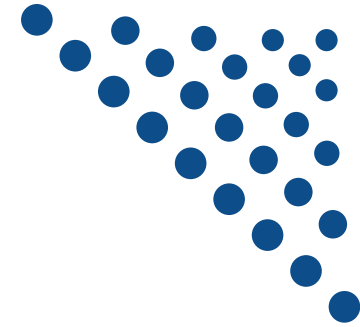




Tariffs and Their Effects

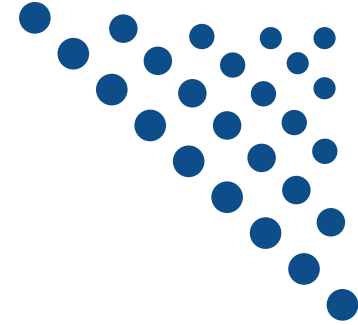
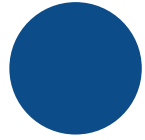
Alan V. Deardorff
University of Michigan

Presentation to Economic Dinner Group
November 18, 2024

Outline

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



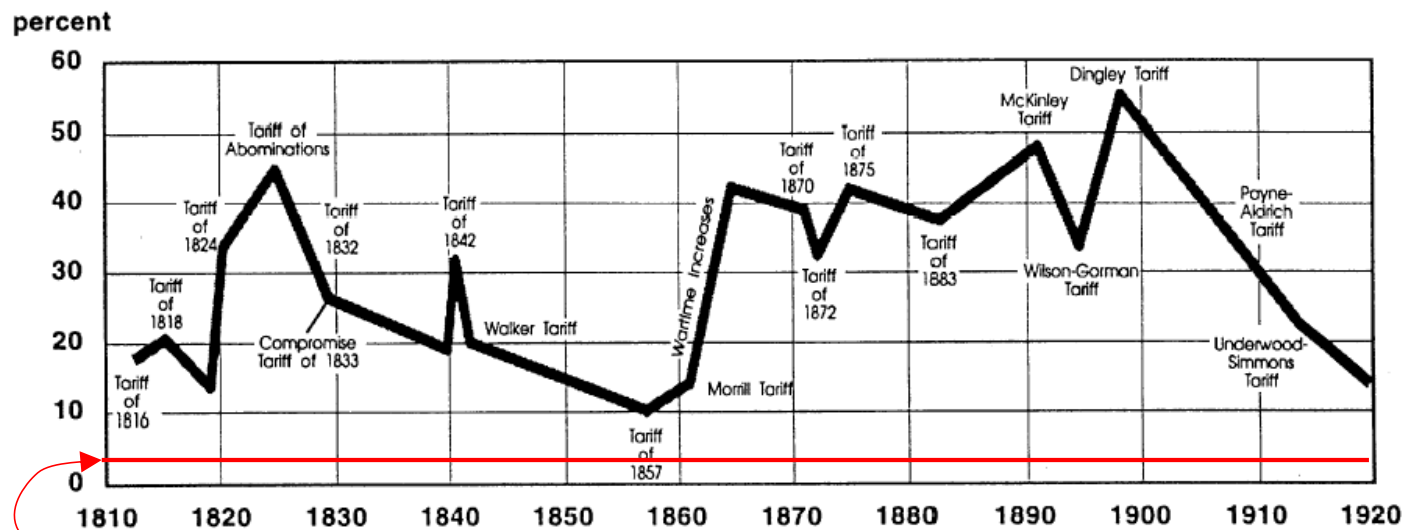


US Tariff History



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US Tariff History, 1810-1920

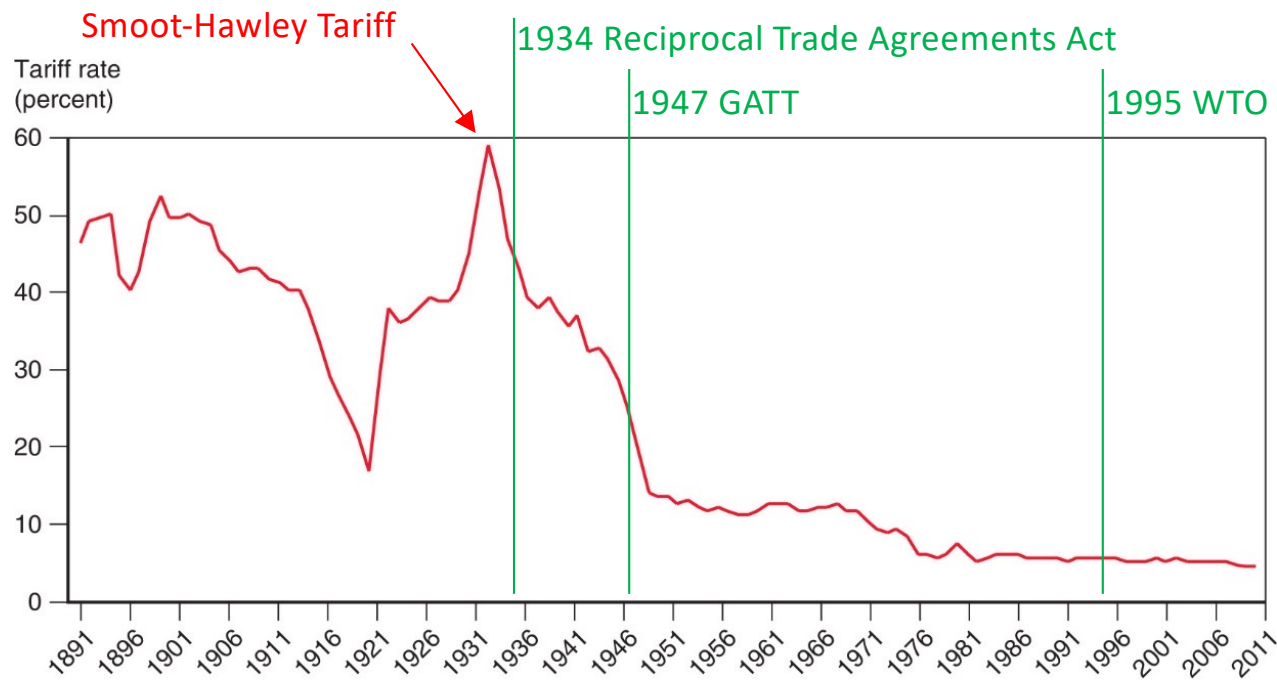


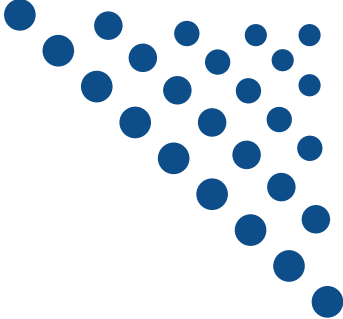
Today, pre-Trump



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US Tariff History, 1891-2011



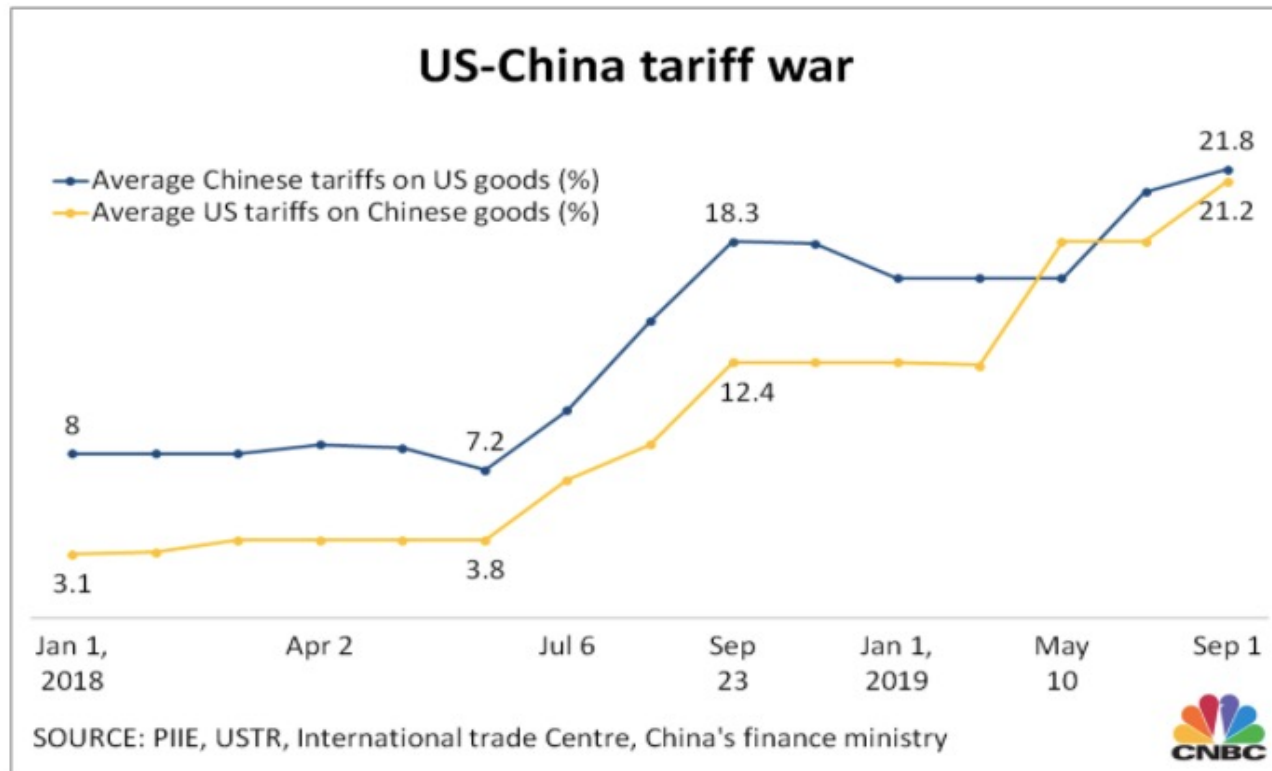


Trump I Tariffs and the Trade War



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US-China Tariff War – Tariff Rates

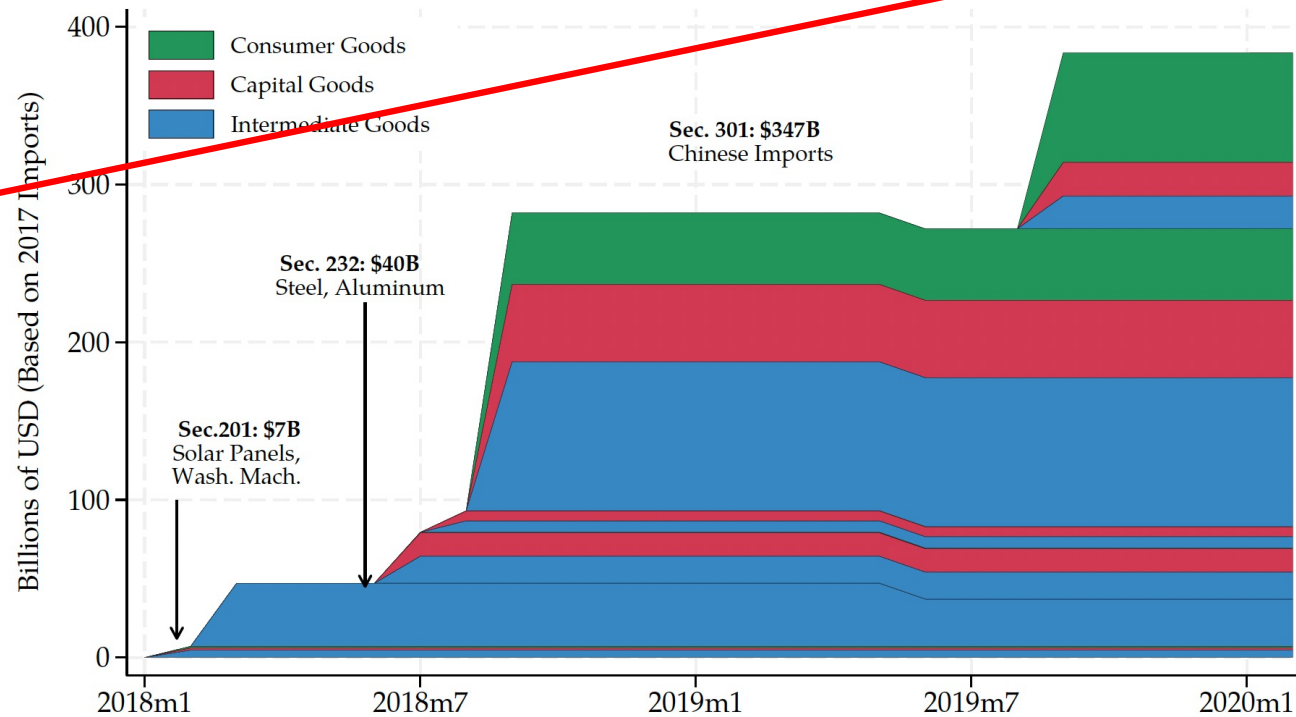


Source: CNBC.com

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.

