



Foreign Investment in U.S. Securities

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Summary

Foreign capital inflows are playing an important role in the U.S. economy by bridging the gap between domestic supplies of and demand for capital. In 2008, as the financial crisis and global economic downturn unfolded, foreign investors looked to U.S. Treasury securities as a “safe haven” investment, while they sharply reduced their net purchases of corporate stocks and bonds. In 2009, foreign capital inflows continued to drop as private investors sharply retrenched, while official purchases of U.S. Treasury securities by foreign governments rose sharply. Foreign investors now hold more than 50% of the publicly held and traded U.S. Treasury securities. The large foreign accumulation of U.S. securities has spurred some observers to argue that this large foreign presence in U.S. financial markets increases the risk of a financial crisis, whether as a result of the uncoordinated actions of market participants or by a coordinated withdrawal from U.S. financial markets by foreign investors for economic or political reasons.

Congress likely would find itself embroiled in any such financial crisis through its direct role in conducting fiscal policy and in its indirect role in the conduct of monetary policy through its supervisory responsibility over the Federal Reserve. Such a coordinated withdrawal seems highly unlikely, particularly since the vast majority of the investors are private entities that presumably would find it difficult to coordinate a withdrawal. The financial crisis and economic downturn, however, have sharply reduced the value of the assets foreign investors acquired, which may make them more hesitant in the future to invest in certain types of securities. As a result of the financial crisis of 2008, foreign investors curtailed their purchases of corporate securities, a phenomenon that was not unique to the United States. In a sense, the slowdown in the U.S. economy and rise in the personal rate of saving have eased somewhat the need for foreign investment. The importance of capital inflows may well change as the federal government’s budget deficits rise over the course of the economic downturn.. This report analyzes the extent of foreign portfolio investment in the U.S. economy and assesses the economic conditions that are attracting such investment and the impact such investments are having on the economy.

Over the course of the recent recession, foreign investors have often favored dollar-denominated investments due to a number of factors, including the evaluation that such investments are a “safe haven” investment during times of uncertainty; comparatively favorable returns on investments, a surplus of saving in other areas of the world, the well-developed U.S. financial system, and the overall stability and relative rate of growth of the U.S. economy. Capital inflows also allow the United States to finance its trade deficit because foreigners are willing to lend to the United States in the form of exchanging the sale of goods, represented by U.S. imports, for such U.S. assets as U.S. businesses and real estate, stocks, bonds, and U.S. Treasury securities. Despite improvements in capital mobility, foreign capital inflows do not fully replace or compensate for a lack of domestic sources of capital. Economic analysis shows that a nation’s rate of capital formation, or domestic investment, seems to have been linked primarily to its domestic rate of saving.

This report relies on a comprehensive set of data on capital flows, represented by purchases and sales of U.S. government securities and U.S. and foreign corporate stocks, bonds, into and out of the United States, that is reported by the Treasury Department on a monthly basis.

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Foreign capital inflows play an important role in the U.S. economy by bridging the gap between domestic supplies of and demand for capital. The importance of these flows has been underscored by the financial crisis in 2008, when international capital markets essentially shut down for a period of time. International capital flows and international capital markets also generally give the owners of capital the ability to reduce their risk by diversifying their investments. Oversight of these markets likely will change as a result of the financial crisis. Foreign investors currently own more than 50% of the publicly held and traded U.S. Treasury securities and hold large amounts of U.S. corporate stocks and bonds, although the value of these assets has dropped markedly. Capital inflows help keep U.S. interest rates below the level they would reach without them and have allowed the nation to spend beyond its current output, including financing its trade deficit. Some observers have expressed concerns about the extent of these foreign holdings, because they argue that this exposure increases the overall risks to the economy should foreign investors decide to withdraw from the U.S. financial markets for political or economic reasons. At the same time, the funding requirements of the U.S. economy may temper the criticism of some foreign investors, especially if capital flows should shrink and U.S. funding requirements increase.

