

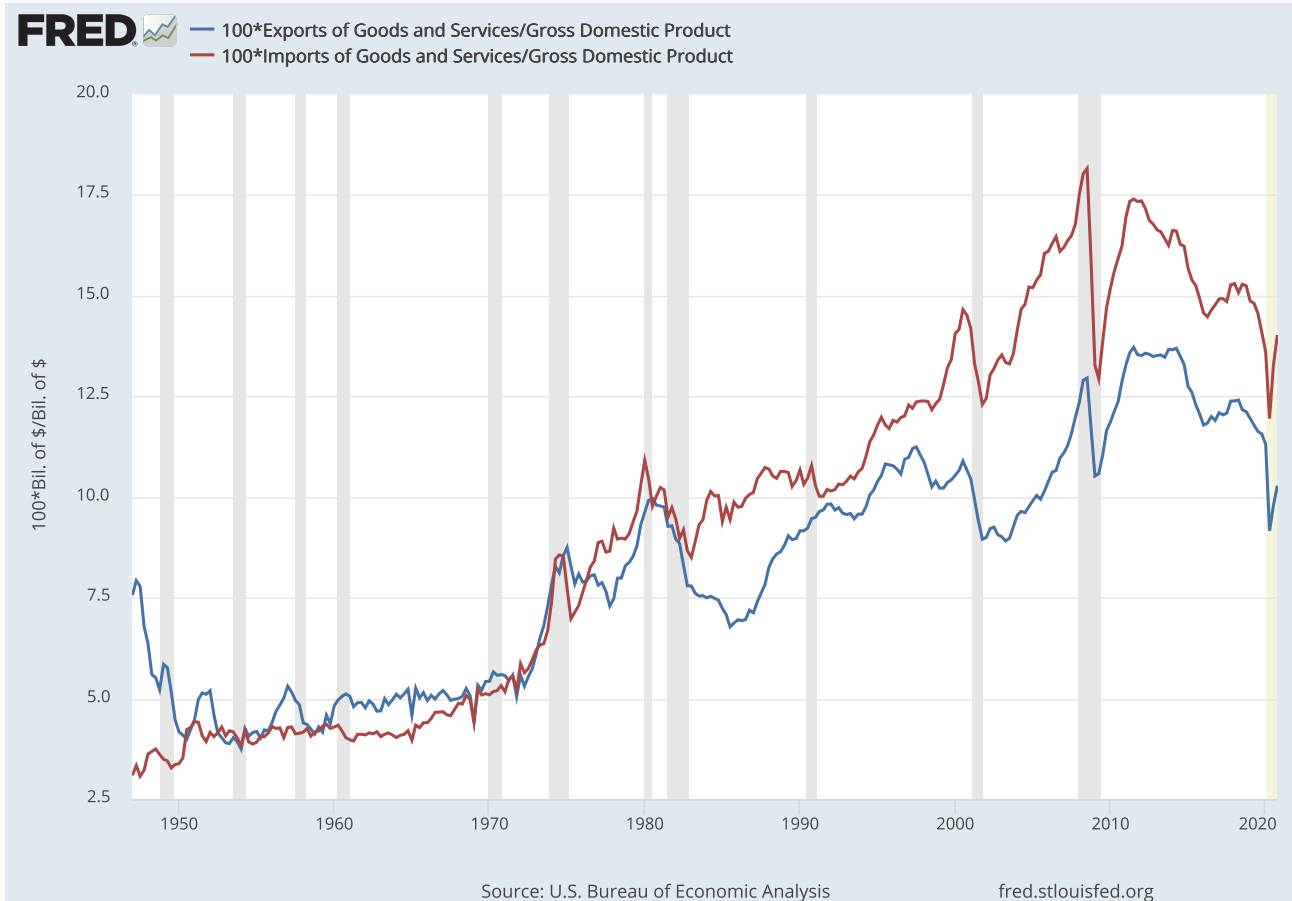
Trade Deficits

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0.1 Introduction



The U.S. trade deficit has been rising...

Source: FRED

0.2 Implications

The current prosperity ... has a **precarious foundation**. It is based to a very large extent on borrowing—both from America's own future and from the rest of the world.

