

# Current Account Fact and Fiction\*

David Backus<sup>†</sup> and Frederic Lambert<sup>‡</sup>

July 7, 2005

Preliminary and incomplete

## Abstract

With US current account and trade deficits over 5% of GDP, many have argued that the country is “on the comfortable path to ruin.” We suggest instead that things have never been better: although national saving is (and has been) low, the ratio of household net worth to consumption remains high. We attribute the external deficit to a combination of high net worth of US households and low investment in other countries.

**JEL Classification Codes:** F32, F21, E21.

**Keywords:** net exports; trade balance; saving; consumption; real exchange rate.

---

\*We welcome comments, including advice on data and measurement issues and references to papers we inadvertently overlooked. We thank Gian Luca Clementi, Nouriel Roubini, and Gian Luca Violante for useful comments. The latest version of the paper will be available at:

[http://pages.stern.nyu.edu/~dbackus/CA/BL\\_latest.pdf](http://pages.stern.nyu.edu/~dbackus/CA/BL_latest.pdf)

If you print this document, we suggest you turn off “Auto-Rotate and Center.”

<sup>†</sup> Stern School of Business, New York University, and NBER; david.backus@nyu.edu.

<sup>‡</sup> Stern School of Business, New York University; flambert@stern.nyu.edu.

# 1 Introduction

In many respects, economic life in the United States has never been better. Per capita GDP reached an all-time high of \$39,921 in 2004. Real GDP grew by 3.6% over the last year, modest by US standards but faster than Canada (3.0%), France (2.4%), Germany (1.5%), Italy (0.8%), Japan (0.8%), and most other developed countries. Employment hit a record 141 million in April 2005, with the unemployment rate steady at 5.2%, well below its 2003 peak of 6.3%.

Despite these signs of prosperity, many professional observers detect signs of trouble. Most of them trace their discomfort to the widely-reported trade and current account deficits (“external deficits” in the language of international macroeconomics), which they connect to a low saving rate and a government budget deficit through familiar flow identities. Representative samples of opinion include:

- Lawrence Summers (2004a): “The most serious problem we have faced in the last fifty years is that of low national saving, resulting dependence on foreign capital, and fiscal sustainability. ... The current account deficit has widened sharply over the last four years ... to an unprecedented rate of 5% of net national product. More than 100% of the deterioration of the current account deficit is accounted for by a drop in national saving. ... The clear change in national saving ... comes from the increase in the federal budget deficit, which accounts for the fact that the US now has the lowest rate of national saving in its history.”
- Stephen Roach (2004): “June’s enormous US trade deficit should be a wake-up call to America and the rest of the world. ... As long as the US continues to live well beyond its means and as long as the rest of the world fails to live up to its means, this seemingly chronic condition will only get worse. The imperatives of global rebalancing are reaching a flashpoint. ... The basic problem [is] a saving-short US economy that is locked into the destructive spiral of ever-widening twin deficits.”
- Nouriel Roubini and Brad Setser (2004, pp 9, 22): “[We examine] ... US external deficits and the ... international monetary system that is integral to their financing – a system whose stability hinges on the willingness of Asian central banks to both hold enormous amounts of US Treasuries. ... Our analysis suggests that the ... system is fragile, and likely will prove unstable. Even if the United States continues to be able to borrow on terms that other, comparable, debtors could not imagine, our analysis suggests that the US is on an unsustainable and dangerous path. ... The deficits since 2000 reflect the need for a low savings country to ... finance large budget deficits.”
- Maurice Obstfeld and Kenneth Rogoff (2004a): “Four years ago, we [argued] that the US current account deficit was on an unsustainable trajectory over the medium term, and that the inevitable reversal would precipitate a change in the real exchange

rate of 12 to 14% if the rebalancing were gradual, but with significant potential for overshooting if the change were precipitous. ... [We now conclude] that the US current account poses a larger potential decline in the dollar than we had earlier speculated.”

- Joseph Stiglitz (2004): “America’s huge fiscal and trade deficits ... jeopardise future American generations’ well-being. As ... Herb Stein put it: ‘If something can’t go on forever, it won’t.’ But no one knows how, or when, it will all end. ... An even weaker dollar is a strong possibility.”
- Warren Buffett (2005, p 20): “As time passes, and as claims against us grow, we own less and less of what we produce. ... Should we continue to run current account deficits comparable to those now prevailing, the net ownership of the US by other countries and their citizens a decade from now will amount to roughly \$11 trillion. ... Our US ‘family’ would then be delivering 3% of its annual output to the rest of the world simply as tribute for the overindulgences of the past. In this case, ... the sons would truly pay for the sins of their fathers.”

*Financial Times* columnist Martin Wolf (2004) gives us the bottom line: “Let’s be blunt about it. The US is now on the comfortable path to ruin.”

Are we on the path to ruin? The future is difficult to read, but we’re not as troubled as many observers, for reasons that will become apparent as we go along. Our goal, however, is not to convince you that everything is fine, but to put the US external deficit into perspective. We look at evidence on external balances (trade and current account) over a broad range of developed countries (16 members of the OECD) and a long period of time (for 8 countries, more than a century). This evidence goes some way toward separating fact from fiction as we think about the likely causes and consequences of the US current account deficit.

In the next section, we take a quick look at external balances in the US and other countries, including the US deficit and corresponding surpluses in Europe and Asia. In Section 3, we start to put this into a broader historical context by documenting some of the properties of external balances in developed countries. In some cases, we describe data going back more than a hundred years; in others, we focus on the period since 1950. We use the data to comment on several common propositions about external balances: that large imbalances are rare, that they can’t last, and that they lead to subsequent real depreciations. In Section 4, we return to the US deficit ... [Fix when outline is clear...]

## 2 Global imbalances

Let’s start with a look at external (im)balances around the world.

The US is currently running an external deficit of more than 5% of GDP. You can get a hint of its origins from Figure 1, where we plot (gross national) saving, (gross private) investment, and net exports over the last fifty years. Each is expressed as a ratio to GDP, with both numerator and denominator valued at current prices. We base our measure of saving on the expenditure identity:  $Y = C + I + G + NX$ , where  $Y$  is GDP,  $C$  is private consumption,  $I$  is private investment (including the change in inventories),  $G$  is government consumption and investment, and  $NX$  is net exports. We define saving as  $S = Y - C - G$ , so that

$$S = I + NX. \tag{1}$$

This definition of saving is somewhat unusual, but there are so many definitions floating around that it hardly seems unreasonable to add one more. We compare it to other definitions in Section 6. The flow identity (1) retains the traditional role of the external balance (net exports in this case) in reconciling saving and investment.

If the definition of saving is novel, the message is not. The ratio of net exports to GDP has declined significantly over the last twenty years. There was a local minimum of about -3% in the mid-1980s, then a return to balance in the early 1990s. By the mid-1990s, net exports was again declining, hitting -3% in 2000 on the way to a deficit of 5.9% in the first quarter of 2005. This development necessarily reflects movements in saving and investment. Both have strong cyclical components (they're both procyclical), but their low-frequency movements are quite different. While investment has been a relatively stable fraction of GDP over the last fifty years, the saving rate has declined slowly since 1980. The trend in net exports mirrors the decline in the saving rate.

Table 1 is a snapshot of external balances around the world in 2004. Although there are other countries running deficits, most are not. The US trade deficit (balance on goods and services, effectively the same as net exports) of approximately \$600b is balanced by surpluses in the Euro-zone countries, other developed countries, and developing countries, each with a surplus of about \$200b. Current accounts are roughly similar, although the Euro-zone's trade surplus is significantly larger than its current account surplus. Of the countries shown, the largest current account surpluses (measured as ratios to GDP) are Norway (13.7% of GDP), Switzerland (12.0%), Japan (3.7%), and Germany (3.6%). Spain (-5.0%) and Australia (-6.4%) are running deficits comparable to the US.

The surpluses in other countries are no surprise — barring the inevitable measurement errors, external balances sum to zero worldwide. Two things are a little surprising, however. One is that some countries are running surpluses whose percentages of GDP are substantially larger than the US deficit. The other is that capital is apparently not flowing from north to south, even a little: almost all of it is flowing to the US.

### 3 Deficit fact and fiction

The opinions we quoted at the start describe what Roubini (2005) calls (fairly, we think) the consensus view. It goes something like this: The US is running an external deficit of unprecedented size. This deficit is the consequence of a low national saving rate, which itself is the consequence (at least in part) of a large government deficit. Since the current account is financed by equal and opposite capital inflows, the US external deficit is financed by foreign borrowing. This can't last forever — eventually the interest on our foreign liabilities would exceed our income — so we should expect to see the deficit shrink. Since the external deficit depends on the relative price of local and foreign goods and services, the reversal will be require a decline in the real value of the dollar. Even so, our remaining foreign debt will depress the living standards of future generations.

How persuasive is this argument? We break it down into its component “propositions,” comparing each one with what we know about external deficits. We list each proposition, describe its logic, and use data to determine whether it is fact or fiction.

We assess these propositions with data for other developed countries. Since our focus is the US current account, we choose countries that (like the US) have high GDP per capita. We do this by using OECD members, excluding new members like Korea, Mexico, and central European countries. That leaves us with 15 countries: Australia, Belgium, Canada, Finland, France, Germany, Italy, Japan, the Netherlands, Norway, Spain, Sweden, Switzerland, the UK, and the US. For this set of countries, we construct three datasets. Quarterly series are taken from the OECD's *Quarterly National Accounts* and *Main Economic Indicators*. A longer annual dataset for the same countries was constructed from the IMF's *International Financial Statistics*. Finally, annual series prior to 1950 are taken from studies by economic historians; most of the sources will be familiar from Backus and Kehoe (1992), Jones and Obstfeld (1996), and Taylor (2002). The sample in this case includes Australia, Canada, France, Japan, Norway, Sweden, the UK, and the US (8 countries altogether). Details on all of these sources are reported Appendix A.

