Notes for Leir retreat:

The US current account, the savings balance

and Dutch disease

Daniel Gros

Differences in savings, rather than investment rates, appear to be the longer run drivers of current account imbalances even if these variables are measured with considerable margins of error. There does not seem to be a link, at least at the aggregate level, between the current account and manufacturing employment, which has declined at similar rates in the US and Europe over the last two decades (with very different current account developments). Rising US production of commodities might have exerted an additional influence on manufacturing employment, which was absent in Europe.

What I will not address is the puzzle why US (and in general Anglo-Saxon) savings have diverged from the rest of developed countries, although capital markets are increasingly integrated and interested rates have followed almost everywhere a very similar trend downwards.

**Measurement problem**

We all use the identity that the current account is equal to savings minus investment. But in the data we have, the current account (typically from balance of payments statistics) is not tightly related to the difference between savings and investment (see below data for US in terms of % of GDP). There are years (like 2015), or in the early 1990s, when the current account and the savings surplus differ by as much as 2-3 % of GDP. The correlation coefficient between the two measures is ‘only’ 70 %. One needs to be careful in using the identity too strongly in empirical work.

For other countries one finds similar discrepancies, especially in data going back before the 1990s.

**What is more important S or I?**

Despite this caveat about the discrepancies in the data, I will follow convention and treat the current account as the difference between savings and investment.

Historically the US current account (as % of GDP) has been correlated more with savings than investment rates as shown in the graph below (see also Ted on this).

The longer term trend of a current account deficit of the US is understandable also as a widening difference between US and other (non Anglo-Saxon) savings rates (see below).

Source: IMF WEO database

This divergence is difficult to explain given that global interest rates have followed a common trend. But in the US (and the UK, not shown) this has been associated with lower savings, but not in the rest of the developed world. One hypothesis is that easier access to credit might have encouraged dis-savings in the US due to the structure of its financial markets, with easier access to consumer credit and mortgages couples with the possibility to extract home owners equity when house prices increase.

Cross-country evidence confirms this primacy of savings. Today’s constellation of current account (im)balances also appear to be the result of large differences in national savings rates, rather than differences in national investment rates. Among the G-7 advanced economies, national savings rates range from about only 12% of GDP for the UK, up to almost 28% of GDP for Germany, a ratio of 2.3 to one. The differences in national investment rates are much smaller, the lowest value is Italy (16.6% of GDP) and the highest is only one half higher, at 23% of GDP for Canada.

The figure below shows the pairs of the current account and national savings rates (averages 2014-16) for the OECD countries.[[1]](#footnote-1) Variations in national savings rates can explain over 70% of the variability in current accounts.

*Figure National savings rates and the current account, average 2014-16 for OECD countries*

*Source:* Own calculations based on WEO data from the IMF.

[Feldstein & Horioka (1980)](http://faculty.georgetown.edu/mh5/class/econ489/Feldstein-Horioka-Puzzle.pdf)[[2]](#footnote-2) argued some time ago that savings and investment decisions should be decoupled in a world of full capital mobility. Looking at data across OECD countries from the 1960s and 1970s, they found that savings and investment ratios were indeed very tightly correlated (correlation coefficients above 90%). It is still true today that high-savings countries tend to have higher investment rates as well, but the correlation is much less strong, with the correlation coefficient closer to 50%, resulting in a much higher variability of current account deficits. In the Feldstein-Horioka data, current accounts rarely exceeded 2% of GDP and the standard deviation across OECD countries was about 1% of GDP. Today, however, the standard deviation across the over 30 OECD countries is much higher, at around 4.5% (of GDP), indicating that there is much more capital mobility.

A corollary of capital mobility should be that high-savings countries are likely to run current account surpluses. Moreover, if differences in national savings rates happen to be larger than differences in national investment rates, one would observe that differences in national savings rates explain most of the differences in current account positions. This is indeed what one observes today.

**Is the US current account the mirror image of the surpluses of Germany (Northern Europe) and Japan?**

A formal regression exercise, which ‘explains’ the US current account as a function of the German and Japanese current accounts shows a strong correlation at first sight. But this correlation seems largely spurious since all the variables follow a common trend (see annex of details). The US current account seems to be largely driven by an autoregressive process.