Trump I Tariffs - US Imports Covered

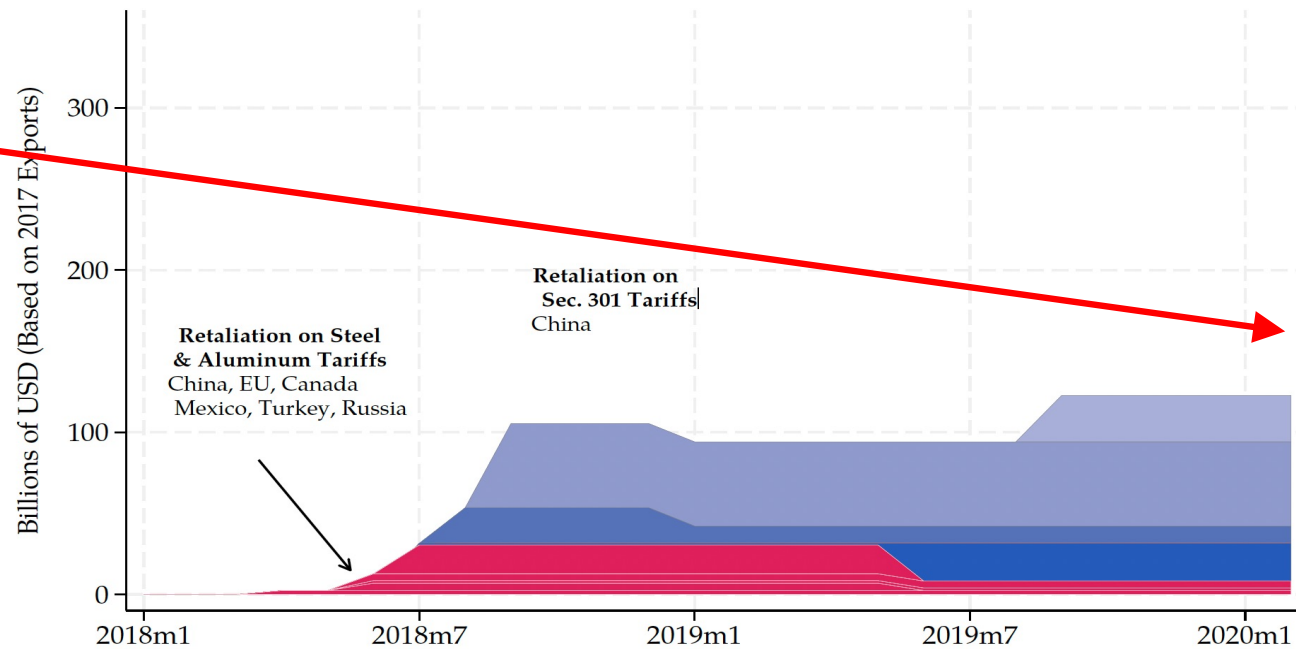
US imports
from China in
2017, per
World Bank:
\$480 billion



Source:
Flaen &
Pierce
2020

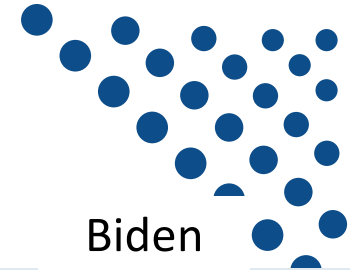
Trump I Tariff Retaliation - US Exports Covered

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



Source:
Flaen &
Pierce
2020

US Trade Balance = Exports minus Imports



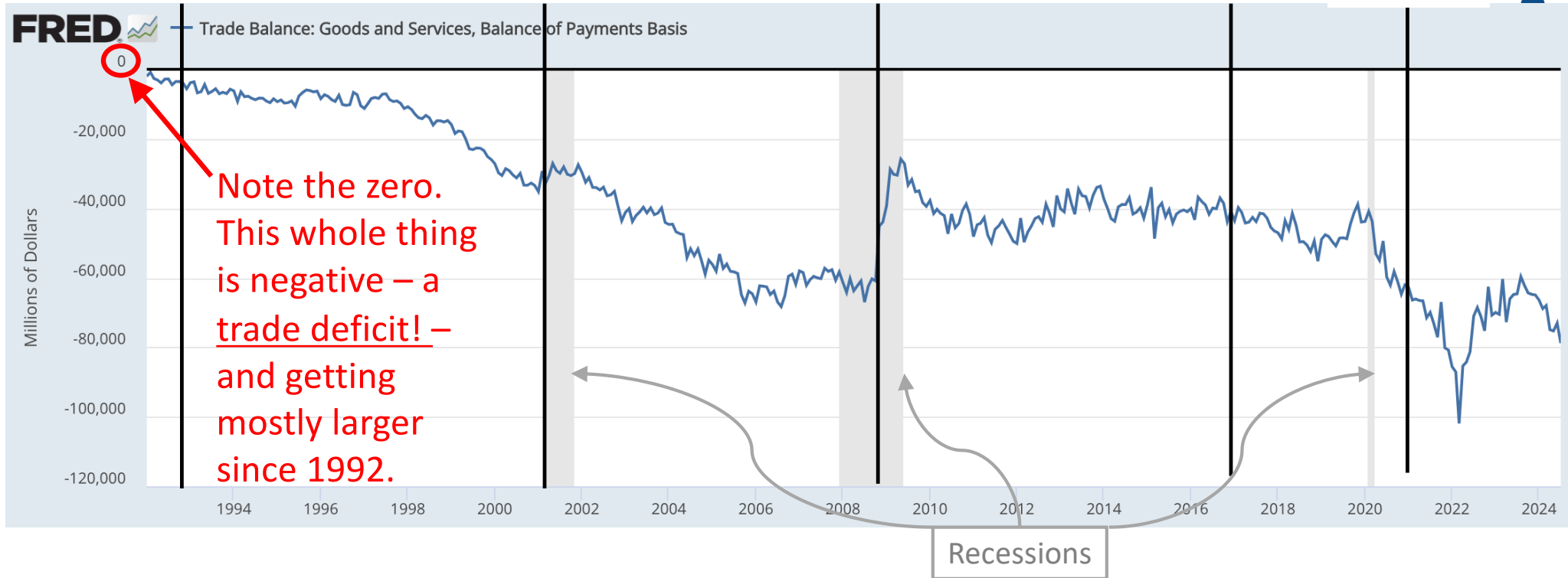
Clinton

Bush

Obama

Trump

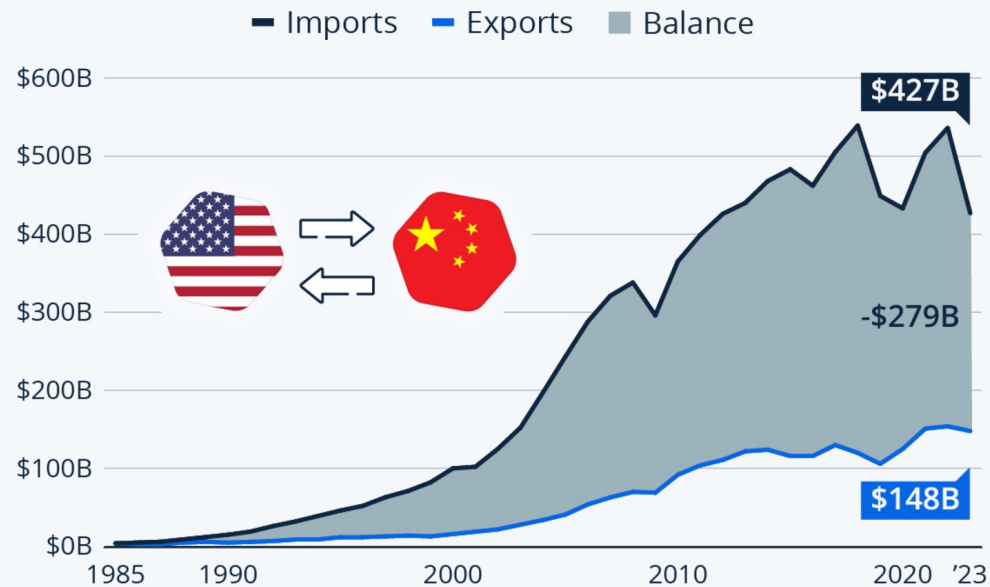
Biden



US Trade Balance 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

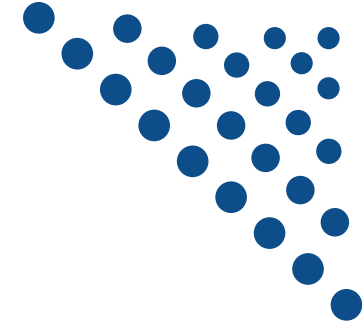


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US Trade Balance with Vietnam



Trump Tariff Exemptions



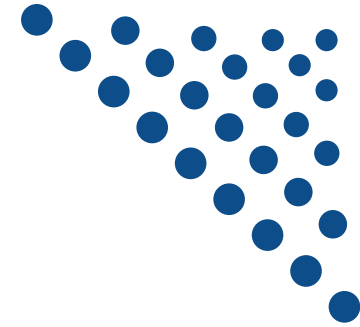
- September 18, 2018:

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

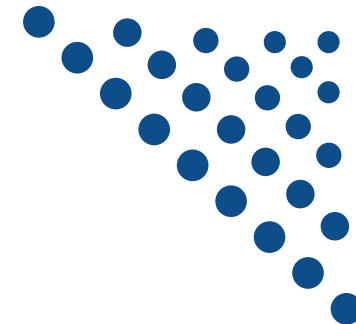
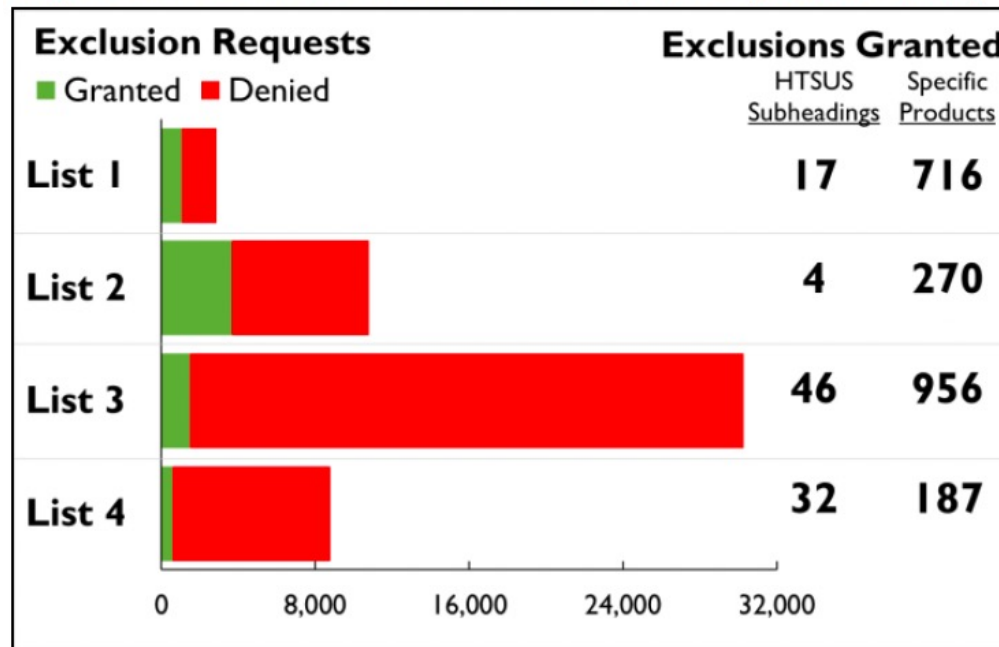
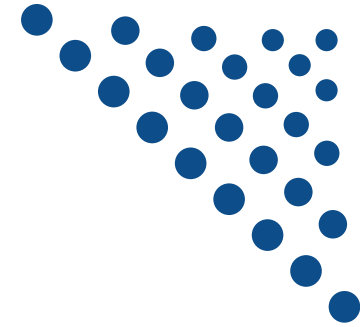


Figure 1. Section 301 Exclusions (Through Jan. 2020)



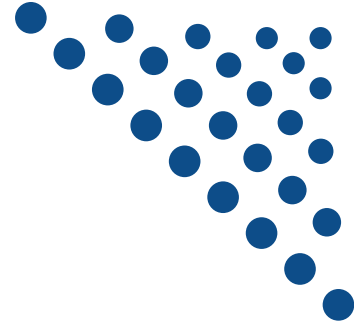
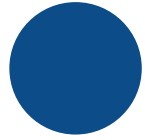
Source: CRS with information from the Office of the USTR.