Let's turn to the propositions.

#### **Proposition 1: The US external deficit is unprecedented.**

The most common word used to describe the US external deficit is “unprecedented.” Certainly it's unlike anything we've seen in the US over the last fifty years — that's clear from Figure 1. In other eras and countries, the term is less appropriate. In the top panel of Figure 2, we see that the US had at most modest deficits between 1900 and 1980. In the first half of the nineteenth century, however, deficits were more common, with a deficit over 5% in 1815 and smaller but more persistent deficits in the 1830s and 1870s. Large surpluses have also occurred, with surpluses greater than 5% of GDP during World War I and immediately following World War II.

We might regard US imbalances as oddities, with large deficits rare and large surpluses associated with wars. In other countries, large imbalances have been more common. In the second panel of Figure 2 we plot long series of the ratio of net exports to GDP for seven other countries: Australia, Canada, France, Japan, Norway, Sweden, and the United Kingdom. In these countries, both deficits and surpluses occurred in about 5% of available observations prior to 1960, giving us imbalances greater than 5% roughly 10% of the time. Jones and Obstfeld (2000, Figure 3) and Taylor (2002, esp Figure 1) make a similar point about the period from 1850 to World War I: that relatively free mobility of capital prior to World War I was associated with larger current account imbalances than we saw between World War II and 1990.

In Figure 3 we show external balances for a larger set of countries over the period 1960-present. [more coming!] The most striking feature of the figure is the substantial increase in both deficits and surpluses over the last fifteen years. If the US deficit is unusually large, so are the surpluses currently run by Germany, Japan, and (especially) Norway and Switzerland. Even if we attribute the Norwegian case (the blue line) to the discovery of oil, the dispersion in external balances has increased sharply in the recent past. Blanchard and Giavazzi (2002) make the same point about the EU, stressing the huge deficits run by Portugal and Greece, which are missing from our sample. Whether this represents a return to the imbalances of a century ago or something new remains to be seen.

Conclusion: the proposition is fiction. The US deficit is unusual, but it is hardly unprecedented. There have been many examples in other developed countries of both deficits and surpluses greater than 5% of GDP.

**Proposition 2: External deficits are associated with government deficits.**

The so-called “twin deficit” proposition is mentioned in the Roach, Roubini-Setser, and Summers quotations above, as well as many other places. DeLong (2004) gives us a particularly vivid version: “[Treasury undersecretary] John Taylor ... is not allowed to say the obvious thing: that savings as a share of GDP has declined as a result of the big Bush budget deficits.” This line of thought was equally popular in the mid-1980s, when the US was also running both external and fiscal deficits. The logic follows from a variant of the flow identity we used earlier. If  $T$  is government tax revenue net of transfer payments and interest, then gross national saving can be decomposed into private and government components:

$$\begin{aligned} S \equiv Y - C - G &= (Y - T - C) + (T - G) \\ &= S_p + S_g, \end{aligned}$$

where  $S_p$  and  $S_g$  represent private saving and government saving (the government deficit with the sign reversed). The logic behind the proposition is that a decline in government saving leads to a decline in total saving, which is then reflected in net exports as in equation

(1). The key issue, of course, is the impact on consumption, which we'll examine directly in Section 5.

What's the evidence? Since 2000, government saving and net exports (expressed as ratios to GDP) have both declined sharply; see Figure 4. However, there is no systematic relationship between these two variables in general. If we look at the period between 1990 and 2000, for example, we might as easily conclude that they move in opposite directions. The second panel of the figure is a scatter-plot of the variables. The correlation between the two is 0.15 for annual data between 1960 and 2004. Other countries show similar patterns, with correlations of  $-0.08$  (Australia),  $-0.05$  (Canada),  $-0.06$  (Switzerland), and  $0.12$  (Sweden). [more coming] The lone strong positive correlation is Norway ( $0.57$ ), with twin deficits in the 1970s and twin surpluses recently. [This is a direct reflection of oil, more later.] At present, Germany and Japan are running substantial external surpluses with government deficits similar in magnitude to the US. On the whole, we find it hard to argue that the recent association between the two deficits is more than an accident. We'll have more to say about the US and Norway later on.

Conclusion: fiction. If correlations are any guide, government deficits play a small role in external deficits of developed countries.

### **Proposition 3: Large external deficits can't last.**

Can external deficits persist? Can the US run a trade deficit of (say) 5% of GDP indefinitely? The problem is that deficits are financed by claims to the US economy. As these claims accumulate, so do interest payments on them. At some point the payments become large enough to force a reduction in consumption and a reduction in the external deficits. One of the clearest examples is given by Roubini and Setser (2004), who find that if we hold constant the ratio of net exports to GDP, net foreign assets rises from its current value of about 25% of GDP to almost 90% by 2015. The current account deficit at that point is close to 9% of GDP, which includes net interest payments to the rest of the world of 3% of GDP. The outcome is thought to be serious enough to call for some combination of private action or public policy.

That's the analysis. As a matter of evidence, do external deficits persist? Our interpretation of the evidence is that external balances are persistent but mean-reverting, with large deficits or surpluses returning (on average) to something closer to zero. Figure 5 shows how values of the net-export-to-GDP ratio are associated with similar ratios 4, 8, 12, and 20 quarters into the future. The data cover 15 OECD countries since 1980, but the features are fairly general. As many others have shown, trade deficits are highly persistent, with autocorrelations of 0.76 over 4 quarters, 0.58 over 8 quarters, and 0.41 over 12 quarters. The cloud of points in the lower right panel suggests, however, that both deficits and surpluses tend not to last forever. The quadrants of the figure do not suggest any clear difference in this respect between deficit and surplus countries.

The autocorrelations show that trade deficits are persistent. The same feature emerges in several striking episodes of large trade imbalances that lasted a decade or more. In our historical dataset, they include: Canada’s deficit averaged 3.5% from 1870-1913; Japan’s deficit averaged 3.5% from 1896-1905; Norway’s deficit averaged close to 4% from 1890-1912; Norway’s surplus averaged over 10% from 1995-2004; Switzerland’s surplus averaged close to 6% from 1992-2004; and the UK’s deficit averaged over 3% from 1892-1904. Such periods aren’t typical, but they happen.

Conclusion: fiction. External deficits appear to be mean-reverting, but they are highly persistent. Prior to World War I, several countries ran deficits averaging at least than 3% of GDP for a decade or more.

## 4 Exchange rate fact and fiction

Exchange rates remain the supreme challenge of international macroeconomics. Decades of work has left many of us with the opinion that short- and medium-term fluctuations are inexplicable, both before and after the fact. Frankel and Rose (1995) is the classic reference. Its punchline was summarized nicely by Obstfeld and Rogoff (2000, p 381), who said: “No model seems to be very good at explaining exchange rates even ex post.” Nevertheless, the consensus view of the US external deficit includes a forecast that the dollar will fall.

[To do: describe what we know — and don’t know — about exchange rates, contrast J-curve for detrended data with same for raw data, mention Lane and Milesi-Ferretti (2002) and Gourinchas and Rey (2005) as relevant evidence.]

### **Proposition 4: External deficits are followed by real depreciations.**

The consensus view of the US external deficit continues with the claim that if the US external deficit is to fall, the mechanism must involve a fall in the real value of the dollar, possibly a sharp one. The Obstfeld-Rogoff and Stiglitz quotations in the introduction are examples, but many others make the same prediction. Buffett has even bet Berkshire Hathaway’s money on it, holding \$21.4b in foreign currency contracts as of the end of 2004 (Buffett 2005, p 19). Obstfeld and Rogoff (2005, p 9) are the clearest example: “In our baseline calibration ..., we find that the real effective exchange rate of the US needs to depreciate by 33 percent. ... Our calibration ... does not allow for possible exchange rate overshooting that could significantly amplify the effect.”

Is their logic sound? Experience has taught us the danger of taking any strong stand on currency prices. Forecasting, in particular, remains a black art, and few have been able to master it consistently. A continuing strand of academic research finds that the Meese-Rogoff (1983) assessment remains true today: it’s virtually impossible to consistently beat

a random walk in a short-term forecasting exercise. See Faust, Rogers, and Wright (2003), probably many others. Current accounts are a specific example of a variable with potential forecasting value. The carefully qualified language of Rosenberg and Folkerts-Landau (2002, p 80) suggests that at least some Wall Street professionals are skeptical, too: “The message ... is that certain economic disturbances may cause exchange rates and the current-account balance to move in the same direction while other disturbances may cause exchange rates and the current account to diverge.”

The proposition is concerned specifically with real exchange rates. In Figure 6, we show (for our usual collection of countries) that there has been no general connection between the ratio of net exports to GDP and subsequent movements in the real effective exchange rate (the IMF’s cpi-based measure) over periods of 1 to 4 years. There is, however, a relation for the US; see Figure 7. There the correlations increases with the time horizon. We hesitate to put much weight on this (correlations between highly persistent variables are based on a small effective number of observations), but there’s little question that US data agree with the proposition. [To do: connect to J-curve.]

Conclusion: we’re not sure. While it’s clear that there’s a correlation for the US between the external deficit and subsequent movements in the real exchange rate, it’s equally clear that there’s little or no correlation for developed countries in general. Given our profession’s long history of failure where exchange rates are concerned, we’d take an even odds bet that the dollar will strengthen over the next two years.

