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Financing the U.S. Trade Deficit: Role of Foreign Governments

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Summary

The nation's trade deficit is equal to the imbalance between national investment and national saving. National saving is the sum of household saving, business saving, and public sector saving (a budget deficit equals public sector borrowing). In the 2000s, the gap between national saving and investment widened, largely because of a fall in private and public saving, causing the trade deficit to widen. (It fell somewhat in 2007 relative to GDP.) To finance the trade deficit, foreign capital must flow into the United States.

Net private capital inflows have not grown over this period, however, to match the widening gap between saving and investment. To finance the growing trade deficit from 2002 through 2007, official capital inflows became increasingly important, as central banks in a few Asian and oil-producing countries purchased U.S. assets to moderate or prevent their currencies from appreciating against the dollar. Net official capital inflows were close to $400 billion in 2006 and 2007. If total net capital inflows should decline, the dollar and trade deficit would decline, U.S. interest rates would rise, and U.S. spending on capital goods and consumer durables would fall, all else equal. This report will be updated as events warrant.

Introduction

By accounting identity, the U.S. current account balance (which consists primarily of the trade balance) must equal the financial (formerly the capital) account balance or the net international flow of capital. That is because a country receives saving from abroad when it imports more than it exports.[1] Capital outflows represent foreign assets purchased by Americans, whereas capital inflows are U.S. assets purchased by foreigners. Also by identity, U.S. spending on capital goods (investment) must equal national saving plus net capital flows. National saving consists of private saving (household and business saving)

[1] For more information, see CRS Report RL31032, *The Trade Deficit: Causes, Consequences, and Cures*, by Craig Elwell.

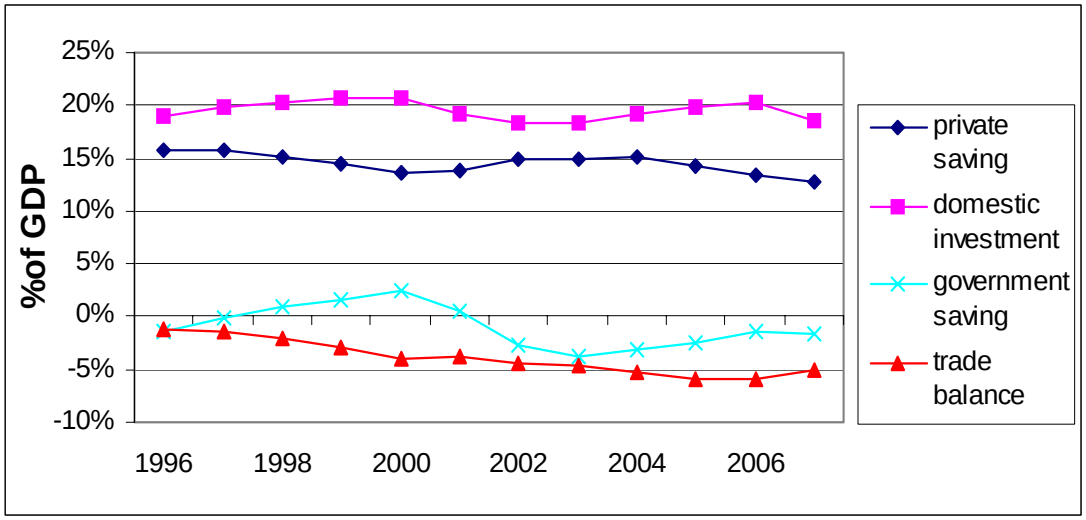
and public sector saving (federal, state, and local government saving). When the public sector runs a budget deficit, it has a negative saving rate, which reduces national saving.

These identities are useful when attempting to provide a proximate explanation for why the U.S. trade deficit has stayed at very high levels from the late 1990s, a period of rapid economic expansion, through the recession of 2001, and to the present.

The 1990s Experience

In the late 1990s, the United States experienced an investment boom and a decline in the private sector saving rate. As can be seen in **Figure 1**, there was a widening gap between the private saving and investment rates as the decade progressed. The result was a growing trade deficit that filled the gap — from 1.3% of GDP in 1997 to 4% of GDP in 2000. Although the public sector budget balance improved as the decade progressed, moving to surplus in 1998, this shift was not large enough to offset the growing private sector saving-investment imbalance, and the trade deficit continued to grow. So paradoxically for some, the budget deficit and trade deficit did not move in the same direction, as had occurred in the 1980s. The reason was that all else did not remain constant — spending on capital goods (investment) rose and private saving fell.