—C. Fred Bergsten, *America in the World Economy: A Strategy for the 1990s* (1988)

The fact that the U.S. remains an **oasis of prosperity** assures continued deterioration in its trade deficit, as imports grow amid weak foreign demand.

—James C. Cooper and Kathleen Madigan, *Business Week* (8 February 8, 1999)

These are the opening quotes from Mann (1999), ch. 8

0.3 Questions

1. What is the role of trade deficits and surpluses?
2. Is a deficit a problem?
3. Is a “large” deficit sustainable?

0.4 Main Insights

A **trade surplus** means the country **saves** for future consumption.

- U.S. residents buy foreign assets

A **trade deficit** means a country **borrow**s against future income.

- U.S. residents sell assets to foreigners

Exactly analogous to borrowing and saving by individuals.

The trade balance has little to do with

- competitiveness
- tariffs

I Trade as saving and borrowing

I.1 Country budget constraint

Like a household, each country has a budget constraint of the form

- saving = income - expenditure

At the country level:

- income = GDP (Y)
- expenditure = $C + I + G$
- saving = $Y - (C + I + G)$

The country budget constraint is just the **sum** of the individual budget constraints.

I.2 National saving

What happens if Americans, on average, want to save more than I ?

In a closed economy:

- it doesn't work: $S = I$
- what adjusts to make this work?

In an open economy:

- we buy foreign assets.

$$\text{Net foreign asset purchases} = Y - (C + I + G)$$

I.3 Foreign Saving and the Trade Balance

Now recall another identity:

- $Y = C + I + G + NX \Rightarrow$

$$NX = Y - (C + I + G)$$

- $NX = EX - IM$ is the trade balance

Therefore: **Foreign asset purchases** = NX

- When the country produces more than it eats, $EX - IM > 0$.
- In return for selling goods, the country must acquire foreign assets.
- $EX - IM$ is **saving** by the country.

I.4 Trade Balance and Saving

Trade surpluses export a country's excess savings.

Trade deficits import savings from abroad.

Implications:

1. Politicians often want trade surpluses and foreign investment. This is not possible.
2. **Balanced trade is not a “natural” outcome.**

At any given world interest rate, households in some countries want to borrow.

Those countries have trade deficits.

This is not, by itself, a problem.

Who cares about the trade balance of North Carolina?

2 Trade Deficit: Causes

2.1 Questions

- Why do countries run trade deficits?
- What could / should be done about them?
- How large a deficit can be sustained?

2.2 NIPA

Recall the NIPA identity:

$$Y = C + I + G + EX - IM$$

Rearrange as

$$\underbrace{Y - T - C}_{\text{private saving}} + \underbrace{T - G}_{\text{public saving}} + \underbrace{IM - EX}_{\text{foreign saving}} = I$$

T : tax revenues.

For an explanation of this equation (and its implications) see Obstfeld, Mistaken Identities, PIIE 2024.

