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Who Financed Recent U.S. Trade Deficits?

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Abstract

Some popular and academic economic explanations of the U.S. trade deficit since 1998 emphasize U.S. private borrowing or foreign private interest in investing in the United States. This paper shows basic U.S. government data that demonstrate that foreign governments have been major financers of the U.S. trade deficit in the 2000s. In this light, it considers several explanations of recent U.S. trade deficits to see if they match these basic data.

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INTRODUCTION

The United States ran large and persistent trade deficits over 1998–2012. Many modern U.S. trade economists tend to attribute the causes of trade (and current account) deficits to macroeconomic factors such as differential savings rates in domestic and foreign markets. On the basis of this differential savings rate explanation, some economists and other commentators have portrayed the U.S. trade deficit in the 2000s as due to an "ant and grasshopper" story[2] in which the grasshopper (American consumers, or in some versions, the U.S. government[3]) went on a borrowing binge while the ants (workers in other countries) worked hard and saved. Alternatively, other economists and commentators argue that foreigners' craving for U.S. dollars and U.S. dollar assets, due to their desire to invest in the innovative U.S. economy, explains the U.S. trade deficit.

Basic data from the U.S. Department of Commerce's Bureau of Economic Analysis (BEA) and the U.S. Department of the Treasury (Treasury) cast doubt on the idea that either an "ant and grasshopper" story or private-market foreign investment alone accounts for the massive U.S. trade deficits (and corresponding U.S. capital account surpluses) of 1998–2012. Instead, these data show that foreign governments accounted for an unprecedented level of financing[4] of the U.S. current account deficit. Thus, any explanation of U.S. trade deficits over 1998–2012 either must include a large role for foreign government financing, or find that such foreign government financing was performing the same role as private foreign financing would have.

This paper also considers other explanations for the U.S. current account deficit in light of these basic data.

U.S. CURRENT ACCOUNT DEFICITS, 1998-2012

A nation's trade balance (exports minus imports) is usually the largest single component of its current account balance, which also measures investment returns and unilateral transfers in and out of the nation's economy. In recent U.S. economic history, the trade deficit is the largest component of its current account deficit, and so the two terms are virtually synonymous. If one wishes to lower the U.S. current account deficit substantially, one will most likely need to lower the U.S. trade deficit substantially.

The United States began running large current account deficits (as a share of U.S. gross domestic product, or GDP) in the 1980s. Those deficits shrank somewhat in the late 1980s and early

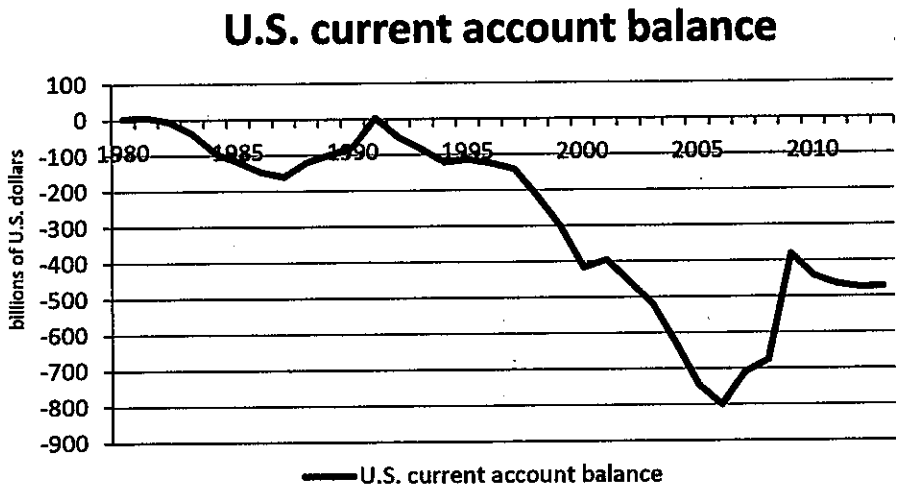
[2] "The Ant and the Grasshopper" is one of Aesop's fables, and the relevant portions are summarized below.

[3] See, for example, Riley, "Federal Spending and the Trade Deficit," July 2011.

[4] As will be discussed later, Borio and Disyatat propose defining financing differently than it is often defined in the economics literature on current account deficits. This author is referring to the more common use of the term for the purposes of this paper, while discussing Borio and Disyatat's alternate definition later. See Borio and Disyatat, "Global Imbalances and the Financial Crisis," May 2011.

1990s as the U.S. economy weakened, but grew again in the late 1990s and remained high until the economic collapse of 2009. With the onset of the modest recovery, current account deficits have returned almost to the levels of the 1980s, at somewhat less than 3 percent of GDP (figure 1).

