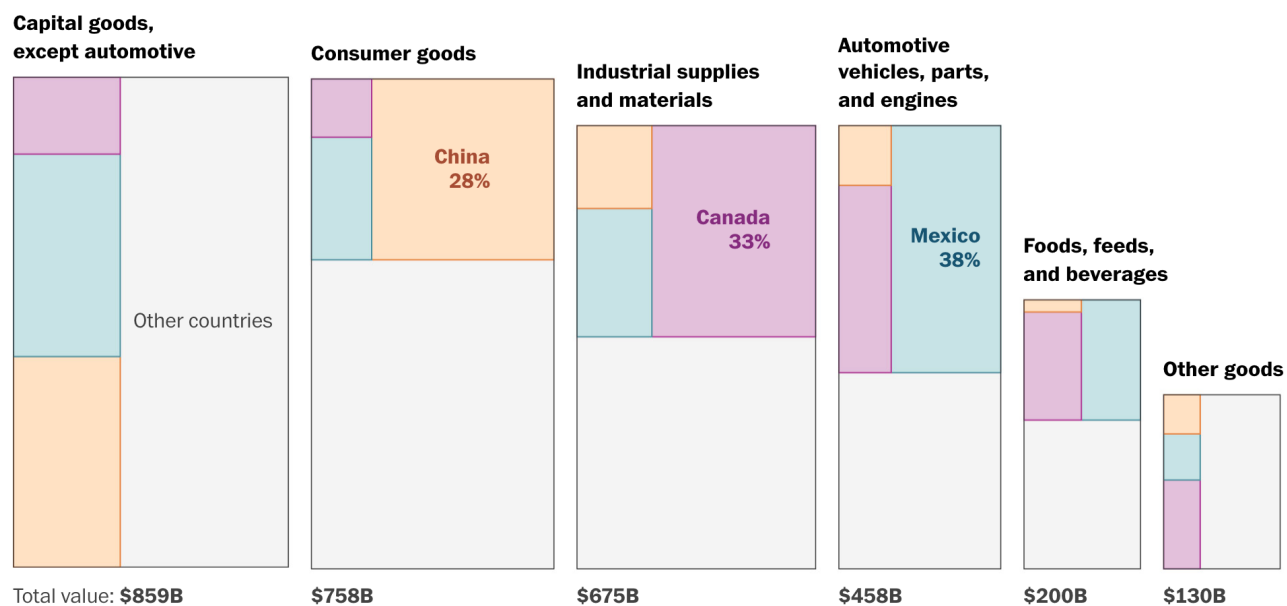


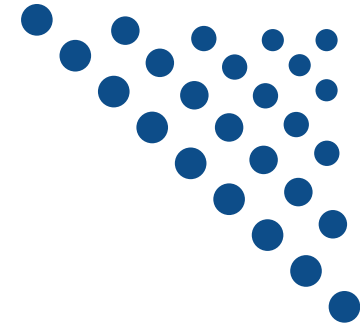
Top suppliers of goods to the U.S. by value in 2023



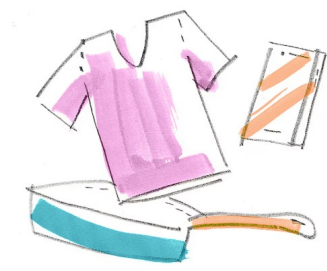


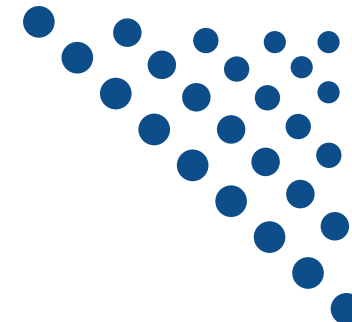
Value of goods imported to the U.S. in 2023 from **Canada**, **China**, **Mexico** and other countries





Here are the products that could be affected by Trump's proposed tariffs.