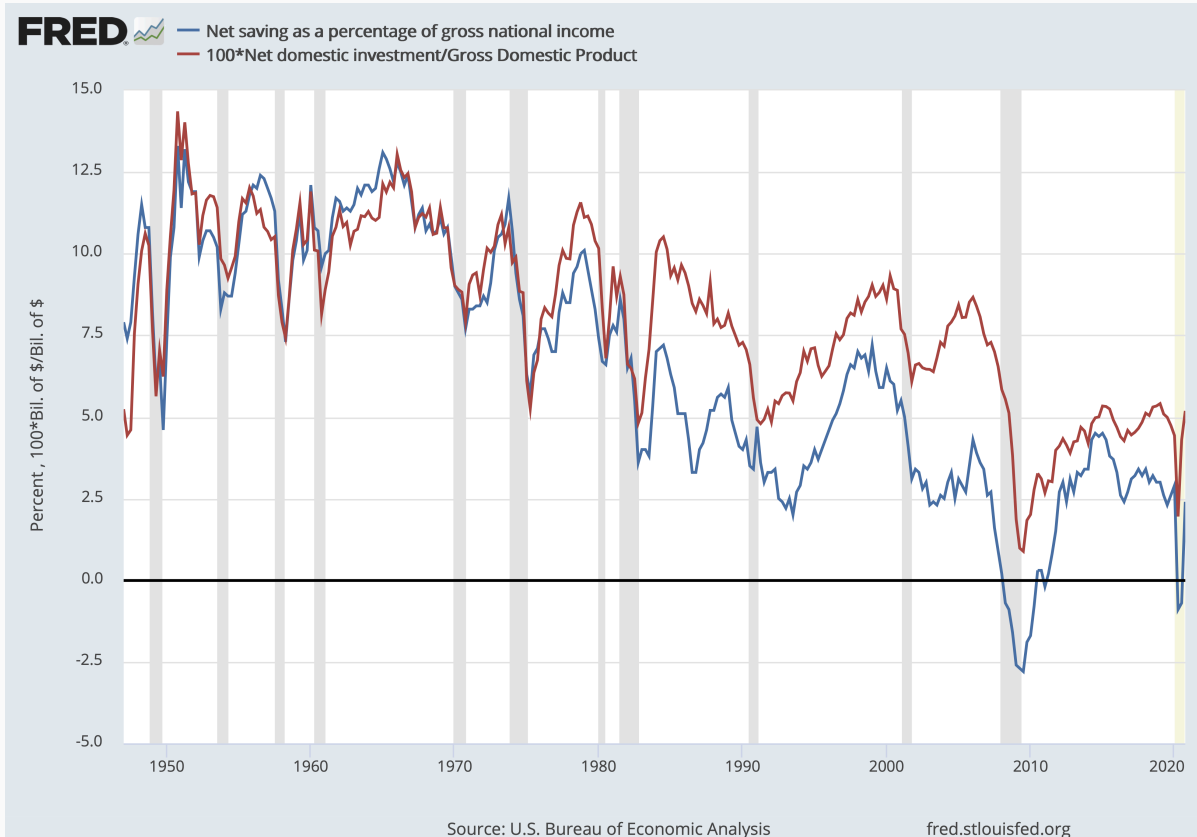
2.3 Reasons for trade deficits

$$\underbrace{Y - T - C}_{\text{private saving}} + \underbrace{T - G}_{\text{public saving}} + \underbrace{IM - EX}_{\text{foreign saving}} = I$$

We get a trade deficit when we have:

1. High investment I .
2. Low private saving
3. Large government deficits

2.4 The U.S. trade deficit



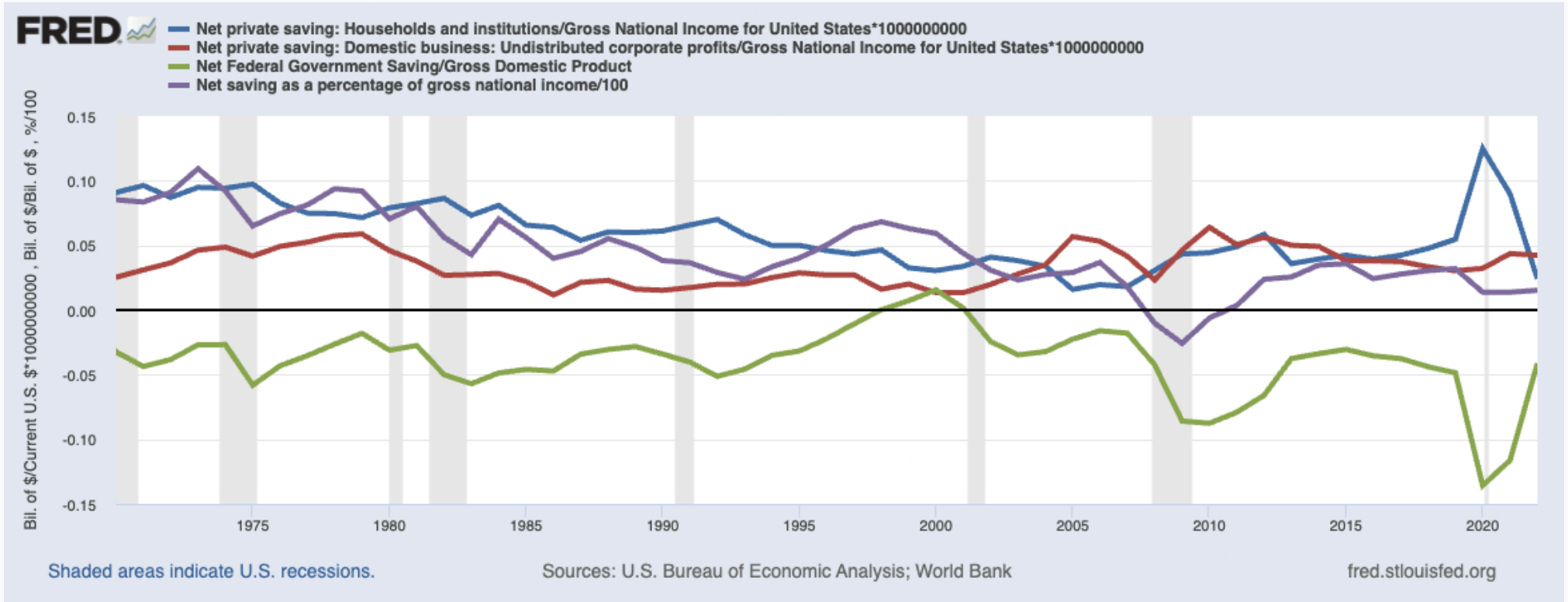
What then causes the rising U.S. trade deficit?

