Abstract. The federal budget’s return to persistent deficits after fiscal year 2001 increased and continues to increase the amount of federal government debt sold to the public. The sale of U.S. Treasury-issued debt to the public provides the government with the cash it needs to cover the gap between its income and its spending. The Treasury Bulletin (published quarterly) provides data on the amount of federal debt held by different categories of holders. The categories of holders include, among others, depository institutions, individuals, pension funds, insurance companies, state and local governments, and foreign governments and international institutions. For this report, the holdings of federal debt by the public are divided into just two categories, domestic private holdings, and foreign and international holdings (hereafter referred to as foreign holdings). The rest of this report documents the growth in foreign holdings of federal debt over the last 20 years and the potential consequences of the changes.
Growth in Foreign Holdings of Federal Debt

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Philip D. Winters
Analyst in Government Finance
Government and Finance Division
Growth in Foreign Holdings of Federal Debt

Summary

The government’s persistent deficits have increased the amount of debt the Treasury must sell to the public to raise the cash needed to cover the gap between its income and spending. Over the last 20 years, and particularly the last 10 years, most of this debt has been sold to foreigners (both central banks and others).

By 2005, foreign holdings had risen to 54% of all privately held federal debt. Domestic holdings have fallen from 83% of all privately held federal debt in 1985 to 46% in 2005. The most dramatic shift in the relative shares has occurred since 1995 during which total privately held federal debt grew by $580 billion, domestic holdings fell by $670 billion, and foreign holdings ballooned by $1,250 billion.

As shares of gross domestic product (GDP), privately held federal debt peaked in 1993 at 45.5% of GDP (having risen from 32.3% of GDP in 1985) before falling back to 31.4% of GDP in 2005. Foreign holdings have risen from 5.4% of GDP in 1985 to almost 17% of GDP in 2005 (their highest level so far). Domestic holdings peaked in 1993 (36.0% of GDP) and have fallen steadily since (to 14.6% of GDP in 2005).

The foreign purchases of federal debt over this 20-year period have held down domestic interest rates and prevented the “crowding out” of private investment that might otherwise have occurred. The foreign holdings of federal debt (or other U.S. assets) means some of our future income will be sent overseas to pay interest (or dividends).

Although unlikely, a rapid diversification out of dollar assets is possible. Such a situation could cause a collapse in the dollar’s value, putting the U.S. economy at risk of recession. A slower divestment of dollar assets would tend to raise U.S. interest rates and slow investment, but would probably not trigger a recession.

The special role that the dollar plays in international finance and the strength and stability of the U.S. financial markets (including Treasury securities) make them attractive sources for foreign investment. These factors generally encourage the retention of dollar assets by foreigners. As a result, the levels of foreign holdings of federal debt are currently neither a threat nor a problem for the nation.
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Growth in Foreign Holdings of Federal Debt

The federal budget’s return to persistent deficits after fiscal year 2001 increased and continues to increase the amount of federal government debt sold to the public.\(^1\) The sale of U.S. Treasury-issued debt to the public provides the government with the cash it needs to cover the gap between its income and its spending.

The *Treasury Bulletin* (published quarterly) provides data on the amount of federal debt held by different categories of holders.\(^2\) The categories of holders include, among others, depository institutions, individuals, pension funds, insurance companies, state and local governments, and foreign governments and international institutions. For this report, the holdings of federal debt by the public are divided into just two categories, domestic private holdings, and foreign and international holdings (hereafter referred to as foreign holdings).\(^3\) The rest of this report documents the growth in foreign holdings of federal debt over the last 20 years and the potential consequences of the changes.

**Growth in Federal Debt Held by Foreigners**

*Figure 1* shows federal debt in billions of dollars annually by domestic and foreign holders for the fiscal years 1985 through 2005.\(^4\) The figure shows the steady and then more rapid growth in foreign holdings over the 20-year period. Domestic holdings of federal debt began falling after 1995, but stabilized after 2001. Since 2001, the increase in foreign holdings is equal to 98% of the total increase in private holdings of federal debt.

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\(^1\) This report does not discuss federal debt held by the Federal Reserve System or by the federal government itself. The Treasury considers this portion of its debt “privately” held, even though some of it is held by state and local governments, foreign governments, and international institutions.

\(^2\) This information is found in Table OFS-2, Estimated Ownership of U.S. Treasury Securities, in the quarterly *Treasury Bulletin*.

\(^3\) Foreign holders include private investors, central banks, and international institutions. These holders have different motivations for holding federal debt. As a result, the management of their holdings may differ as they react to changing economic and political conditions.

\(^4\) Unless otherwise noted, all years are fiscal years.
The 2001 to 2005 growth in foreign holdings along with relatively stable domestic holdings pushed foreign holdings to 54% of total holdings at the end of 2005. (If Federal Reserve System holdings were included in domestic holdings, the foreign share would remain below 50%.) In 1985, foreign holdings were 17% of total privately held federal debt. Over 20 years, domestic holdings declined from 83% of total private holdings in 1985 to 64% in 2001, and to 46% in 2005. Table 1 provides data for Figure 1, containing the levels of domestic and foreign private holdings of federal debt in dollars and as percentages of privately held federal debt yearly for the 1985 through 2005 period.

Over this period, total private holdings grew in each year except during the four years that the government had a surplus (1998 through 2001). Between 1985 and 2005, foreign holdings grew in all but three of the years with surpluses. Domestic private holdings grew through 1994 and then fell in each subsequent year until 2002, after which it remained relatively unchanged. For the whole period, foreign holdings produced 73% and domestic holdings produced 27% of the total increase in privately held federal debt.