Inflows of capital into the U.S. economy are not new, although they grew sporadically over the last decade, as indicated in **Table 1**. By 2007, before the global economic recession, total foreign capital inflows to the United States reached over \$2 trillion. As **Figure 1** shows, these capital inflows are comprised of official inflows, primarily foreign governments' purchases of U.S. Treasury securities, and private inflows comprised of portfolio investment, which includes foreigners' purchases of U.S. Treasury and corporate securities, and financial liabilities, and direct investment in U.S. businesses and real estate. By 2008, total foreign capital inflows totaled about \$534 billion, or down by two-thirds from 2007. In 2009, such inflows fell to \$435, reflecting the sharp slowdown in the rate of economic growth and reduced demands for foreign capital in the economy. Private capital inflows, which generally comprise more than three-fourths of the total capital inflows, fell to a negative \$12 billion, down more than ten-fold from the \$1.6 trillion they accounted for in 2007 as foreign investors pared back their holdings of corporate securities. In 2009, official inflows offset the small net outflows by private investors. Other private capital inflows are associated with U.S. liabilities to foreigners reported by U.S. banks and securities firms. These accounts registered a decrease for the fifth consecutive quarter in the second quarter of 2009, mostly as a result of a large reduction in foreign banks' deposits at banks in the United States.

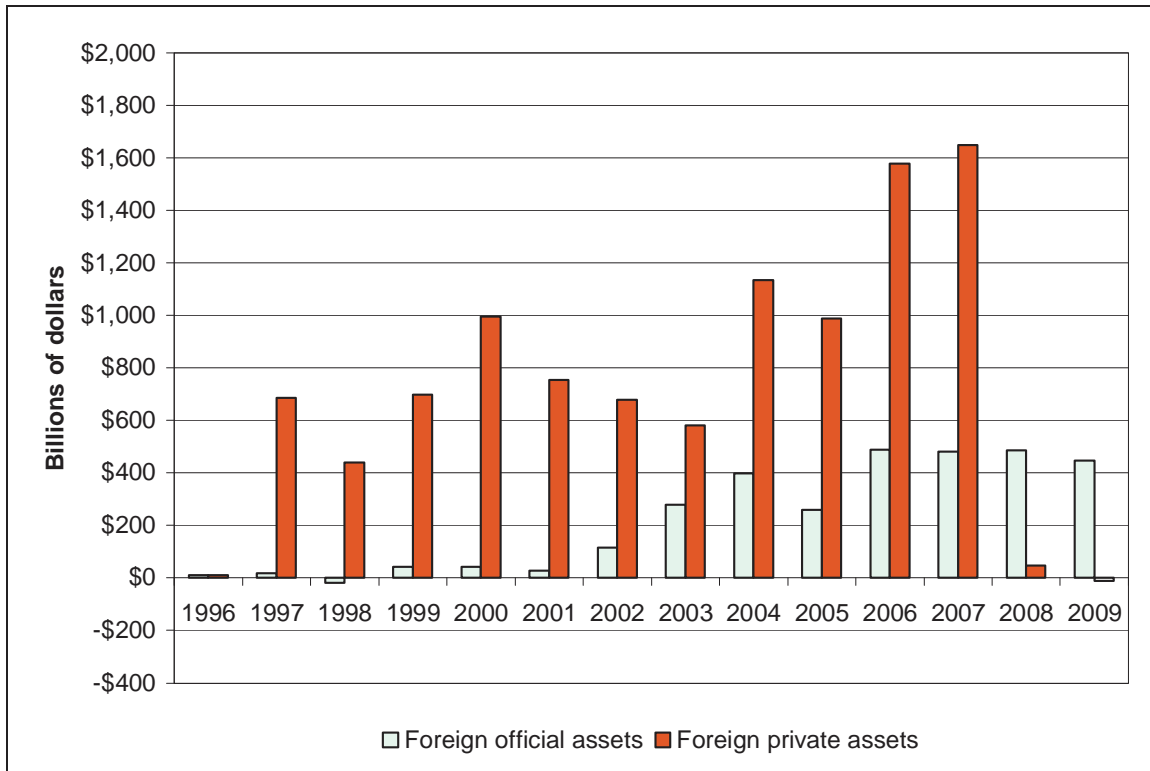
Capital flows are highly liquid, can respond abruptly to changes in economic and financial conditions, and exercise a primary influence on exchange rates and through those on global flows of goods and services. Economists generally attribute recent rise and fall in foreign investment to a number of factors, including a "safe haven" effect during times of uncertainty; comparatively favorable returns on investments relative to risk, a surplus of saving in other areas of the world, the well-developed U.S. financial system, and the overall stability of the U.S. economy. Net capital inflows (inflows net of outflows) bridge the gap in the United States between the amount of credit demanded and the domestic supply of funds, likely help keep U.S. interest rates below the level they likely would reach without the foreign capital. These capital inflows also allow the United States to spend beyond its means, including financing its trade deficit, because foreigners are willing to lend to the United States in the form of exchanging goods, represented by U.S. imports, for such U.S. assets as stocks, bonds, and U.S. Treasury securities.