I/Y has been falling slightly \Rightarrow trade surplus

S/Y has been falling faster \Rightarrow trade deficit

Source: FRED

2.5 The Decline of U.S. Saving



Household saving has been falling - why?

2.6 Foreign governments as buyers

The flip side:

- If the U.S. runs a trade deficit, other countries must run surpluses.
- China accounts for about 1/3 of the our total deficit.
- Other Asian countries have high saving rates

Since 2000:

- Deficits are financed largely by selling treasury bonds to foreign governments (Feldstein 2008).
- The likely motivation: sustain their own trade surpluses.

2.7 Is the Dollar to Blame?

Should we conclude that the dollar is too strong?

Is that the reason why we have a trade deficit?

2.8 Reducing the trade deficit

How could the trade deficit be reduced?

$$\underbrace{Y - T - C}_{\text{private saving}} + \underbrace{T - G}_{\text{public saving}} + \underbrace{IM - EX}_{\text{foreign saving}} = I$$

Anything that improves the TB must do one of the following:

1. Increase private saving.
2. Reduce the government budget deficit.
3. Reduce investment.

2.8 Reducing the trade deficit

Key point

Whenever you hear a story about the trade deficit, check that S^P, S^G, I are affected in the right way.

2.9 Possible Fixes for the Trade Deficit

Faster economic growth

- e.g.: subsidize investment in technology

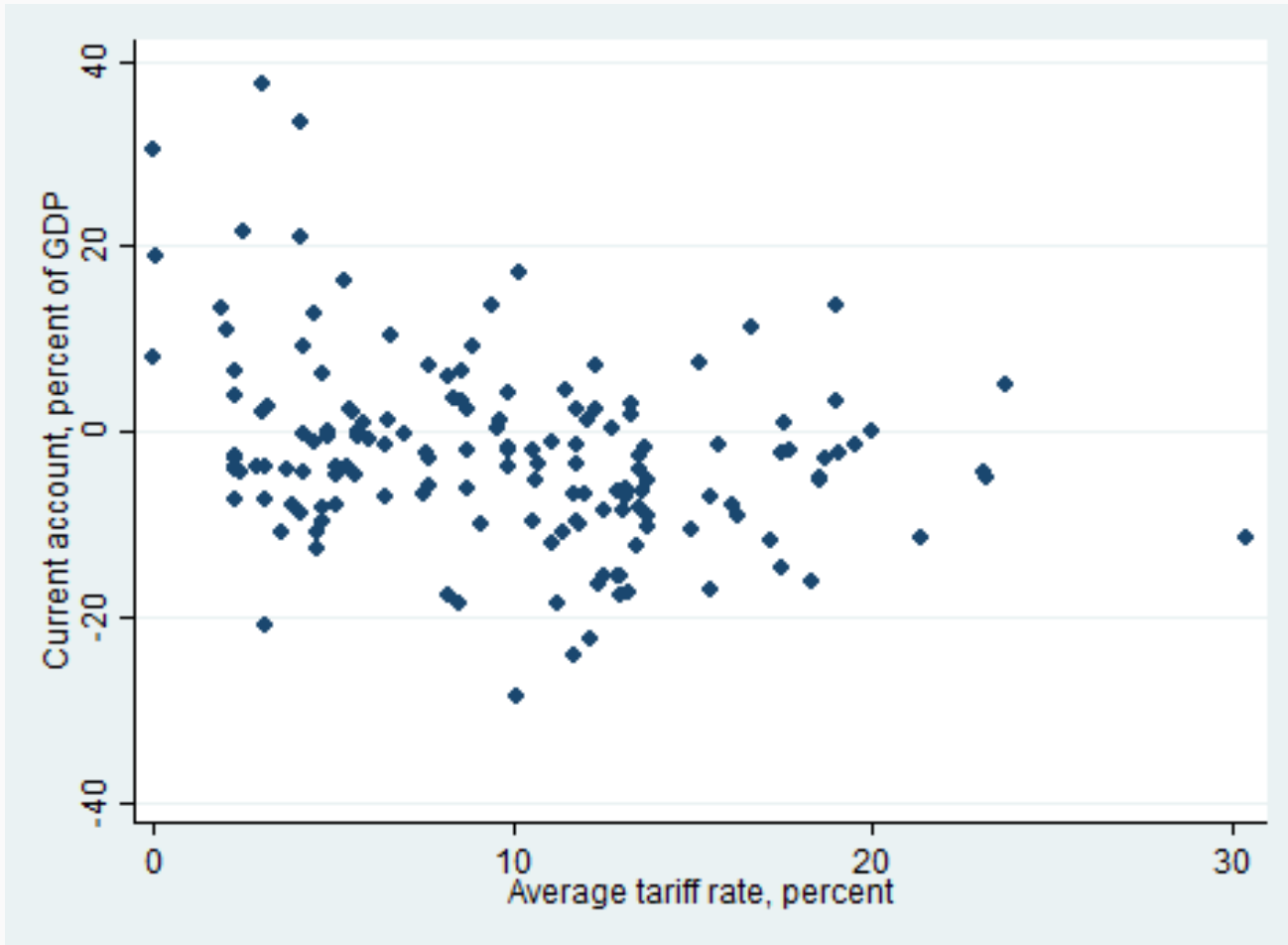
Reduce cost of production

- Deregulation
- Lower U.S. wages

Tariffs

How do these relate to $NX = S - I$?

2.10 Tariffs and the Trade Deficit



No correlation between tariffs and trade balances.

Why don't tariffs reduce trade deficits?

Source: [Gagnon \(2017\)](#)

2.1 | Tariffs and the Trade Deficit

Figure 2

Higher tariffs ultimately reduce US exports



Source: Author's illustration.

The mechanism. Illustration from [Gagnon 2025](#)

2.12 Weaken the Dollar?

Peter Coy argues that policy makers should think of ways to weaken the dollar.

How would that work?

- Restrict capital flows?

2.13 Recap Questions

1. What kinds of countries do you expect to run trade deficits?

Successful ones that grow fast? Or laggards?

2. Can a country run a trade surplus and attract foreign investment at the same time?

3. The Investment Reduction Act gives out grants for certain types of manufacturing investment.

Do you expect the IRA to reduce the trade deficit by “bringing back” manufacturing jobs?