## 5 US fact and fiction

Let’s consider specifically the US situation. We saw earlier (Figure 1) that the decline in net exports reflected primarily a similar decline in saving, defined as  $S = Y - C - G$ . In Figure 8 we show a little more detail, breaking out private consumption and government purchases. There we see clearly that the central issue is the steady rise in the ratio of consumption to GDP. Consumption averaged about 62% of GDP between 1950 and 1980 with little variation. Over the last 25 years, the ratio increased steadily, and is now about 70% of GDP. Judged by the standard of developed countries, that’s a remarkable change. Note, too, that this steady increase was not directly reflected in saving or net exports in the 1990s, because government purchases fell as a fraction of GDP (GDP grew). The recent increase in government purchases has accelerated the decline in net exports in this century. In our view, the path of consumption casts additional doubt on the twin deficits hypothesis. While government deficits may have played a role in raising consumption, the contrast between their volatility and the steady increase in consumption suggests that they are unlikely to be the central factor.

The question for this section, however, is whether the dramatic increase in consumption implies:

### **Proposition 5: We are living beyond our means.**

This is the final element of the consensus view: that by running persistent external deficits, Americans are financing a consumption binge by borrowing abroad. When the debt comes due, our living standards will suffer. Buffett (2003) describes the situation using a folksy analogy in which the citizens of Squanderville borrow from the citizens of Thriftville to finance a level of consumption above what they produce. In one scenario, future generations Squanderville work harder and consume less to service the debt they inherit. They are, as the saying goes, paying for the sins of their fathers. In another scenario, the people of Squanderville decide not to service their debt, triggering a financial crisis. Neither scenario is appealing.

Is that what we see? One way to address the question is to look at the balance sheet of US households. If more claims on the US economy are owned by people outside the country, has our net worth fallen? The answer, as you can see in Figure 9, is no. (Actually, it's **NO!**) The ratio of household net worth (as measured by the Flow of Funds Accounts) to consumption remains well above its post-war average, even after the sharp drop in the stock market in 2001-02. At the end of 2004, the ratio of net worth to consumption was above its peak value in the period 1950-1990. [To do: talk about composition, housing, leverage.]

Conclusion: the proposition is fiction. Although a rising fraction of claims to the US economy is owned by people outside the country, the value of the remaining claims is high. If “living beyond our means” suggests spending income and assets we don't have, we're not doing it.

Buffett's analogy evidently requires some modification. We suggest something like this: the residents of Squanderville have a terrific new project. To finance it, they sell 10% to residents of Thriftville, whose own projects do not look as promising. When the project proves to be wildly profitable, the people of Squanderville are happy to share the returns with the people of Thriftville, who in turn are happy to benefit from having access to a broader range of projects. The mayor of Squanderville writes to Buffett requesting that their name be changed to Entrepreneurville.

## **6 What's going on?**

If the consensus misses important features of the world economy, what is really going on? Why is US net worth so high if saving is so low? Why are other countries buying claims on the US economy?

[To do: show various measures of saving for the US, explain how they're related.]

People who study saving know that the change in household net worth does not correspond to any of the standard saving measures from the National Income and Product

Accounts. See, for example, the lucid discussions in Gale and Sabelhaus (1999), Lusardi (1999), and Parker (1999). Even private saving, which includes the undistributed income of firms, is missing the valuation changes in claims to assets. In the US over the last 15 years, these changes have been huge, with high returns leading to high net worth despite low rates of private saving. The short answer, then, to why net worth is high when saving is low: returns have been high. There is also a clear pattern in the data between saving and net worth; see Figure 10. Private saving rates are strongly and negatively correlated with the ratio of net worth to consumption, with saving high when net worth is low. Whether this reflects accident or design is hard to say.

What about other countries? Why are Germany and Japan (among others) running large external surpluses? Have their saving rates been unusually high, and their consumption low? The evidence is presented in Figures 10 and 11. In Europe (this is the “former OECD” aggregate reported by the OECD), consumption has been flat as a fraction of GDP since at least 1990. Investment, however, fell by about 4% of GDP between 1990 and 1993. A rise in government purchases makes up part of the difference, with the rest appearing as a surplus in net exports. Roughly speaking, the fall in investment has led to an increase in purchases of foreign assets. While investment has fallen for Europe as a whole, there are some striking differences across countries. In Germany and Switzerland the fall in investment has been dramatic, but in Spain investment has risen over the last 15 years or so. In France, investment has been flat. The differences in investment are reflected in their different external balances. Japan also experienced a sharp drop in investment of almost 8% of GDP. Increases in consumption and government purchases resulted in a smaller trade surplus.

This evidence suggests that the true puzzle behind global imbalances is the decline in investment in many of the world’s most successful economies. This decline is associated, on the whole, with low growth in real GDP, so the pattern is one of capital flowing from countries with low growth rates to those with high growth rates. This pattern has been well documented in time series for individual countries (high growth is associated with low net exports) but it’s apparently true in the cross-section, too. See Figure 13. (For the time series, see Aguiar and Gopinath (2004, Table 1), Backus and Kehoe (1992, Table 3), Backus, Kehoe, and Kydland (1994, Table 1), and Neumeyer and Perri (2005, Table 1), among others.)

Despite the evidence, the leaders of the consensus remained unconvinced. As usual, Summers (2004b) has a particularly colorful version: “There is a standard set of things that the finance ministers of countries with significant current account deficits say, suggesting that such deficits are somehow a sign of economic strength. Perhaps the sharpest formulation that I have heard is: ‘We live in a country that capital is trying to get into. Would you rather live in a country that capital is trying to get out of?’” He fails to note that that in much of the developed world, capital is not only trying to escape, but succeeding.

That leaves us with a natural explanation of the movements of capital around the

world. Why are Americans consuming so much? Because they have experienced phenomenal returns on their assets: they're rich. Why are other countries buying foreign assets? Because domestic investment prospects appear worse than those in the US.

## 7 Country studies

[To do: Talk in detail about several countries, including Australia, Norway, and Switzerland.]

## 8 Conclusions

In our view, public discussion of today's "global imbalances" contains both fact and fiction. In fiction, we would include:

- large imbalances are unprecedented
- external deficits are associated with government deficits
- Americans are living beyond their means

We think the evidence contradicts each of these propositions. There are, however, some striking facts about the current situation:

- the US is running a substantial external deficit
- the ratio of consumption to GDP in the US has risen by about 7 percentage points over the last 25 years
- the ratio of net worth to consumption remains high
- investment has fallen dramatically in many developed countries

Although it's not evidence, we would include one other proposition as fact: that continued deficits are likely to lead to substantial interest payments to foreign owners of US assets.

These facts lead us to a novel interpretation of the flow of capital around the developed world: Americans are spending a lot because they have strong balance sheets. Other countries are buying foreign assets because their own economies appear less attractive. We don't claim the world is a perfect capital market, but a pattern of this sort is not hard to make sense of.

As capital markets become more integrated internationally — and they’re a long way from that at present — it’s entirely possible that what looks like large imbalances today will be dwarfed in the future. If so, we’ll need a new language: our current terminology is too value-laden. A nonzero current account is an “imbalance,” a decline is a “deterioration,” and movements toward zero are “corrections.” In a world with free capital movements, none of these negative connotations make any sense.

We’re still left with lots of questions. Could American asset values fall? Of course, in which case we’d expect a decline in consumption. Why are so many other developed countries doing so poorly? Good question. We wouldn’t be surprised to see things change (certainly Germany and Japan have overcome enormous obstacles in the past), in which case capital may once again flow into these countries, not out. Certainly the lessons of the past suggest that economic performance can change quickly. In the meantime, we’re some ways from having the “burden of foreign ownership” kill off the American economy.

## **A Data sources**

[To do.]

## References

- Aguiar, Mark, and Gita Gopinath, 2004, "Emerging market business cycles: the cycle is the trend," manuscript, 2004.
- Backus, David K., and Patrick J. Kehoe, 1992, "International evidence on the historical properties of business cycles," *American Economic Review* 82, 864-888.
- Backus, David K., Patrick J. Kehoe, and Finn E. Kydland, 1994, "Dynamics of the trade balance and the terms of trade: the J curve?" *American Economic Review* 84, 84-103.
- Bernanke, Ben S., 2005, "The worldwide saving glut and the US current account deficit," remarks at the Sandridge and Homer Jones Lectures, March and April.
- Blanchard, Olivier, and Francesco Giavazzi, 2002, "Current account deficits in the euro area: the end of the Feldstein-Horioka puzzle?," *Brookings Papers on Economic Activity*, 147-186.
- Buffett, Warren E., 2003, "America's growing trade deficit is selling the nation out from under us," *Fortune*, November 10.
- Buffett, Warren E., 2005, "Letter to shareholders of Berkshire Hathaway Inc.," February 28.
- Caballero, Ricardo, Kevin Cowan, and Jonathan Kearns, 2004, "Fear of sudden stops: lessons from Australia and Chile," NBER Working Paper 10519, May.
- DeLong, Brad, 2004, "John Taylor blasts off for the gamma quadrant," Brad DeLong's Semi-Daily Journal, November 8.
- Edwards, Sebastian, 2005, "Is the US current account deficit sustainable? if not, how costly is adjustment likely to be?," *Brookings Papers on Economic Activity*, forthcoming.
- Engel, Charles, and John H. Rogers, 2005, "TBA," unpublished manuscript; prepared for the November Carnegie-Rochester Conference on Public Policy.
- Faust, Jon, John H. Rogers, and Jonathan H. Wright, 2003, "Exchange rate forecasting: the errors we've really made," *Journal of International Economics* 60, 35-59.
- Ferrero, Andrea, 2005, "External dimensions of fiscal policy," unpublished manuscript, New York University.
- Frankel, Jeffrey, and Andrew Rose, 1995, "An empirical characterization of nominal exchange rates," in *Handbook of International Economics (Volume III)*, G. Grossman and K. Rogoff, eds., Amsterdam: North-Holland.
- Gale, William G., and John Sabelhaus, 1999, "Perspectives on the household saving rate," *Brookings Papers on Economic Activity*, 181-224.
- Gourinchas, Pierre-Olivier, and Hélène Rey, 2005, "International financial adjustment," NBER Working Paper 11155, February.
- Jones, Matthew T., and Maurice Obstfeld, 2000, "Saving, investment, and gold: a reassessment of historical current account data," in *Money, Capital Mobility, and Trade:*