**The deficit and the US manufacturing sector: Dutch disease writ large?**

The US is a large producer of commodities. Manufacturing is subject to a ‘Dutch Disease’ effect, which has been operating mostly over the last 10 years. The improvement in the non-manufacturing balance since 2005 is almost exactly equal to the deterioration in the manufacturing balance (about 300 billion USD, or close to 2 % of GDP. This is significant relative to the decline of manufacturing). The US even has a slight surplus in non-manufacturing trade in 2015! The improvement in US non-manufacturing deficit since 2005 was mostly driven by supply (shale oil/gas, but also by prices. The deterioration of the trade balance pre 2005/6 was mostly driven by a demand expansion as both manufacturing and non-manufacturing balances deteriorated. Over 20 years (1995-2015) the deterioration in the manufacturing balance could be ascribed one half to Dutch disease and one half to the S-I balance.

Europe is different: EU 28 has large deficit in non-manufacturing goods (about 250 billion USD in 2015, but also very variable). The EU provides a mirror image to the US: since 2005 the improvement in manufacturing is mainly reflected in a higher overall trade surplus. Prior to 2005 the Dutch disease was helping. The non-manufacturing balance deteriorated by about 500 billion US. Hence the EU was forced to export more manufacturing goods for any given desired current account (S-I) balance. Changes in EU non-manufacturing deficit mostly driven by prices, little variation in domestic supply.

Conclusion: difference EU – US in terms of manufacturing trade is large: over the last 20 years EU experiences an improvement in the manufacturing balance of about 250 billion US, whereas that of the US deteriorates by 650 billion. Over a 20 years horizon the Dutch disease seems to have been a minor effect.

Europe is different. In Europe (data is for EU 28) there is a strong negative correlation between the balances on manufacturing and non-manufacturing (at least until the euro crisis hit domestic demand, leading to a large current account surplus). See chart below.

**Decline in manufacturing employment: Cause or common trend?**

The US and the EU show a common trend for employment in manufacturing over the last 20 years: in EU the share has fallen by 8 percentage points, against ‘only’ 5 for US. In relative terms the decline is about the same: the share of manufacturing falls by over 30 % in twenty years in both the EU and US. (See also the notes by Nick.)

Source: Eurostat

**Conclusions**

The US and Europe have experienced quite different developments in terms of the current and even more so in terms of the balance of trade in manufacturing. The overall trade balance was surely driven by macroeconomic forces, but the balance in manufacturing goods was also affected by increasing US supply of commodities (shale oil and gas), which might have crowded out exports of manufacturing.

However, despite these differences the trend in employment in manufacturing have been remarkably similar in relative terms (and an even stronger decline in absolute terms in Europe). Employment in manufacturing was already much lower in the US in the 1990, even before the onset of the really large current account deficits this century. All in all, it appears difficult to link the decline in US manufacturing to the continuing US current account deficits.

Annex:

Regression results

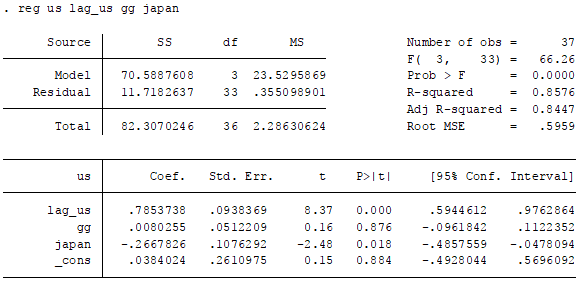
Dependent: US current account % GDP

RHS:

First lag of dependent.

GG= current account of Germany plus Northern neighbors (% GDP)

Japan = current account as % GDP



1. Except Greece, which is in a special situation because its current account benefits from concessional interest rates on its foreign debt. [↑](#footnote-ref-1)
2. M. Feldstein and C. Horioka, “Domestic Saving and International Capital Flows”, *The Economic Journal*, Vol. 90, No, 358, June 1980, pp. 314-329. [↑](#footnote-ref-2)