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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 1990s, this imbalance was largely due to a private investment boom and decline in private saving. In the 2000s, private investment fell and private saving rose. All else equal, this should have led to a smaller trade deficit. However, all else was not equal — the public sector budget moved from a surplus of 2.4% of GDP in 2000 to a deficit of 2.6% in 2005. Thus, while the borrowing needs of the private sector declined, the public sector borrowing needs increased, and the national saving-investment gap continued to be filled by foreign lending. The composition of capital inflows also changed. During 2002-2004, they came increasingly from official rather than private sources, as a few Asian countries purchased U.S. assets to moderate or prevent their currencies from appreciating against the dollar. During 2005, the 1990s pattern returned. If net capital inflows should decline sharply, the dollar and trade deficit would decline, U.S. interest rates would rise, and U.S. spending on capital investment and consumer durables would fall, all else equal. This report will be updated as events warrant.

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 borrows from abroad only if 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) 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.

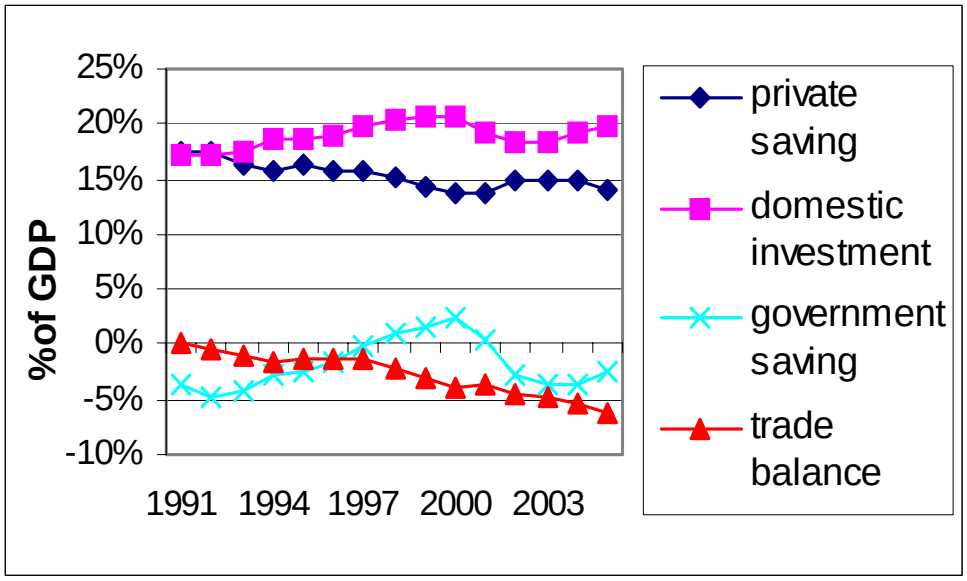
[1] For more information, see CRS Report RL30534, *America's Growing Current Account Deficit*, by Marc Labonte and Gail Makinen, and CRS Report RL31032, *The Trade Deficit: Causes, Consequences, and Cures*, by Craig Elwell.

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 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 to fill that 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 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: Bureau of Economic Analysis (BEA), U.S. Department of Commerce.
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 (2000-2004)

The American investment boom came to an abrupt halt with the 2001 economic recession. Domestic investment spending fell from 22% of GDP in 2000 to 18% of GDP in 2003. Over that period, private saving varied from 13.6% of GDP in 2000 to 15% of GDP in 2002-2004. Since the trade deficit reflects the imbalance of saving and investment, one might assume that the change in saving and investment would result in a smaller trade deficit, all else equal. However, other things were not equal during this period — the public sector went from being a net contributor to national saving, running a budget surplus of 2.4% of GDP in calendar year 2000, to a net borrower, running a budget deficit of 2.6% of GDP in 2005.[3] The shift in the fiscal position meant that the overall shortfall of national saving relative to investment in the 2000s was roughly the same as the 1990s even though the borrowing needs of the private sector were much diminished. It also 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 from 6.5% to 1%. 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 $0.6 trillion 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 also fell sharply, from $0.6 trillion in 2000 to $0.3 trillion in 2003. In 2004, however, private inflows increased sharply to $1.0 trillion, but private capital outflows grew even more rapidly to $0.9 trillion, so that net private inflows declined to $0.2 trillion.