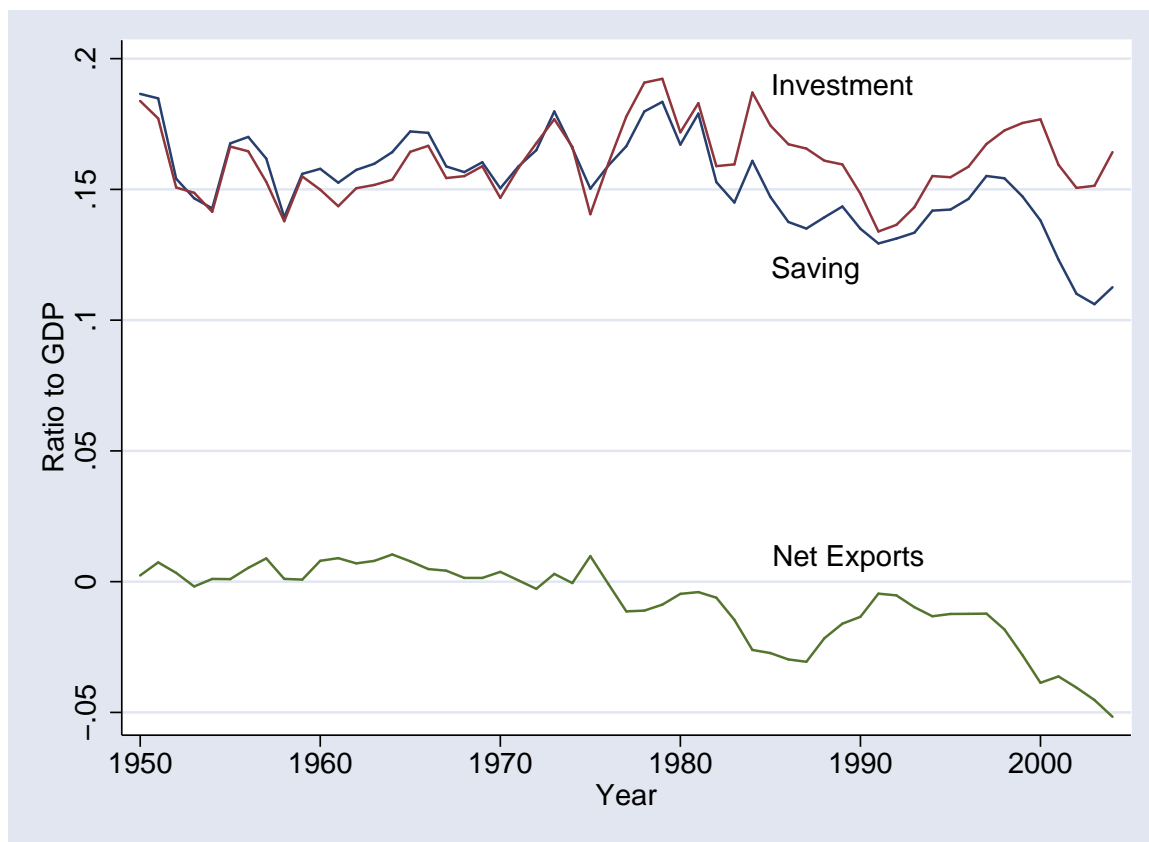
- Essays in Honor of Robert A. Mundell*, Guillermo A. Calvo, Rudiger Dornbusch, and Maurice Obstfeld, eds., Cambridge: MIT Press.
- Lane, Philip R., and Gian Maria Milesi-Ferretti, 2002, "External wealth, the trade balance, and the real exchange rate," *European Economic Review* 46, 1049-1071.
- Lusardi, Annamaria, 1999, "Comment," *NBER Macroeconomics Annual*, 374-386.
- Meese, Richard, and Kenneth Rogoff, 1983, "Empirical exchange rate models of the seventies: do they fit out of sample?," *Journal of International Economics* 14, 3-24.
- Neumeyer, Pablo A., and Fabrizio Perri, 2005, "Business cycles in emerging economies: the role of interest rates," *Journal of Monetary Economics* 52, 345-380.
- Obstfeld, Maurice, and Kenneth Rogoff, 2000, "Six major puzzles," *NBER Macroeconomics Annual*, 339-390.
- Obstfeld, Maurice, and Kenneth Rogoff, 2004, "The US deficit problem," *Financial Times*, November 1.
- Obstfeld, Maurice, and Kenneth Rogoff, 2005, "Global current account imbalances and exchange rate adjustments," *Brookings Papers on Economic Activity*, forthcoming.
- Parker, Jonathan A., 1999, "Spendthrift in America? on two decades of decline in the US saving rate," *NBER Macroeconomics Annual*, 317-370.
- Roach, Stephen, 2004, "Twin deficits at the flashpoint?," Morgan Stanley, Global Economic Forum, August 16.
- Rosenberg, Michael R., and David Folkerts-Landau, 2002, *The Deutsche Bank guide to exchange-rate determination*, May.
- Roubini, Nouriel, 2005, "Global imbalances: a contemporary Rashomon tale with five interpretations," *Global Economics Blog*, May 1.
- Roubini, Nouriel, and Brad Setser, 2004, "The US as a net debtor: The sustainability of the US external imbalances," unpublished manuscript, November.
- Stiglitz, Joseph, 2004, "This can't go on forever — so it won't," *Guardian*, January 1.
- Summers, Lawrence H., 2004a, "The United States and the global adjustment process," Third Annual Stavros S. Niarchos Lecture, Institute for International Economics, March.
- Summers, Lawrence H., 2004b, "The US current account deficit and the global economy," Per Jacobsson Lecture, International Monetary Fund, October.
- Taylor, Alan M., 2002, "A century of current account dynamics," *Journal of International Money and Finance* 21, 725-748.
- Wolf, Martin, 2004, "America is now on the comfortable path to ruin," *Financial Times*, August 18.

**Table 1**  
**External balances in 2004**

Country or Region	Balance on Goods & Services US Dollars (b)	Balance on Current Account US Dollars (b)	% of GDP
United States	-617.1	-665.9	-5.7
Euro zone	192.7	35.6	0.6
Other advanced economies	227.3	302.5	-
Developing economies	278.5	246.6	-
Australia	-	-39.6	-6.4
Brazil	-	-11.7	1.9
China	-	70.0	4.2
Germany	146.5	96.4	3.6
Japan	93.8	171.8	3.7
Norway	-	34.4	13.7
Spain	-33.2	-49.2	-5.0
Switzerland	-	42.9	12.0

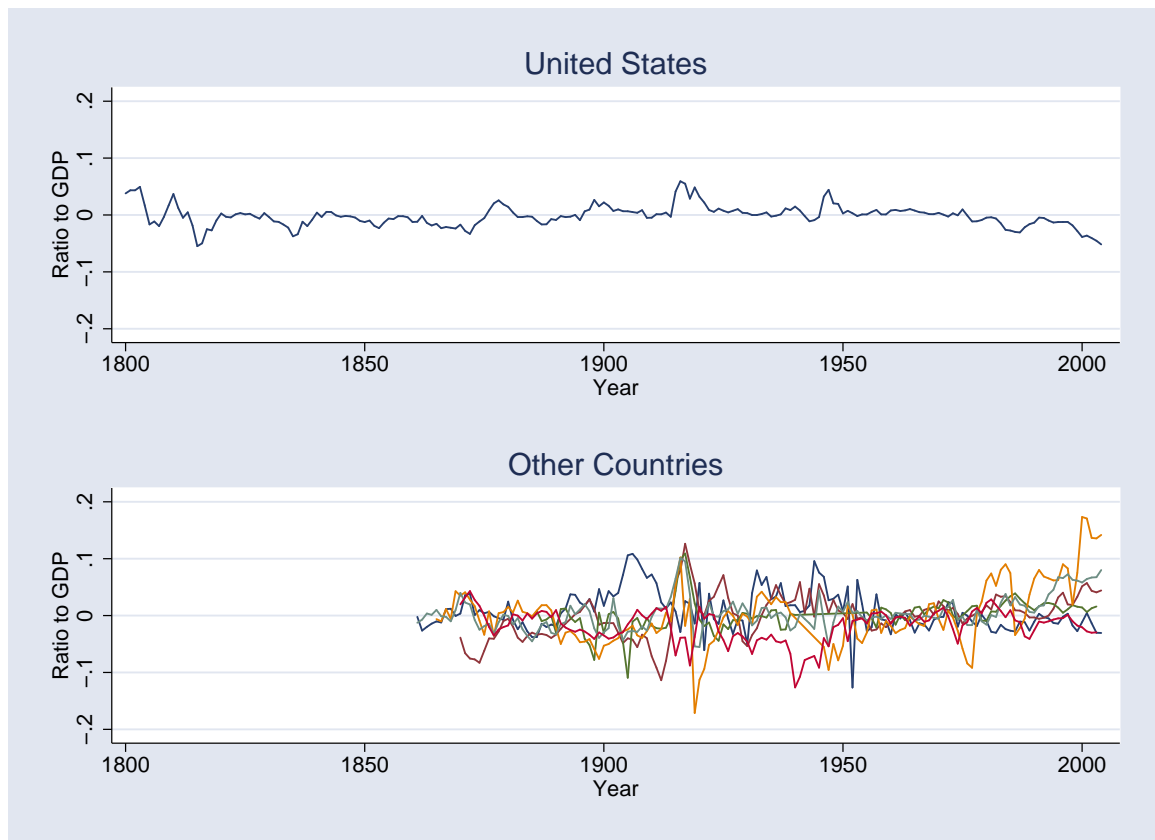
Source: International Monetary Fund, *World Economic Outlook*, April 2005, tables 25-32 of the Statistical Appendix.

