The Trade Deficit and Foreign Debt

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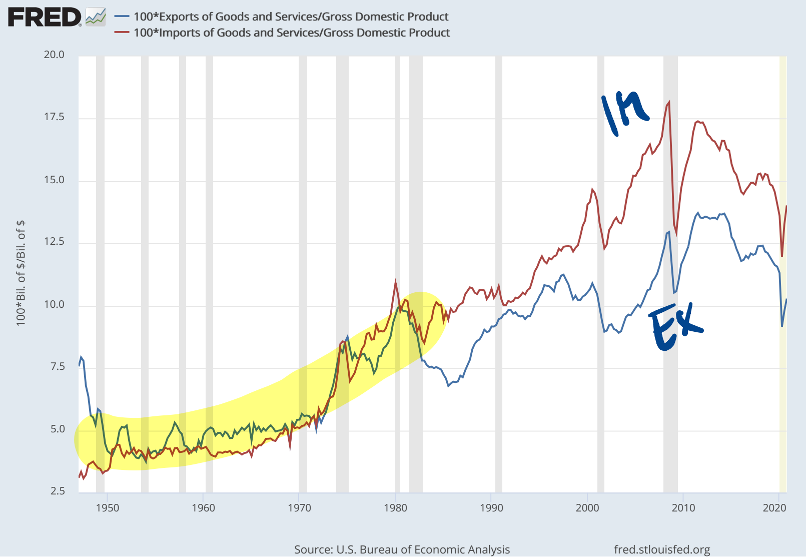
The U.S. Trade Balance



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

Causes of trade deficit?

- High production costs
  - High wages
  - Labor protections
- Consumers prefer foreign goods
- Dollar too strong

How to fix the trade deficit

- Tariffs
- Subsidies
- Domestic content requirements

- Deregulation

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 openings quote from Mann (1999), ch. 8

Questions

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

Main Insights

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

- U.S. residents buy foreign assets

A deficit means a country **borrows** against future income.

- U.S. residents sell assets to foreigners

Exactly analogous to borrowing and saving by individuals.

There is nothing inherently good or bad about trade deficits.

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.

National saving

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

$Y - (C + I + G) > 0$

In a closed economy:

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

$i \downarrow$

In an open economy:

- we buy foreign assets.

$$\text{Net foreign asset purchases} = Y - (C + I + G) \tag{1}$$

Foreign Saving and the Trade Balance

Now recall another identity:

- $Y = C + I + G + NX \implies NX = Y - (C + I + G)$
- $NX = EX - IM$ 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.

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?

What Causes Trade Deficits?

What Causes Trade Deficits?

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

NIPA

Recall the NIPA identity:

$$Y = C + I + G + EX - IM \tag{2}$$

Rearrange as

$$\underbrace{Y - T - C}_{private\ saving} + \underbrace{T - G}_{public\ saving} + \underbrace{IM - EX}_{foreign\ saving} = I \tag{3}$$

T: tax revenues.

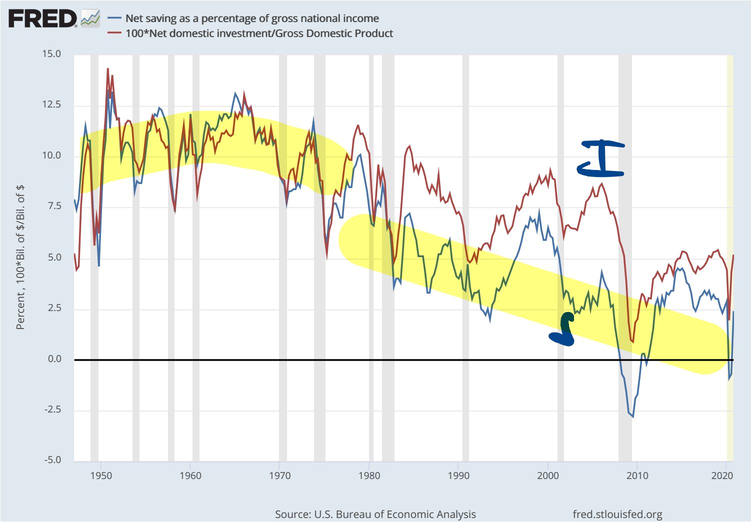
Reasons for trade deficits

$$\underbrace{Y - T - C}_{private\ \ saving} + \underbrace{T - G}_{public\ \ saving} + \underbrace{IM - EX}_{foreign\ \ saving} = I \tag{4}$$

We get a trade deficit when we have:

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

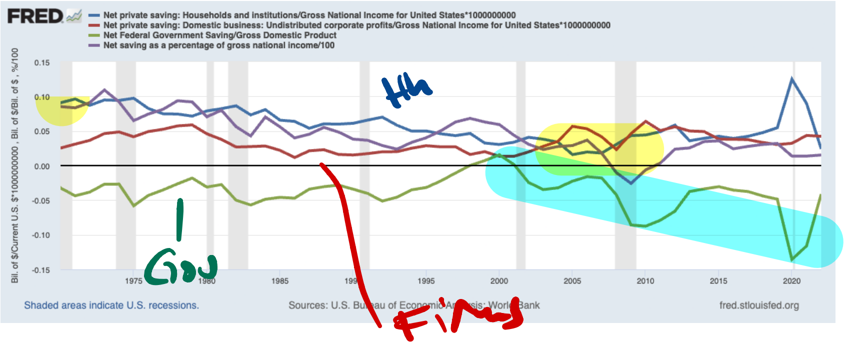
The U.S. trade deficit



I/Y has been falling slightly $\implies$ trade surplus

S/Y has been falling faster $\implies$ trade deficit

The Decline of U.S. Saving



Household saving has been falling - why?