Based on the decline in net private capital flows, one would have expected the trade deficit to decline by about $200 billion from 2002 to 2004. This did not occur because of an increase in official capital inflows — primarily, purchases of U.S. assets by foreign central banks.

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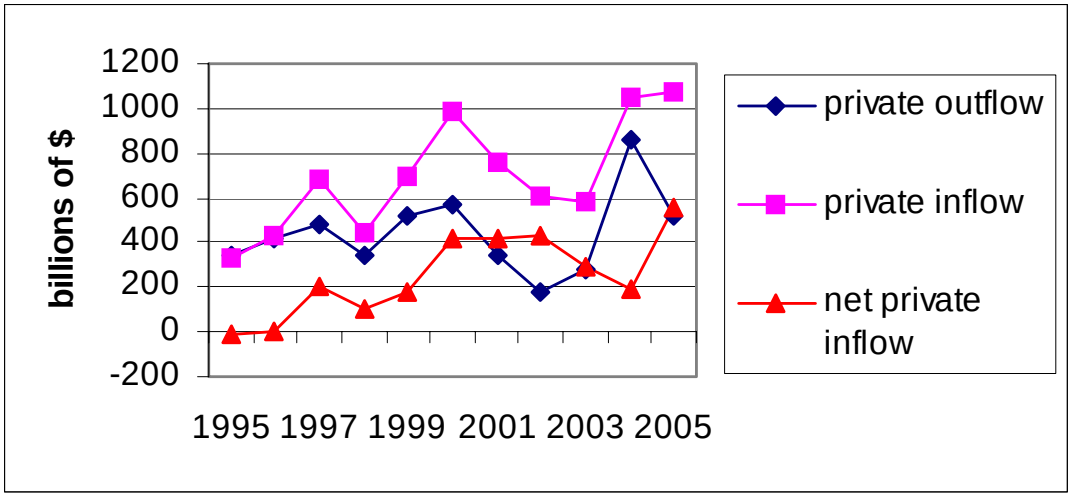
[2] For more information on foreign lending to the United States, see CRS Report RL32462, *Foreign Investment in U.S. Securities*, by James Jackson.

[3] Most of the fiscal shift from 2000 to 2005 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 2.6% of GDP in 2005 (down from 3.5% in 2003 and 2004).

[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 the Connection?* by Marc Labonte and Gail Makinen.

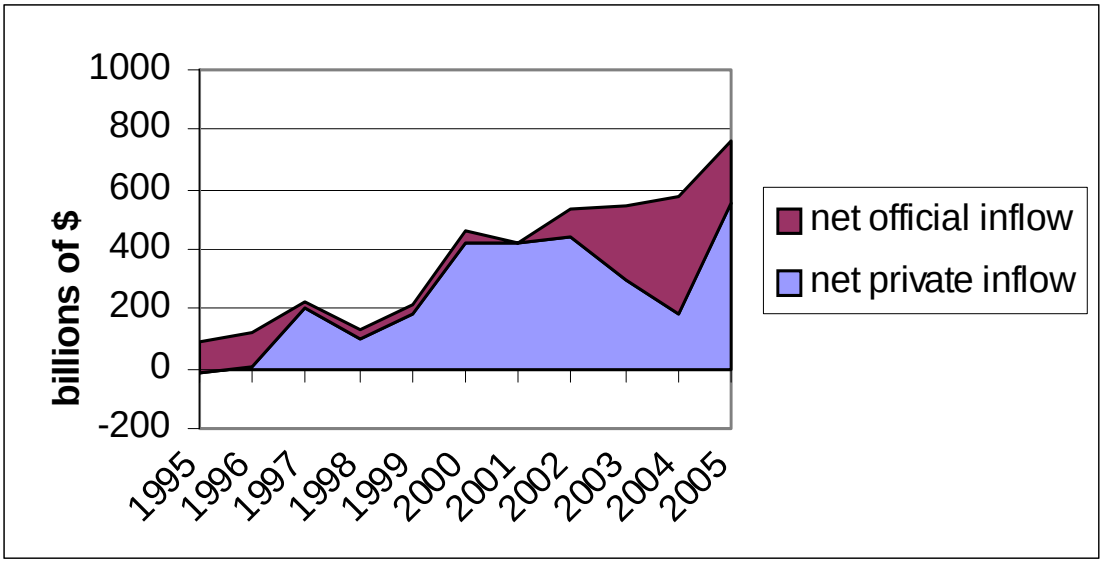
Figure 2: Composition of U.S. Private Capital Flows



Source: Bureau of Economic Analysis.