Between 1995 and 2005, domestic holdings fell by $671 billion while foreign holdings grew by $1,250 billion, an amount twice as large as the overall increase in privately held federal debt (which grew by $579 billion over these years).
Figure 2 shows domestic and foreign holdings as shares of gross domestic product (GDP). A line representing total privately held federal debt (the sum of foreign and domestic holdings) as a percentage of GDP is included in Figure 2. As shares of GDP, the data present a different overall view of privately held federal debt over the last 20 years than is shown in Figure 1. Total holdings are now slightly below their level in 1985 and well below their peak in 1993 as percentages of GDP. Foreign holdings grew in dollars and as shares of GDP and, by 2004, were larger than domestic holdings.

Foreign holdings reached 15.0% of GDP in 1997 before falling to 10.0% of GDP in 2001. Since then, the constant, substantial growth in foreign holdings has raised them to 16.8% of GDP. This level of foreign holdings is likely to be surpassed in the next few years as the government continues to need foreign resources to help finance its large and persistent budget deficits. Total privately held federal debt will continue growing as long as the government has deficits. Whether it grows or shrinks as a percentage of GDP depends on the relative rates of growth of privately held debt and GDP.

Figure 3. Annual Change in Privately Held Federal Debt, FY1985-FY2005

Figure 3 shows the year-to-year change (in dollars) in domestic, foreign, and total privately held debt for the fiscal years 1985 through 2005. The figure clearly shows the rise in purchases of federal debt by foreign holders, particularly after 1994, while domestic holder purchases became smaller and smaller before turning
negative.\(^5\) Over the four years that the government had a surplus (1998-2001), net private holdings fell. Domestic holdings fell in three of the four years; foreign holdings fell in two of the four years. Since 2001, domestic holdings of federal debt have barely changed (in dollars) and remain below their 2000 level. Foreign holdings increased steadily and rapidly in each year since 2001. As a result, foreign holders have purchased debt equal to 98% of all privately held federal debt sold by the Treasury since 2001.

**Figure 4. Change in Holdings by Five-Year Period, FY1985-FY2005**

![Figure 4](image.png)

**Figure 4** shows the change in holdings by five-year period, as well as for the entire 20-year period (the far right section of the figure). The data show domestic holders purchased the majority of the debt in the first two five-year periods, but reduced their holdings in the second two five-year periods. Over the last two periods, foreign holders purchased more than all the (net) new federal debt issued by the government. This was done by purchasing federal debt sold by domestic holders.

Both domestic and foreign holders of privately held federal debt ended the 20-year period with more federal debt (in dollars) than they held at the beginning of the period. Foreign holders almost tripled their holdings as a share of GDP; domestic holders reduced their holdings by almost half as a percentage of GDP. Foreign holders absorbed almost three-quarters of the net federal debt issued over that period; domestic holders absorbed the rest (see the last section of **Figure 4**).

**Table 1** shows foreign and domestic holdings of privately held federal debt annually for the 20-year period. The data show the relative decline in domestic

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\(^5\) A negative change means a net reduction in holdings.
holdings over the entire 20 years and the actual dollar decline since 1995. Over the 20 years, privately held debt grew by 189%, domestic holdings grew by 61%, and foreign holdings grew (from a small starting amount) by 828%. Foreign holdings comprised 73% of the total increase in private holdings, while the increase in domestic holdings made up 27%. In the first half of the period, between 1985 and 1995, the shares of the increase in privately held debt were reversed, with domestic holdings producing 70% of the increase and foreign holdings producing the remaining 30%. After 1995, total private holdings grew, domestic holdings fell, while foreign holdings grew rapidly.

### Table 1. Components of Privately Held Federal Debt

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<th>End of Fiscal Year</th>
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<th>Domestic Private Holdings</th>
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### Possible Consequences of Increased Foreign Holdings of Federal Debt

The increase in foreign holdings of federal debt has held down domestic interest rates, preventing the “crowding out” of investment that might have otherwise occurred as a result of large federal deficits. Without the inflow of funds into the financial markets from foreign investors, competition for the available funds in the domestic financial markets by investors and the federal government would raise interest rates. The increased government demand for financial resources to finance the deficit (in the absence of inflows from overseas) reduces the resources available...
to the private sector, crowding out private investment. Instead, when foreigners finance the deficit, exports get crowded out through a larger trade deficit.

There is no firm consensus among analysts over the longer-term effect of increased foreign holdings of federal debt (and other U.S. assets). Although unlikely, the possibility exists for adverse economic repercussions if foreign holders were to engage in a rapid, large scale diversification out of dollar assets.6 This could cause a collapse in the dollar’s value, putting the economy at risk of recession. Under a more orderly divestment of foreign holdings, interest rates would still rise and investment would be smaller, but a recession could be avoided. Supporting the slower diversification away from dollar assets is the tendency of foreign holders of Treasury securities to be very stable in their holdings. Once purchased, foreigners tend to hold onto U.S. Treasury securities. At this time, there seems little prospect that foreign holders of Treasury securities will move away from these dollar assets.

Factors supporting the value of the dollar include the rapid growth of wealth and large pools of savings in emerging economies and oil exporting countries. These create strong demand for low risk and liquid wealth savings options, something the U.S. financial markets provide in abundance, including U.S. Treasury securities, which are a particularly important option for foreigners. A second factor is the large and growing amount of Treasury debt held by foreign central banks, which are less prone to sudden portfolio adjustments than private sector holders. A third factor is that the U.S. borrows in dollars, our own currency, so any exchange rate movements do not change the cost (measured in dollars) of our interest payments or principal payments to foreigners.

An examination of the data and the economics of the situation indicates that the levels of foreign holdings of federal debt are currently neither a threat nor a problem for the United States.

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6 Such action would have negative effects on the value of dollar assets still held. A rapid diversification away from dollar-denominated assets could prove costly to the country doing the diversification.