FIGURE 1: The U.S. current account balance, as a percent of U.S. GDP



Source: BEA and author's calculations

For most of U.S. history, U.S. trade was far more balanced than it is now. The United States ran nearly balanced trade until the 1980s, with only a brief period during 1942–1947 in which the United States ran large trade surpluses. In U.S. postwar history, trade overall was usually a small percentage of GDP, and the U.S. current account was roughly balanced, until approximately the late 1970s.[5]

During the more recent period of high and persistent U.S. current account deficits, many U.S. economists and commentators have offered the following two explanations for U.S. current account or trade deficits. Underlying both claims is the belief that trade deficits are not caused by

[5] The United States ran small trade deficits (usually less than 1 percent of gross national product) for the first half of the 19th century. Those deficits became surpluses in the last decades of the 19th century. In the 20th century, the United States ran trade surpluses of under 2 percent from 1929 to 1941. It then ran a trade surplus of over 3 percent of GDP from 1942–1947. The surplus fell to under 3 three percent of GDP in 1948 and 1949, and after 1950, remained under 1.6 percent of GDP, generally dwindling until it became a small deficit in the 1970s. USDOC, BEA, *Survey of Current Business*, July 1954 and August 1974, Lipsey, Robert. "U.S. Foreign Trade and the Balance of Payments, 1800-1913," and author's calculations.

microeconomic factors, such as tariff rates or industrial competitiveness, but rather by international capital flows.[6]

First, some commentators have argued that U.S. trade deficits mostly reflect what this paper will refer to as an "ant and grasshopper" story in which the U.S. trade deficit is largely a symptom of low U.S. savings and high foreign savings.[7] In this sense, the United States resembles Aesop's grasshopper while foreign countries are the thrifty ants. For example, economist Gregory Mankiw has stated:

> *My view is that the trade deficit is not a problem in itself but is a symptom of a problem. The problem is low national saving. Given that national saving is low, I am not eager for the trade deficit to disappear, because that would mean that domestic investment would need to fall to the low level of national saving. But I do think it would be good if the trade deficit were to disappear accompanied by an increase in national saving.*[8]

Similarly, Laurence Kotlikoff argues that trade deficits only reflect a problem insofar as they reflect inadequate national savings, but may otherwise reflect investment flows that are positive for a nation's long-term growth.[9] Other commentators, such as Stephen Roach of Morgan Stanley Asia and Yukon Huang of the Carnegie Endowment, have tied the U.S. trade deficit to increased U.S. consumption independent of Chinese (among other trading partners') policies, just as they assert that China's large trade surplus is due to high Chinese saving, without always explaining which sectors (households, businesses, and government) account for what share of that saving.[10]

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[6] A summary of this point of view is contained in Daniel Griswold's 1998 piece "America's Maligned and Misunderstood Trade Deficit." In addition to other points, Griswold returns to the writings of Adam Smith and David Hume to argue against concerns over trade deficits, connecting recent periods of shrinking U.S. trade deficits to U.S. recessions. Griswold's arguments are also based on the work of trade economist Douglas Irwin—e.g., Irwin's 1996 publication for the American Enterprise Institute, *Three Simple Principles of Trade Policy.* Also see the statement by the San Francisco Federal Reserve that "by the national income identity . . ., a trade deficit is caused by a change in national saving or investment or both." Federal Reserve Bank of San Francisco, "Is the U.S. Trade Deficit a Problem?" June 2007. Some of these commentators (e.g., Griswold and Irwin) have also posited that, whatever the reasons, trade deficits do not matter (an issue beyond the scope of this paper). This point of view contrasts with the traditional Keynesian view that trade deficits represent a loss of aggregate demand. See Palley, "Explaining Global Imbalances," November 2011.

[7] At some level, this kind of argument may just be a restatement of an accounting identity, as Ian Fletcher argues. See Fletcher, "The Fiscal Cliff and the Trade Deficit," November 2012.

[8] Mankiw, "Is the U.S. Trade Deficit a Problem?" March 31, 2006.

[9] Kotlikoff, "Trade Deficits Are a Problem If," 2011.

[10] See Crawshaw, "Roach: U.S. Should Save, China Spend," November 2008; Roach, "America's Renminbi Fixation," April 2012. There is also an economics literature that attempts to explain China's trade surplus as a product of factors other than the fact that the Chinese government simply not allowing foreign exchange to recirculate freely, as it does not. Those interested in this literature can see a summary at Trachtman, "Understanding China's Trade Surplus," 2012, or an example at Wen, "Explaining China's Trade Imbalance Puzzle," 2011.

