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Foreign Holdings of Federal Debt

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Summary

This report presents current data on estimated ownership of U.S. Treasury securities and major holders of federal debt by country. Federal debt represents the accumulated balance of borrowing by the federal government. To finance federal borrowing, U.S. Treasury securities are sold to investors. Treasury securities may be purchased directly from the Treasury or on the secondary market by individual private investors, financial institutions in the United States or overseas, and foreign, state, or local governments. Foreign investors have held slightly less than half of the publicly held federal debt in recent years, prompting questions on the location of the foreign holders and how much debt they hold.

This report will be updated annually or as events warrant.

Contents

Figures

Tables

Contacts

Selected Statistics on Foreign Holdings of Federal Debt

Federal debt represents, in large measure, the accumulated balance of federal borrowing of the U.S. government. The portion of gross federal debt held by the public consists primarily of investment in marketable U.S. Treasury securities.[1] Investors in the United States and abroad include official institutions, such as the U.S. Federal Reserve; financial institutions, such as public banks; and private individual investors.

Table 1 provides December 2015 data, available as of March 2016, on estimated ownership of U.S. Treasury securities by type of investment and the percentage of that investment attributable to foreign investors.[2]

The table shows that from December 2011 to December 2015, foreign holdings of debt increased by $1.1 trillion to approximately $6.1 trillion. During the same period, total publicly held debt increased by approximately $3.5 trillion to $15.1 trillion. Because the total debt has increased at about the same pace as the debt held by foreigners, the share of federal debt held by foreigners has been relatively steady. In December 2015, foreigners held 40% of the publicly held debt.[3] Interest on the debt paid to foreigners in 2015 was $94.9 billion.[4] Although 2015 was the first time in the past 10 years that foreign holdings declined, it is too soon to say whether this is a turning point in the heretofore upward trend.

Table 1. Estimated Ownership of U.S. Treasury Securities

(in billions of dollars)

End of Month	Total Publicly Held Debt	Foreign Holdings of Publicly Held Debt	Foreign Holdings as a Share of Total Publicly Held Debt
Dec. 2015	$15,141.1	$6,118.0	40%
Dec. 2014	$14,416.7	$6,156.2	43%
Dec. 2013	$13,680.6	$5,793.8	43%

[1] Figures on federal debt held by the public are available on the Department of Treasury Bureau of Public Debt website, "The Debt to the Penny and Who Holds It," at http://www.treasurydirect.gov/NP/BPDLogin?application=np. The gross debt is composed of debt held by the public and intragovernmental debt held by federal trust funds. Although gross federal debt is the broadest measure of the debt, the debt measure that is relevant in an economic sense is debt held by the public. This is the measure of debt that has actually been sold in credit markets and has influenced interest rates and private investment decisions. Intragovernmental debt, by contrast, is both an asset and a liability to the federal government. See CRS Report R44383, *Deficits and Debt: Economic Effects and Other Issues*, by (name redacted) .

[2] This report discusses foreign holdings of U.S. federal debt. Foreign investors also hold U.S. private securities. For data on foreign holdings of U.S. private securities, see "Foreign Portfolio Holdings of U.S. Securities," at http://www.treasury.gov/resource-center/data-chart-center/tic/Pages/fpis.aspx, produced by the Treasury Department International Capital System.

[3] Data are excerpted from the Federal Reserve Board of Governors Flow of Funds data, Table L209. State, local, and foreign holdings include special issues of nonmarketable securities to municipal entities and foreign official accounts. They also include municipal, foreign official, and private holdings of marketable Treasury securities.

[4] Bureau of Economic Analysis, International Transactions, Table 4.3, line 39, at http://bea.gov/iTable/index_ita.cfm. There is no data available on interest on the debt paid to individual countries.

End of Month	Total Publicly Held Debt	Foreign Holdings of Publicly Held Debt	Foreign Holdings as a Share of Total Publicly Held Debt
Dec. 2012	$12,822.9	$5,571.5	44%
Dec. 2011	$11,642.0	$5,004.4	43%

Source: Federal Reserve Board of Governors Flow of Funds, Table L.210 Treasury Securities, March 28, 2016 available at http://www.federalreserve.gov/releases/z1/.

