Policy Brief

CBO Says Tariffs Will Be Bad; In Reality They Will Be Even Worse

A Dynamic Model is Needed to Capture 10-Year Impacts

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This *Policy Brief* examines the Congressional Budget Office's (CBO) recent assessment of economy-wide impacts of proposed tariffs on U.S. imports. Given CBO's important role in legislative processes, it is critical to ask whether CBO's approach fully captures the likely impacts of potential tariffs.

Summary

Over the course of the 2023-2024 election season, then-candidate Donald Trump suggested that one of his first acts as President would be to impose tariffs on U.S. imports to achieve various ends. Proposals included "universal" tariffs from 10%-20% tariffs on all imports, plus an additional 60%-100% on imports from China. In addition, he has suggested he would impose 25% tariffs on imports from Mexico and Canada.

Numerous organizations responded with studies quantifying the probable economic effects of these tariffs on the United States.[1] All but one found that the net impacts would be negative.[2]

On December 18, the CBO released the most recent effort to assess the economy-wide effects of Trump's proposed global

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plus additional China tariffs.[3] Members of Congress will rely heavily on CBO assessments in the coming months or year if Trump follows through on implementing these tariffs, so the CBO analysis merits a deeper dive into its findings and the assumptions that gave rise to those findings.

While CBO identifies the many ways in which the tariffs will ripple through the economy, we find its effort to quantify those effects significantly understates the potential net impacts of the proposed tariffs. In fact, we estimate the impacts would be roughly double what CBO has estimated.

This paper summarizes the CBO results, explains how they got to those results and one serious flaw, and what happens if you "fix" the approach to match the ways in which the U.S. economy actually responds to tariffs.

What CBO Did

CBO examined three tariff scenarios, all effective on January 1, 2025: (1) a uniform increase in tariffs of 10% on all imports; (2) an increase in tariffs of 60% on all goods imported from China, and (3) the combination of 10% tariffs on all countries coupled with a total of 60% tariffs on imports from China. In each case, the proposed new tariffs are added to existing U.S. tariffs. CBO assumed trading partners would retaliate with equivalent tariffs on U.S. exports. CBO performed its assessment for both "static" and "dynamic" scoring requirements for budgetary analysis.[4] It looked at the economic impacts over the 10-year period of 2025-2034.

What CBO Found

CBO notes the proposed tariffs would have numerous impacts. For the sake of brevity, we focus on CBO's estimates of all three tariff proposals together, although our conclusions apply to the individual tariff results as well.

In terms of positives for the U.S. economy, CBO concluded:

- Tariffs would raise revenue for the federal government and decrease the budget deficit. CBO estimates the increase in tariff revenue would amount to $2.7 trillion over 10 years.
- Some consumers and businesses would substitute domestically made goods for imported goods.

CBO found reduced budget deficits would come at a large cost to the U.S. economy: higher inflation, increased business uncertainty, lower productivity, and lower U.S. exports.

Yet CBO found increased tariff revenue comes at a large cost to the economy, businesses and consumers – particularly lower-income households. Overall, CBO found the size of the U.S. economy would fall by 0.6% relative to CBO's baseline estimates for the next 10 years. This happens despite the increase in U.S. sourcing of some goods, due to:

- **Higher inflation** of about 1 percentage point for the first few years tariffs are in place as consumer and capital goods (physical assets used to produce goods and services) would be more expensive and reduce purchasing power of both consumers and businesses;
- **Increased business uncertainty** about future barriers to trade, especially for businesses that use imported goods in domestic production;
- **Lower productivity** because some U.S business would delay or forgo new investment or make expensive changes to their supply chains; while reduced competition from imports would result in U.S.-based labor and capital being used in less efficient sectors, and
- **Lower U.S. exports** as trading partners retaliate with tariffs of their own.

CBO's inflation estimate considers the countervailing impacts of a rise in the value of the dollar resulting from the tariffs, as well as the impact of lower prices of exported goods in the production of imported derivative products. According to CBO, "In particular, by reducing foreign demand for agricultural exports, retaliatory tariffs would lead to lower prices for certain foods products." CBO also notes that the tariffs would have a greater negative impact on the purchasing power of lower-income households.

What CBO Should Have Done

Key "ingredients" in the modeling CBO performed to estimate the economic effects of the tariffs are trade change impacts derived from the Global Trade Analysis Project (GTAP) model. CBO used this model to estimate the changes in U.S. exports and imports that would result from the imposition of the new tariffs, and the up and downstream impacts of those changes on U.S. GDP. It then "fed" these results into a broader model CBO uses to estimate inflationary, budget and other impacts of tariffs.