In some versions of the "ant and grasshopper" view, trade policy (the setting of tariffs and quotas) is also described as having little role in increasing U.S. trade deficits. For example, in 1996, economist Douglas Irwin wrote that "the United States may have a relatively open market and foreign markets may be more closed, but these facts would not manifest themselves in the trade balance."[11]

In a second explanation offered for high U.S. trade deficits, other commentators have argued that U.S. trade deficits have reflected foreign beliefs that the United States is (or was) a great place to invest, in part due to high U.S. growth rates. Under this argument, the U.S. trade deficit is a positive indicator that foreigners wish to invest their money in one of the most innovative and productive economies in the world. For example, in 1998, Dan Griswold of the Cato Institute stated that "trade deficits may even be good news for the economy because they signal global investor confidence in the United States and rising purchasing power among domestic consumers."[12] Thus, according to this explanation, the United States should happily accept this investment.[13]

FOUR POINTS FROM BASIC DATA THAT ADDRESS THESE THEORIES

Basic U.S. government data cast some doubt on both the "ant and grasshopper" story and the "foreigners love U.S. investment opportunities" story as complete explanations for the large U.S. trade deficits over 1998–2012. U.S. government data make it possible to examine who was buying U.S. assets in the period and what was the minimum being bought by foreign governments. The data show that foreign governments—not just foreign private buyers—were substantial buyers of U.S. assets over 2002–2012. The large increase in foreign government buying of U.S. assets in 2002 suggests that a complete explanation of the recent U.S. trade deficit should give substantial weight to the shift in the activities of non-market actors, i.e., governments that may not be financing U.S. projects solely for the return on investment.[14] The "ant and grasshopper" and "foreigners love U.S. investment opportunities" stories may capture part of the reason for U.S. trade deficits, but they may also not give adequate emphasis to the role of foreign governments.

[11] Irwin, *Three Simple Principles of Trade Policy*, 1996.

[12] Griswold, "America's Maligned and Misunderstood Trade Deficit," 1998. See also the Kotlikoff analysis noted earlier ("Trade Deficits Are a Problem If," 2011).

[13] Palley discusses other ways that some U.S. economists have downplayed concern over U.S. trade deficits, attributing U.S. trade deficits to, for example, the allegedly faster U.S. rates of technological innovation during the late 1990s and early 2000s. Palley, "Explaining Global Imbalances," November 2011.

[14] Treasuries are bought in a market, but the foreign government buyers are non-market actors, i.e., their motivations may not be market motives.

Four major data and interpretive points illustrate the large role foreign governments have played in financing recent U.S. trade deficits.

Point 1: Foreigners Were Significant Financers of the Growth in U.S. Government Debt in the 2000s

One portion of total U.S. debt is held by the federal government.[15] Some argue that, because the majority of the federal government debt is held by U.S. citizens, foreign and international holdings of U.S. government debt are not significant. For example, National Public Radio (NPR) put on its website a graph showing the breakdown of who owns U.S. government debt, with foreigners only owning approximately one-third of such debt.[16]

However, these arguments and presentations obscure the fact that a large part of U.S. government debt has long been held by U.S. citizens. Thus, the current level of U.S. government debt starts from a base of high domestic ownership. During the growth in the U.S. current account deficit after 2001, however, foreign and international sources were the buyers of over 40 percent of the net increase in U.S. government debt.

Table 1 shows total foreign ownership of U.S. Treasury securities from 1989–2012. Numbers for each year are cumulative. As can be seen from the table, as of December 1993, foreign and international sources owned about 14 percent of U.S. Treasury securities outstanding. By December 2012, foreign and international sources owned over 33 percent of U.S. Treasury securities outstanding. For this cumulative change to occur, foreign and international sources needed to be larger buyers of U.S. Treasuries after 1993 than prior to that year. As can be seen in the table 1, the largest change in relative foreign purchases of U.S. Treasuries occurred between December 2001 and December 2012, a period in which foreign and international sources purchased over 43 percent of all U.S. Treasury securities issued.

Table 1, however, only shows that foreign and international sources were major buyers of U.S. government debt, and not whether those foreign and international sources were governments or private citizens. According to other U.S. Treasury data, as of January 2014, foreign governments accounted for over 71 percent of total foreign holdings of U.S. Treasury securities, making foreign governments likely responsible for a large share of the increasing foreign and international interest in U.S. government debt.[17]

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[15] Total U.S. debt would also include household and business debts.

[16] Bui, "Everyone the U.S. Government Owes Money To," October 2013. NPR is using data from the General Accounting Office (GAO).

[17] U.S. Treasury "Major Foreign Holders of U.S. Treasury Securities," (accessed May 2014) and author's calculations.