Trump Tariff Exemptions



- **Issues with the exemptions**

- “Firms hiring lobbyists were less likely to have steel tariff exemptions approved.”
- Contributions to Republicans made China exemptions more likely
- Contributions to Democrats made China exemptions less likely
- Renewal of exemptions were uncertain and came late enough to create uncertainty.

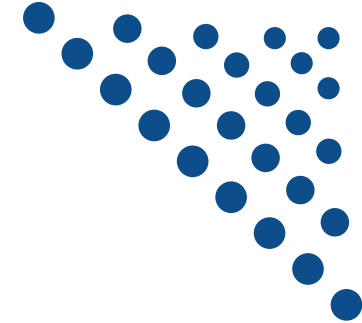


Trump II Tariffs



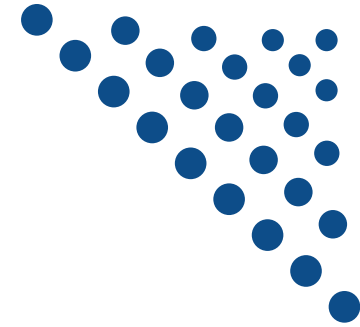
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Trump II Tariff Plans



- **“To me the most beautiful word in the dictionary is ‘tariff’”**
- **Has 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

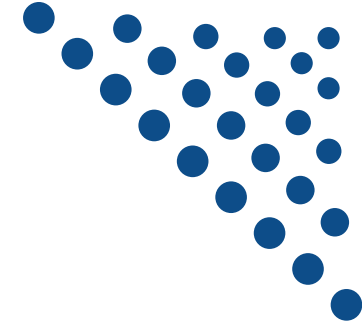
Trump II Tariff Plans



- **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 the threat to negotiate “deals”
 - For the benefit of the country (?)
 - For the benefit of himself (!)

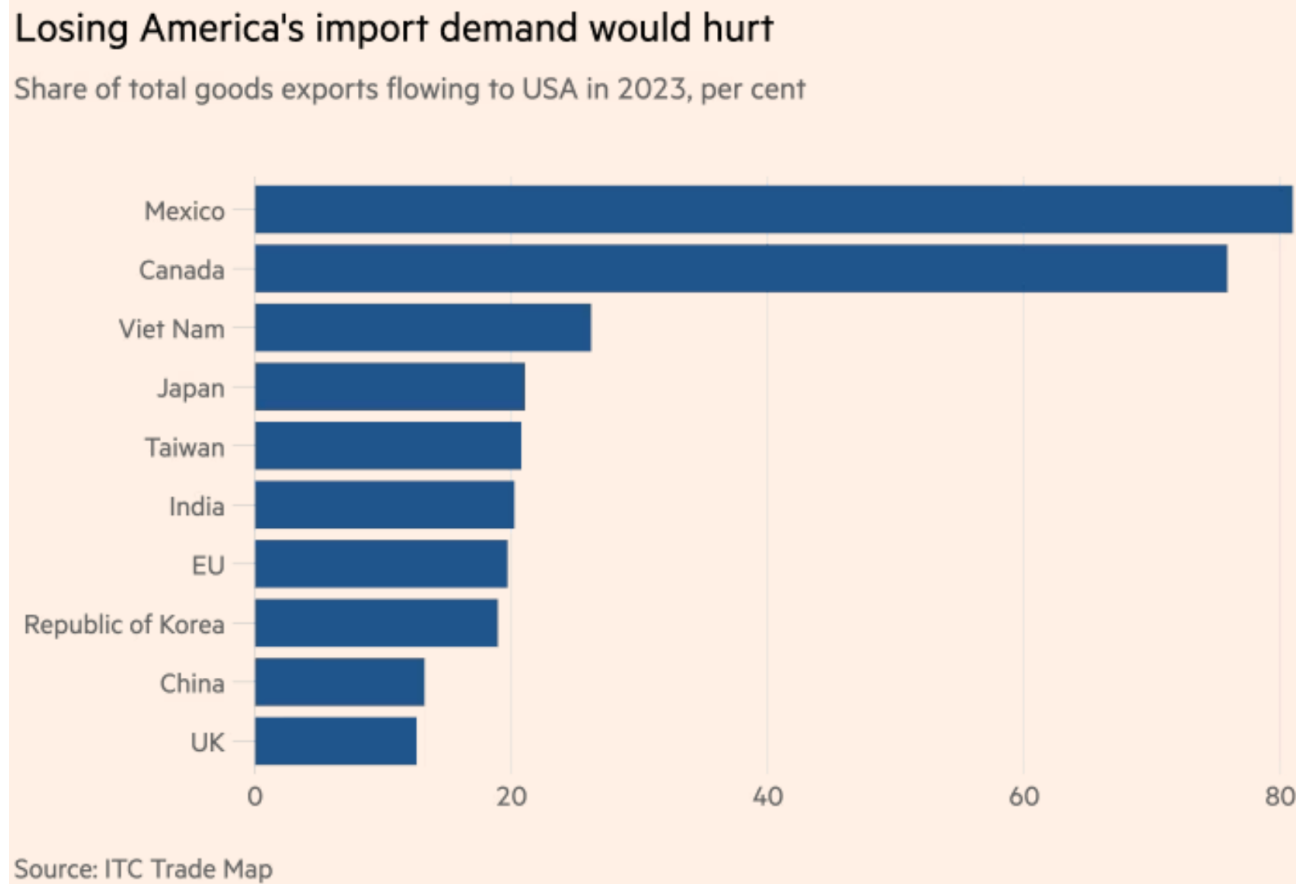
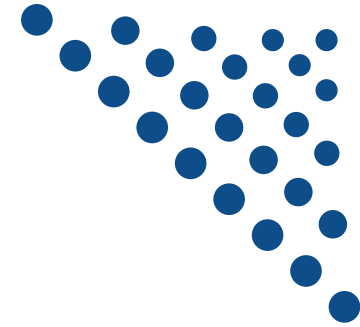
Trump II Tariff Plans



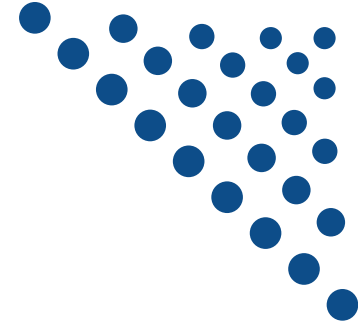
- **What will Trump be able to do?**

- The 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, not used yet
- 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

What Countries will Be Hurt?



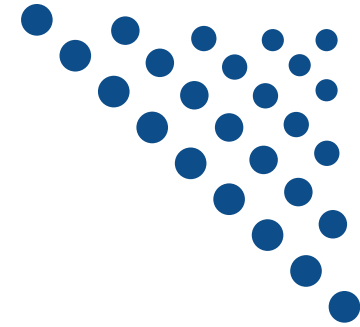
Source:
Keynes, FT,
11/15/24



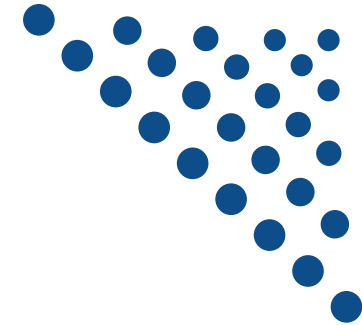
Effects of Tariffs in General



Economic effects of a tariff



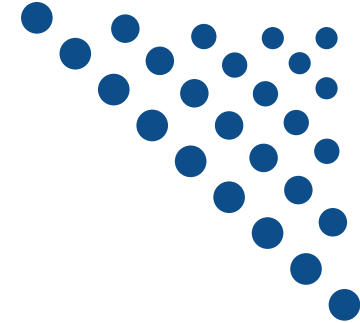
- **A tariff is a tax on imports. It causes**
 - A rise in the price of the imported good in the importing country
 - A fall in the price of the imported good in the exporting country
 - The quantity imported to fall
 - Revenue for the tariff-levying government
- **Almost always: the rise at home is 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.
 - Example: Trump's tariffs caused US prices to rise, with hardly any perceptible fall in prices abroad.



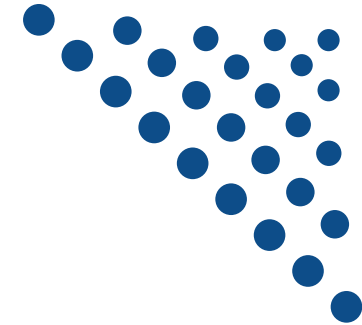
Effects of a tariff

- **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

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

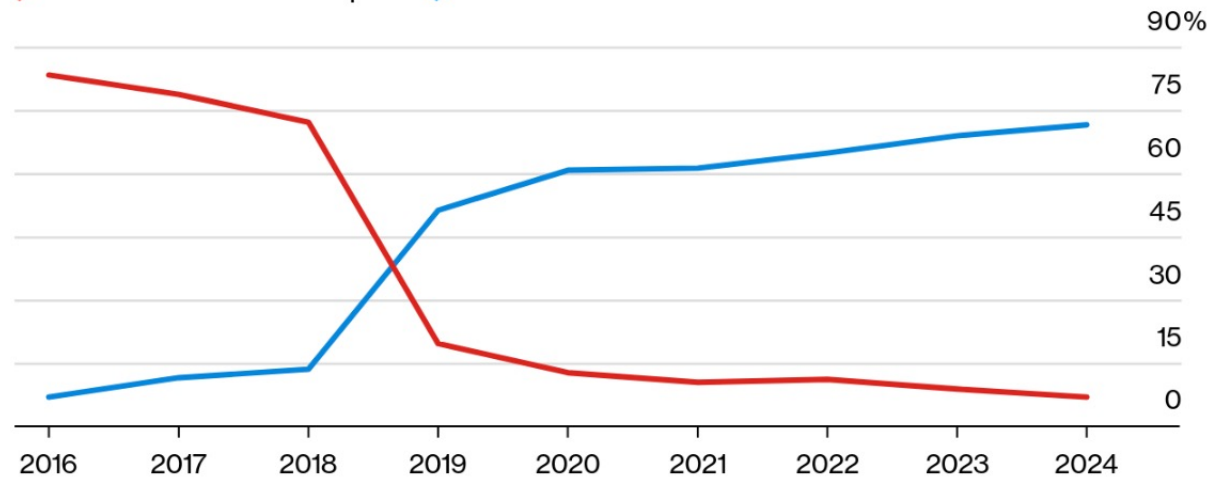


Effects of Trump I on Christmas Lights

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



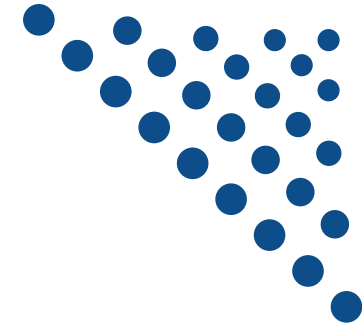
Source: Xeneta, US Census Bureau

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.

