The Trade Deficit and Foreign Debt

Prof. Lutz Hendricks

Econ520

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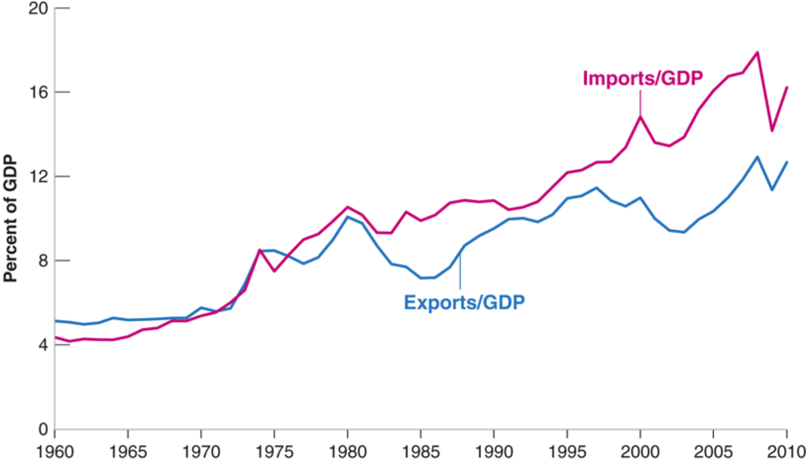
The U.S. Trade Balance



Source: Series GDP, EXPGS, IMPGS. Federal Reserve Economic Data (FRED) http://research.stlouis-fed.org/fred2/

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

Issues

Questions:

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

The main point:

- A trade surplus means the country **saves** for future consumption.
- A deficit means a country **borrows** against future income.

Exactly analogous to borrowing and saving by individuals.

Example: Trade across time

Assumptions:

- 2 countries
- 1 good, perishable
- **A** has a good harvest in odd periods, **B** in even periods
- Households like smooth consumption

Example: Trade across time

Year	1	2	3	4	5	6
Harvest						
A	100	0	100	0	100	0
B	0	100	0	100	0	100
Trade balance						
A	50	-50	50	-50	50	-50
B	-50	50	-50	50	-50	50

What does consumption look like?

- in autarky: volatile (not good)
- with trade: constant

Trade as risk sharing

Consider the stochastic version of the previous example.

- In each year, one country has a good harvest.
- The probability of a good harvest in each country is 1/2.

> By trading bonds against goods, countries can achieve perfect consumption smoothing.

All of this is exactly the same for a **household**:

- saving in good times / dissaving in bad times
- this allows a household to smooth consumption

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 = foreign asset purchases = $Y - (C + I + G)$

Foreign Saving and the Trade Balance

Now recall another identity:

- $Y = C + I + G + NX$
- $NX = EX - IM$ 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 surpluses export a country's excess savings.

Trade deficits import savings from abroad.

Politicians often want trade surpluses and foreign investment. This is not possible.

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:

$$Y = C + I + G + EX - IM \tag{1}$$

Rearrange as

$$\underbrace{Y - T - C}_{private\ \ saving} + \underbrace{T - G}_{public\ \ saving} + \underbrace{IM - EX}_{foreign\ \ saving} = I \tag{2}$$

T: tax revenues.

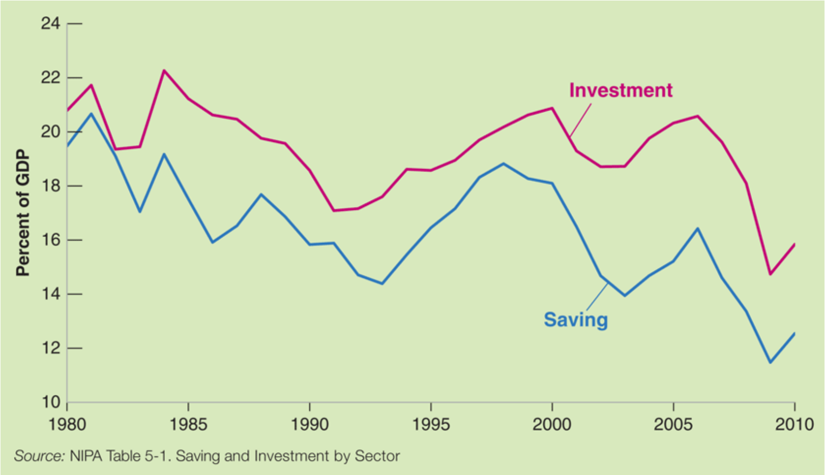
Reasons for trade deficits

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

We get a trade deficit when we have:

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

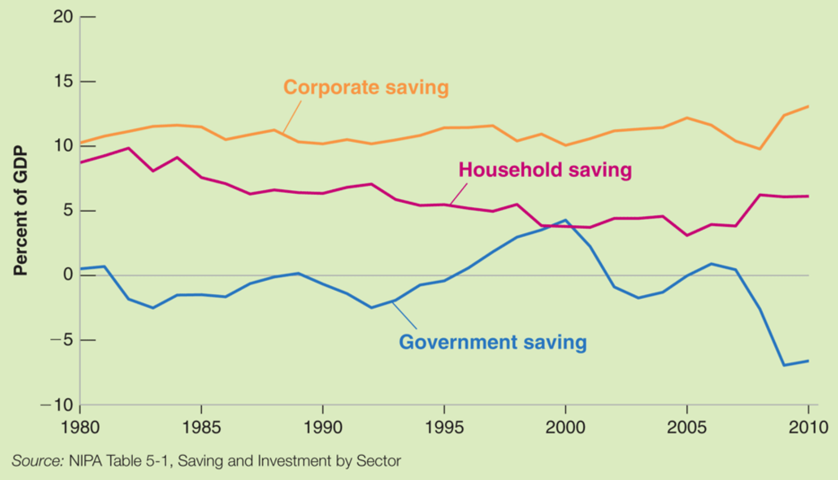
The U.S. trade deficit



I/Y has been roughly constant.