TABLE 1 Total foreign and international ownership of Treasury securities during 1993–2012

Year	Total Public Debt	Owned by foreign and international[1]	Percent foreign and international
	Billions of dollars		*Percent*
1993	4,536	650	14.3
1994	4,800	667	13.9
1995	4,989	835	16.7
1996	5,323	1,102	20.7
1997	5,502	1,242	22.6
1998	5,614	1,279	22.8
1999	5,776	1,269	22.0
2000	5,662	1,034	18.3
2001	5,943	1,051	17.7
2002	6,406	1,247	19.5
2003	6,998	1,523	21.8
2004	7,596	1,849	24.3
2005	8,170	2,034	24.9
2006	8,680	2,103	24.2
2007	9,229	2,353	25.5
2008	10,700	3,077	28.8
2009	12,311	3,685	29.9
2010	14,025	4,454	31.8
2011	15,223	5,007	32.9
2012	16,433	5,574	33.9
Difference, 2012 and 2001	10,489	4,523	43.1

[1]"Foreign and international" is the heading used by the Treasury in the source data. It likely reflects that the Treasury does not know with complete certainty whether certain holdings are from certain countries, as will be discussed further below in the text.

Source: U.S. Department of the Treasury, Ownership of Federal Securities, 1999, 2004, 2009, and 2013, and author's calculations.

Point 2: Foreign Government Holdings of U.S. Government Debt Are Likely Even Higher Than the Data Show

Data on foreign government holdings of U.S. government debt are almost certainly a minimum rather than an exact measure. In particular, data for one of the largest holders of U.S. Treasury debt, China, may be underestimated.

As of June 2012, China held over $3.2 trillion in total foreign exchange reserves, and it is likely that roughly two-thirds of those holdings are in U.S. dollars. (The exact percentage is not known except by the Government of China. However, in 2010, *Chinadaily* reported that the IMF estimated that 61 percent of China's 2010 currency reserves were in U.S.-dollar assets, while

calculations based on U.S. Treasury data yielded an estimate of 66 percent.)[18] These estimates would yield Chinese holdings of U.S. dollars well above the level of Chinese holdings of U.S. Treasuries reported by the U.S. Treasury. This discrepancy means that China is either holding dollars in other forms and/or that the Treasury data are not capturing all of China's holdings.

Treasury data on how much U.S. government debt that China holds is likely a minimum, and the actual level could be much higher. Economist Brad Setser, before joining Treasury, noted in 2009 that "[t]he US only tracks the initial sale of a bond to an investor abroad. Subsequent sales never [enter] into the TIC [Treasury] data, though they are often picked up in the annual survey."[19] For example, if a U.K. (or Caribbean, or Swiss, or Belgian, etc.) bank purchased Treasuries for the Chinese government, that purchase might be recorded in U.S. Treasury data as a U.K. purchase, rather than a Chinese purchase.

In June 2011, Reuters reported that Treasury investigations had found that China had been buying more U.S. debt than it had disclosed.[20] Additionally, in 2012, Reuters reported that China was now purchasing Treasury debt as a primary dealer, a category previously reserved for select U.S.-based banks.[21] It is quite possible then, that there is underreporting of Chinese holdings (due to the results of the Treasury investigation), and China's importance as a buyer should not be underestimated (due to China's status as a primary dealer).

These first two sections have shown that foreign governments were substantial purchasers of U.S. government debt in recent years. As noted above, however, Treasury debt only shows us what is happening with U.S. government debt, and not how total U.S. government and private debt is financed. The next section will show how the entire U.S. current account deficit, including both U.S. government and U.S. private debt, is financed by both foreign private and foreign government sources.

Point 3: Foreign Governments Were Substantial Buyers of U.S. Assets

Foreign governments finance a large part of the U.S. current account deficit. In the U.S. international transaction data, there are usually higher foreign private investment flows than foreign government investment flows into the United States. However, focusing on just these levels would obscure the fact that there are also high U.S. private investment flows into foreign countries,[22] while the U.S. government has tended not to have large investments overseas. For

[18] See Bloomberg, "China Quarterly Reserves Have First Decline," January 2012; Ming, "US Debt in China's Forex Reserves Worrisome," May 2011.

[19] Setser, "I Am Pretty Sure China Didn't Sell Treasuries in April," June 2009.

[20] Flitter, "U.S. Caught China Buying More Debt than Disclosed," June 2011.

[21] Flitter, "U.S. Lets China Bypass Wall Street for Treasury Orders," May 2012.

[22] This type of misleading analysis will be seen in Borio and Disyatat, "Global Imbalances and the Financial Crisis," May 2011, below.

the current account deficit, what matters is not just the level of investment inflow, but rather the net investment flows, i.e., U.S. investment outflows net of foreign investment inflows.[23]

By looking at U.S. and foreign net investment flows, the role of foreign government investments as a large financer of the U.S. trade deficit becomes clear. While there are large foreign private inflows into the United States, these flows are often cancelled out, at least in part, by large U.S. private investment outflows. What has allowed the U.S. current account deficit to remain large is the difference between large foreign government inflows and usually small U.S. government outflows.

