

ANALYSIS

Tariffs do not Improve the Trade Balance



A central premise of US trade policy under the new Trump administration is the view that higher tariffs reduce the US trade deficit. At first glance, it might seem reasonable that a tax on imports restricts imports while leaving exports unaffected. In reality, that is not the case. While tariffs could theoretically impact the trade balance via domestic savings or investment, the direction of this impact is unclear, and other factors are more important.

Empirically, we find a negative and statistically significant relationship between average tariff levels and the current account balance as a share of GDP for non-OECD countries. In other words, higher tariffs are associated with larger trade deficits. For OECD countries, we find no correlation.

One possible interpretation of our findings for non-OECD economies is that high tariffs are associated with macroeconomic conditions or policies that reduce domestic savings relative to investment. However, given the diversity of countries in our sample, we hesitate to draw strong conclusions regarding mechanisms that could explain the result.

What we can state with confidence, however, is that there is no correlation between higher tariffs and a positive trade balance. In fact, a policy mix that includes higher tariffs is more likely to widen a country's trade deficit than to reduce it. By contrast, policies that reduce the US fiscal deficit and/or encourage US investment abroad would help reduce the US trade deficit.

Table of contents

Exe	cutive summary	2
1	Background	4
2	The trade balance reflects a country's net savings	4
3	A country that has a trade deficit must have a capital surplus	5
4	Tariffs could affect the trade balance indirectly but the direction is unclear	-5
5	Is there a correlation between tariffs and a country's trade balance?	6
6	Summary and policy recommendations	8
Lite	rature	.9
Арр	endix	10
Sammanfattning på svenska Summary in Swedish		2

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1 Background

A central premise of US trade policy under the new Trump administration is the notion that rising tariffs can improve the US current account – often referred to as the trade balance.¹

At first glance, it might seem reasonable to assume that a tax on imports would restrict imports while leaving exports unaffected. In reality, it is not the case. Economists have spent countless hours explaining the determinants of a country's trade balance. Two recent examples are <u>Baldwin (2024)</u> and <u>Obstfeld (2024)</u>. The problem is that the explanation typically requires algebra and going through national accounting identities. While it is not rocket science, it is also not entirely intuitive.

2 The trade balance reflects a country's net savings

As we demonstrate in the appendix, a nation's current account equals domestic savings minus domestic investment. It's not a theory. It does not require empirical validation. It is simply a fundamental accounting identity. Tariffs therefore cannot affect the trade balance unless they affect domestic savings and/or investment.² Conversely, macroeconomic policies that impact domestic savings and investment in a country will affect the trade balance. As Obstfeld (2024) explains,

"The [trade] deficit is the macroeconomic outcome of an economy's collective decisions to save and invest...Imports rise with total aggregate domestic spending, total spending influences the amount of home product available for export, and the dollar's foreign exchange value tends to rise when total spending rises. These linkages ensure that the current account balance exactly equals national saving less domestic investment."

With this in mind, the most obvious culprit in explaining the US trade deficit is the large US fiscal deficit. A large fiscal deficit means that US public savings are negative. Another suspect is the large inward investment flows to the US from abroad in recent years. Together, these two factors – the fiscal deficit and an inflow of foreign capital – practically guarantee a US trade deficit. Policies that reduce the US fiscal deficit and/or the US capital account surplus would therefore also reduce the US trade deficit.

¹ In this brief, we use the term trade balance as a proxy for the current account. Formally, the balance of trade refers to a country's net exports of goods and services. It is the largest component of the current account. Besides the balance of trade, the current account also includes net income (dividends, interest, and wages earned abroad) and net transfer payments (foreign aid, remittances, and pension payments).

² Domestic savings refer to all savings generated within the home economy by both the private sector and the government. Domestic investment refers to all investments within the country, regardless of whether the financing comes from domestic savings or foreign investors.

3 A country that has a trade deficit must have a capital surplus

It is equally important to recognise that the two components of a country's external economic balance – the current account and the capital account – must always offset each other. Since the US has a capital account surplus – a larger inflow than outflow of capital – it must run a current account deficit. Net capital inflows are always matched by net payments for imports. To reduce its trade deficit, the US must therefore either reduce capital inflows or increase US investment abroad. A further implication of this is that tariffs cannot *both* stimulate foreign investment in the US *and* reduce the trade deficit.