**Figure 1**  
US flows: saving, investment, and net exports



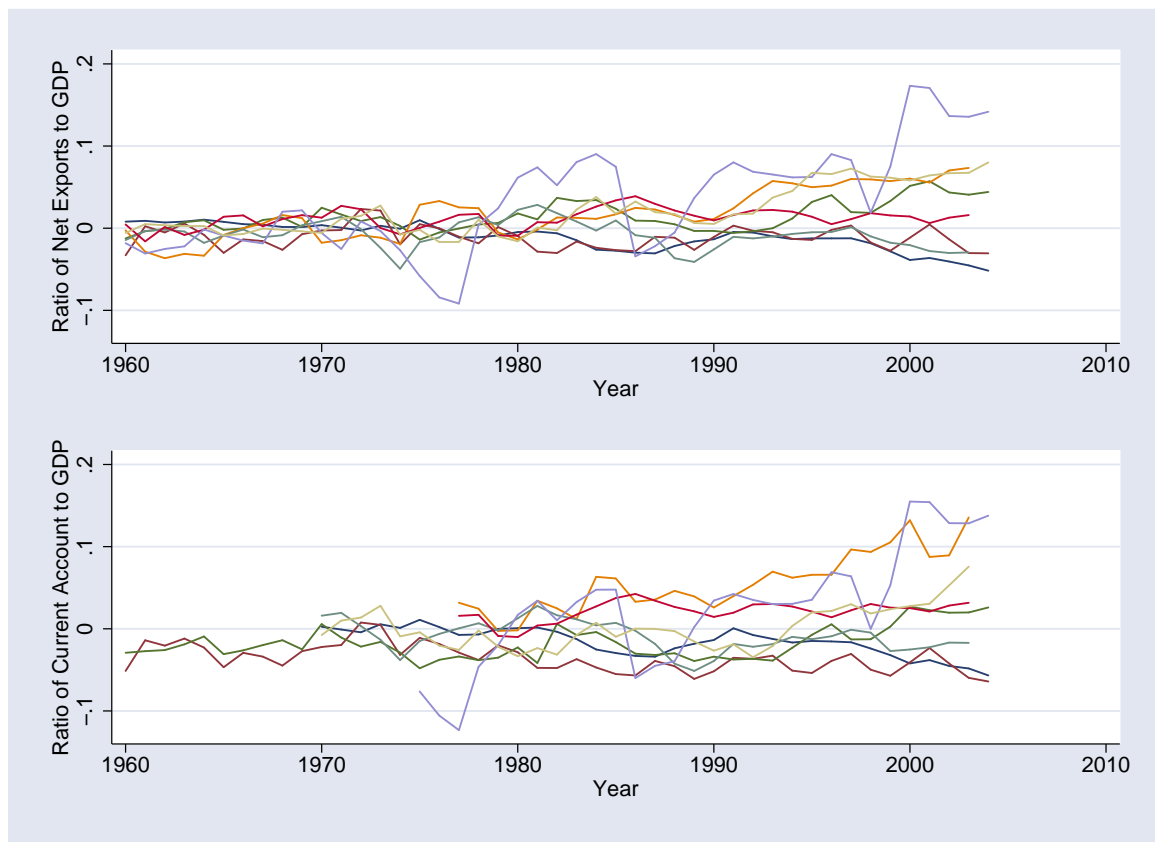
The lines represent gross national saving (defined as GDP minus private consumption and government purchases), gross private investment (including the change in inventories), and net exports, each expressed as a ratio to GDP. All are measured at current prices.

**Figure 2**  
Net exports over the last century or more



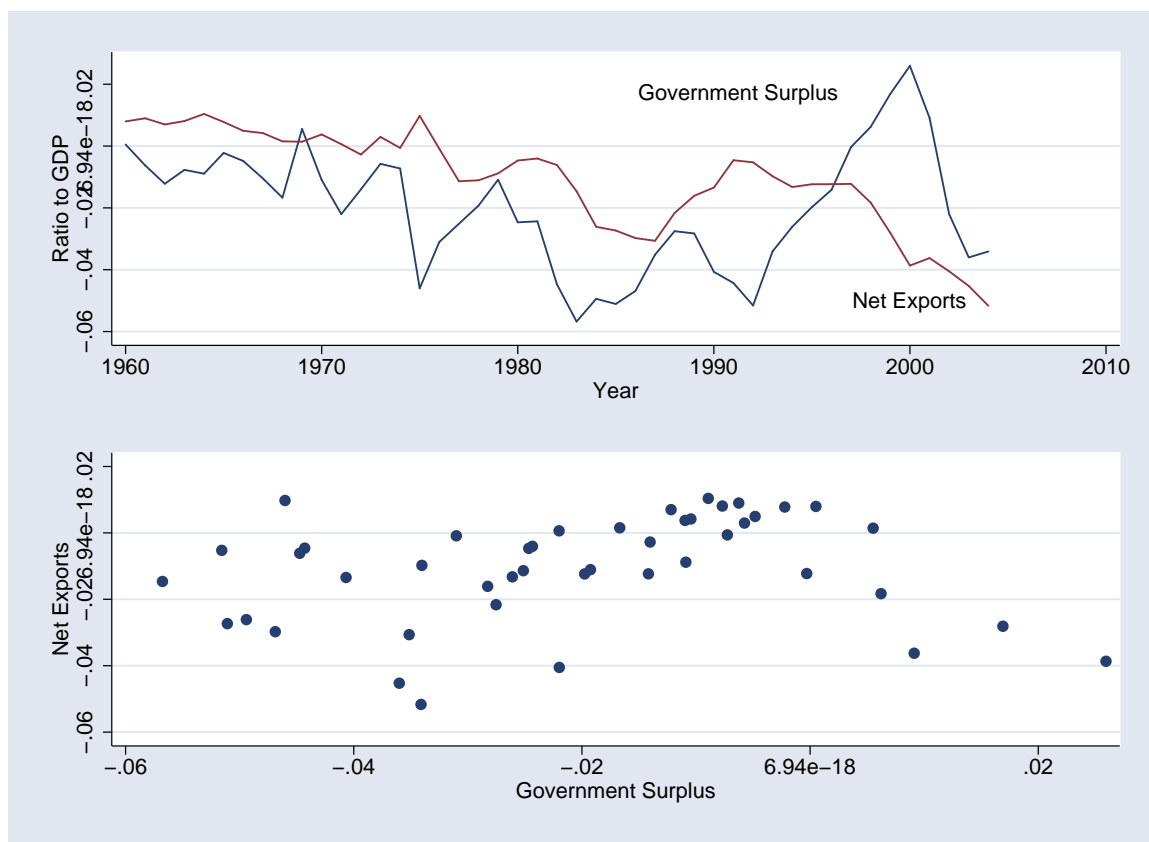
The top panel shows the ratio of net exports to GDP for the US since 1800. The bottom panel shows the same for seven other countries: Australia, Canada, France, Japan, Norway, Sweden, and the United Kingdom.