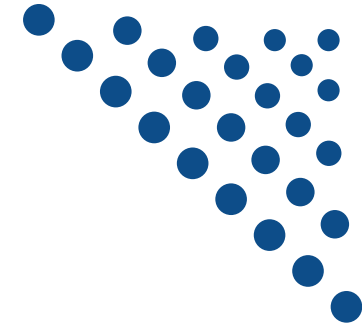


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Effects of a tariff

- **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, no reason for tariffs to raise income
 - So NO!

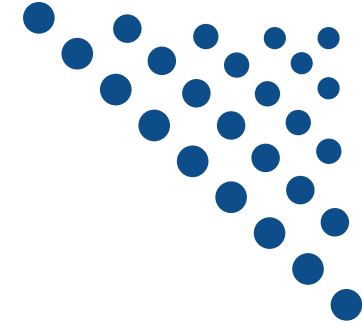


Effects of a tariff

- **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**

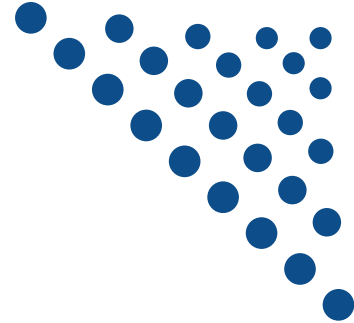
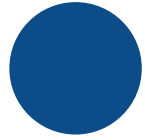
- Tariffs, especially on China, raise prices of the products disproportionately bought by low-income consumers, hurting them more than high-income consumers

- **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



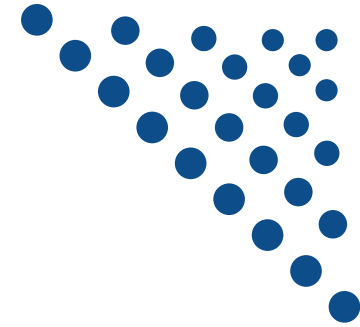
Effects of Trump II Tariffs



- **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 for the 2 sets of tariffs

Effects of Trump Proposed Tariffs

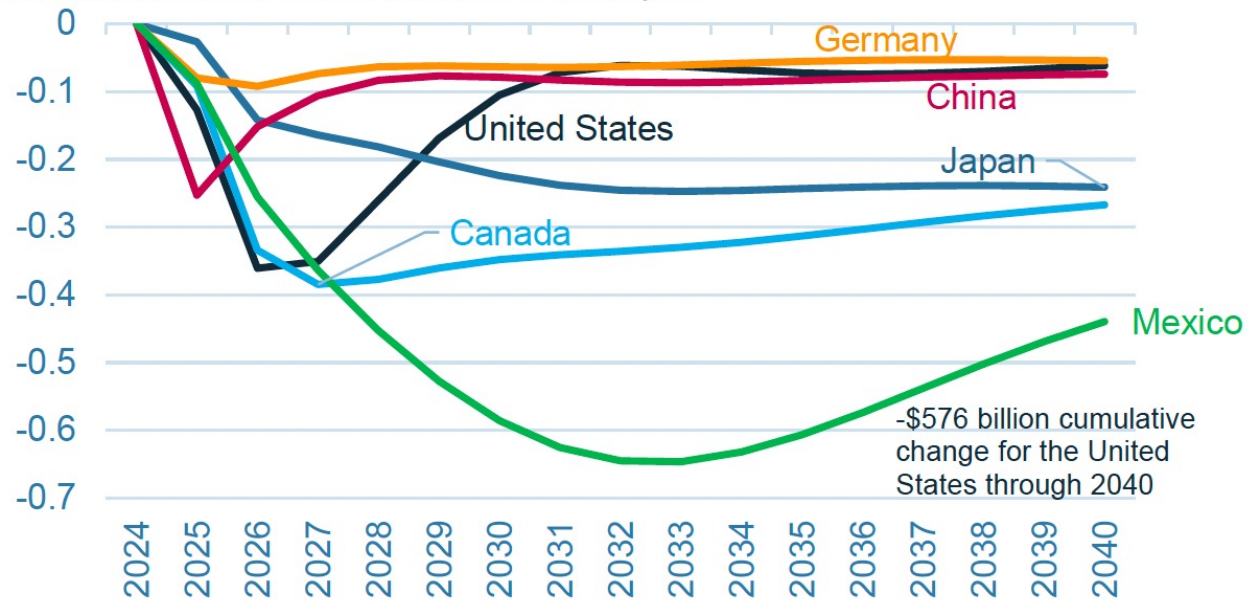
on GDP

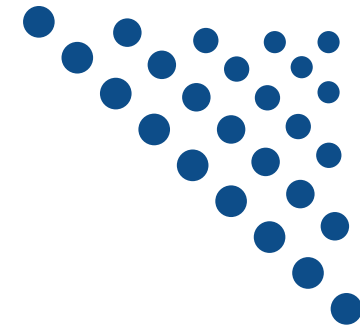


Effects of 10% Tariff on All US Imports

Real GDP

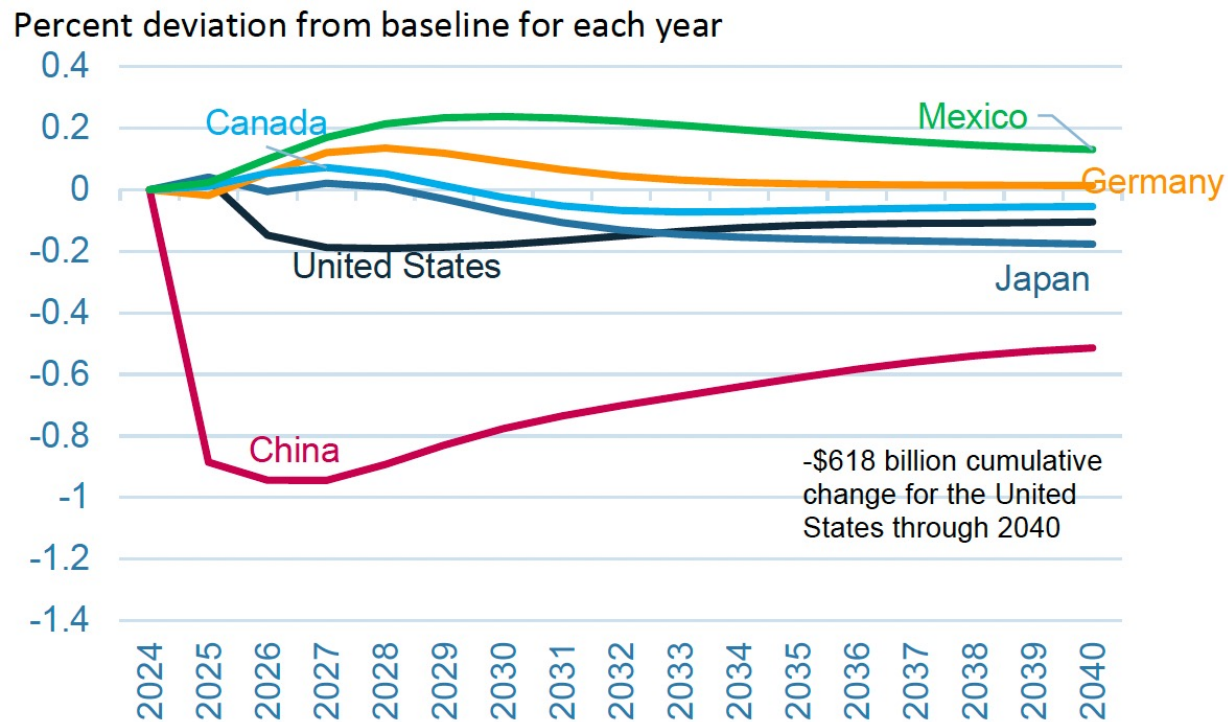
Percent deviation from baseline for each year