4 Tariffs could affect the trade balance indirectly but the direction is unclear

As noted earlier, tariffs only impact the US trade balance to the extent that they influence the balance between savings (private or public) and investment, including through foreign capital inflows. In theory, tariffs could therefore affect the trade balance, but the direction of the impact is unclear. Tariffs could reduce the expected return on investment, thereby discouraging investment in the US, leading to a *reduced* trade deficit. Or they could increase inflation and discourage domestic private savings, thereby *increasing* the trade deficit.

In practice, as both Baldwin (2024) and Obstfeld (2024) conclude, tariffs are unlikely to have a large impact on a country's trade balance. Other factors are far more important.

5 Is there a correlation between tariffs and a country's trade balance?

While the trade balance is primarily determined by broader macroeconomic factors, tariffs could influence it at the margins through their effects on domestic savings and investment. As discussed earlier, the theoretical direction of this effect remains unclear, making it an empirical question.

To examine whether there is a correlation between tariffs and the trade balance, we analysed data on the average MFN tariff level and the current account balance as a share of GDP for 168 countries globally over a four-year period (2019–2022). The results are shown in Figure 1. Interestingly, we find a negative and statistically significant relationship between these two variables across all countries.³ In other words, higher tariffs are associated with a *higher* trade deficit.

Figure 1. Current account balance and MFN tariffs



Source: WDI and WITS.

³ Figure 1 presents simple averages of MFN tariffs on manufactured goods only, but the results are almost identical when all goods (including agricultural goods) are included. Each dot represents a country that reports both the current account (WDI) and MFN tariffs (WITS) in World Bank data between 2019 and 2022.

In figure 2, we further explore this relationship by separating OECD and non-OECD countries. As the figure shows, most OECD economies have relatively small current account deficits or surpluses as a share of GDP. For non-OECD countries, the relationship is much more dispersed. Nonetheless, we still find a statistically significant negative correlation. For OECD countries, the relationship between tariffs and the current account is no longer statistically significant.





2019-2022, manufacturing tariffs only

Source: WDI and WITS.

Our findings suggest that non-OECD countries drive the overall results and that these countries share certain macroeconomic characteristics that produce a negative correlation between tariffs and the trade balance. In particular, it seems plausible that many developing countries maintain relatively high tariffs while simultaneously pursuing macroeconomic policies that allow inflation and suppress domestic savings. At the same time, high expected growth rates have made them attractive destinations for foreign investment. In other words, the negative correlation between tariffs and the trade balance in non-OECD economies may reflect a situation where high tariffs are associated with macroeconomic conditions and/or policies that reduce domestic savings relative to investment.

6 Summary and policy recommendations

Tariffs are highly unlikely to improve a country's trade balance. While they could theoretically impact the trade balance via domestic savings or investment, the direction of this impact is unclear, and other factors are more significant determinants.

Empirically, we find a negative and statistically significant relationship between average tariff levels and the current account balance as a share of GDP for non-OECD countries. In other words, higher tariffs are associated with larger trade deficits. For OECD countries, we find no such correlation.

One possible interpretation of our findings is that high tariffs are correlated with macroeconomic conditions or policies that reduce domestic savings relative to investment. However, given the diversity of countries in our sample, we hesitate to draw strong further conclusions regarding mechanisms that could explain the results.

What we can state with confidence, however, is that there is no correlation between higher tariffs and a positive trade balance. In fact, a policy mix that includes higher tariffs is more likely to widen a country's trade deficit than to reduce it. By contrast, policies that reduce the US fiscal deficit and/or encourage US investment abroad would help reduce the US trade deficit.

In this analysis, we have examined the relationship between tariffs and the trade balance. It is important to keep in mind, however, that since a trade deficit is offset by a capital surplus, there is no inherent value in pursuing policies to improve the trade balance.

Literature

Baldwin, R. (2024). *The tariffs and balance of trade paradox: Why macro always wins*. Retrieved from Linkedin: <u>The Tariffs and Balance of Trade Paradox: Why</u> <u>Macro Always Wins (in Pictures). | LinkedIn</u>

Obstfeld, M. (2024). *Misconceptions about US trade deficits muddy the economic policy debate* (Policy Brief 24-7). Peterson Institute for International Economics. Retrieved from <u>https://www.piie.com/publications/policy-briefs/2024/misconceptions-about-us-trade-deficits-muddy-economic-policy-debate</u>

Appendix

1. National accounts - the national income identity

We begin with the GDP identity:

 $\mathbf{Y} = \mathbf{C} + \mathbf{I} + \mathbf{G} + (\mathbf{X} - \mathbf{M})$

where:

- Y = GDP (Gross Domestic Product)
- C = Consumption
- I = Investments
- G = Government expenditures
- X = Exports
- M = Imports
- X M = The Current Account Balance (BB)

2. National accounts - disposable national income

The disposable income (Yd) is:

Yd = Y + TR - T

where:

- TR = Transfers from the government (e.g., benefits)
- T = Taxes

The nation's total savings (S) consist of both private and public savings:

S = (Y - T - C) + (T - G)

where:

- (Y T C) represents private savings
- (T G) represents public savings

Thus, we can rewrite it as:

 $\mathbf{S} = \mathbf{Y} - \mathbf{C} - \mathbf{G}$

3. Derivation of the relationship with the current account balance

From the GDP identity, we know that:

Y = C + I + G + (X - M)

Rearranging the equation gives:

Y - C - G = I + (X - M)

Since we previously defined national savings as:

 $\mathbf{S} = \mathbf{Y} - \mathbf{C} - \mathbf{G}$

we can substitute Y - C - G with S:

$$S = I + (X - M)$$

By isolating the current account balance (X - M):

X - M = S - I

4. Conclusion

The current account balance (BB) is defined as net exports (X - M), which we now see is equal to savings minus investments:

BB = S - I

This implies that:

- if savings exceed investments (S > I), the country has a surplus in the current account balance (positive net exports).
- if savings are less than investments (S < I), the country has a deficit in the current account balance (negative net exports).

This relationship illustrates the fundamental connection between a nation's external balance and its domestic savings and investments.

Sammanfattning på svenska Summary in Swedish

En central premiss för amerikansk handelspolitik under den nya Trumpadministrationen är uppfattningen att höjda tullar minskar USA:s handelsunderskott. Vid första anblick kan det verka logiskt att en skatt på import minskar importen utan att påverka exporten. I verkligheten förhåller det sig annorlunda. Det är högst osannolikt att höjda tullar förbättrar ett lands handelsbalans. Även om tullar teoretiskt kan påverka handelsbalansen via förändringar i ett lands sparande och/eller investeringar, är effektens riktning oklar, och andra faktorer spelar en betydligt större roll.

Empiriskt finner vi en negativ och statistiskt signifikant relation mellan tullnivåer och bytesbalans som andel av BNP för icke-OECD-länder. Högre tullar är med andra ord förknippade med ett *större* handelsunderskott för dessa länder. För OECD-länder finner vi inget samband alls.

En möjlig tolkning för utvecklingsländer är att höga tullar sammanfaller med makroekonomiska förhållanden eller politik som minskar det inhemska sparandet relativt investeringarna. Eftersom vårt urval består av många olika länder, är vi dock försiktiga med att dra alltför långtgående slutsatser.

Vad vi däremot kan säga med säkerhet är att det saknas en korrelation mellan höga tullar och en positiv handelsbalans. Det förefaller tvärtom mer sannolikt att en policymix som omfattar höjda tullar leder till ett ökat handelsunderskott (eller minskat överskott). Däremot skulle åtgärder som minskar det amerikanska budgetunderskottet och/eller främjar amerikanska investeringar utomlands bidra till att minska USA:s handelsunderskott.

I den här analysen har vi undersökt kopplingar mellan tullar och handelsbalansen. Det är dock viktigt att komma ihåg att eftersom ett underskott i handelsbalansen motsvaras av ett nettoinflöde av investeringar i ett land, finns det inget värde i sig att föra en politik för stärkt handelsbalans. **The National Board of Trade Sweden** is the government agency for international trade, the EU internal market and trade policy. Our mission is to facilitate free and open trade with transparent rules as well as free movement in the EU internal market.

Our goal is a well-functioning internal market, an external EU trade policy based on free trade and an open and strong multilateral trading system.

We provide the Swedish Government with analyses, reports and policy recommendations. We also participate in international meetings and negotiations.

The National Board of Trade, via SOLVIT, helps businesses and citizens encountering obstacles to free movement. We also host several networks with business organisations and authorities which aim to facilitate trade.

As an expert agency in trade policy issues, we also provide assistance to developing countries through trade-related development cooperation. One example is Open Trade Gate Sweden, a one-stop information centre assisting exporters from developing countries in their trade with Sweden and the EU.

Our analyses and reports aim to increase the knowledge on the importance of trade for the international economy and for the global sustainable development. Publications issued by the National Board of Trade only reflect the views of the Board.

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