Table I. Capital Inflows of the United States, 1996-2009

(in billions of dollars)

| | Total | Official assets | Private assets | | | | | |
|------|---------|-----------------|----------------|-------------------|---------------------|----------------------|---------------|--------|
| | | | Total | Direct investment | Treasury securities | Corporate securities | U.S. currency | Other |
| 1996 | \$21.5 | \$10.5 | \$11.0 | \$0.9 | \$0.0 | \$4.5 | \$0.0 | \$5.6 |
| 1997 | 704.5 | 19.0 | 685.4 | 105.6 | 130.4 | 161.4 | 22.4 | 265.5 |
| 1998 | 420.8 | -19.9 | 440.7 | 179.0 | 28.6 | 156.3 | 13.8 | 62.9 |
| 1999 | 742.2 | 43.5 | 698.7 | 289.4 | -44.5 | 298.8 | 24.4 | 130.5 |
| 2000 | 1,038.2 | 42.8 | 995.5 | 321.3 | -70.0 | 459.9 | -3.4 | 287.6 |
| 2001 | 782.9 | 28.1 | 754.8 | 167.0 | -14.4 | 393.9 | 23.8 | 184.5 |
| 2002 | 795.2 | 115.9 | 679.2 | 84.4 | 100.4 | 283.3 | 18.9 | 192.3 |
| 2003 | 858.3 | 278.1 | 580.2 | 63.8 | 91.5 | 220.7 | 10.6 | 193.7 |
| 2004 | 1,533.2 | 397.8 | 1,135.4 | 146.0 | 93.6 | 381.5 | 13.3 | 501.1 |
| 2005 | 1,247.3 | 259.3 | 988.1 | 112.6 | 132.3 | 450.4 | 8.4 | 284.3 |
| 2006 | 2,065.2 | 487.9 | 1,577.2 | 243.2 | -58.2 | 683.2 | 2.2 | 706.8 |
| 2007 | 2,129.5 | 480.9 | 1,648.5 | 275.8 | 66.8 | 605.7 | -10.7 | 711.0 |
| 2008 | 534.1 | 487.0 | 47.1 | 319.7 | 196.6 | -126.7 | 29.2 | -371.8 |
| 2009 | 435.2 | 447.6 | -12.3 | 152.1 | 37.6 | -6.6 | 12.6 | -208.1 |

Source: Weinberg, Douglas B., and Erin M. Whitaker, U.S. International Transactions, Fourth Quarter and Year 2009, *Survey of Current Business*, April, 2010. p. 36.

Figure I. Foreign Official and Private Capital Inflows to the United States, 1994-2009

Source: Department of Commerce.

Capital Flows in the Economy

Table 2 shows the net flow of funds in the U.S. economy. The flow of funds accounts measure financial flows across sectors of the economy, tracking funds as they move from those sectors that supply the sources of capital through intermediaries to sectors that use the capital to acquire physical and financial assets.¹ The net flows show the overall financial position by sector, whether that sector is a net supplier or a net user of financial capital in the economy. Since the demand for funds in the economy as a whole must equal the supply of funds, a deficit in one sector must be offset by a surplus in another sector. Generally, the household sector, or individuals, provides funds to the economy, because individuals save part of their income, while the business sector uses those funds to invest in plant and equipment that, in turn, serve as the building blocks for the production of additional goods and services. The Government sector (the combination of federal, state, and local governments) can be either a net supplier of funds or a net user depending on whether the sector is running a surplus or a deficit, respectively. The interplay within the economy between saving and investment, or the supply and uses of funds, tends to affect domestic interest rates, which move to equate the demand and supply of funds. Shifts in the interest rate also tend to attract capital from abroad, denoted by the rest of the world (ROW) in **Table 2**.