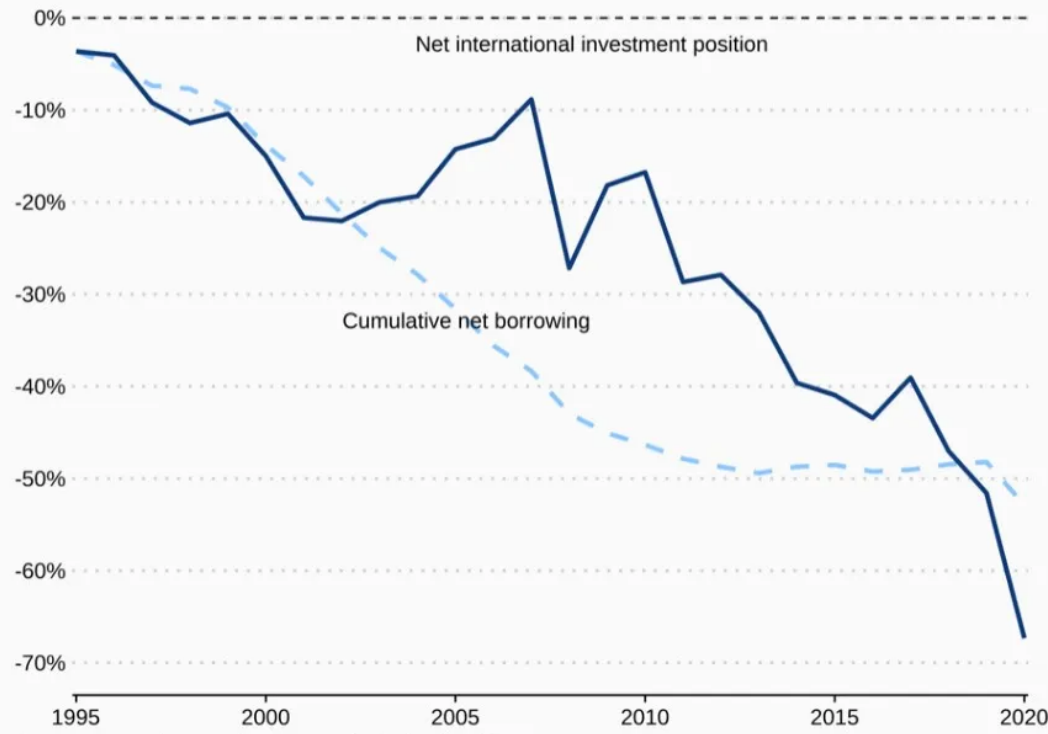
4. What policies might fix the trade deficit?

3 Trade Deficits: Consequences

3.1 Net foreign assets

U.S. net international investment position and cumulative external borrowing