As seen in **Figure 3**, net private inflows tracked net total inflows very closely from 1997 to 2001. But between 2002 and 2004, net total inflows kept climbing while net private inflows first stabilized in 2002 and then declined. The two diverged because of the sharp rise in net official capital inflows from $0 in 2001 to $353 billion in 2004. Five countries had very large official foreign exchange reserve accumulations: from 2002 to 2005, official foreign exchange reserves increased by $530 billion in China, $64 billion in India, $373 billion in Japan, $89 billion in Korea, and $92 billion in Taiwan. (These increases represent foreign reserve assets originating from all countries; data for assets from only the U.S. are not available.)

Figure 3: U.S. Net Capital Inflows by Type



Source: Bureau of Economic Analysis.

The decline in net private capital flows 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, and the dollar has fallen 11% in real terms 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 (30%), the Canadian dollar (20%), and the British pound (22%). In all three areas, short-term interest rates during 2002-2004 remained higher than in the United States.[5] The dollar declined by 17% in nominal terms against the Japanese yen and stayed constant with the Chinese yuan. Japan is linked to the United States with a flexible exchange rate, whereas China formally maintains a fixed exchange rate.

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.[6] 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. A similar story can be told about Taiwan, Korea, and India.

The Chinese role in this situation is more complicated since its government does not allow the free flow of capital out 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. Instead, the U.S.-China aspect is more directly centered on trade. Many argue that the exchange value of the Chinese yuan is too low relative to the U.S. dollar and that this undervaluation is growing. Why this is so is often left unspecified. It could be due to a variety of factors: inflation is lower in China than in the United States, productivity is growing more rapidly, a growing number of foreign export-oriented firms are concentrating production in China, and so on. Regardless, what this means is that, over time, China has become an increasingly attractive place from which to buy. The result is a growing trade deficit. This deficit is only possible if the Bank of China buys the surplus dollars represented by the trade deficit at the fixed exchange rate. And this it has done: the foreign exchange reserves of the Bank of China have shown a large increase since 2000. It should be noted that this is in its essence a capital movement from China to the United States — an official capital movement set in motion by the Bank of China as opposed to a private capital movement by Chinese citizens.

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[5] Interestingly, although short-term rates were lower in the United States than in these other countries, long-term rates were mostly higher. This may be a sign that budget deficits and the low private saving rate have indeed pushed up long-term interest rates as economists have predicted. See CRS Report RL31775, *Do Budget Deficits Push Up Interest Rates and Is This the Relevant Question?* by Marc Labonte.

[6] Traditionally, the effect of shifts in monetary policy is reflected in shifts in market interest rates. In Japan, this is limited by the fact that short rates are effectively zero while longer term rates are low. In such a situation, the only available option for monetary policy to stimulate the economy is for the central bank to buy foreign currency in the foreign exchange market in an effort to depreciate the home currency or prevent it from appreciating. Currency depreciation should tend to stimulate exports and discourage imports, thereby stimulating domestic economic activity.

During 2005, the gap between domestic investment and national saving persisted. It was, as in the past, filled largely by the net inflow of private capital, whereas the inflow from official sources declined. The rise in the net inflow of private capital was due largely to strong investment demand and the sharp increase in short-term interest rates brought about by the Federal Reserve as it seeks to restrain the growth in aggregate demand. With the rebound in private capital inflows, the dollar rose in value, reducing the need for official capital inflows to keep the dollar from falling against local currencies.

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

Did the shift in net capital inflow to the United States during 2002-2004 from private to official sources have a different effect 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, all else equal.