¹ Teplin, Albert M., the U.S. Flows of Funds Accounts and Their Uses, *Federal Reserve Bulletin*, July 2001. p. 431-441.

As **Table 2** indicates, from 1996 through 1998, the household sector ran a net surplus, or provided net savings to the economy. The business sector also provided net surplus funds in 1996, or businesses earned more in profits than they invested. The government sector, primarily the federal government, experienced net deficits, which decreased until 1998, when the federal government and state and local governments experienced financial surpluses. Capital inflows from the rest of the world rose and fell during this period, depending on the combination of household saving, business sector saving and investment, and the extent of the deficit or surplus in the government sector.

Starting in 1999, the household sector began dissaving, as individuals spent more than they earned. Part of this dissaving was offset by the government sector, which experienced a surplus from 1998 to 2001. As a result of the large household dissaving, however, the economy as a whole experienced a gap between domestic saving and investment that was filled with large capital inflows. Those inflows were particularly large in nominal terms from 2000 to 2006 as household dissaving continued and government sector surpluses turned to historically large deficits in nominal terms.

Capital inflows in 2009 were \$226, less than half the \$506 billion recorded in 2008. This drop in capital inflows reflected a sharp reversal in the behavior of households from dissaving to saving, an increase in business sector dissaving, and an increase in the deficits experienced by state and local governments as the effects of the slowdown in the economy became more pronounced. Households turned from a dissaving of \$530 billion in 2006 to a net saving of \$96 billion in 2009, reflecting tight credit conditions and concern among households over the state of the economy. The Federal Reserve reported that in 2008, households experienced a drop in their net worth of more than \$13 trillion, or about 20%. By the first quarter of 2010, however, household net worth had grown by over \$1 trillion from the end of 2009.²

Table 2. Flow of Funds of the U.S. Economy, 1996-2009

(in billions of dollars)

| Year | Households | Businesses | Government | | | ROW |
|------|------------|------------|------------|-----------------|---------|-------|
| | | | Total | State and Local | Federal | |
| 1996 | 175.2 | 19.8 | -196.8 | -1.2 | -195.6 | 137.9 |
| 1997 | 47.4 | -18.3 | -116.6 | -47.5 | -69.1 | 219.6 |
| 1998 | 128.0 | -45.7 | 64.8 | 48.8 | 16.0 | 75.0 |
| 1999 | -132.7 | -62.6 | 115.3 | 9.9 | 105.4 | 231.7 |
| 2000 | -371.0 | -82.9 | 252.5 | 54.5 | 198.0 | 476.3 |
| 2001 | -494.4 | -82.9 | 233.4 | 35.4 | 198.0 | 485.4 |
| 2002 | -304.0 | 8.7 | -382.6 | -95.6 | -287.0 | 501.7 |
| 2003 | -79.3 | 30.3 | -546.3 | -70.2 | -476.4 | 529.4 |
| 2004 | -52.4 | 121.9 | -469.3 | -32.8 | -436.5 | 533.7 |

² Board of Governors of the Federal Reserve System, *Flow of Funds Accounts of the United States, Flows and Outstandings*, various issues.

| Year | Households | Businesses | Government | | | ROW |
|----------|------------|------------|------------|-----------------|----------|-------|
| | | | Total | State and Local | Federal | |
| 2005 | -460.5 | -44.8 | -373.1 | 7.3 | -380.4 | 712.1 |
| 2006 | -537.0 | -201.5 | -188.9 | 76.1 | -265.0 | 805.2 |
| 2007 | 71.3 | -272.1 | -327.3 | 8.4 | -335.7 | 661.7 |
| 2008 | 760.5 | -608.0 | -848.3 | -42.9 | -805.4 | 506.0 |
| 2009 | 96.0 | 128.0 | -1,288.6 | -23.1 | -1,265.5 | 226.1 |
| 2009 I | -16.1 | -330.8 | -1061.3 | -67.4 | -993.9 | 136.8 |
| 2009 II | -315.0 | 273.5 | -1323.1 | -149.9 | -1,473.0 | 247.8 |
| 2009 III | 511.0 | 386.2 | -1,390.2 | -60.1 | -1,320.1 | 339.9 |
| 2009 IV | 204.2 | 183.2 | -1,379.7 | -114.6 | -1,265.1 | 179.8 |
| 2010 I | 45.7 | 188.9 | -1,436.7 | -86.1 | -1,350.6 | 460.5 |