Relative to GDP



Source: Bureau of Economic Analysis and author's calculations

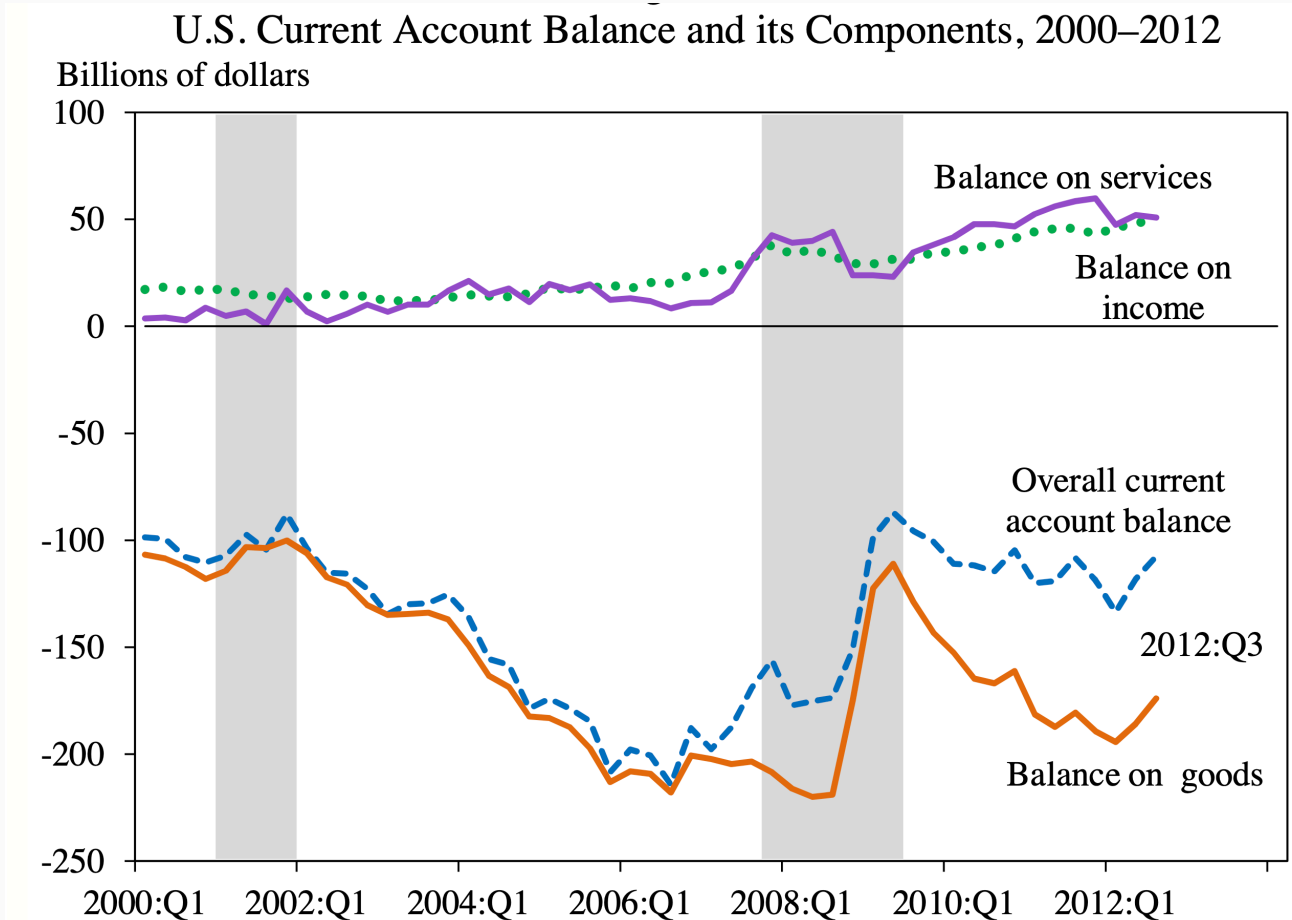
The US is increasingly a net debtor nation. Should we worry?