Figure 1. U.S. Saving, Investment, Budget Balance, and Trade Balance



Source: CRS Report RS21480, *Saving Rates in the United States: Calculation and Comparison*, by Brian W. Cashell.

Notes: Private saving equals household and business saving. (Net) government saving equals the combined budget balance of the federal and state and local sector. Domestic investment includes private and public investment. The trade balance measure used in this chart is measured as the current account deficit in the BEA saving and investment tables. BEA measures government saving on a calendar year basis using a different definition than in budget documents.

Why did the 1990s investment boom lead to a growing trade deficit and an appreciating dollar? The substantial acceleration in productivity growth that began in the last half of the 1990s undoubtedly increased the real rate of return on U.S. capital. Since this rise in productivity was largely an American phenomenon, real rates of return in the U.S. rose relative to those abroad and this served to increase the attractiveness of U.S.

assets. The response of foreigners (and Americans) was to substitute American assets for non-American assets in their portfolios.[2] To buy American assets, foreigners had first to buy dollars. This drove up the price of the dollar on the foreign exchange market (the dollar appreciated) and, as explained above, this led to a growing trade deficit.

The 2000s Experience

The American investment boom came to an abrupt halt with the 2001 economic recession. As seen in **Figure 1**, domestic investment spending fell to 18% of GDP in 2003 from 22% in 2000 (it has since recovered somewhat). Over that period, private saving first increased modestly from 13.6% of GDP in 2000 to nearly 14.9% of GDP in 2003 (it has since declined). Since the trade deficit reflects the imbalance of national saving and investment, one might assume that the change in saving and investment would result initially in a smaller trade deficit and then a larger one, all else equal. However, other things were not equal during this period — the public sector initially went from being a net contributor to national saving, running a net budget surplus of 2.4% of GDP in calendar year 2000, to a net borrower, running a budget deficit that peaked at 3.6% of GDP in 2003 (a shift of 6% of GDP).[3] This change in fiscal position meant that the overall shortfall of national saving relative to investment in the early 2000s grew and was larger than in the 1990s. As the fiscal position improved after 2003, it was not enough to offset the growing gap between private investment and private saving. This meant that long-term interest rates did not fall as much as they otherwise would have.[4]

Investors choose where to buy assets based on the (risk-adjusted) rate of return. The Federal Reserve had an important influence on interest rates from 2000 to 2003, lowering short-term interest rates to 1% from 6.5%. It might be expected that the fall in interest rates that accompanied the investment slowdown and the steep stock market decline of mid-2000 to 2002 made the U.S. economy a less attractive destination for foreign capital. As can be seen in **Figure 2**, this was generally the case. Annual private capital inflows fell from about $1 trillion in 2000 to $600 billion in 2003. However, at the same time that the U.S. was experiencing an economic downturn, so was much of the rest of the world, and American purchases of foreign assets (private outflows) also fell sharply, from $600 billion in 2000 to $300 billion in 2003.

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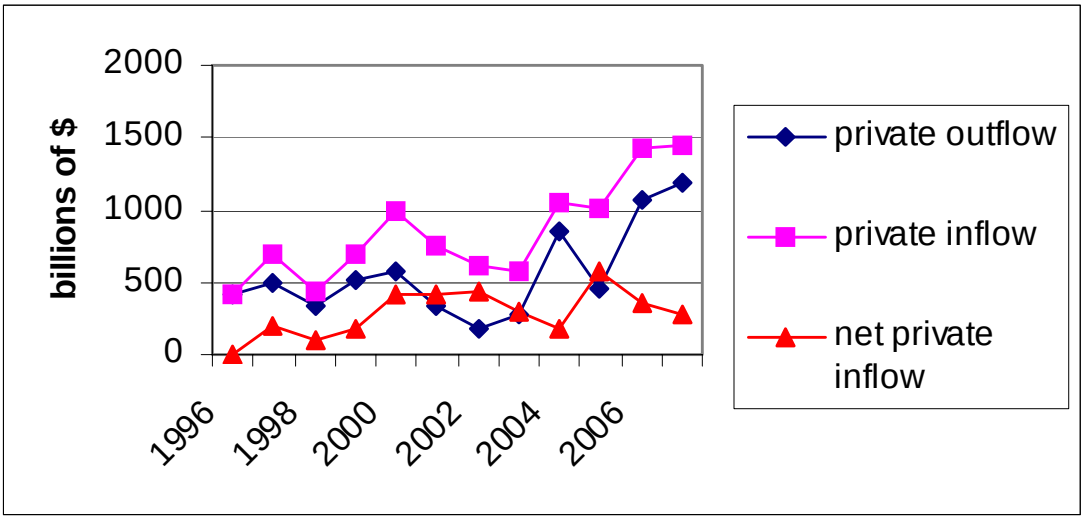
[2] For more information on foreign lending to the United States, see CRS Report RL32462, *Foreign Investment in U.S. Securities*, by James Jackson.