Source: Board of Governors of the Federal Reserve System, Flow of Funds Accounts of the United States, Flows and Outstandings First Quarter 2010, June 10, 2010.

Foreign capital inflows augment domestic U.S. sources of capital, which, in turn, keep U.S. interest rates lower than they would be without the foreign capital. Indeed economists generally argue that it is this interplay between the demand for and the supply of credit in the economy that drives the broad inflows and outflows of capital. As U.S. demands for capital outstrip domestic sources of funds, domestic interest rates rise relative to those abroad, which tends to draw capital away from other countries to the United States. During periods of uncertainty, foreign investors often turn to U.S. Treasury securities as a “safe haven” investment, as was the case at times in 2008 and 2009.

The United States also has benefitted from a surplus of saving over investment in many areas of the world that has provided a supply of funds and accommodated the overall shortfall of saving in the country. This surplus of saving has been available to the United States, because foreigners have remained willing to loan that saving to the United States in the form of acquiring U.S. assets, which have accommodated the growing current account deficits. Over the past decade, the United States experienced a decline in its rate of saving and an increase in the rate of domestic investment, as indicated in **Table 3**. The large increase in the nation’s current account deficit would not have been possible without the accommodating inflows of foreign capital.

**Table 3. Saving and Investment in Selected Countries and Areas;
1996-2003, 2004-2008, and 2009**

(percentage of Gross Domestic Product)

| Area/Country | Average, 1996-2003 | Average, 2004-2008 | 2009 | Change |
|---------------|-----------------------|-----------------------|------|--------|
| World | | | | |
| Saving | 21.9 | 23.5 | 21.4 | -2.1 |
| Investment | 22.1 | 22.2 | 23.1 | -1.6 |
| United States | | | | |

| Area/Country | Average, 1996-2003 | Average, 2004-2008 | 2009 | Change |
|--------------------------------------|-----------------------|-----------------------|------|--------|
| Saving | 17.0 | 14.6 | 10.8 | -3.8 |
| Investment | 19.6 | 19.6 | 15.0 | -4.6 |
| Other Advanced Economies | | | | |
| Saving | 21.1 | 20.3 | 17.1 | -3.2 |
| Investment | 21.3 | 21.2 | 18.0 | -3.2 |
| Eurozone | | | | |
| Saving | 21.4 | 21.8 | 18.7 | -3.1 |
| Investment | 20.8 | 21.4 | 19.1 | -2.3 |
| Japan | | | | |
| Saving | 28.1 | 27.4 | 23.0 | -4.4 |
| Investment | 25.6 | 23.5 | 20.3 | -3.2 |
| Newly Industrialized Asian Economies | | | | |
| Saving | 32.3 | 32.3 | 32.4 | 0.1 |
| Investment | 28.1 | 26.6 | 23.6 | -3.0 |
| Emerging Developing Economies | | | | |
| Saving | 25.0 | 32.4 | 31.1 | -1.3 |
| Investment | 24.9 | 28.5 | 29.2 | 0.7 |
| Developing Asia | | | | |
| Saving | 33.1 | 42.6 | 43.6 | 1.0 |
| Investment | 31.7 | 37.4 | 39.5 | 2.1 |
| Middle East | | | | |
| Saving | 27.3 | 40.7 | 29.6 | -11.1 |
| Investment | 23.4 | 25.2 | 27.8 | 2.6 |

Source: *World Economic Outlook*, International Monetary Fund, April 2010, Table A-16.

Note: the change indicated in the final represents the change between the value of the respective line in 2009 and the average amount in the preceding five-year period.