Whenever the trade balance is in deficit, foreigners invest in the U.S.

The U.S. sells off assets.

Source: Brookings 2021

3.2 U.S. Interest Income



But: the US still receives net income on assets.

Source: Economic Report of the President 2013

3.3 U.S. Interest Income

A strange fact Even though our net asset position deteriorates, we pay no (net) interest.

In 2018, U.S. net external **debt** was about 50% of GDP.

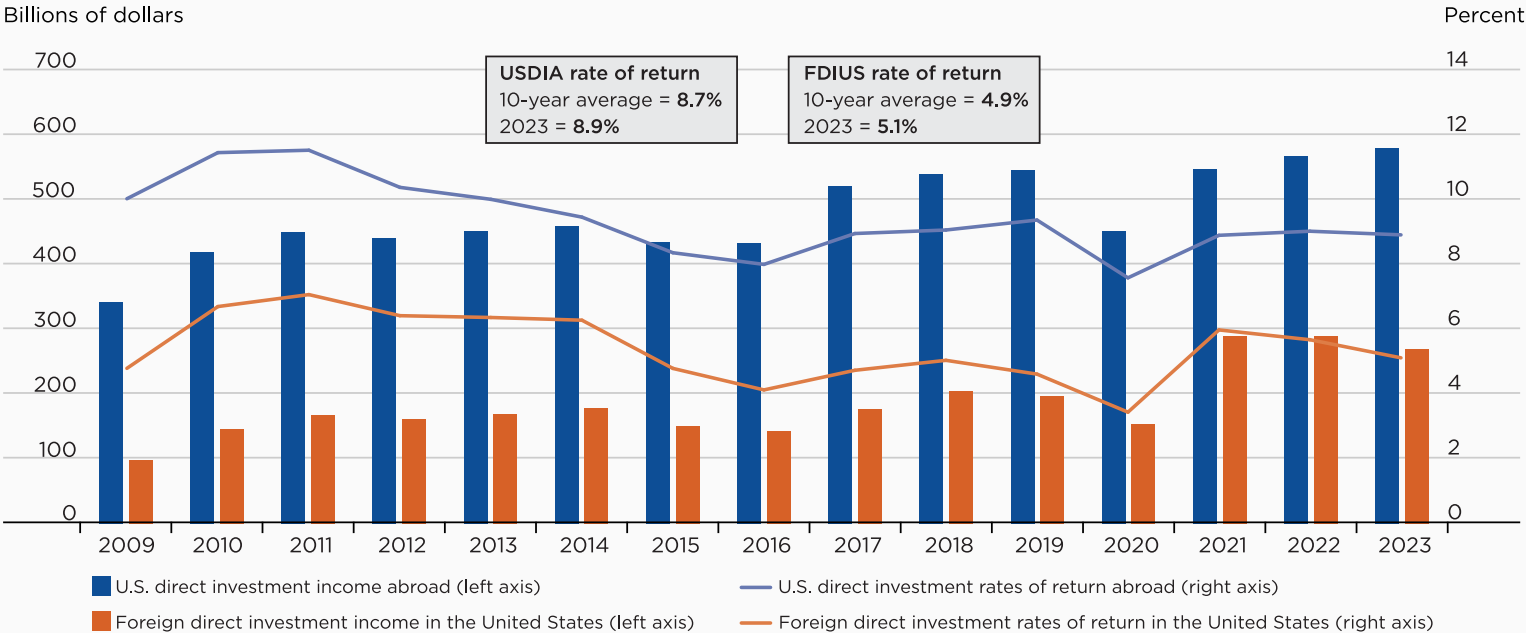
But the U.S. **earned** about 1% of GDP in net interest income.