Data on major foreign holders of federal debt by country are provided in **Table 2**. According to the data, the top three estimated foreign holders of federal debt by country, ranked in descending order as of December 2015, are China ($1,246.1 billion), Japan ($1,122.6 billion), and Caribbean Banking Centers[5] ($351.7 billion). Based on these estimates, China holds approximately 20.3% of all foreign investment in U.S. privately held federal debt; Japan holds approximately 18.3%; and Caribbean Banking Centers holds approximately 5.7%.[6]

Table 2. Top 10 Foreign Holders of Federal Debt, by Country

(data current as of March 28, 2016)

	As of December 2015			As of December 2011	
Country	Amount Held ($ billions)	Percentage of all foreign holdings in federal debt	Country	Amount Held ($ billions)	Percentage of all foreign holdings in federal debt
Mainland China	$1,246.1	20.27%	Mainland China	$1,151.9	23.01%
Japan	$1,122.6	18.26%	Japan	$1,058.1	21.13%
Caribbean Banking Centers	$351.7	5.72%	Oil Exporters	$260.8	5.21%
Oil Exporters	$292.5	4.76%	Caribbean Banking Centers	$227.2	4.54%
Ireland	$265.1	4.31%	Brazil	$226.9	3.54%
Brazil	$254.8	4.14%	Taiwan	$177.3	3.54%
Switzerland	$231.9	3.77%	Russia	$149.5	2.99%
United Kingdom	$218.3	3.55%	Luxembourg	$147.6	2.95%
Luxembourg	$200.5	3.26%	Switzerland	$142.4	2.84%
Hong Kong	$200.2	3.26%	Belgium	$135.2	2.70%
Total Top 10 Countries of Foreign Investors in Federal Debt	$4,383.7	71.30%	Total Top 10 Countries of Foreign Investors in Federal Debt	$3,676.9	73.44%

[5] Treasury's definition of Caribbean Banking Centers includes Bahamas, Bermuda, Cayman Islands, Netherlands Antilles, British Virgin Islands, and Panama.

[6] Foreign holdings are estimated by the Treasury Department based on the location of the holdings, not the nationality of the holder. For certain countries, such as the Caribbean Banking Centers, many of the holdings are likely owned by third country citizens.

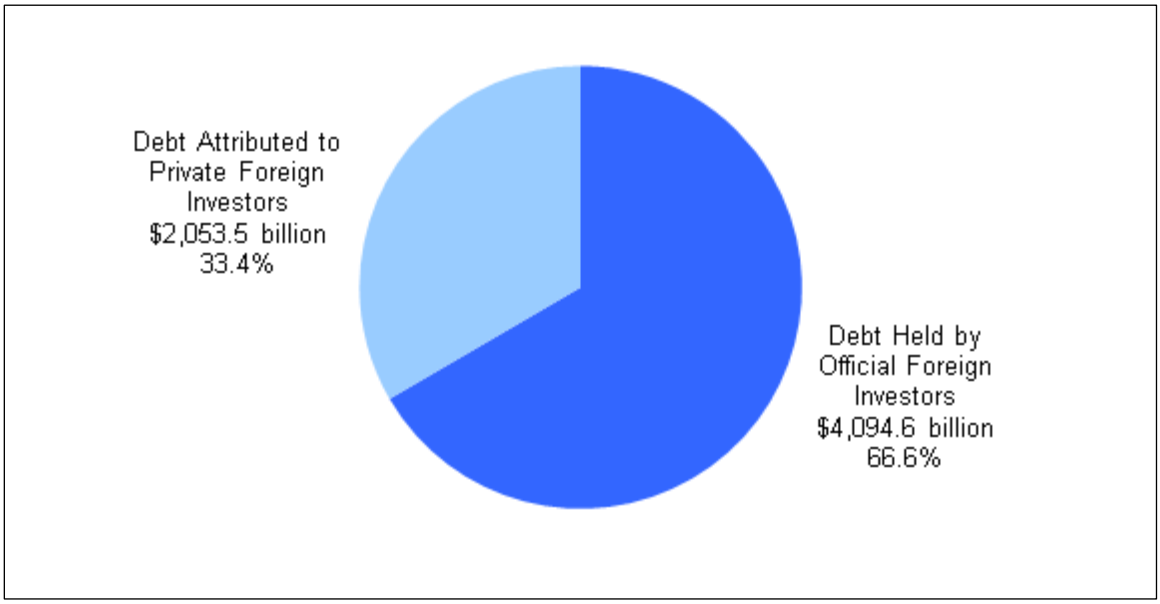
	As of December 2015			As of December 2011	
Country	Amount Held ($ billions)	Percentage of all foreign holdings in federal debt	Country	Amount Held ($ billions)	Percentage of all foreign holdings in federal debt
Total All Foreign Investment in Federal Debt	$6,148.1	100%	Total All Foreign Investment in Federal Debt	$5,006.9	100%