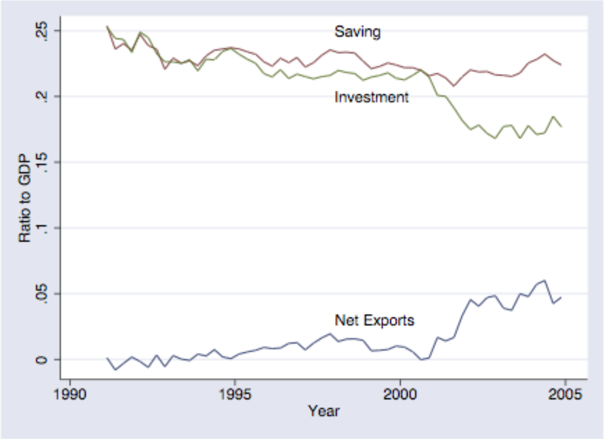
S/Y has been falling.

The Decline of U.S. Saving



Household saving has been falling - why? We'll come back to that...

Low Investment in Other Countries



Source: Backus et al. (2009)

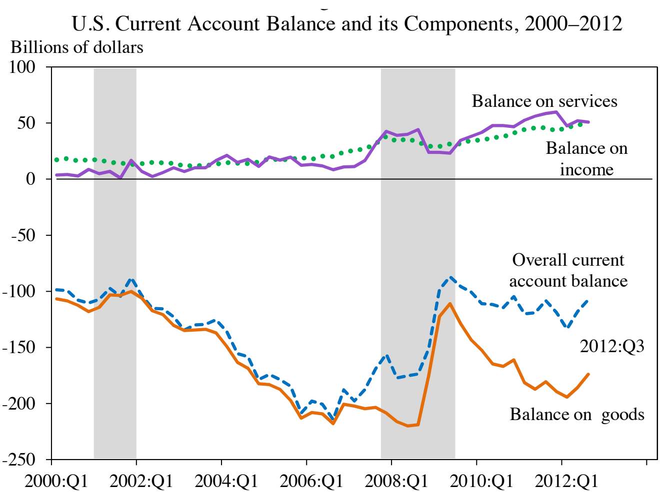
One reason for our defict: surpluses in other rich countries.

Why? - They don't grow / invest.

Foreign governments as buyers

- Since 2000: Deficits are financed largely by selling treasury bonds to foreign governments (Feldstein 2008).
- The likely motivation: sustain their own trade surpluses.

Trade Surplus in Services



Source: Economic Report of the President 2013

The US still has a surplus in services and receives net income.

How could the trade deficit be reduced?

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

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.*

Popular causes of the trade deficit

- Sluggish economic growth
- Too high cost of production
- Low wages in competitor countries
- Foreign trade restrictions or dumping
- "Overvalued" exchange rate

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

Consequences of Trade Deficits

Net foreign assets

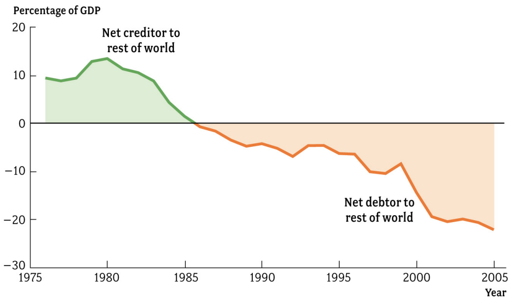


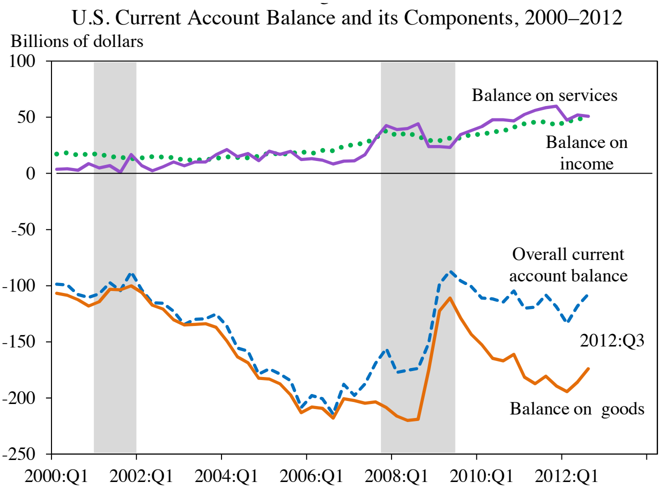
FIGURE 14.6 Net Foreign Assets in the United States, 1976–2005

Macroeconomics, Charles I. Jones

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 networking asset position deteriorates, we pay no (net) interest.

In 2005, the U.S. had \$5 trillion in net debt and **earned** about \$17 billion in net income.

U.S. Interest Income

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

One reason: capital gains.

- BEA estimates about $2.3 trillion in capital gains (1982-2005)

Second reason: U.S. assets earn a higher return than do foreign assets in the U.S.

- Foreign direct investment is probably underestimated.
- U.S. assets are safer / more liquid.

Sustainability

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?

Does the trade deficit cost growth/jobs?

> *"It requires about 2.5 million full-time workers to produce \$100 billion worth of exportable goods and services. Since the rest of the world has been running a \$100 billion trade surplus with the United States, at least 2.5 million workers in the rest of the world owe their jobs to that surplus." – Lester Thurow*

Thoughts?

Reading

- Blanchard and Johnson (2013), ch. 19-6
- Poole, William (2003). A Perspective on U.S. International Trade. Federal Reserve Bank of St. Louis.

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.