Using BEA data on international transactions, we can identify how much U.S. private and U.S. government investment went overseas as well as how much foreign private and foreign government investment flowed into the United States. Table 2 shows how net private and net government assets finance the U.S. current account deficit. As can be seen, net government assets (foreign government assets in the United States less U.S. government assets overseas) financed a substantial portion of the U.S. current account deficit in the 2000s, and continued to do so after the Great Recession. During and after the recession, the U.S. government engaged, for the first time during the period shown (1993-2012), in large purchases of overseas assets, perhaps contributing to the outlier values in 2008 and 2009.[24]

Overall, the numbers in table 2 lead to the following fact about the U.S. current account deficit over 2003 to 2012: during this period, 70 percent of the U.S. current account deficit was accounted for by the difference in net holdings between U.S. and foreign government holdings. Even if one were only to look at the period 2003 to 2007 (perhaps to avoid the extraordinary swaps that took place in 2008 and 2009), over 55 percent of the U.S. current account deficit was accounted for by the difference in net holdings between U.S. and foreign government holdings.

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[23] In the international transaction data, these investment flows show up in the financial account, not the current account. However, as discussed earlier, this paper is examining the U.S. current account deficit from the point of view of how it is financed.

[24] This analysis extends analysis from Labonte, "Financing the U.S. Trade Deficit," June 2009.

TABLE 2 Components of U.S. Current Account Deficit from 1993-2012

Year	Current account balance	Net private transactions	Net government transactions	Discrepancy[1]	Net government transactions / current account deficit
	billions of dollars				*percent*
1993	-84.8	9.2	73.5	-2.1	86.6
1994	-121.6	79.7	34.6	-7.3	28.5
1995	-113.6	-16.3	120.6	-9.3	106.2
1996	-124.8	2.1	121.0	-1.6	97.0
1997	-140.7	200.9	20.0	80.1	14.2
1998	-215.1	94.1	-12.7	-133.7	-5.9
1999	-300.8	183.1	32.0	-85.6	10.7
2000	-416.3	436.2	44.0	63.8	10.6
2001	-396.7	377.6	33.5	14.4	8.4
2002	-457.8	387.9	119.3	49.4	26.1
2003	-518.7	252.8	276.0	10.1	53.2
2004	-629.3	130.1	393.2	-106.0	62.5
2005	-739.8	421.8	239.6	-78.4	32.4
2006	-798.5	283.8	480.2	-34.5	60.1
2007	-713.4	152.4	503.4	-57.6	70.6
2008	-681.3	743.3	1,089.1	1,151.1	159.8
2009	-381.6	-783.2	-8.8	-1,173.6	-2.3
2010	-449.5	20.0	392.6	-36.9	87.3
2011	-457.7	382.4	373.4	298.1	81.6
2012	-440.4	-28.4	313.1	-155.7	71.1

[1] Net private transactions plus net government transactions should equal the current account balance, but may not due to issues such as statistical discrepancies. In most years, these discrepancies would likely not change the analysis. In 2008, 2009, 2011, and 2012, there are large discrepancies. These large discrepancies may be due to Federal Reserve swaps conducted in those years. This use of the word "discrepancy" is not the same as that used by BEA when providing an explanation of its published data.

Source: BEA, and author's calculations.

Point 4: Foreign Government Currency Reserves Grew Dramatically in the 2000s

Foreign government currency reserves grew dramatically in the 2000s, and beyond normal historical levels. Table 3 shows the change in total reserves for selected[25] nations between 2000 and 2012, both in levels and as a percent of GDP. As can be seen, U.S. reserves did rise as a percent of

[25] These countries were selected to provide examples of some large U.S. trading partners in Europe, Asia, and South America.

GDP, but from one low level to another low level, and remained below the other countries' ratio of reserves to GDP in 2000. Meanwhile, other countries' governments increased their reserves not only in absolute terms but also in large amounts relative to the size of their national economies. These increases were far larger for the selected Asian countries, as well as Brazil, than for the selected European countries, with the exception of Switzerland.

TABLE 3 Total reserves for selected countries, 2000 and 2012

Country or reporting area	Total Reserves, 2000	Total Reserves, 2012
	Billions of dollars (percent of GDP)	
Brazil	33.0 (5.1)	373.2 (16.6)
China	171.7 (14.3)	3,387.5 (41.2)
France	63.7 (4.8)	184.5 (7.1)
Germany	87.5 (4.6)	248.9 (7.3)
Hong Kong	107.6 (62.7)	317.4 (120.6)
Japan	361.6 (7.6)	1,268.1 (21.3)
Korea	96.3 (18.0)	327.7 (29.0)
Switzerland	53.6 (20.1)	531.3 (84.2)
United States	128.4 (1.3)	574.3 (3.5)

Source: World Bank website, and author's calculations.