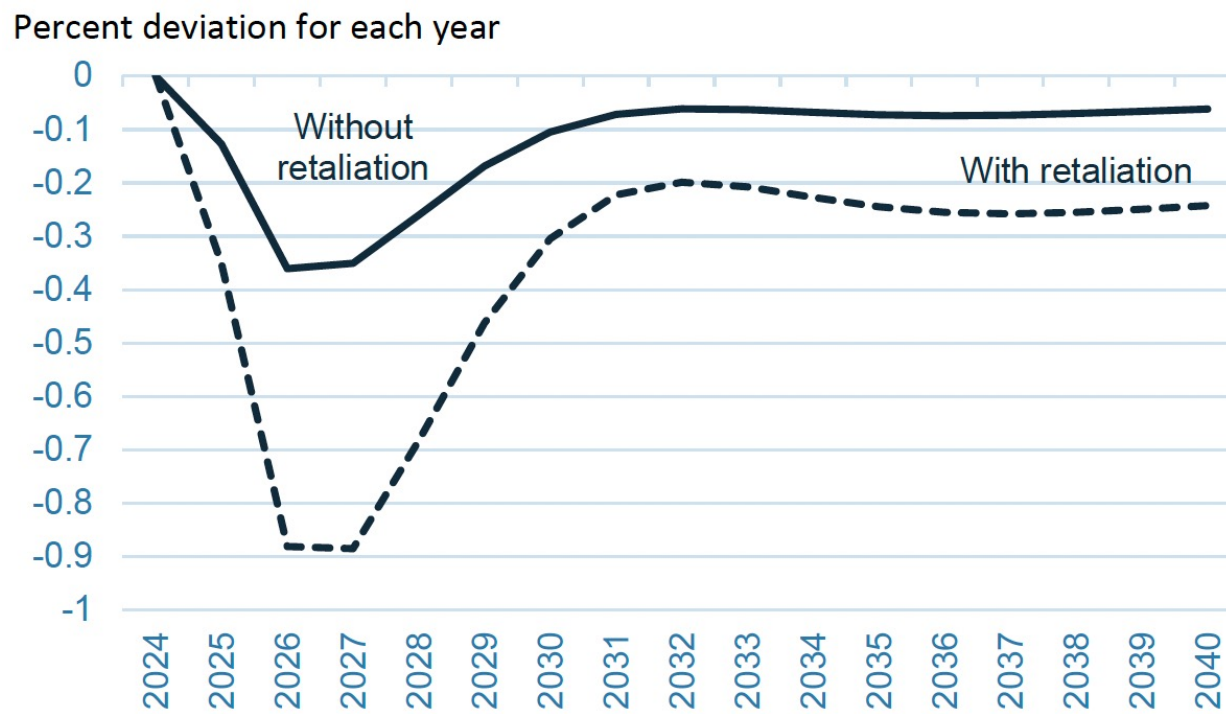
Effects of 60% Tariff on China Exports

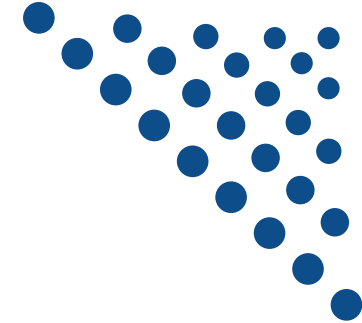
Real GDP



Effects of 10% Tariff on All US Imports

US GDP with and without Retaliation

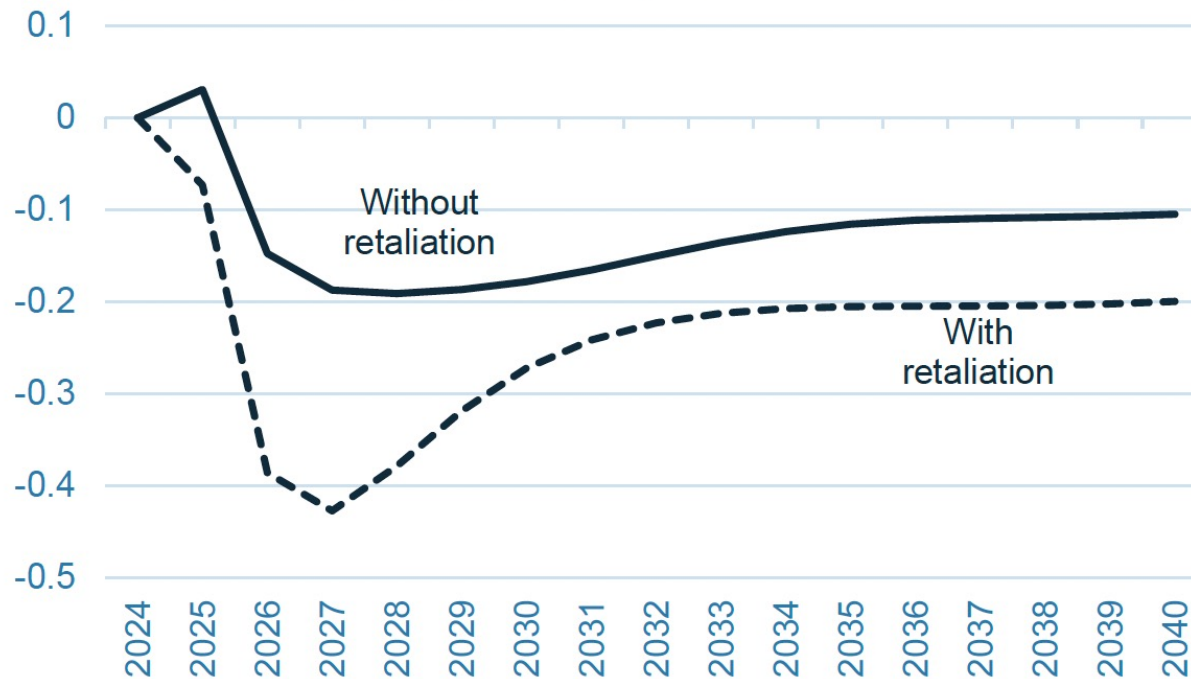




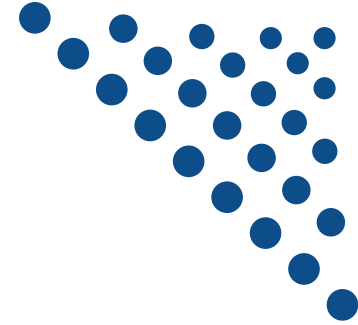
Effects of 60% Tariff on China Exports

US GDP with and without Retaliation

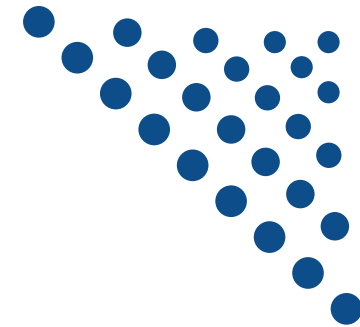
Percent deviation from baseline for each year



Effects of Trump Proposed Tariffs



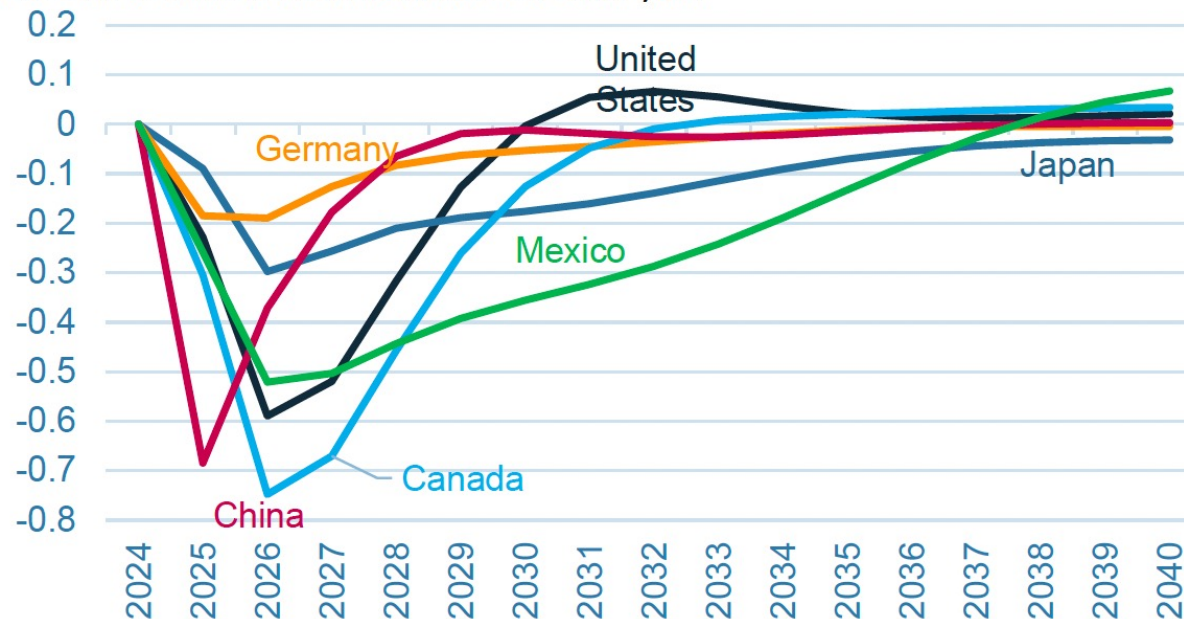
on Employment

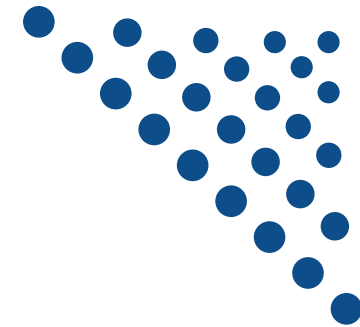


Effects of 10% Tariff on All US Imports

Employment

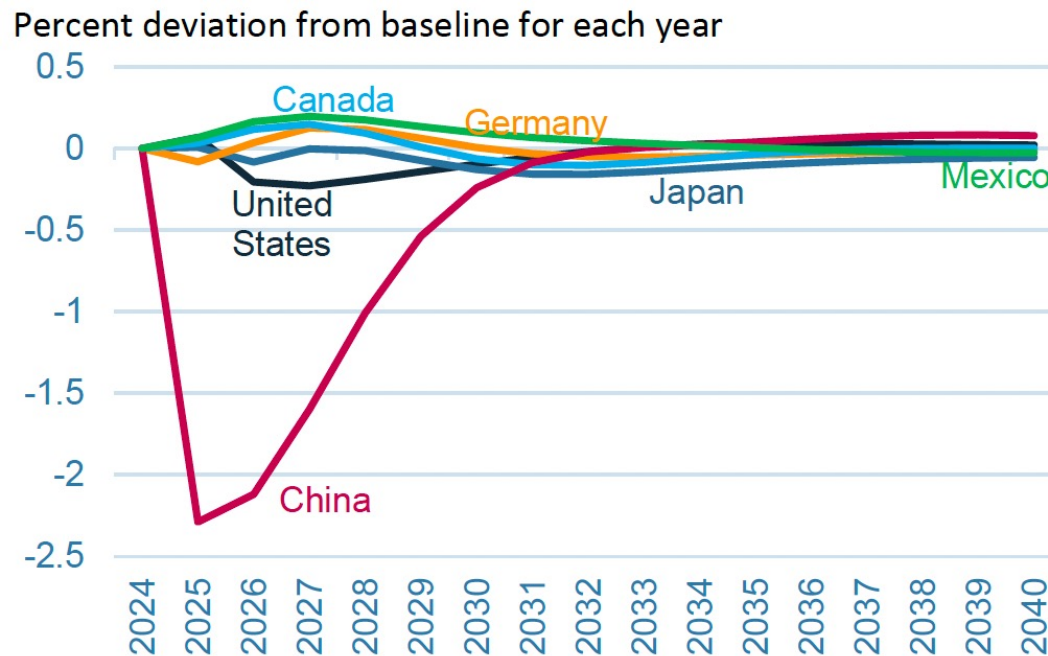
Percent deviation from baseline for each year