[3] Most of the fiscal shift from 2000 to 2007 came at the federal level, since state and local governments have balanced budget rules. The federal budget shifted from a surplus of 1.9% of GDP in 2000 to a deficit of 3.4% of GDP in FY2003. In subsequent years it declined reaching 1.6% of GDP in 2007.

[4] This was the same logic behind the "twin deficits" argument made in the 1980s. See CRS Report RS21409, *The Budget Deficit and the Trade Deficit: What Is Their Relationship?*, by Marc Labonte and Gail Makinen.

Figure 2. Composition of U.S. Private Capital Flows, 1996-2007

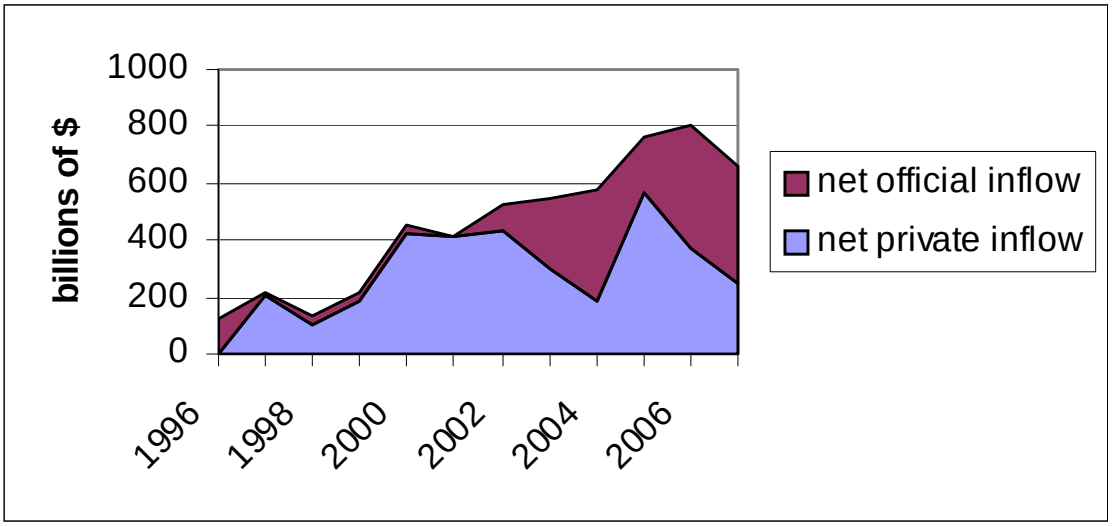


Source: Bureau of Economic Analysis

Beginning in 2004, with the acceleration in world economic growth, international capital flows began to rise. Private inflows increased sharply, topping $1.4 trillion in 2006 and 2007. In 2005, private outflows fell causing net private inflows to rise. In 2006 and 2007, private outflows rose relative to private inflows, causing net private inflows to fall to $356 billion in 2006 and $268 billion in 2007.

Based on the decline in net private capital flows from 2002 to 2007, the trade deficit would have been expected to have decline. This did not occur (except for a small decline in 2007) because of an increase in official capital inflows — primarily purchases of U.S. assets by foreign central banks to increase their foreign exchange reserves. And it is this net inflow that filled the growing gap between national saving and investment in the United States. As seen in **Figure 3**, net private inflows tracked net total inflows very closely from 1997 to 2001. But since 2002, net total inflows (the trade deficit) kept climbing while net private inflows both rose and fell. Net official capital inflows became a major source of financing for domestic investment over this period, equaling $448 billion in 2006 and $390 billion in 2007.

Figure 3: U.S. Net Capital Inflows by Type, 1996-2007



Source: Bureau of Economic Analysis.