Based on the data presented in tables 2 and 3, it is highly likely that increased purchases of U.S. dollars played a large role in these increases in foreign governments' reserves. If so, then these increases in foreign governments' reserves are likely an important factor in understanding U.S. current account deficits in the 2000–2012 period. As the Congressional Research Service has noted, "[i]f... a government requires exporters to sell their dollars to the government at a fixed exchange rate, and that government invests the dollars in U.S. securities rather than allowing businesses and consumers to use the dollars to buy American exports, then this combination of government intervention in currency markets plus exchange controls can increase the size of the U.S. trade deficit."[26] While this description may only apply to China in the above table, China's increase in its foreign currency reserves was the single largest. Nonetheless, even though

[26] Hornbeck, "Trade Primer," January 2013.

other countries might not exercise such control over exchange rates, their interventions might be large enough, and with enough control over foreign exchange, to have a similar effect.[27]

Analysis

Both in terms of purchases of U.S. Treasuries, and at the level of all investment in the United States, foreign governments have been large financers of U.S. debts. Compared with U.S. government investment overseas, foreign investment in the United States has played a large role in financing the U.S. trade deficits since 1998. This foreign government interest in the U.S. market likely stems from a general desire of foreign governments to increase their currency reserves over the last decade or so.

Thus, the important question becomes why did foreign governments choose to increase their currency reserves? One possible explanation is that foreign governments were acting entirely the way market actors would, and that had foreign governments not purchased the U.S. assets that they did, private foreigners would have done so. If so, then there may not be much significance to the foreign government role here. One needs to accept such a hypothesis in order to believe the "ant and grasshopper" or the "foreigners love U.S. investment opportunities" explanations as principal explanations for the U.S. trade deficits of the 2000s.

If one does not accept that foreign governments were acting in the same way as private foreign investors would, then a very large share of the financing of U.S. trade deficits has come from sources with potentially non-market motives. Explanations that focus only on the profligacy of U.S. consumers ("ant and grasshopper" stories) or on a market-based desire by foreign investors to invest in the United States likely fail to explain perhaps the single-largest source of financing for the U.S. current account deficit.

This paper will now examine several other explanations for the U.S. trade deficit in light of the above data.

OTHER EXPLANATIONS

The U.S. Dollar as Reserve Currency

In the 1960s, economist Robert Triffin showed that a nation that has its currency used as an international reserve currency will need to run a trade deficit.[28] Under Triffin's theory, the U.S.

[27] See, for example, Bergsten and Gagnon, who provide analysis alleging that several nations, including but not limited to China, "intervene aggressively to keep their currencies undervalued and thus to unfairly maintain current account surpluses." Bergsten and Gagnon, "Currency Manipulation, the US Economy, and the Global Economic Order," December 2012.

[28] See, for example, description in Palley, "Explaining Global Imbalances," November 2011.

dollar's function as a reserve currency certainly could explain in general why the United States runs persistent and large trade deficits.

Nonetheless, the U.S. dollar's status as a reserve currency does not explain why foreign governments acquired much larger reserves in 2012 than they had before 1998. Nor does it explain why U.S. current account deficits have been persistently large since 1998. U.S. trade deficits never cracked three percent of GDP in the 1960s or 1970s, and did so only briefly in the 1980s. In all these decades, the U.S. dollar was a reserve currency. Why did U.S. trade deficits only grow to be nearly 3 percent of U.S. GDP, or more, in the 1980s, and remain persistently at or above that level after 1998?[29]

Bernanke's "Savings Glut"

In 2005, Federal Reserve Chairman Ben Bernanke put forward another possible explanation for the U.S. current account deficit. He described a "savings glut" in some parts of the world that helped foster current account deficits in other parts of the world, including the United States. He attributed the "savings glut" in part to the desire of developing nations hit by the Asian financial crisis to channel their local savings into large reserves in anticipation of a future crisis.[30]

The data above do not directly address the savings glut hypothesis, but are consistent with it. However, Bernanke's suggestions for reducing the savings glut focus on improving and liberalizing flawed financial systems in developing nations. In this sense, the savings glut story may morph into a variant of the "ant and grasshopper" story, albeit perhaps with some policy recommendations for the ants as well. Of more concern, other economists have attempted to discuss the savings glut in terms of too much savings in emerging markets because of inadequate safety nets.[31] Such an explanation potentially takes the focus off of foreign governments' savings, and explains it with a reference to private savings. This paper suggests that whatever the explanation for any savings glut, a key point to remember is that a large portion of any "savings glut" is the net savings of other countries' governments. Thus, explaining a "savings glut" requires explaining foreign governments' behavior.