As **Table 3** indicates, compared with the 2004-2008 period, world saving in 2009 fell by 2.1% of gross domestic product (GDP), while investment fell by 1.6% of GDP. This shift toward less saving relative to investment reflected the far-reaching impact of the economic recession on the performance of economies world wide. Similarly, in the United States both saving and investment fell, reducing its demand on global funds. Among other advanced economies saving and investment both fell in 2009 as other developed economies in Europe and Asia experienced a slowdown in their rate of economic growth. In the emerging developing economies of Asia and the Middle East, saving fell faster than investment in 2009, which reduced the supply of excess saving to the rest of the world. In the developing economies of Asia (which includes China), saving as a share of GDP increased slightly faster, than did investment, which served as one source of excess saving to the rest of the world.

Capital inflows allow the United States to finance its trade deficit, because foreigners are willing to lend to the United States in the form of exchanging the sale of goods, represented by U.S. imports, for such U.S. assets as businesses and real estate (referred to as direct investment), and stocks, bonds, and U.S. Treasury securities. In 2008 and 2009, the value of many of those assets dropped sharply, as the financial crisis eroded the value of financial assets and the economic downturn reduced profits and the value of on-going businesses. Capital inflows, however, put upward pressure on the dollar, which tends to push up the price of U.S. exports relative to imports and to reduce the overall level of exports. Furthermore, foreign investment in the U.S. economy drains off some of the income earned on the foreign-owned assets that otherwise would accrue to the U.S. economy as foreign investors repatriate their earnings.

Some observers are particularly concerned about the long-term impact of the U.S. position as a net international investment debtor on the pattern of U.S. international income receipts and payments.³ In 2009, the United States received \$588 billion in income receipts on its investments abroad and paid out \$467 billion in income payments on foreign-owned assets in the United States for a net surplus of \$121 billion in income receipts, up slightly from the net surplus in income receipts experienced in 2008. Considering the overall negative balance of the U.S. net investment position, it is surprising that the net surplus of income receipts continues to be positive. As the annual amount of foreign investment in the U.S. economy continues to exceed the amount of U.S. investment abroad, however, it seems inevitable that U.S. payments on foreign-owned assets will rise relative to U.S. receipts. A net outflow of income payments would act as a drag on the national economy as U.S. national income is reduced by the net amount of funds that are channeled abroad to foreign investors.

Foreign capital inflows, while important, do not fully replace or compensate for a lack of domestic sources of capital. Capital mobility has increased sharply over the last twenty years, but economic analysis shows that a nation's rate of capital formation, or domestic investment, seems to be linked primarily to its domestic rate of saving. This phenomenon was first presented in a paper published in 1980 by Martin Feldstein and Charles Horioka.⁴ The Feldstein-Horioka paper maintained that despite the dramatic growth in capital flows between nations, international capital mobility remains somewhat limited so that a nation's rate of domestic investment is linked to its domestic rate of saving.⁵

Capital Flows and the Dollar

Another aspect of capital mobility and capital inflows is the impact such capital flows have on the international exchange value of the dollar. Demand for U.S. assets, such as financial securities,

³ CRS Report RL32964, *The United States as a Net Debtor Nation: Overview of the International Investment Position*, by James K. Jackson.

⁴ Feldstein, Martin, and Charles Horioka, Domestic Saving and International Capital Flows, *The Economic Journal*, June, 1980, pp. 314-329; Feldstein, Martin, *Aspects of Global Economic Integration: Outlook for the Future*. NBER Working Paper 7899, September 2000, pp. 9-12.

⁵ Developments in capital markets have improved capital mobility since the Feldstein-Horioka paper was published and have led some economists to question Feldstein and Horioka's conclusion concerning the lack of perfect capital mobility. (Ghosh, Atish R., International Capital Mobility Amongst the Major Industrialized Countries: Too Little or Too Much?, *The Economic Journal*, January 1995, pp. 107-128.) Indeed, some authors argue that short-term capital flows among the major developed economies are highly liquid, perhaps too liquid, and seem to be driven as much by short-term economic events and speculation as they are by longer term economic trends.

translates into demand for the dollar, since U.S. securities are denominated in dollars. As demand for the dollar rises or falls according to overall demand for dollar-denominated assets, the value of the dollar changes. These exchange rate changes, in turn, have secondary effects on the prices of U.S. and foreign goods, which tend to alter the U.S. trade balance. At times, foreign governments have moved aggressively in international capital markets to acquire the dollar directly or to acquire Treasury securities in order to strengthen the value of the dollar against particular currencies. In other cases, some foreign countries have pegged the international exchange value of their currencies to the dollar.

