The Trade Deficit and Foreign Debt

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Issues

What is the role of trade deficits and surpluses?

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

Rearrange as

$$\underbrace{Y - T - C}_{private\ \ saving} + \underbrace{T - G}_{public\ \ saving} + \underbrace{IM - EX}_{foreign\ \ saving} = I \tag{1}$$

T: tax revenues.

Reasons for trade deficits

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

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

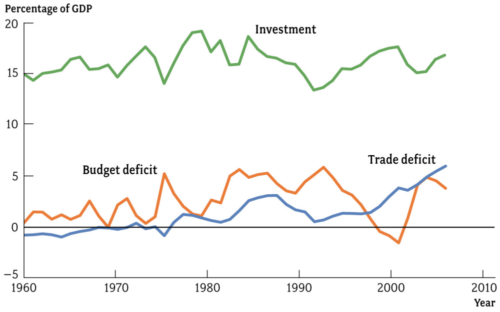


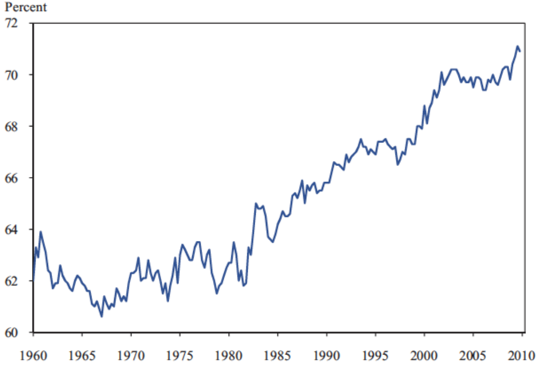
FIGURE 14.5 U.S. Investment, Budget Deficit, and Trade Deficit, 1960–2005

I has been roughly constant.

The trade deficit has been rising $\rightarrow$ saving must have declined.

The Decline of U.S. Saving

Figure 4-1
Personal Consumption Expenditures as a Share of GDP

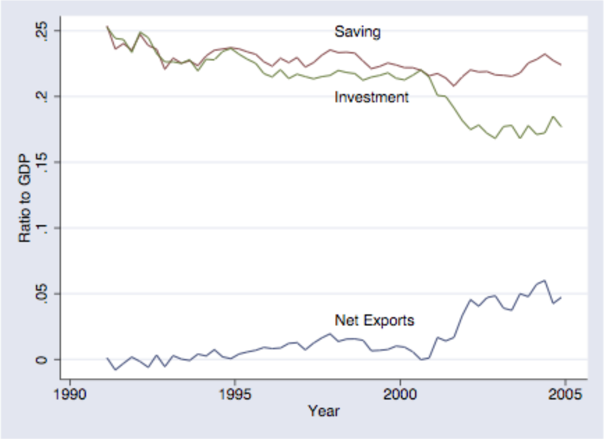


Source: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 1.1.10.

Source: ERP 2010

Consumption / GDP is rising - why? We'll come back to that...

Low Investment in Other Countries



Source: Backus et al. 2009

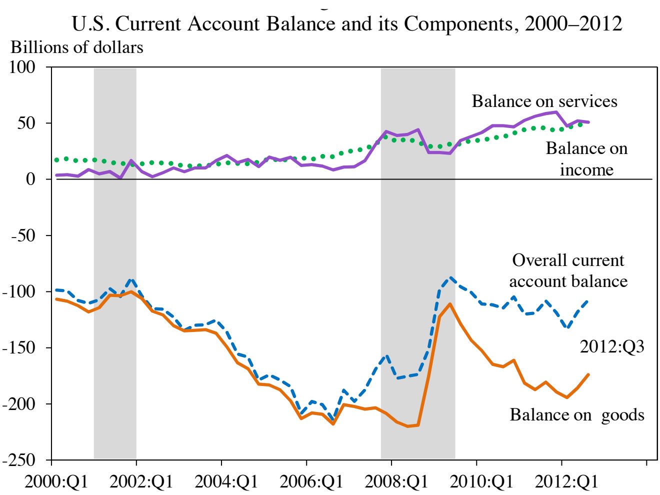
One reason for our defict: surpluses in other rich countries.