Borio and Disyatat: Look at Gross Flows

On the other hand, in a May 2011 paper, Bank of International Settlements (BIS) economists Borio and Disyatat argue that international current account imbalances were not likely a cause of the 2008 global financial crisis.[32] While this author is not assessing the causes of the global

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[29] Palley also offers other reasons for skepticism about the reserve currency hypothesis. Palley, "Explaining Global Imbalances," November 2011.

[30] Bernanke, "The Global Saving Glut and the U.S. Current Account Deficit," March 2005.

[31] For example, Mendoza, "Financial integration, financial deepness and global imbalances," as cited in Borio and Disyatat, "Global Imbalances and the Financial Crisis," May 2011.

[32] Borio and Disyatat, "Global Imbalances and the Financial Crisis," May 2011.

financial crisis here, Borio and Disyatat's paper does contain several analytical points on the U.S. current account deficit that are problematic, or prone to potential misinterpretation, and worth discussing here.

Borio and Disyatat argue that since U.S. financial inflows and outflows are very large relative to official (and even nonofficial) U.S. financial flows from emerging economies, it is doubtful that those latter flows played much of a role in "determining financial flows into the United States." The authors are defining financing as the use of specific, available funds for a particular expenditure. Their definition of financing is likely a more accurate use of the term than the one that economists typically use when discussing current account deficits, i.e., as national savings less national investment. Thus, based on this terminology change, they argue that attributing the current account balance to net foreign investment is "arbitrary."

In considering current account deficits only, this argument is misleading. Even if one accepts Borio and Disyatat's terminology change, it is still a simple fact of accounting that if the large net foreign government buying of U.S. assets had not happened, and all other flows had stayed the same, the U.S. current account deficit would have been much lower. In other words, had foreign governments bought U.S. assets at the levels that the U.S. government bought foreign assets over much of recent history, and foreign private investors had not compensated, then the United States would have run a much smaller current account deficit.

Perhaps Borio and Disyatat would respond that the same analysis holds if any large private actor would have chosen not to make an investment. It would, but then the authors would need to show why such a choice is relevant. Differences in two countries' trade relationships that are due to one country's government engaging in policies to generate such a difference are qualitatively different than subtracting one private actor's actions. In other words, the difference between governmental net flows was a large portion of the U.S. current account deficit in the 2000s, and changing the terminology cannot change that fact.

A second problematic analysis in Borio and Disyatat is that they argue that, since some trade deficit countries have acquired large financial reserves, the relationship between reserve levels, currency, and current account deficits is empirically weak. This analysis is not correct. A trade deficit nation can acquire large reserves in preventing its currency from appreciating even more; the fact that its current account balance is negative while it acquires reserves does not mean the acquisition of reserves had no impact on its current account balance.

Moreover, as previously discussed, these foreign government acquisitions are not insignificant simply because they are small relative to total private flows. Perhaps because they are addressing a somewhat different question, Borio and Disyatat downplay or ignore that U.S. private financial outflows often balance private financial inflows better than government flows do. As the earlier charts and tables show, foreign government net purchases are large in comparison with both the U.S. economy and the economies of many of the countries that engage in such purchases. Thus, it is difficult to imagine that the decisions foreign governments are making are insignificant.

Interestingly, Borio and Disyatat also note that foreign governments' currency "accumulation may reflect the wish to resist the appreciation of the currency, when the authorities face strong foreign demand for domestic currency assets, manifested in gross capital inflows." This may or may not be true. Nonetheless, foreign government resistance to the currency appreciation that private sector flows are pushing is likely to have an impact on the U.S. current account balance.

Importantly, Borio and Disyatat are to a great extent addressing issues outside the scope of this paper, such as whether Bernanke's "savings glut" in emerging markets was a major contributor to the financial crisis. The authors do acknowledge elsewhere in their paper that large foreign official inflows could have had an effect on the U.S. economy.

Reaction to the Asian Crisis, or Other Preparation for Financial Failure

Dean Baker (along with Jared Bernstein) has argued that recent reserve growth is due to the failure of the International Monetary Fund (IMF) in the late 1990s during the Asian crisis.[33] This explanation is consistent with the data. It sounds similar to Bernanke's but leads to a different policy prescription, i.e., that the U.S. government should work to ensure that the IMF does not handle future financial crises the way that it handled the East Asian crisis. Importantly, Baker's explanation keeps a significant focus on the activities of foreign governments as financers of the U.S. trade deficit, a focus that fits the data shown above.