Also, the dollar is heavily traded in financial markets around the globe and, at times, plays the role of a global currency. Disruptions in this role have important implications for the United States and for the smooth functioning of the international financial system. This prominent role means that the exchange value of the dollar often acts as a mechanism for transmitting economic and political news and events across national borders. While such a role helps facilitate a broad range of international economic and financial activities, it also means that the dollar's exchange value can vary greatly on a daily or weekly basis as it is buffeted by international events.⁶ A triennial survey of the world's leading central banks conducted by the Bank for International Settlements in April 2007⁷ indicates that the **daily** trading of foreign currencies through traditional foreign exchange markets⁸ totals more than \$3.2 trillion, up sharply from the \$1.9 trillion reported in the previous survey conducted in 2004, as indicated in **Table 4**. In addition to the traditional foreign exchange market, the over-the-counter (OTC)⁹ foreign exchange derivatives market reported that daily turnover of interest rate and non-traditional foreign exchange derivatives contracts reached \$2.1 trillion in April 2007. The combined amount of \$5.3 trillion for daily foreign exchange trading in the traditional and OTC markets is more than three times the **annual** amount of U.S. exports of goods and services. The data also indicate that 86.3% of the global foreign exchange turnover is in U.S. dollars, slightly lower than the 88.7% share reported in a similar survey conducted in 2004.¹⁰

Table 4. Foreign Exchange Market Turnover
(daily averages in April, in billions of U.S. dollars)

| | 1992 | 1995 | 1998 | 2001 | 2004 | 2007 |
|---|-------|------|------|------|------|-------|
| Foreign Exchange Market Turnover | | | | | | |
| Instrument | | | | | | |
| Spot transactions | \$394 | 494 | 568 | 386 | 621 | 1,005 |
| Outright forwards | 58 | 97 | 128 | 130 | 208 | 362 |
| Foreign exchange swaps | 324 | 546 | 734 | 656 | 944 | 1,714 |

⁶ Samuelson, Robert J., Dangers in a Dollar on the Edge. *The Washington Post*, December 8, 2006. p. A39.

⁷ The next such survey is scheduled for April 2010, with data released in August 2010.

⁸ Traditional foreign exchange markets are organized exchanges which trade primarily in foreign exchange futures and options contracts where the terms and condition of the contracts are standardized.

⁹ The over-the-counter foreign exchange derivatives market is an informal market consisting of dealers who custom-tailor agreements to meet the specific needs regarding maturity, payments intervals or other terms that allow the contracts to meet specific requirements for risk.

¹⁰ *Triennial Central Bank Survey: Foreign Exchange and Derivatives Market Activity in 2007*. Bank for International Settlement, September 2007. pp. 1-2. A copy of the report is available at <http://www.bis.org/publ/rpfx07.pdf>

| | 1992 | 1995 | 1998 | 2001 | 2004 | 2007 |
|---|------------|--------------|--------------|--------------|--------------|--------------|
| Reporting gaps | 43 | 53 | 61 | 28 | 107 | 129 |
| Total "traditional" turnover | 820 | 1,190 | 1,490 | 1,200 | 1,880 | 3,210 |
| Over the Counter Derivatives Market Turnover | | | | | | |
| Foreign exchange instruments | | | 97 | 87 | 140 | 291 |
| Interest rate instruments | | | 265 | 489 | 1,025 | 2,090 |
| Reporting gaps | | | 13 | 19 | 55 | 113 |
| Total OTC turnover | | | 375 | 575 | 1,220 | 2,090 |
| Total market turnover | 820 | 1,190 | 1,865 | 1,775 | 3,100 | 5,300 |
| United States | | | | | | |
| Foreign exchange turnover | | 244 | 351 | 254 | 461 | 664 |
| OTC derivatives turnover | | | 90 | 135 | 355 | 607 |
| Total | | 244 | 441 | 389 | 816 | 1,271 |

Source: Triennial Central Bank Survey: Foreign Exchange and Derivatives Market Activity in 2007. Bank for International Settlement, September 2007.