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?

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

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

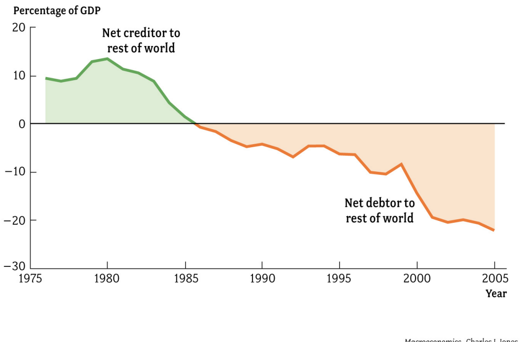
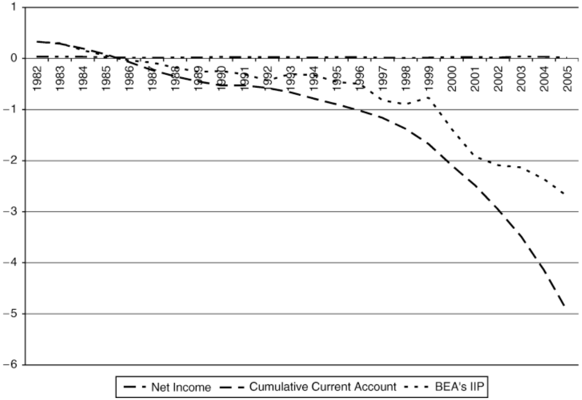


FIGURE 14.6 Net Foreign Assets in the United States, 1976–2005

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

The U.S. sells off assets.

U.S. Interest Payments



Source: Hausman & Sturzenegger (2006)

A strange fact

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

U.S. Interest Payments

- If we continue to borrow, why don't we pay interest to the rest of the world?
- In 2005, the U.S. had \$5 trillion in net debt and **earned** about \$17 billion in net income.
- One reason: capital gains.
  - BEA estimates about \$2.3 trillion in capital gains (1982-2005)
  - This reduces the net debt from \$5 trillion to \$2.7 trillion.
- 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.

Trade Deficits May Be Smaller

- We worry about trade deficits because of the interest payments they imply.
- As long as the U.S. enjoys a rate of return advantage, it can borrow from abroad without paying interest.
- The "true" deficit may be much smaller than official numbers suggest.
- In fact: the U.S. may run a "true surplus:" it acquires assets that pay more than the assets it sells.

Does the trade deficit cost growth/jobs?

- We could have produced the goods we imported at home.
- Thoughts?

How worrisome is the trade deficit?

- There is no definite upper bound to foreign debt.
- A country can keep borrowing as long as lenders can be convinced to lend.
- But note: countries do not borrow – individuals do.
  - The country's trade deficit is simply the sum of individual borrowing.
  - Why should we worry about that?
- What is the trade balance of North Carolina?

Reading

- Blanchard / Johson, Macroeconomics, 6th ed., ch. 19-6
- Poole, William (2003). "A Perspective on U.S. International Trade." Federal Reserve Bank of St. Louis. http://research.stlouisfed.org/publications/review/04/03/Poole.pdf

Advanced Reading

- Jones, Macroeconomics, ch. 14.
- Economic Report of the President 2010, ch. 4. [on trade deficits and saving rates]
- Backus, David (et al.) 2009. "Current Account Fact and Fiction." NBER working paper #15525. http://www.nber.org/papers/w15525.
- Feldstein, Martin. 2008. "Resolving the Global Imbalance: The Dollar and the U.S. Saving Rate." Journal of Economic Perspectives, 22(3): 113–25.
- Hausmann, R. and Sturzenegger, F. (2006). "Why the US Current Account Deficit is Sustainable." International Finance 9 223-240. DOI: 10.1111/j.1468-2362.2006.00185.x