Similarly, Aizenman and Lee create a distinction between what they call traditional currency interventions to create an export advantage ("monetary mercantilism") and large reserve hoardings in order to prepare for potential financial failures after policies to promote loans to domestic producers ("financial mercantilism").[34] They state that financial mercantilism is not always damaging to trading partners' economies, and posit their belief that Asian governments' large-scale "international reserves hoarding" is due to financial mercantilism rather than monetary mercantilism. Their belief is based on their statement that keeping currencies undervalued for a long period of time would be difficult, and based on a limited selection of economic work that posits that many Asian currencies (including that of China) were not much undervalued. Their work would appear to be contradicted by the findings of Bergsten and Gagnon.[35]

Also in contrast to Aizenman and Lee, Palley argues that the large scale of Asian governments' currency acquisitions is in excess of anything needed to avoid another episode of capital flight.[36] Even if the only motivation were to avoid the kind of difficulty that Asian nations found themselves in in 1997, though, building a large hard currency reserve for economic emergencies

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[33] Baker and Bernstein, *Getting Back to Full Employment*, 2013.

[34] Aizenman and Lee, "Financial Versus Monetary Mercantilism," December 2006.

[35] Bergsten and Gagnon, "Currency Manipulation, the US Economy, and the Global Economic Order," December 2012.

[36] Palley, "Explaining Global Imbalances," November 2011.

sounds very similar to the types of mercantilist motives that Adam Smith decried in his Wealth of Nations.[37] In that sense, perhaps Baker's argument should be considered under the category of the larger class of potentially mercantilist reasons why many foreign governments acquired so many U.S. assets over 1998–2012.

It is also worth noting that Asian currencies appreciated, and their trade surpluses with the United States shrank, in the early to mid-1990s.[38] It is possible that policymakers in some of these nations may have attributed part of any economic or financial problem their nations experienced in the 1990s to the shrinkage of their trade surpluses with the United States and/or the earlier appreciation of their currencies against the dollar.

Foreign Governments Acquiring Dollar Reserves to Maintain a Trade Surplus with the United States

Another possible explanation for the increase in foreign governments' reserves is that foreign governments were acting to keep their trade balance with the United States larger than it would be without their intervention. For example, economists at the Peterson Institute of International Economics (PIIE) have presented work describing some foreign governments as engaged in currency reserve acquisitions in order to maintain trade surpluses.[39] Such explanations are also consistent with the basic government data described above.

For example, looking at the data in table 2 above, net foreign private flows financed most of the U.S. current account deficit over 1997 to 2002. However, perhaps in the wake of the fall of the U.S. stock market after 2000, net foreign private flows fell over 2000 to 2004. Around 2002, foreign governments stepped into the breach and allowed the U.S. current account deficit to remain large even though foreign private investors were showing less relative interest in the United States. One possible explanation for this increase, consistent with the work of Bergsten and Gagnon, is that foreign governments did not wish to allow their trade surpluses with the United States to diminish. It should be noted that, whatever the motivation for these foreign government acquisitions, the acquisitions were in no way forced on these foreign governments.

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[37] See Smith, *Wealth of Nations*, 1776, book IV, chapter 1. Smith criticizes "the mercantile system" as one in which national policies work to increase reserves of money (in Smith's case, gold and silver) by running trade surpluses, rather than focusing on what Smith describes as the true economic wealth of a nation, i.e., all of its productive potential.

[38] For example, both Japan and Korea ran large current account surpluses in the mid-1980s. Their currencies both appreciated against the dollar until the early 1990s (Korea) or mid-1990s (Japan), and both countries' current account surpluses shrank substantially. See data from the Federal Reserve Bank of St. Louis and the International Monetary Fund.

[39] See Bergsten and Gagnon, "Currency Manipulation, the U.S. Economy, and the Global Economic Order," December 2012.

CONCLUSION

Foreign governments invested in U.S. assets at record levels in the 2000s, far beyond the traditional levels of reserve growth, and at high levels relative both to their own economies and to the U.S. economy. These investments have sometimes been a replacement for foreign private investment (e.g., during 2002–04 and in 2012) and have sometimes merely remained flat while foreign private investment rose. But they have never substantially declined, except very briefly in 2009.

From these facts, one must either conclude that foreign governments are acting in exactly the same way as other private foreign investors would or that without foreign government purchases of U.S. securities, the U.S. current account deficit would have been lower, perhaps even substantially lower. Whatever the reason, foreign governments have played a large role in recent U.S. trade deficits. Thus, any explanation of why there have been large recent U.S. trade deficits must provide ample explanation of foreign government actions.

This paper has presented some basic U.S. and international data that show that foreign government actions are important contributors to the U.S. current account deficit of 1998 to the present. It then has suggested that any explanations of recent U.S. current account deficits must be consistent with this reality, and has examined several explanations through the prism of this reality.

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