Cellphones, clothes and household goods

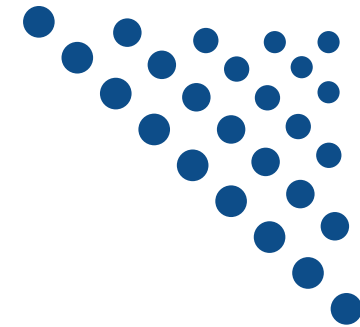
Canada, China, Mexico and other top suppliers by share of value of goods imported by the U.S. in 2023

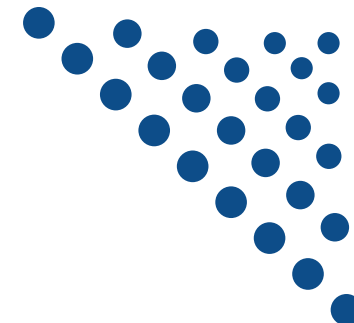




Produce, beer and juice

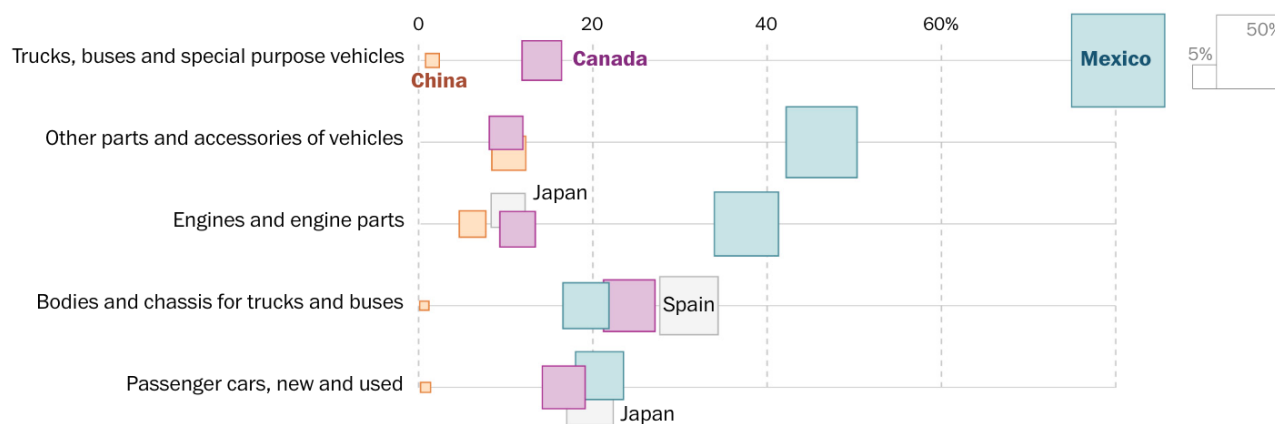
Canada, China, Mexico and other top suppliers by share of value of goods imported by the U.S. in 2023



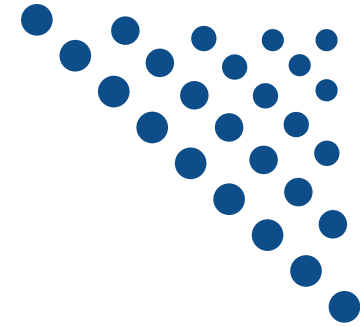


Vehicles and car parts

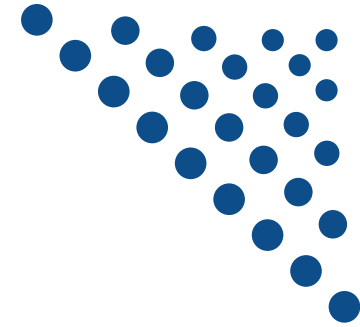
Canada, China, Mexico and other top suppliers by share of value of goods imported by the U.S. in 2023



Next Week



Thank you!



Questions?

See slides on my website

<https://websites.umich.edu/~alandear/presentations/>