Official capital inflows have not been spread evenly among U.S. trading partners. They have been concentrated in Asian economies, and more recently, in oil-producing economies. By contrast, the foreign reserve accumulation of many trading other partners, such as the euro area and the Anglo-Saxon countries, has been negligible.

The decline in net private capital flows through 2007 placed downward pressure on the U.S. dollar since foreigners needed to buy fewer dollars to buy U.S. assets. But the rise in net official capital inflows tempered that decline. The dollar has fallen 35% in real terms against major currencies since its peak in February 2002. When one examines the depreciation of the dollar since then, it is due mainly to a decline against the euro (78%), the Canadian dollar (58%), and the British pound (38%) — the same countries that have not been a source of official capital inflows. The dollar declined by 29% in nominal terms against the Japanese yen and by 19% against the Chinese yuan.

Why did some countries decide to increase their foreign exchange reserves since 2002? Although Japan allows its currency to float, it would appear that the government is committed to a policy of moderating the yen's appreciation relative to the dollar so as not to nip Japan's revival of economic growth in the bud and add deflationary pressures to the Japanese price level. This means that as relative private demand for U.S. goods or assets in Japan declined, the Bank of Japan entered the foreign exchange market and bought dollars (and with them dollar-denominated assets) to moderate the yen's appreciation. Thus, the bilateral trade deficit between the United States and Japan did not decline as much as it would have if the Bank of Japan had not entered the exchange market to support the dollar. This was particularly the case through 2004; the increase in Japan's foreign exchange reserves has been much more modest since then. A similar story can be told about other countries accumulating foreign reserves.

The Chinese role in this episode is more complicated since its government does not allow the free flow of private capital out of China. Nevertheless, the data from China must still conform to the accounting identity mentioned above. Thus, for China to have a current account surplus, domestic investment in China must be less than China's

national saving. However, it is the Chinese government rather than private individuals who are diverting China's saving abroad. The result has been a large accumulation of dollar denominated assets by the Bank of China. Thus, lower U.S. interest rates are unlikely to have had much of an effect on the bilateral flow of capital from China to the U.S.. Since 2005, China has allowed the yuan to appreciate against the dollar, but intervenes in currency markets to prevent the yuan's value from changing by more than 0.3% daily, at most. Between 2002 and 2007, the yuan has appreciated 19% in nominal terms against the dollar.

What Do These Trends Mean for the U.S. Economy?

Did the shift in net capital inflow to the United States since 2002 from primarily private to a mix of private and official sources change the effect of the trade deficit on the U.S. economy? The shift meant that net inflows were based less on private lenders seeking profitable opportunities in the United States and more on efforts by foreign central banks to keep their currency from appreciating against the dollar.

Although the motive for the trade deficit has changed since the 1990s, its effect on the U.S. economy remains the same. When private foreigners buy U.S. assets, they must first obtain dollars, and this pushes up the value of the dollar. This makes U.S. exports and import-competing goods less desirable, reducing production and employment in those industries. On the other hand, the capital inflow increases the supply of saving available to U.S. borrowers, thereby pushing down domestic interest rates. This has an offsetting positive effect on the U.S. economy because it increases interest-sensitive spending on plant, equipment, homes, consumer durables (such as automobiles and appliances), and the like, thereby boosting employment in those industries. In the medium term, the trade deficit has no net effect on U.S. aggregate spending or employment, although there may be transitional effects. It does change the composition of spending and employment, however, away from the trade sector and toward the capital and durable good sectors.

When the trade deficit results from official capital flows, the outcome is very much the same. When a country reduces its relative demand for U.S. goods and services, U.S. exports (and employment within export industries) fall. With a floating exchange rate, the dollar would depreciate. But if the foreign country has fixed its exchange rate to the dollar, its central bank must instead purchase dollars (and U.S. assets) to prevent the dollar from depreciating. This pushes down U.S. interest rates and stimulates interest-sensitive U.S. spending just the same as if a private capital inflow motivated by relative rates of return had occurred.

Thus, if the purchase of U.S. assets by foreign central banks (official capital inflows to the United States) ceased, the composition of output would change. All else equal, the U.S. dollar would depreciate, increasing the output of U.S. exports and import-competing industries. But at the same time, less saving would be available for Americans to finance their spending on capital goods and for the U.S. government to finance its budget deficit. As a result, interest rates would rise and depress interest-sensitive spending, all else equal.