**Figure 3**  
External deficits since 1960



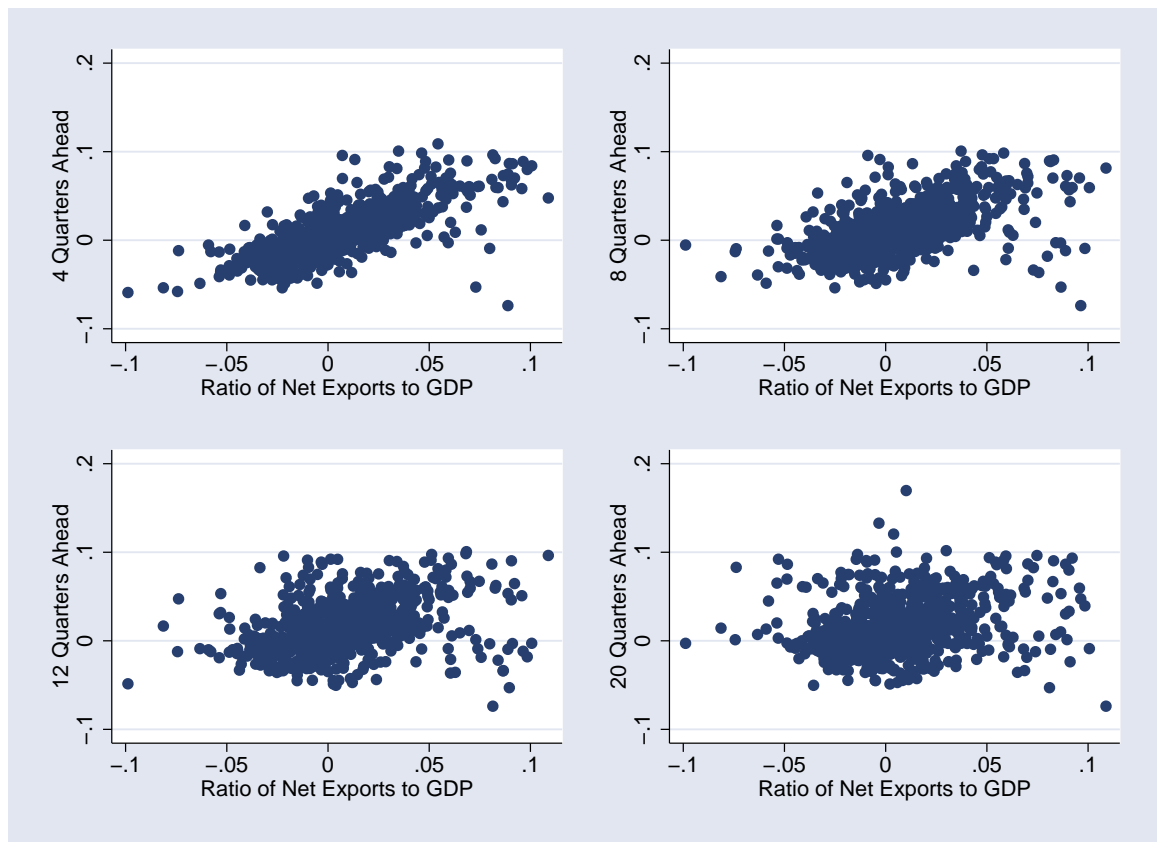
The two panels picture ratios of net exports (top) and the current account balance (bottom) to GDP for a subset of developed countries.

Figure 4  
Twin deficits in the US



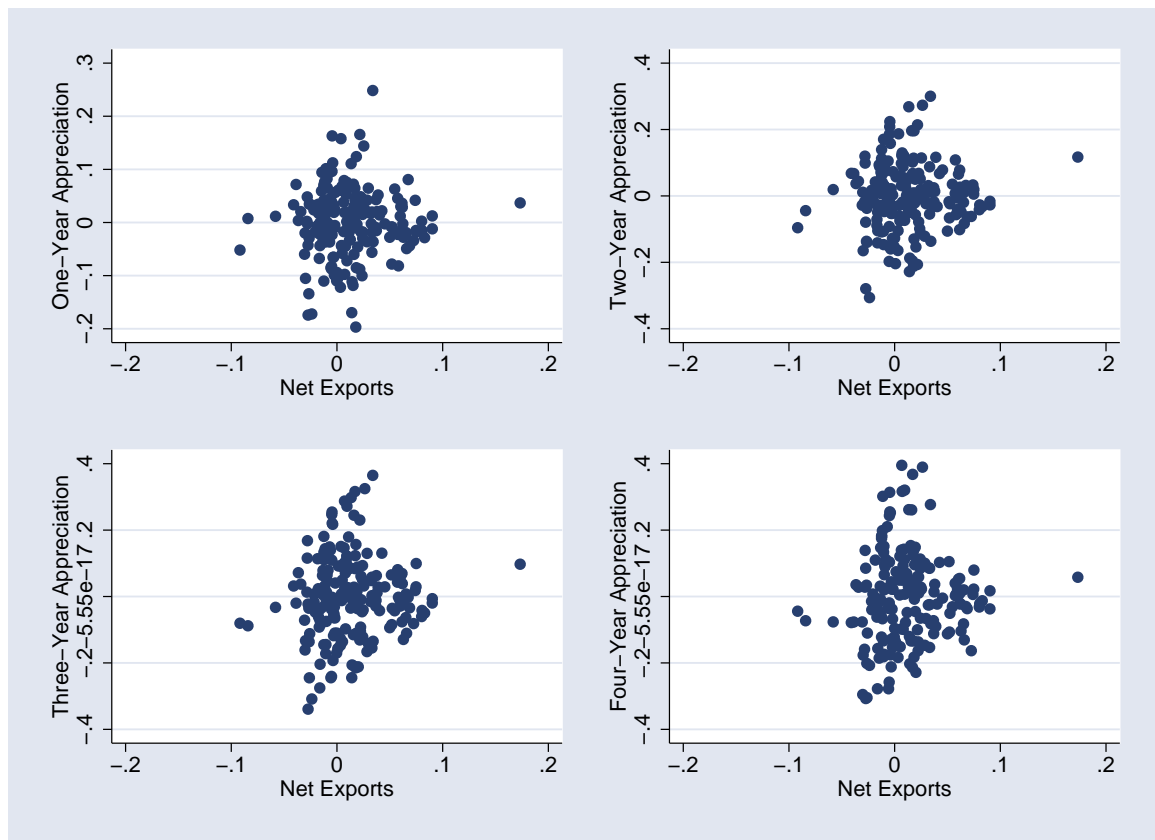
The panels illustrate the relation between net exports and the government surplus. Both series are plotted in the top panel. In the bottom panel, we report the same data as a scatter plot. The correlation between the two variables is 0.15.

**Figure 5**  
Persistence of net exports



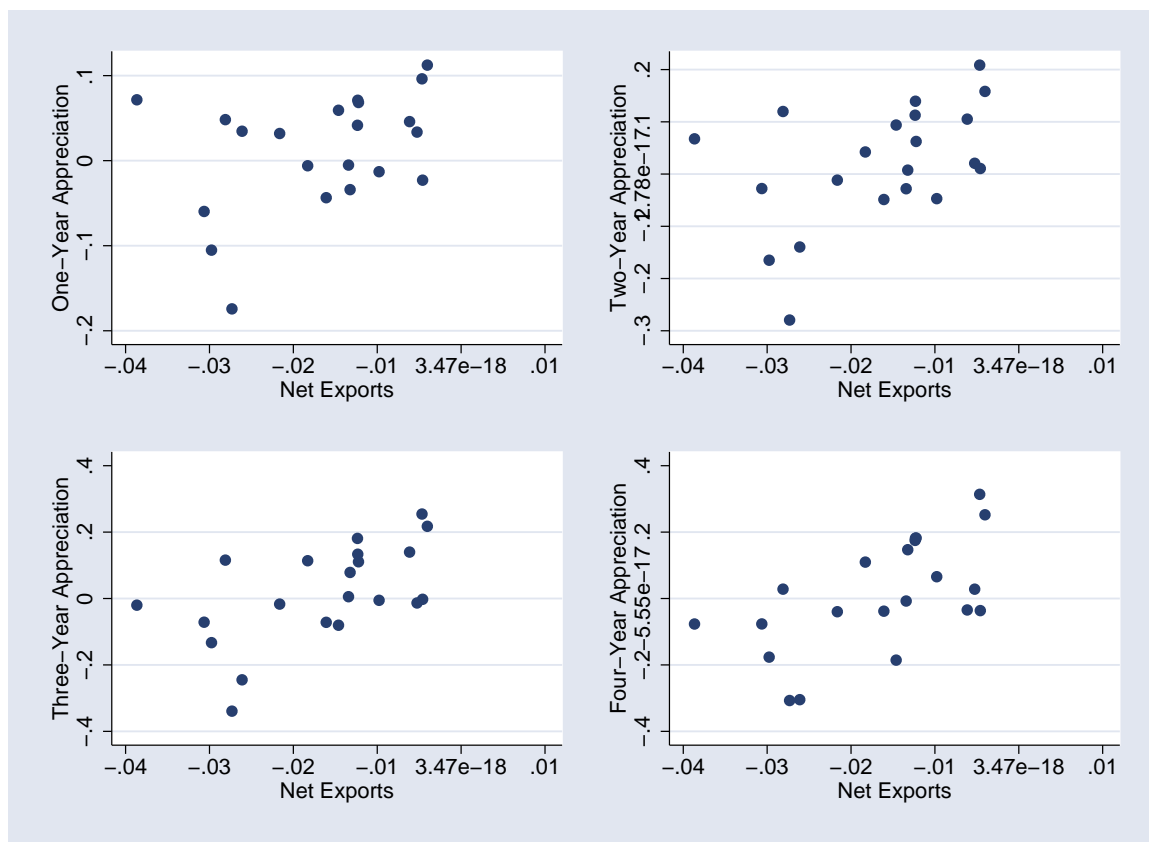
The panels plot the ratio of net exports to GDP at different dates: the ratio “n” quarters in the future against the ratio now. The data are quarterly for 15 countries starting in 1980.