CBO used a "static" trade model that does not consider feedback effects of tariffs on investment and the available capital stock across the U.S. economy.

It is important to know that GTAP offers two options for measuring these impacts, a "static" (i.e., short-run) approach and a "dynamic" (i.e., long-run) approach. The differences are not dissimilar to the "static" and "dynamic" flavors of budget scoring exercises. CBO used the "static" version of GTAP,[5] which does not consider the feedback effects of tariff changes on levels and investment and changes in available capital stock across the entire economy. What this means is that CBO has taken a static approach appropriate for short run analysis (i.e. what happens to the efficiency and size of the U.S. economy in the first 12-18 months after tariff implementation), while ignoring dynamic adjustment related to how changes in savings and investment will drive changes to the size of the U.S. economy over the ten-year framework assessed by CBO.

What CBO Would Have Found

A "dynamic" model finds similar revenue gains, but shows tariffs would shrink U.S. GDP by 1.2% and depress household real wage income by 1.5.%

Had CBO used the more appropriate (dynamic) version of GTAP to estimate the impacts of the tariffs, it would have concluded the net negative impacts on GDP and inflation to be much higher. By our assessment, the full set of tariffs would:

- raise essentially the same revenue as in the CBO study -- around $2.7 trillion over ten years;
- lead to a cut to U.S. GDP of 1.2% once capital stocks adjust over the time horizon assessed by CBO (twice the static short-run effects reported);
- depress household real wage income by about 1.5%.

Conclusion

It is noteworthy that CBO found tariffs would exact a heavy price to the economy, businesses, and households – particularly low-income households – despite revenue gains. It is even more important to know that the estimated values of those impacts are significantly biased downward by a modeling error. When corrected, policy makers should be aware that the costs are much higher. In other words, a policy change of this magnitude modeled correctly would reveal twice the economic costs to GDP as that identified in the CBO study.

Endnotes

[1] See, for example, Erica York, "Trump's $300 Billion Tax Hike Would Threaten U.S. Businesses and Consumers, Tax Foundation, Aug. 25, 2023, https://taxfoundation.org/blog/donald-trump-10-percent-tariff/; U.S. Budget Watch, "Donald Trump's 60% Tariff on Chinese Imports," Apr. 10, 2024, https://www.crfb.org/blogs/donald-trumps-60-tariff-chinese-imports, and Kimberly Clausing and Mary E. Lovely, "Why Trump's tariff proposal would harm working Americans," Peterson Institute for International Economics, Policy Briefs 24-1, May 2024, https://www.piie.com/publications/policy-briefs/2024/why-trumps-tariff-proposals-would-harm-working-americans, among others.

[2] The one outlier is from Jeff Ferry and Andre Heritage, "Model Shows That Universal 10% Tariff Would Improve Incomes, Output and Jobs (Updated)," Coalition for a Prosperous America, September 18, 2023, https://prosperousamerica.org/model-shows-that-universal-10-tariff-would-improve-incomes-output-and-jobs/. Their results are suspect however as the authors have changed some of the model's input parameters in ways that are not realistic reflections of the ways in which capital and labor markets find equilibrium (among other flaws). See Joseph Francois and Robert Koopman, "The Coalition for a Prosperous America Analysis of a 10% Universal Tariff: Comments," September 2024, https://tradepartnership.com/wp-content/uploads/2024/09/The-Coalition-for-a-Prosperous-America- Analysis-of-a-10-universal-tariff_Comments_23Sep2024.pdf.

[3] Congressional Budget Office, "Effects of Illustrative Policies That Would Increase Tariffs," December 18, 2024, https://www.cbo.gov/system/files/2024-12/61112-Tariffs.pdf.

[4] "Under long-standing convention" (see page 2), CBO follows "static scoring" which means evaluating the budgetary impact of a (in this case) tariff change by holding the size of the U.S. economy constant. "Under the rules of the House of Representatives," CBO states that the proposed tariffs are significant enough that they would be" considered major legislation," which permits CBO to use "dynamic scoring" to evaluate their effects on the economy broadly (it need not be held constant), employment, capital stock and other macroeconomic barriers.

[5] Email communication with Congressional Budget Office staff, Dec. 24, 2024.

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