Source: Treasury Department International Capital System (TIC), at http://www.treasury.gov/resource-center/data-chart-center/tic/Documents/mfhhis01.txt.

Notes: Data, including estimated foreign holders of federal debt historically by month, in these Treasury Department tables are periodically adjusted. Current monthly estimates are available at http://www.treas.gov/tic/mfh.txt. Aggregate data totals in **Table 1** vary slightly from aggregate data totals in **Table 2** because of minor technical differences between the two sources. Percentage approximations calculated by CRS. Percentages may not sum to 100% due to rounding.

Foreign holdings as estimated by the Treasury Department can be divided into official (governmental investment) and private sources. **Figure 1** provides data on the current breakdown of estimated foreign holdings in U.S. federal debt. As the figure shows, 66.6% ($4,094.6 billion) of foreign holdings in U.S. federal debt are held by governmental sources. Private investors hold the other 33.4% ($2,053.5 billion). After increasing for several years, overall foreign holdings have been relatively flat since 2013.

Figure 1. Breakdown of Official vs. Private Foreign Holdings of U.S. Federal Debt



Source: Treasury Department International Capital System, http://www.treasury.gov/resource-center/data-chart-center/tic/Documents/mfhhis01.txt.

Notes: Data in the chart represent estimated December 2015 figures and are current as of March 28, 2016. Figures are in billions of dollars. Data in the Treasury Department tables are periodically adjusted. For the most current estimates, click on the URL address listed above.

The estimated combined total of all foreign holdings for December 2015 was $6,148.1 billion. Data consist of reported December 2015 figures from the TIC table listed above. The breakdown between estimated official and private holdings is not publicly available on a country-by-country basis. Approximate percentages calculated by CRS.

Foreign Investment in U.S. Federal Debt: Why Is It an Issue of Concern?

From an economic perspective, foreign holdings of federal debt can be viewed in the broader context of U.S. savings, investment, and borrowing from abroad. For decades, the United States has saved less than it invests. Domestic saving is composed of saving by U.S. households, businesses, and governments; by accounting identity,[7] when government runs budget deficits, it reduces domestic saving. By the same accounting identity, the shortfall between U.S. saving and physical investment is met by borrowing from abroad. When the deficit rises (i.e., public saving falls), U.S. investment must fall (referred to as the deficit "crowding out" investment) or borrowing from abroad must rise. If capital were fully mobile and unlimited, a larger deficit would be fully matched by greater borrowing from abroad, and there would be no crowding out of domestic investment. To be a net borrower from abroad, the United States must run a trade deficit (it must buy more imports from foreigners than it sells in exports to foreigners).[8] Since 2000, U.S. borrowing from abroad and the trade deficit each have exceeded $300 billion each year. Borrowing from abroad peaked at $800 billion in 2006 and was $484 billion in 2015. Borrowing from abroad has occurred through foreign purchases of both U.S. government and U.S. private securities and other assets.

As a result of foreign purchases of Treasury securities, the federal government must send U.S. income abroad to foreigners. If the overall economy is larger as a result of federal borrowing (because the borrowing stimulated economic recovery[9] or was used to productively add to the U.S. capital stock, for example), then this outcome may leave the United States better off overall on net despite the transfer of income abroad. In other words, without foreign borrowing, U.S. income would be lower than it currently is net of foreign interest payments in this scenario. From 2008 to 2014, the output gap (the difference between actual gross domestic product [GDP] and potential GDP) was large, meaning the economy had significant idle capital and labor resources. In the presence of a large output gap, government budget deficits have a greater potential than usual to stimulate the economy and increase total income. As the economy gets closer to full employment, the scope for deficits to stimulate the economy diminishes. Because the federal government has run deficits almost every year since the 1960s, the mainstream economic view is that these budget deficits have not led to a larger economy on net over the long run for two reasons. First, the government has run deficits in many years when the economy was near or at full employment, precluding the role of deficit stimulus. Second, federal spending on capital is small[10] relative to the overall budget.