Source and details: Council on Foreign Relations, 2018

If we continue to borrow, why don't we pay interest to the rest of the world?

3.4 U.S. Interest Income

Chart 2. Direct Investment Income and Rates of Return



FDIUS Foreign direct investment in the United States
USDIA U.S. direct investment abroad
U.S. Bureau of Economic Analysis

One reason:
The return on
U.S. foreign
assets is
higher than
that on our
liabilities.

Source: BEA
2025

3.5 Tax Arbitrage

Another reason for high U.S. returns: tax arbitrage

Foreign companies shift income abroad

- to low-tax countries

In sum:

- Net debt has been rising.
- The rate of return gap has been rising.
“**Exorbitant privilege**”
- On net, income payments have been flat.

3.6 What Does the Future Hold?

The rate of return gap is important for **sustainability** of the trade deficit.

- As long as the U.S. enjoys a rate of return advantage, it can borrow from abroad without paying interest.
- Even large deficits can be sustainable.

But will the “exorbitant privilege” prevail in the future?

4 Sustainability

4.1 Sustainability

How much can a country borrow?

- There is no clear answer
- Some countries have large debts and no trouble borrowing (Japan)
- Other countries suddenly get into trouble (Greece)

Remember: countries do not borrow - individuals do.

- The country's trade deficit is simply the sum of individual borrowing.

What is the trade balance of North Carolina?

4.2 Recap Questions

The fact that the U.S. remains an oasis of prosperity assures continued deterioration in its trade deficit, as imports grow amid weak foreign demand.

—James C. Cooper and Kathleen Madigan, *Business Week* (8 February 8, 1999)

What is Cooper saying here?

Is he correct?

Is the trade deficit a good thing or a bad thing?

4.3 Recap Questions

The current prosperity . . . has a precarious foundation. It is based to a very large extent on borrowing—both from America's own future and from the rest of the world.

—C. Fred Bergsten, *America in the World Economy: A Strategy for the 1990s* (1988)

What is Bergsten saying here?

Is the trade deficit a good thing or a bad thing?

4.4 Recap Questions

Senior Fellow Brad Setser ... writes that there is still an East Asian “savings glut,” in which exceptionally high savings rates in the region ... drive large trade surpluses, which must be absorbed by deficit countries, like the United States.

– CFR.org

1. How does a “savings glut” leads to a trade surplus?
2. What are mechanisms through which the foreign savings glut generates domestic trade deficit?

4.5 Does the trade deficit cost jobs?

Thoughts?

4.6 Reading

- Blanchard (2018), ch. 19-6
- Poole, William (2003). A Perspective on U.S. International Trade. Federal Reserve Bank of St. Louis.
- Council on Foreign Relations: The U.S. Trade Deficit: How Much Does It Matter?

4.6.1 Advanced Reading

- Economic Report of the President 2010, ch. 4. (on trade deficits and saving rates)
- John Cochrane 2025 (Explanation of the basic logic of saving, investment, and trade balances)

Bibliography

Blanchard, Olivier J. 2018. *Macroeconomics*. 7th ed. Pearson.