**Figure 6**  
External deficits and real exchange rates



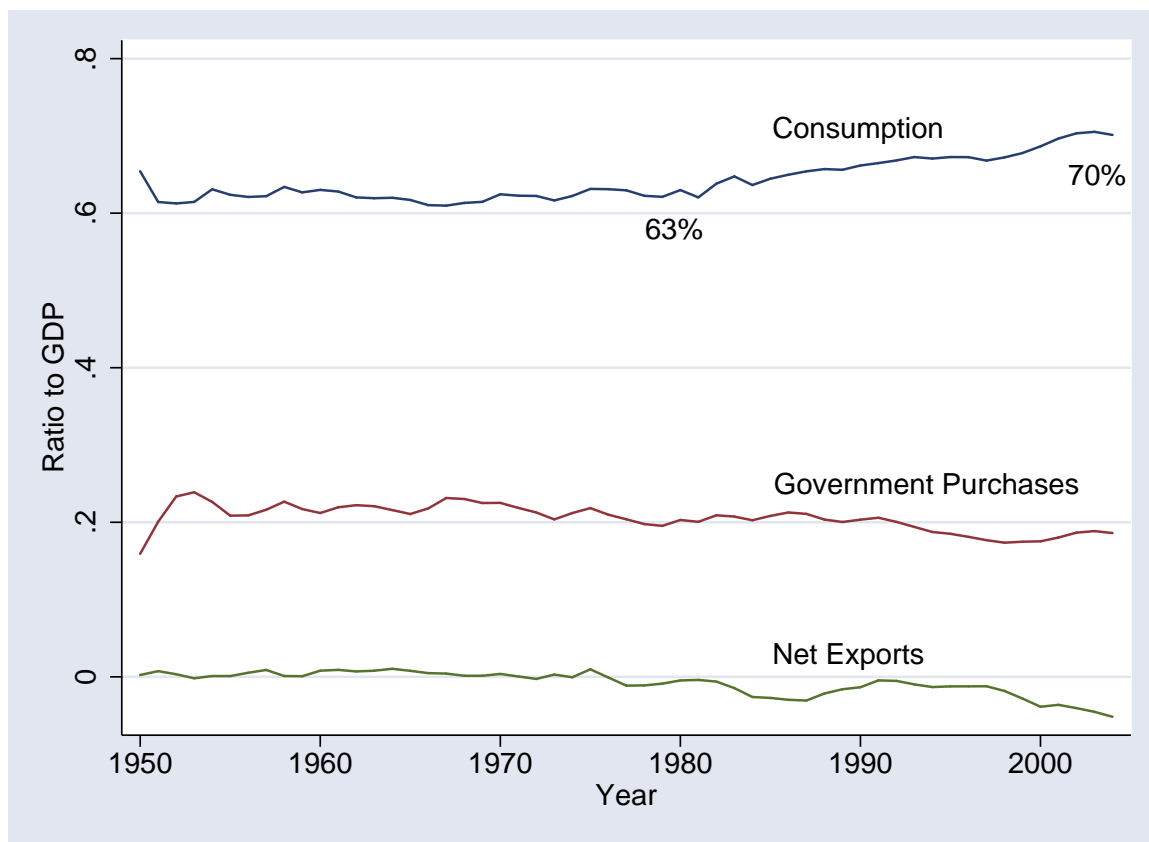
The figure shows the relation between net exports and the rate of appreciation of the real exchange rate over 1-4 years in annual data. The correlations are 0.05, 0.07, 0.08, and 0.06.

**Figure 7**  
External deficits and real exchange rates in the US



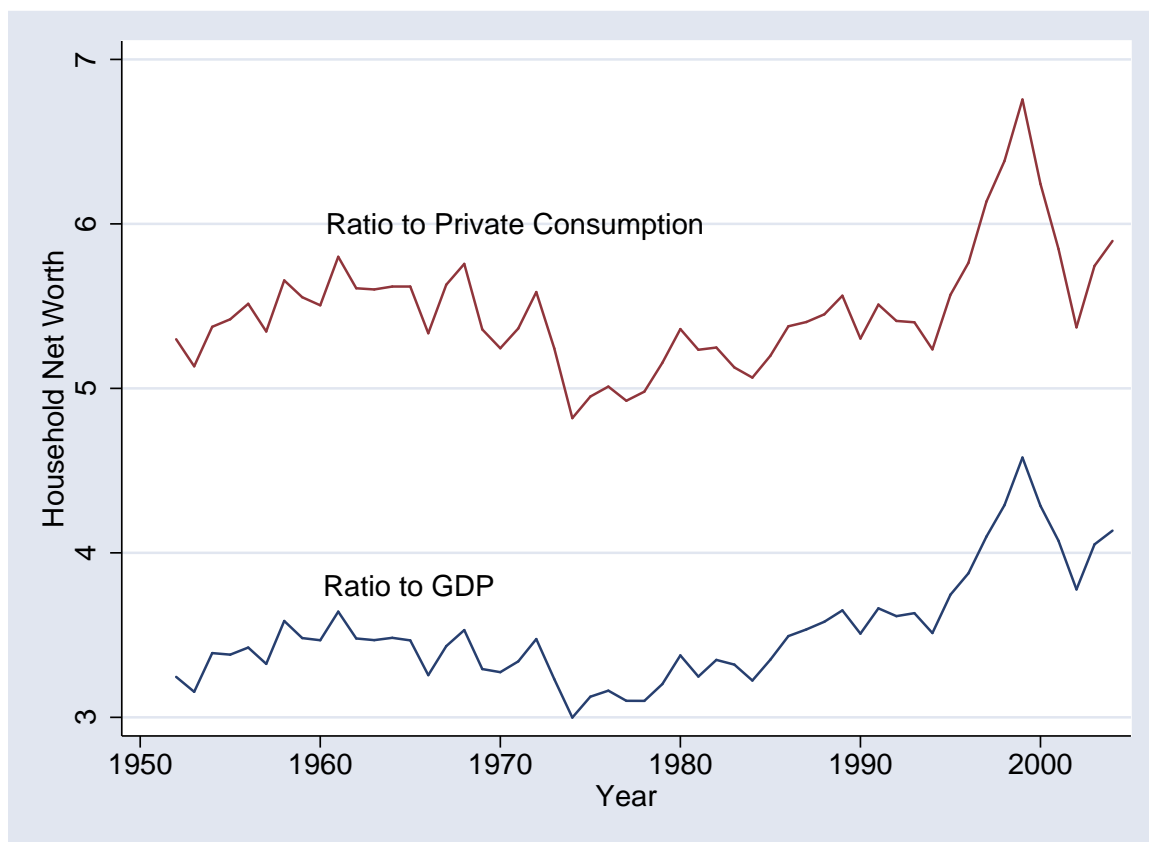
The figure shows the relation between net exports and the rate of appreciation of the real exchange rate over 1-4 years in annual data. The correlations are 0.38, 0.47, 0.56, and 0.60.

**Figure 8**  
US flows: consumption and government purchases



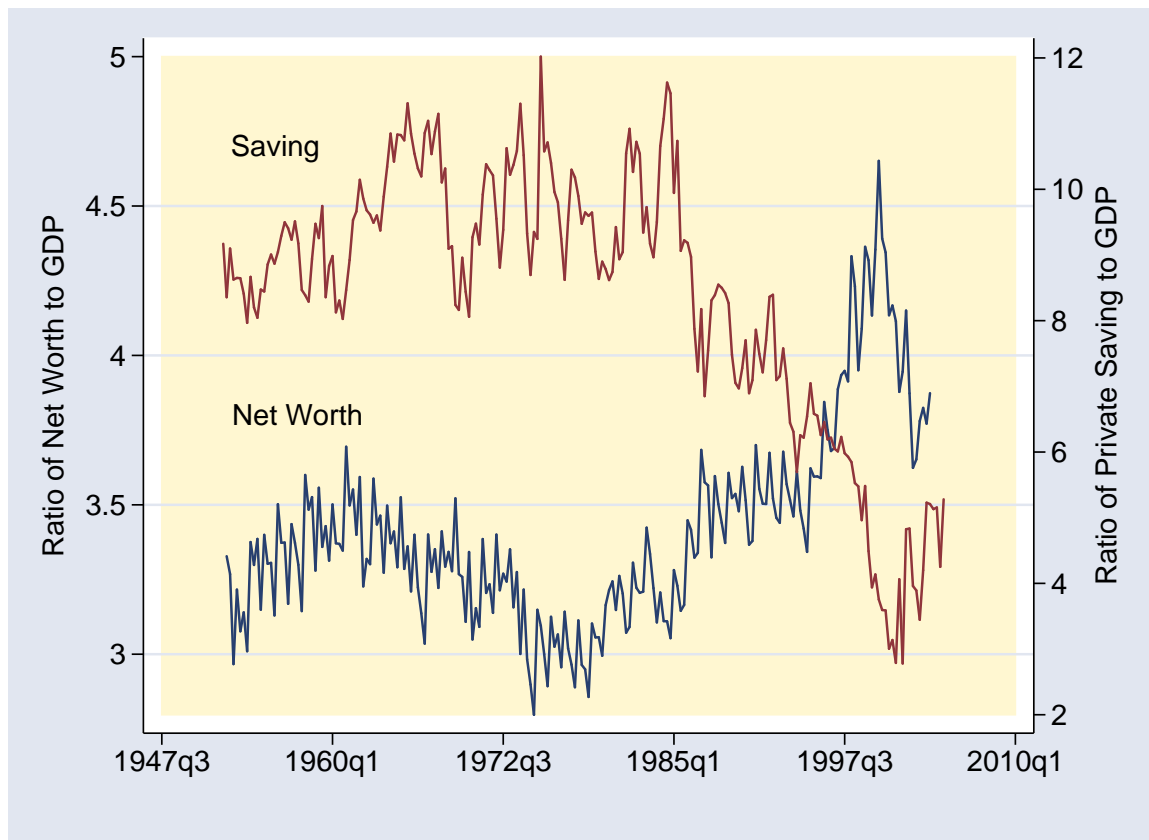
The figure adds consumption and government purchases to Figure 1, each measured at current prices and expressed as a ratio to GDP.