It can be argued that the underlying long-term economic problem is the budget deficit itself, and not that the deficit is financed in part by foreigners. This can be illustrated by the counterfactual—assume the same budget deficits and U.S. saving rates without the possibility of

[7] The accounting identity is (household saving + business saving + government saving) + (borrowing from abroad – lending to abroad) = (public investment + private investment).

[8] By accounting identity, borrowing from abroad is equal to the current account deficit. The trade deficit is the largest component of the trade deficit.

[9] For a discussion of how government deficits can stimulate the economy, see CRS Report R41578, *Unemployment: Issues in the 113th Congress*, by (name redacted) .

[10] In 2015, non-defense capital investment was $40 billion and grants for capital investment were $77 billion. Source: Office of Management and Budget, *FY 2017 Budget of the United States Government, Historical Tables*, March 2014, Table 9.2.

foreign borrowing. In this case, budget deficits would have had a much greater "crowding out" effect on U.S. private investment, because only domestic saving would have been available to finance both. The pressures the deficit has placed on domestic saving would have pushed up interest rates throughout the economy and caused fewer private investment projects to be profitably undertaken. With fewer private investment projects, overall GDP would have been lower over time relative to what it would have been. The ability to borrow from foreigners avoids the deleterious effects on U.S. interest rates, private investment, and GDP, to an extent, even if it means that the returns on some of this investment now flow to foreigners instead of Americans. In other words, all else equal, foreign purchases of Treasury securities reduce the federal government's borrowing costs and reduce the costs the deficit imposes on the broader economy.

The burden of a foreign-financed deficit is borne by exporters and import-competing businesses, because borrowing from abroad necessitates a trade deficit. It is also borne by future generations, because future interest payments will require income transfers to foreigners.[11] To the extent that the deficit crowds out private investment rather than is financed through foreign borrowing, its burden is also borne by future generations through an otherwise smaller GDP. Because interest rates are at historically low levels, this burden has not grown significantly given the increase in borrowing. Were rates to rise, however, the burden would rise with some lag as new borrowing was made at the new higher rates and old borrowing matured and "rolled over" into new debt instruments with higher rates.[12]

Thus far, this report has considered the impact of the government's budget deficit and the low U.S. saving rate on U.S. Treasury yields, but not investor demand. Since interest rates fell to historic lows at a time when the supply of Treasury securities rose to historic heights, it follows that Treasury rates have been driven mainly by increased investor demand in recent years. In the wake of the 2008 financial crisis, investor demand for Treasury securities increased as investors undertook a "flight to safety." Treasury securities are perceived as a "safe haven" compared with other assets because of low perceived default risk and greater liquidity (i.e., the ability to sell quickly and at low cost) than virtually any alternative asset. For foreign investors, their behavior also implies that they view the risk from exchange rate changes of holding dollar-denominated assets to be lower than alternative assets denominated in other currencies. The reasons for this flight to safety are varied. For example, investors who had previously held more risky assets may now be more averse to risk and are seeking to minimize their loss exposure; investors may not currently see profitable private investment opportunities and are holding their wealth in Treasury securities as a "store of value" until those opportunities arise; or investors may now need Treasury securities to post as collateral for certain types of transactions (such as repurchase agreements) where previously other types of collateral could be used (or used at low cost).

Flight-to-safety considerations are likely to subside if economic conditions continue to normalize, reducing the incentive for foreigners to buy Treasuries and raising their yields, all else equal. More normal economic conditions would also be expected to increase domestic investment demand, which would either push up domestic interest rates or lead to more foreign borrowing. Recently, relatively stronger economic growth in the United States compared with other advanced economies has led U.S. interest rates to begin to rise relative to foreign rates. This relative movement in rates could attract additional foreign capital inflows.