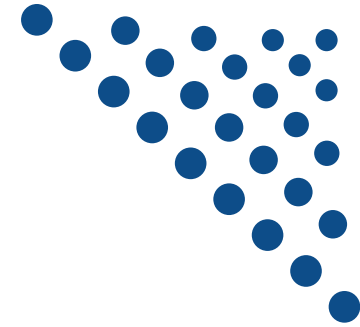


Effects of 60% Tariff on China Exports

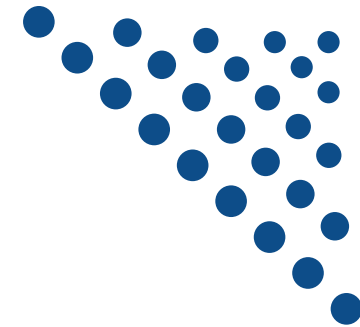
Employment



Effects of Trump Proposed Tariffs

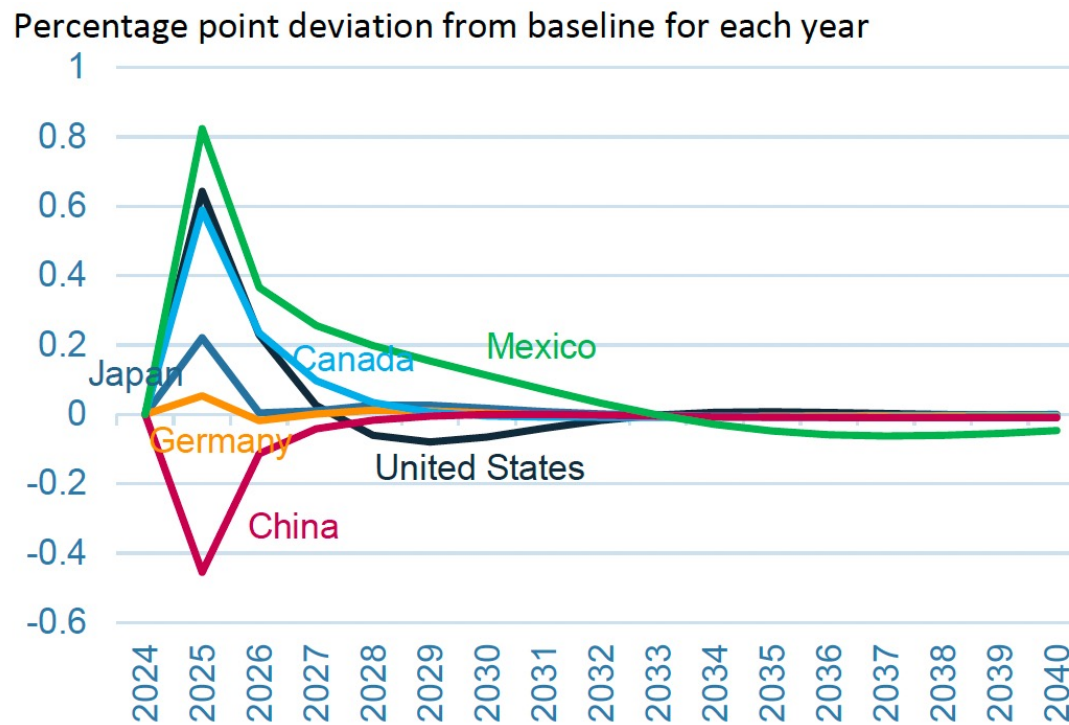


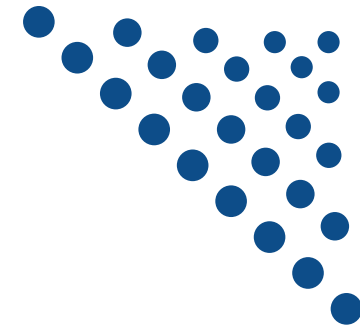
on Inflation



Effects of 10% Tariff on All US Imports

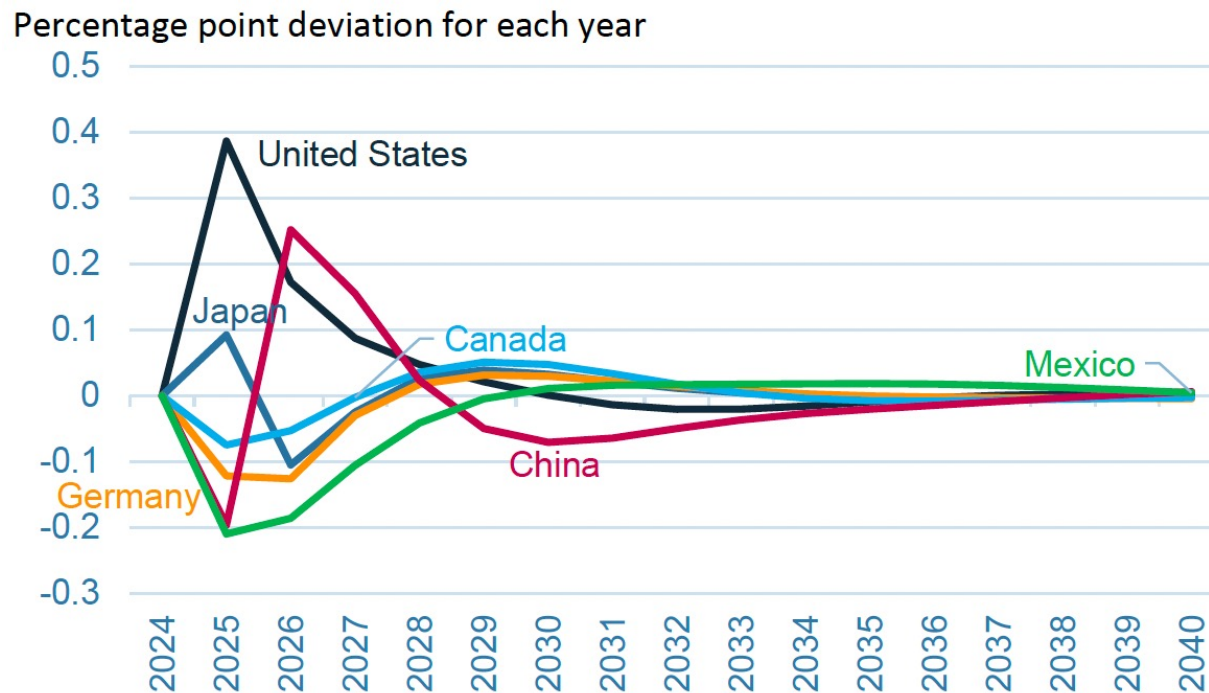
Inflation

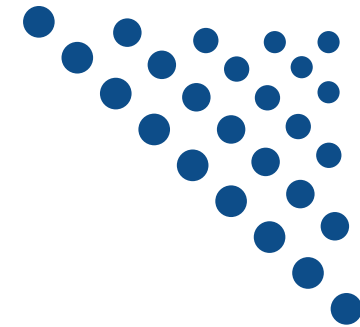




Effects of 60% Tariff on China Exports

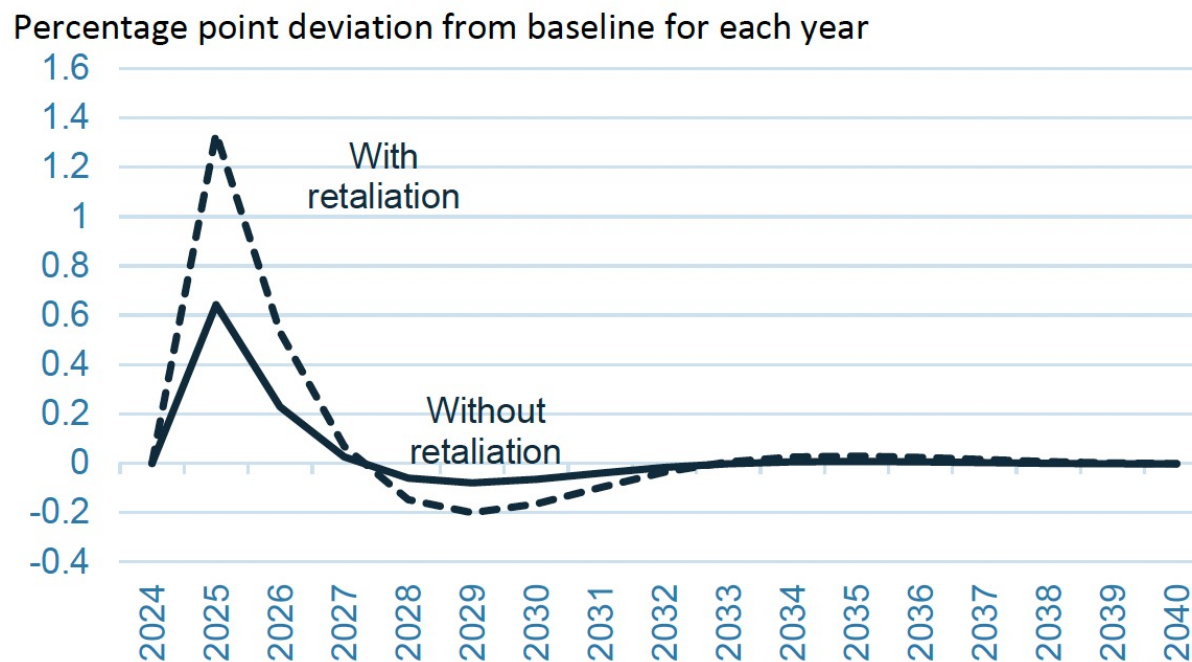
Inflation

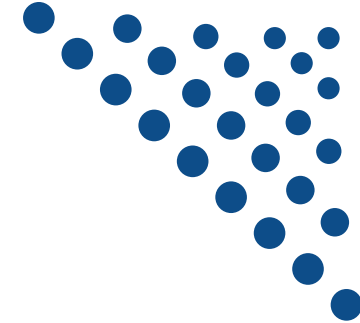




Effects of 10% Tariff on All US Imports

US Inflation with and without Retaliation

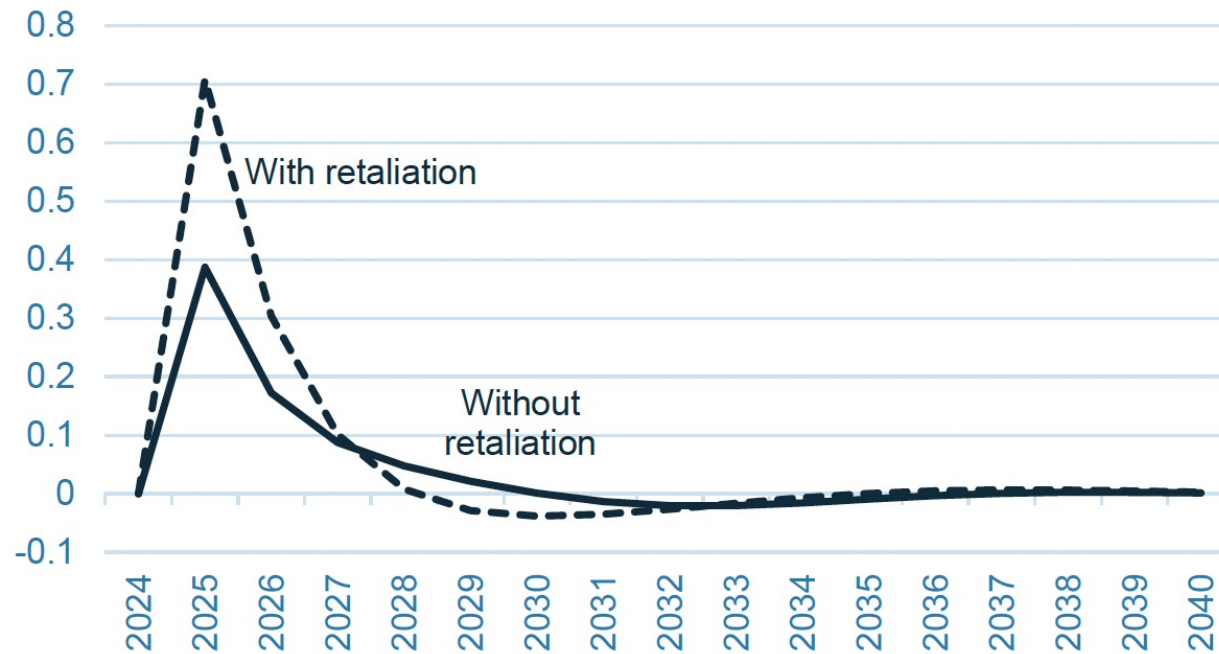




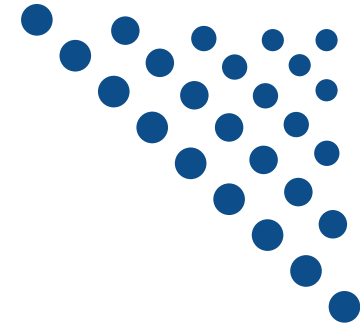
Effects of 60% Tariff on China Exports

US Inflation with and without Retaliation

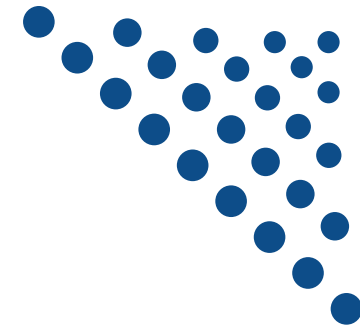
Percentage point deviation from baseline for each year