Foreign governments as buyers

The flip side:

- If the U.S. runs a trade deficits, other countries must run surpluses.
- China accounts for about 1/3 of the our total deficit.

Since 2000: Deficits are financed largely by selling treasury bonds to foreign governments (Feldstein 2008).

- The likely motivation: sustain their own trade surpluses.

Is the Dollar to Blame?

Exchange rate

Should we conclude that the dollar is too strong?

Is that the reason why we have a trade deficit?

How could the trade deficit be reduced?

$$\underbrace{Y-T-C}_{private\ \ saving} + \underbrace{T-G}_{public\ \ saving} + \underbrace{IM-EX}_{foreign\ \ saving} = I \qquad (5)$$

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

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

This is a key point – whenever you hear a story about the trade deficit, check that S^P, S^G, I are affected in the right way.

Possible Fixes for the Trade Deficit

Faster economic growth

- e.g.: subsidize investment in technology $I\uparrow,\ S^p -,\ S^g\downarrow \Rightarrow NX\downarrow$

Reduce cost of production

- Deregulation
- Lower U.S. wages $I\uparrow?,\ S^p -,\ S^g -$ $NX?$

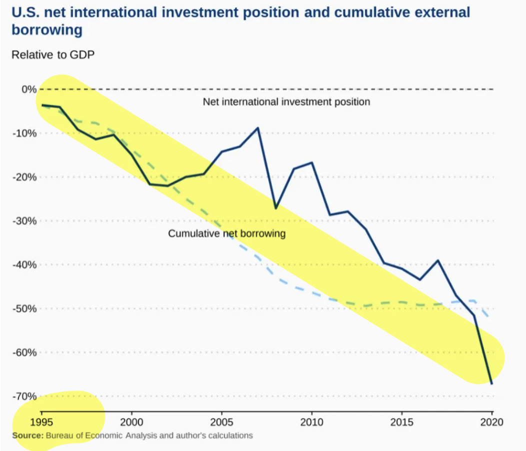
Tariffs

$I -,\ S^p -,\ S^g - \Rightarrow NX -$

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

Consequences of Trade Deficits

Net foreign assets

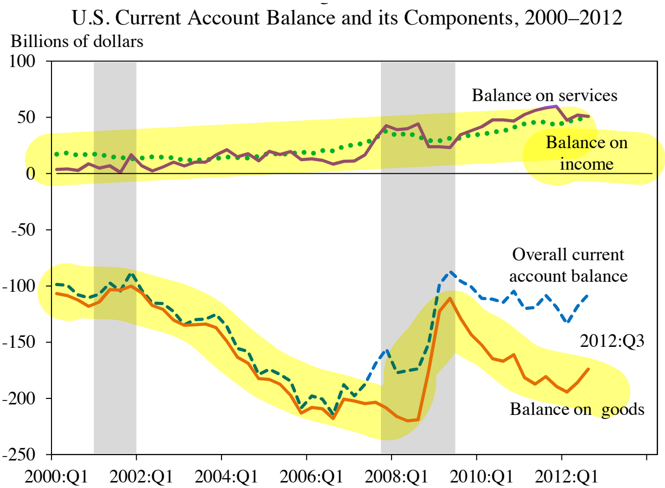


Source: The US is increasingly a net debtor nation. Should we worry?

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

The U.S. sells off assets.

U.S. Interest Income



Source: Economic Report of the President 2013

But: the US still receives net income on assets.

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

U.S. Interest Income

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

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

- U.S. foreign assets are mostly FDI and equity (high return).
- U.S. liabilities are mostly government bonds (low return).

This 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.

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?

Recap Questions

Quote: "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."

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?

$$NX = S - I$$
$$\uparrow \quad \uparrow \quad -$$

Capital inflows $\Rightarrow i\downarrow \Rightarrow I\uparrow \Rightarrow NX\downarrow$

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. What policies might fix the trade deficit?

$$NX = \underset{\downarrow}{S} - \underset{\uparrow}{I}$$

High when growing fast

Reading

- Blanchard and Johnson (2013), 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?

Advanced Reading

- Jones (2013), ch. 14.
- Economic Report of the President 2010, ch. 4. [on trade deficits and saving rates]
- Backus et al. (2009)
- Is the trade deficit sustainable: Feldstein (2008), Hausmann and Sturzenegger (2006)

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Backus, D., E. Henriksen, F. Lambert, and C. Telmer (2009): "Current account fact and fiction," Tech. rep., National Bureau of Economic Research.

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