[11] See CRS Report RL30520, *The National Debt: Who Bears Its Burden?*, by (name redacted). Income transfers to domestic debt holders have no net cost on the United States because they transfer income from one group of Americans (taxpayers) to another (bond holders).

[12] The average maturity length of the outstanding debt is about five years.

Finally, any discussion of foreign holdings of Treasuries would be incomplete without a discussion of the large holdings of foreign governments (referred to as "foreign official holdings" in **Figure 1**).[13] Foreign official holdings are motivated primarily by a desire for a liquid and stable store of value for foreign reserves; relatively few assets besides U.S. Treasury securities fill this role well. Depending on the country, foreign reserves may be accumulated as a result of a country's exchange rate policy, the desire to reinvest export proceeds, or the desire to build a "war chest" to fend off speculation against the country's exchange rate and securities. If motivated by any of these factors, rate of return may be a lesser consideration for foreign governments than it is for a private investor. Although large, foreign official holdings have not been significantly increasing since 2013, after more than a decade of rapid growth before then.

Since 1986, the United States has had a net foreign debt, and that debt grew to $7 trillion in 2014. The growth in net foreign debt is unsustainable in the long run, meaning that it cannot continuously grow faster than GDP, as it has generally done in recent decades. This net foreign debt has not imposed any burden on Americans thus far, however, because the United States has consistently earned more income on its foreign assets than it has paid on its foreign debt, even though foreigners owned more U.S. assets than Americans owned foreign assets. Although it is likely that the United States would begin to make net debt payments to foreigners at some point if the net foreign debt were to continue to grow, it has not been a cause for concern yet. To date, the primary drawback is the risk that its unsustainable growth poses, albeit slight in the short run. Unsustainable growth in the net foreign debt could lead to foreigners at some point reevaluating and reducing their U.S. asset holdings. If this happened suddenly, it could lead to financial instability and a sharp decline in the value of the dollar. Alternatively, were the growth in the debt to decline gradually, it is unlikely to be destabilizing.[14]

A related concern is whether the major role of foreigners in Treasury markets adds more risk to financial stability. In other words, would financial stability be less at risk if the United States borrowed the same amount from foreigners, but foreigners invested exclusively in private securities instead of U.S. Treasury securities? Empirical evidence does not shed much light on this question, although the fact that some foreign crisis countries, such as Ireland, had accumulated mainly private, not government, debt might suggest that avoiding foreign ownership of government debt is not a panacea. Although countries like Greece with large foreign holdings of government debt have experienced financing problems, a large share of Italy's large government debt was held domestically, and it has nevertheless faced financing problems. The major role of foreign governments as holders of U.S. Treasuries could reduce financial instability if foreign governments are less motivated by rate of return concerns because that implies they would be less likely to sell their holdings if prices started to fall. Finally, foreign official holdings of U.S. debt may have foreign policy (as opposed to economic) implications that are beyond the scope of this report.

What policy options exist if policymakers decided foreign ownership of federal debt was undesirable? Absent strict capital controls, it is unlikely that foreigners could effectively be prevented from buying Treasury securities. After Treasury securities are initially auctioned by

[13] U.S. Treasury, *Major Foreign Holders of Treasury Securities*, at http://www.treasury.gov/resource-center/data-chart-center/tic/Documents/mfh.txt.

[14] The "safe haven" role of Treasuries and "reserve currency" role of the dollar have led to counterintuitive outcomes—lower Treasury yields in response to U.S. events with systemic risk potential, such as the subprime mortgage crisis and the federal debt downgrade. These counterintuitive outcomes make it even harder to accurately predict when the debt might become unsustainable and perhaps make a destabilizing reversal of capital flows less likely compared with other countries.

Treasury, they are traded on diffused and international secondary markets, and turnover is much higher on secondary markets than initial auctions. A foreign ban on secondary markets would be hard to enforce because secondary market activity could shift overseas, and even if it could be enforced, the U.S. saving-investment imbalance would likely shift foreign investment into other U.S. securities—perhaps even newly created financial products that allowed foreigners to indirectly invest in Treasury securities. Thus, a ban would not address the underlying economic factors driving foreign purchases. Economically, the only way government could reduce its reliance on foreign borrowing is by raising the U.S. saving rate, which could be done most directly by reducing budget deficits.

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