Effects of Trump Proposed Tariffs



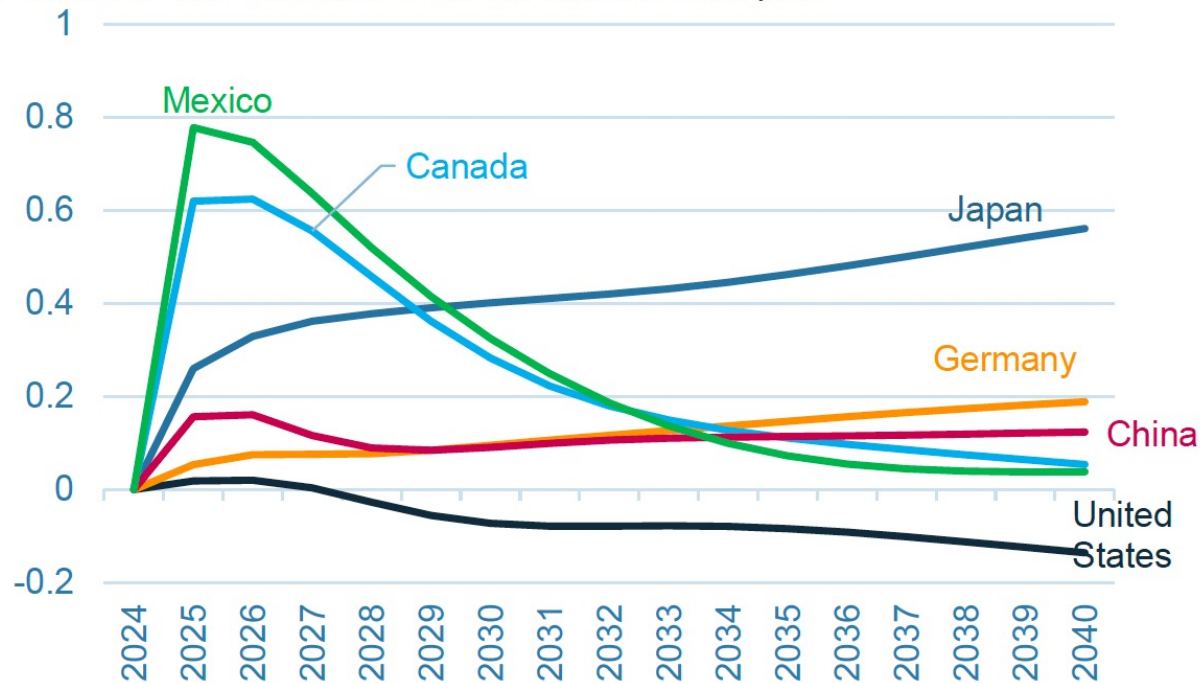
on Trade Surplus

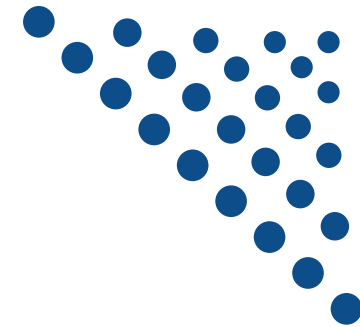


Effects of 10% Tariff on All US Imports

Trade Surplus

Percent of GDP deviation from baseline for each year

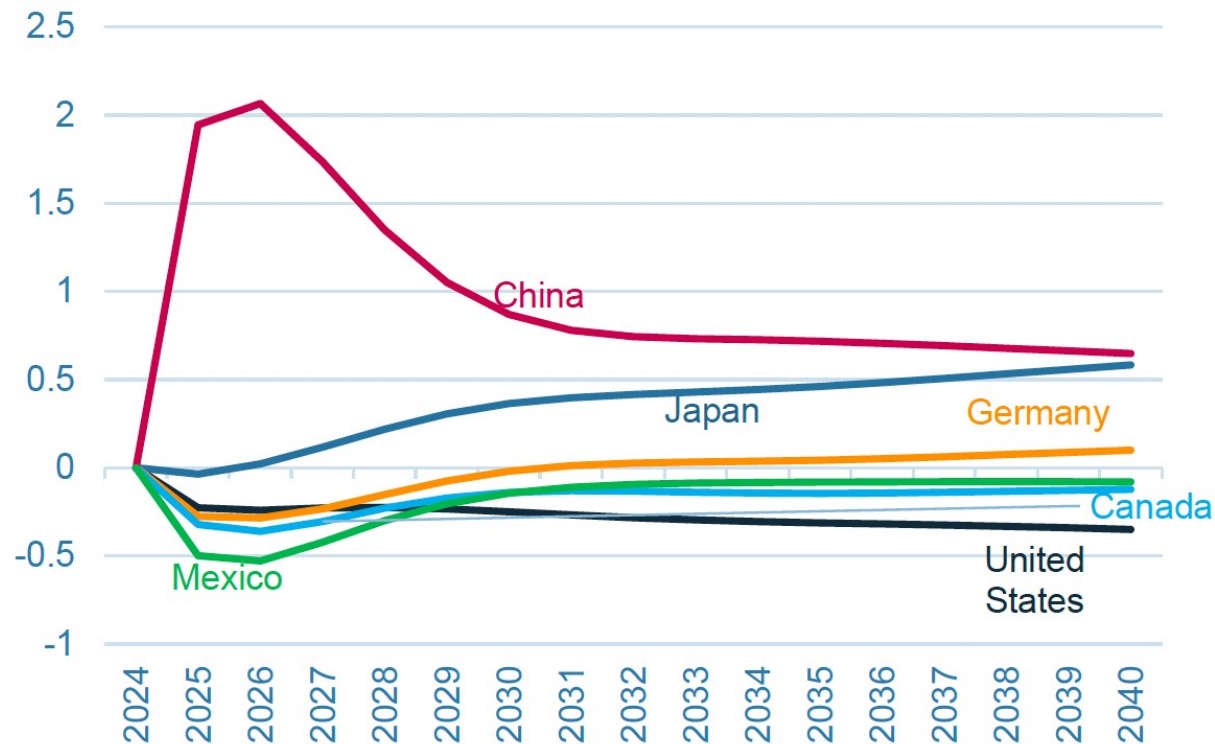




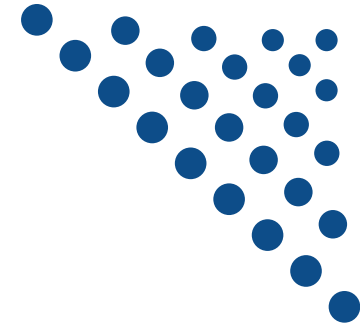
Effects of 60% Tariff on China Exports

Trade Surplus

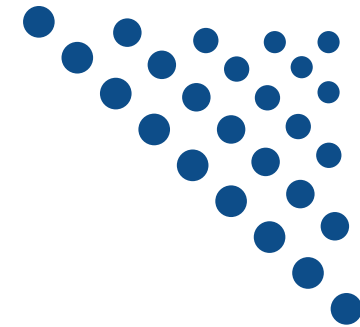
Percent of GDP deviation from baseline for each year



Effects of Trump Proposed Tariffs



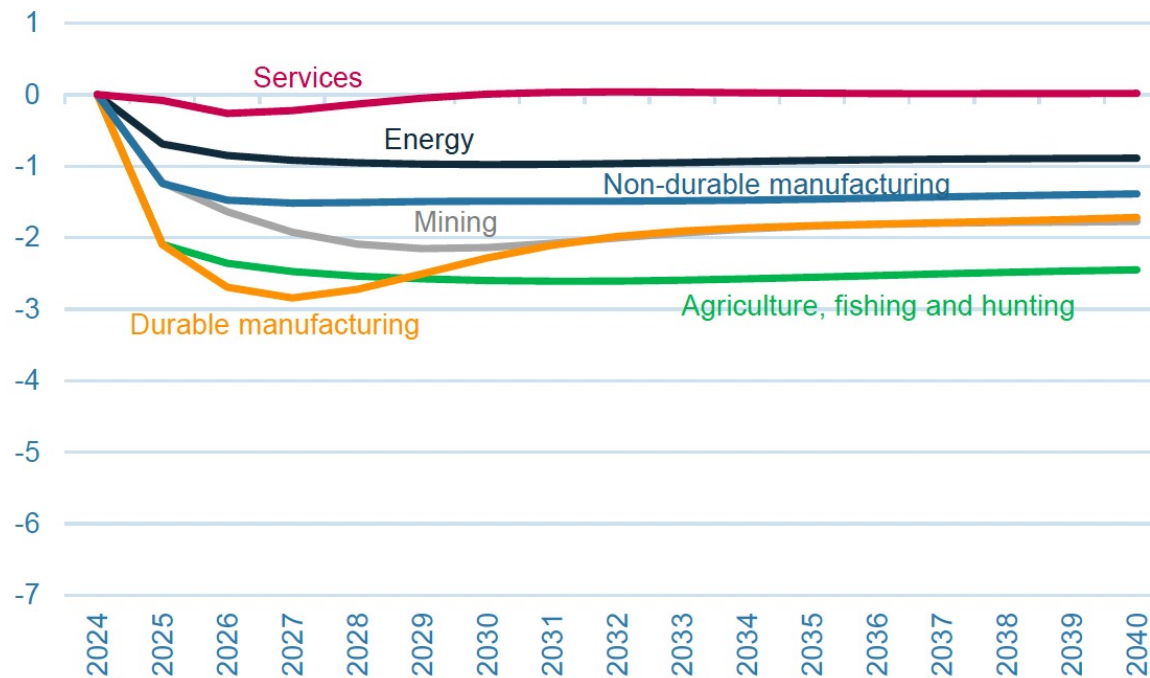
on Sectoral Production

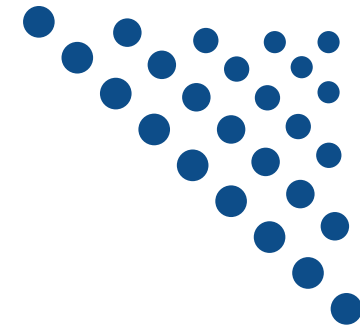


Effects of 10% Tariff on All US Imports

US Sectoral Production

Percent deviation from baseline for each year

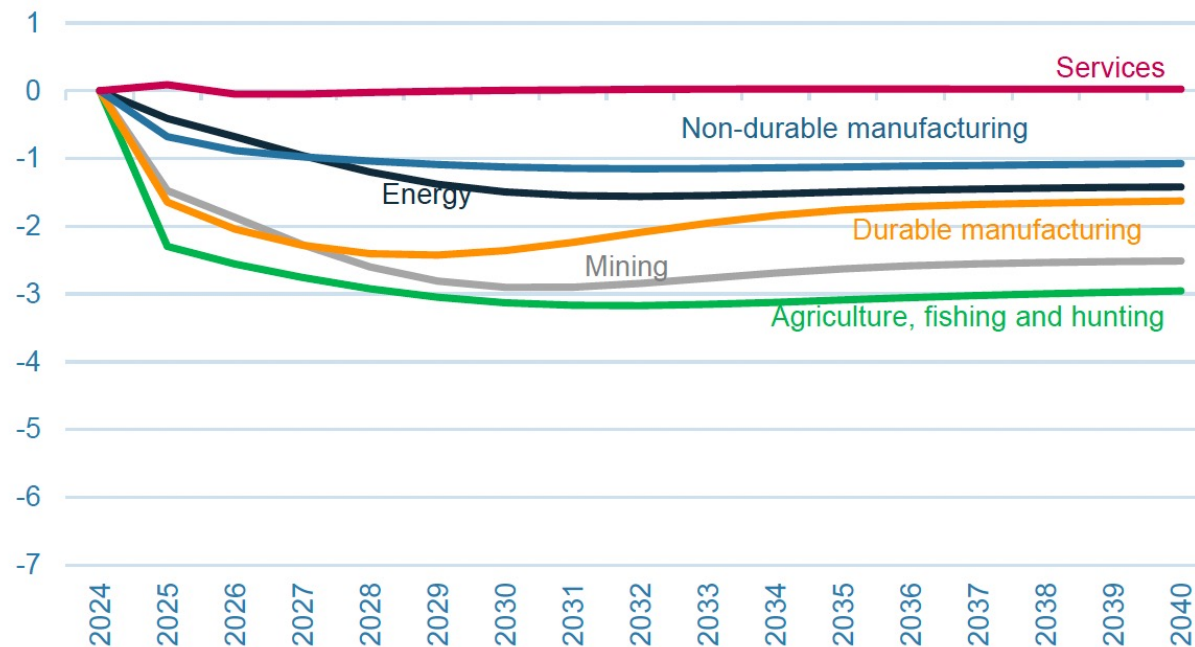




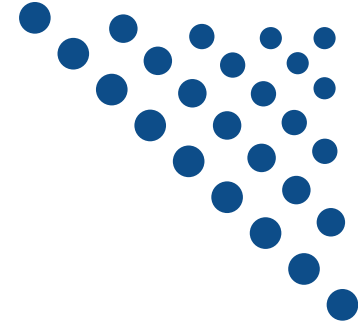
Effects of 60% Tariff on China Exports

US Sectoral Production

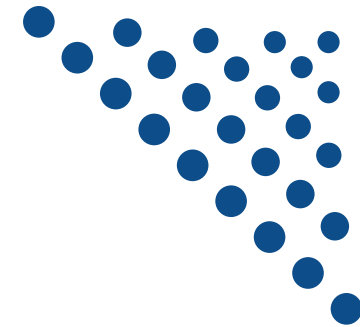
Percent deviation from baseline for each year