**Figure 9**  
**US Household Net Worth**



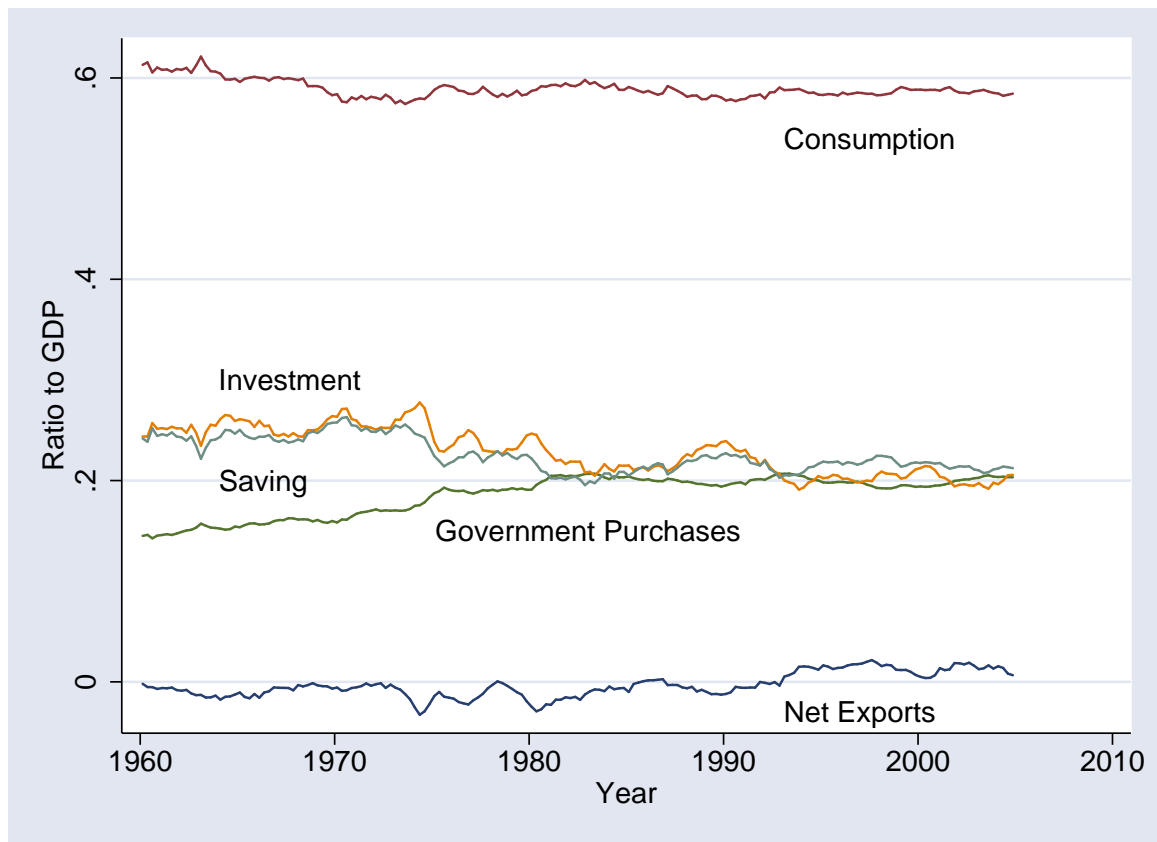
Ratios of household net worth to consumption and GDP. Net worth includes financial assets and durable goods, with housing at market value.

Figure 10  
US saving and net worth



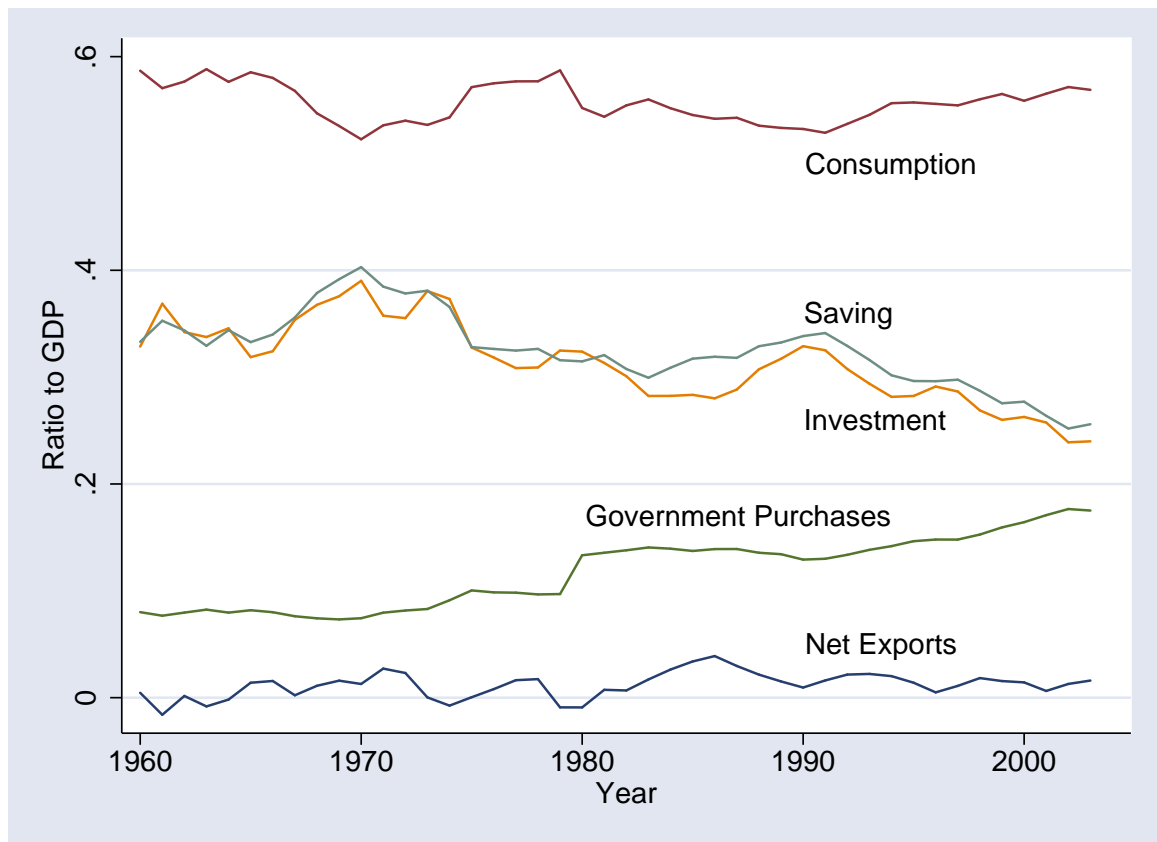
Ratios of NIPA saving and household net worth to consumption.

Figure 11  
What's happening in Europe?



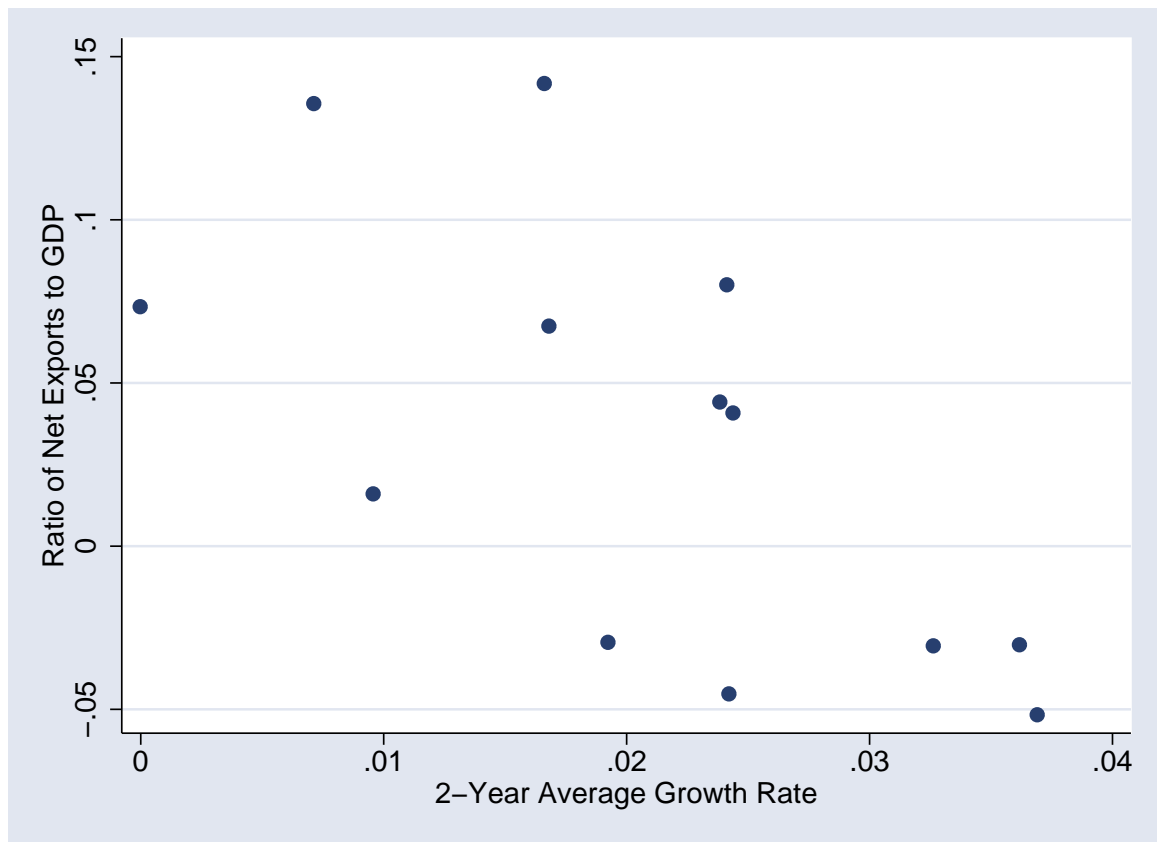
Same as Figure 8.

Figure 12  
What's happening in Japan?



Same as Figure 8.

Figure 13  
Net exports and growth



Cross-country scatterplot for most recent year of net exports and output growth.