

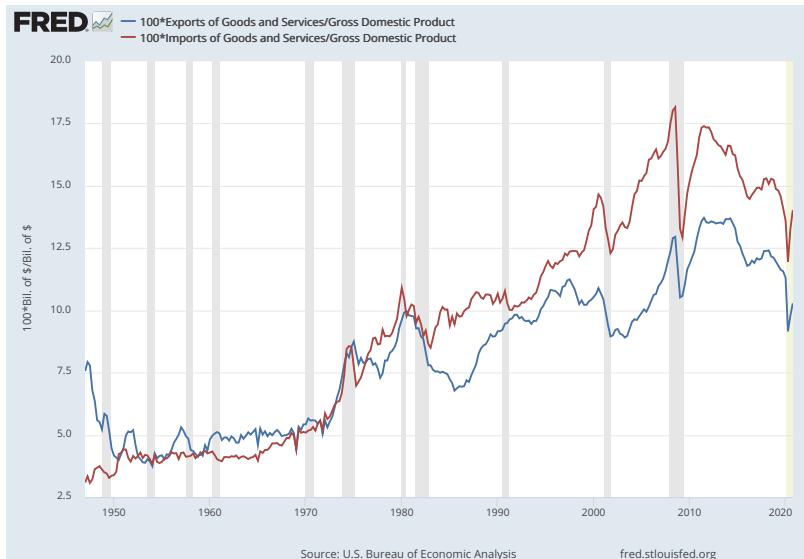
# The Trade Deficit and Foreign Debt

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# The U.S. Trade Balance



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

## 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 **borrow**s 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

- ▶  $\text{saving} = \text{income} - \text{expenditure}$

At the country level:

- ▶  $\text{income} = \text{GDP } (Y)$
- ▶  $\text{expenditure} = C + I + G$
- ▶  $\text{saving} = Y - (C + I + G)$

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  $I$ ?

In a closed economy:

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

In an open economy:

- ▶ we buy foreign assets.

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

# 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:

$$Y = C + I + G + EX - IM \quad (2)$$

Rearrange as

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

$T$ : tax revenues.

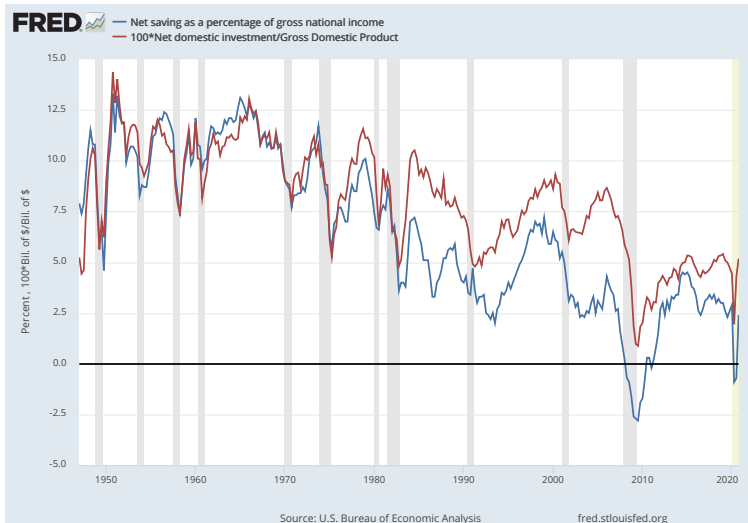
## Reasons for trade deficits

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

We get a trade deficit when we have:

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

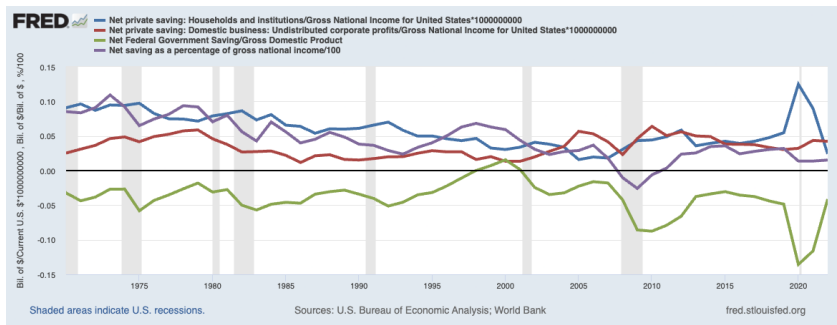
# The U.S. trade deficit



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

$S/Y$  has been falling faster  $\Rightarrow$  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?

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?

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

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

Reduce cost of production

- ▶ Deregulation
- ▶ Lower U.S. wages

Tariffs

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

## Consequences of Trade Deficits

# Net foreign assets

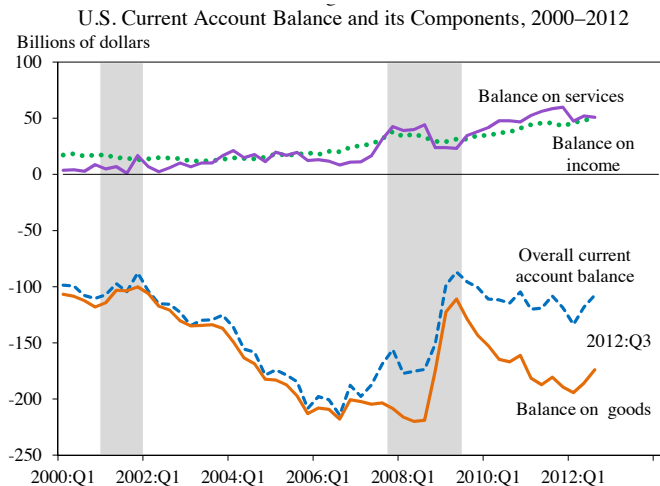


Source: The US is increasingly a net debtor nation. Should we worry?

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

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?

# 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)

## References I

- Backus, D., E. Henriksen, F. Lambert, and C. Telmer (2009): "Current account fact and fiction," Tech. rep., National Bureau of Economic Research.
- Blanchard, O. and D. Johnson (2013): *Macroeconomics*, Boston: Pearson, 6th ed.
- Feldstein, M. (2008): "Resolving the Global Imbalance: The Dollar and the US Saving Rate (Digest Summary)," *Journal of Economic Perspectives*, 22, 113–125.
- Hausmann, R. and F. Sturzenegger (2006): "Why the US Current Account Deficit is Sustainable," *International Finance*, 9, 223–240.
- Jones, C. I. (2013): *Macroeconomics*, W W Norton, 3rd ed.
- Mann, C. L. (1999): *Is The US Trade Deficit Sustainable?*, Peterson Institute For International Economics.