Effects of Trump Proposed Tariffs



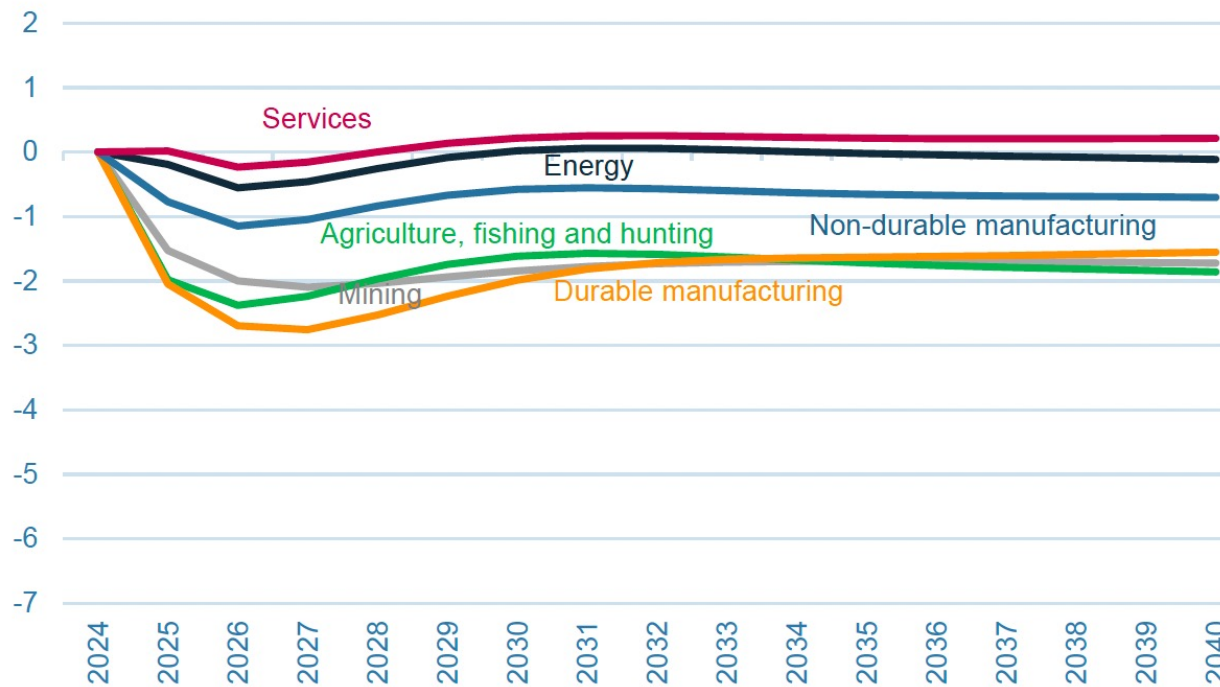
on Sectoral Employment

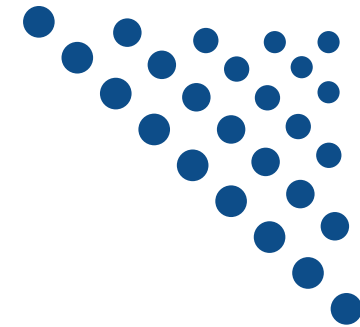


Effects of 10% Tariff on All US Imports

US Sectoral Employment

Percent deviation from baseline for each year

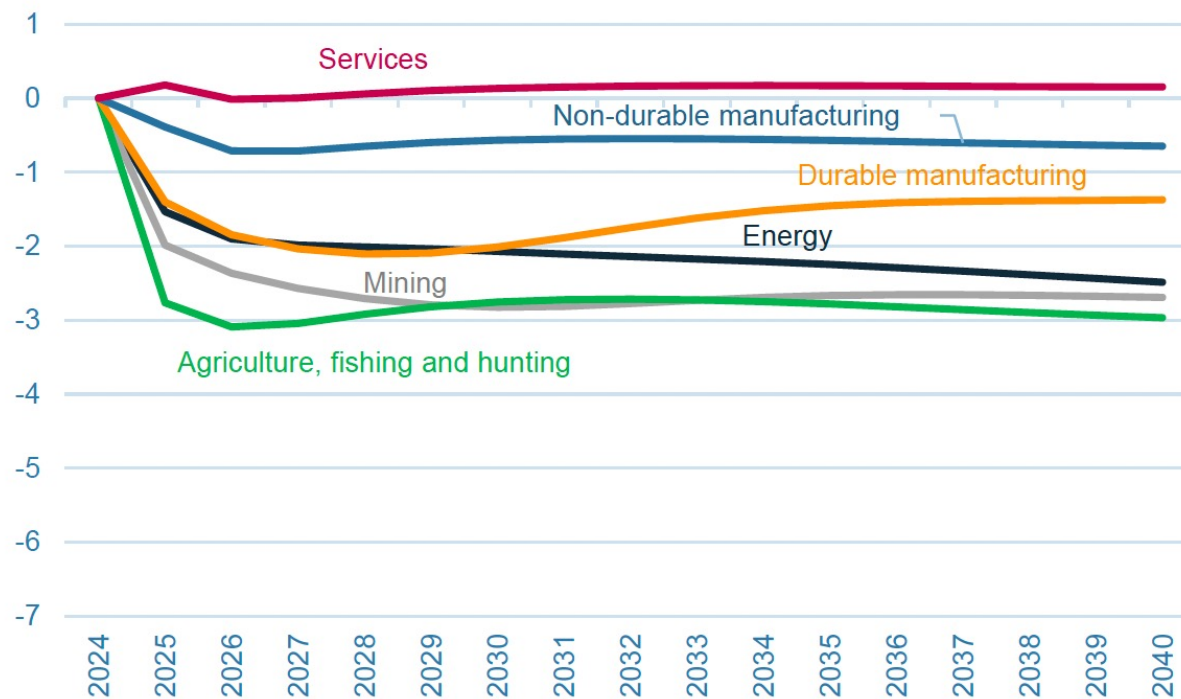




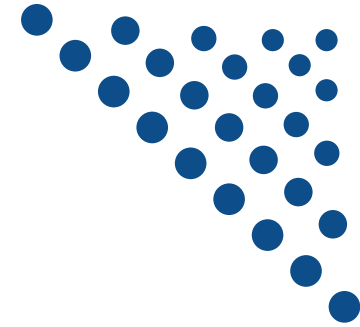
Effects of 60% Tariff on China Exports

US Sectoral Employment

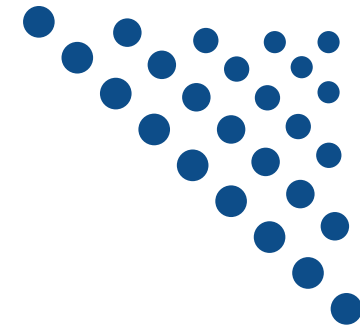
Percent deviation from baseline for each year



Effects of Trump Proposed Tariffs



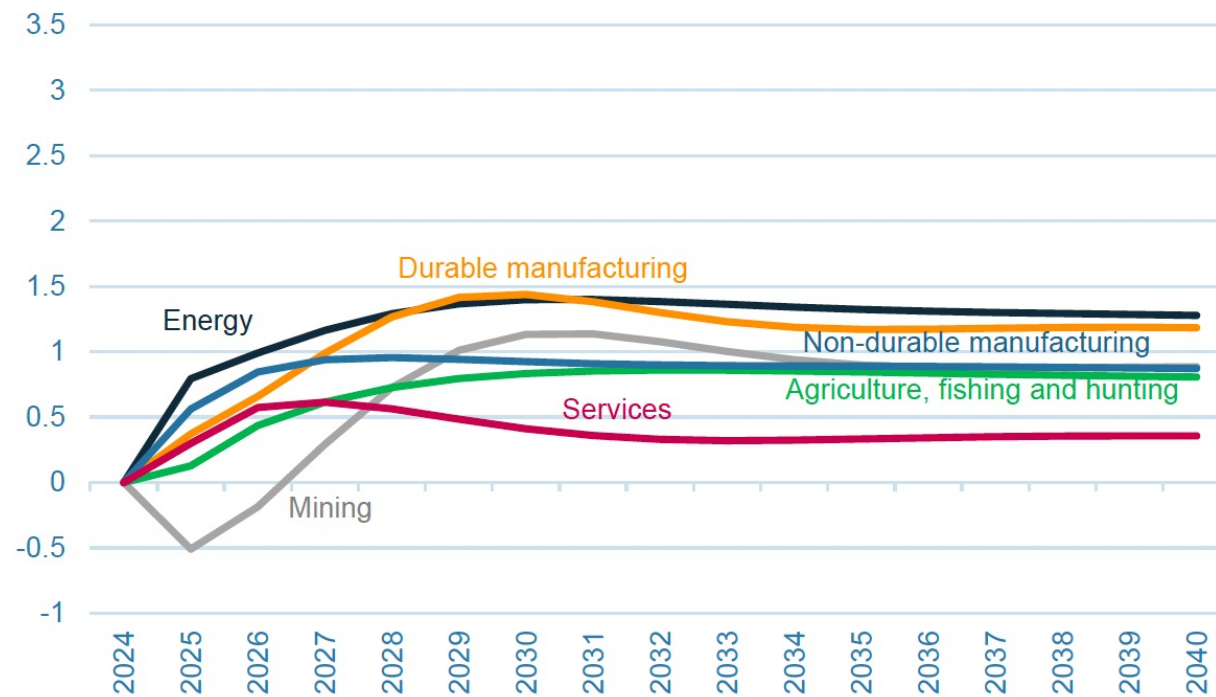
on Sectoral Prices

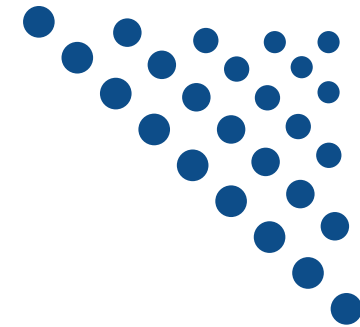


Effects of 10% Tariff on All US Imports

Sectoral Prices

Percent deviation from baseline for each year

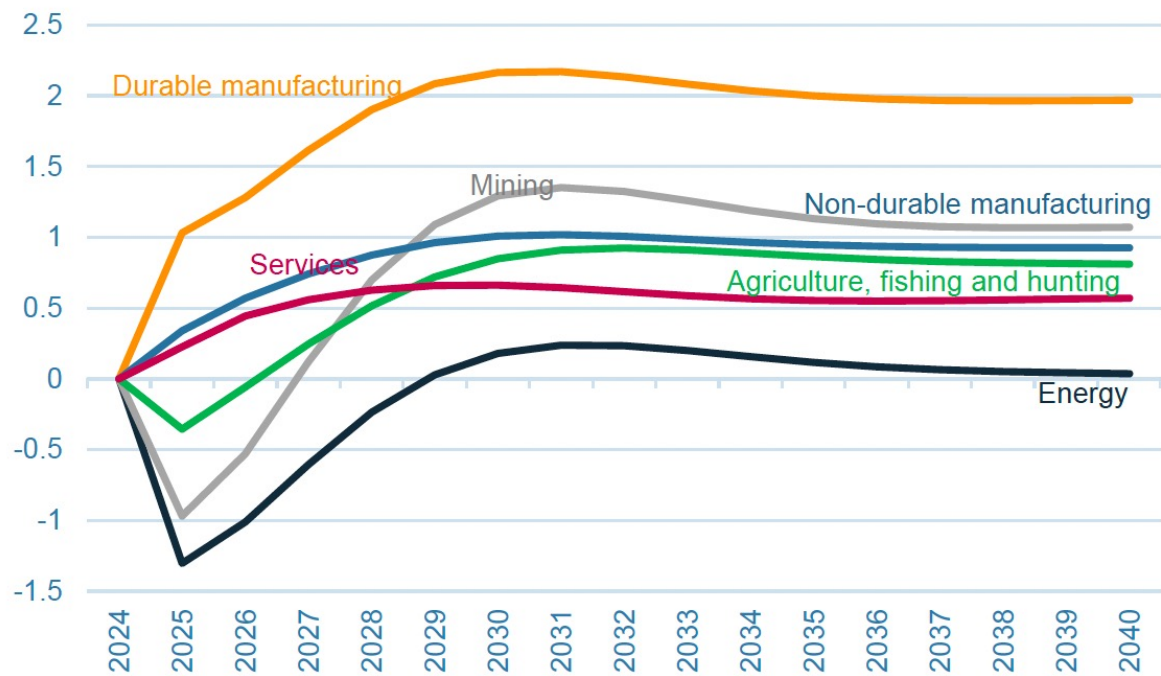




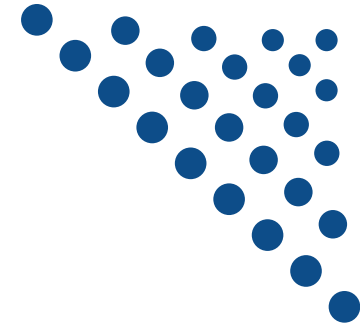
Effects of 60% Tariff on China Exports

US Sectoral Prices

Percent deviation from baseline for each year



Thank you!



Questions?

See slides on my website

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