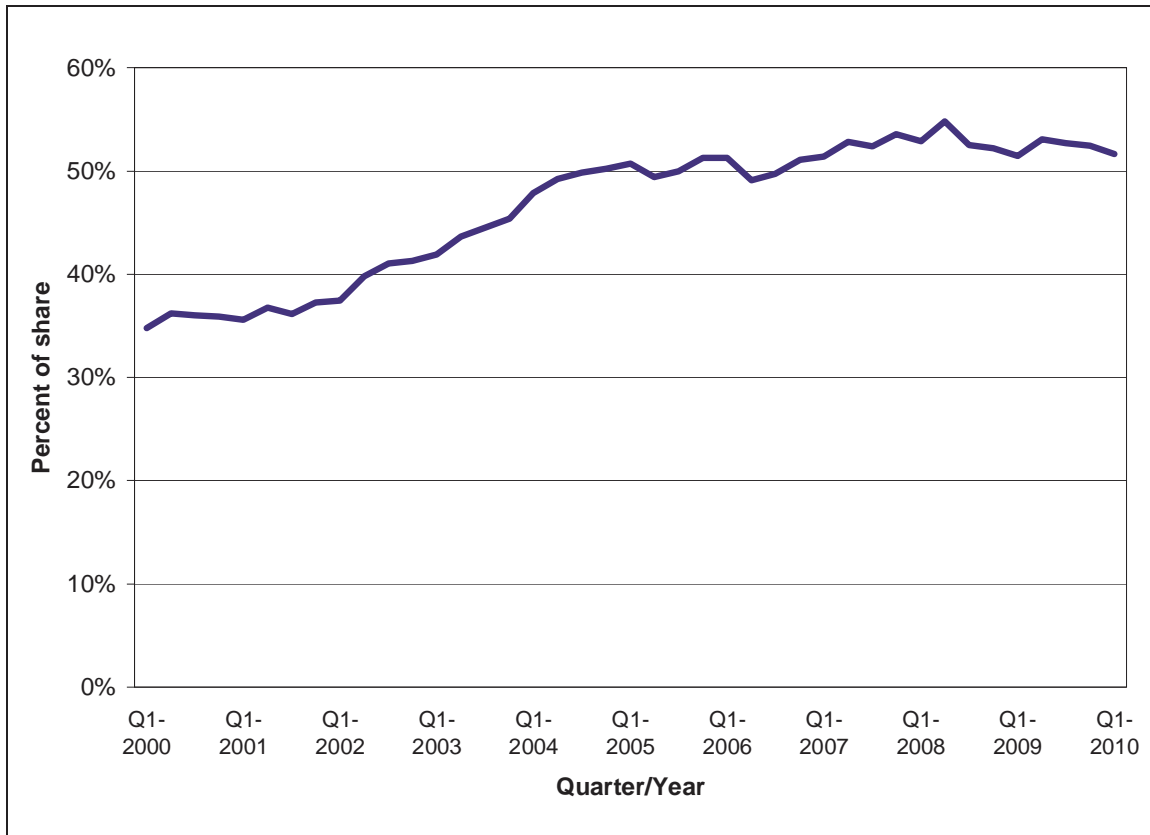
In the U.S. foreign exchange market, the value of the dollar is followed closely by multinational firms, international banks, and investors who are attempting to offset some of the inherent risks involved with foreign exchange trading. On a daily basis, turnover in the U.S. foreign exchange market¹¹ averages \$664 billion; similar transactions in the U.S. foreign exchange derivative markets¹² averages \$607 billion, nearly double the amount reported in a similar survey conducted in 2004.¹³ Foreigners also buy and sell U.S. corporate bonds and stocks and U.S. Treasury securities. Foreigners now own about 53% of the total amount of outstanding U.S. Treasury securities that are publicly held and traded, as indicated in **Figure 2**.¹⁴

¹¹ Defined as foreign exchange transactions in the spot and forward exchange markets and foreign exchange swaps. A spot transaction is defined as a single transaction involving the exchange of two currencies at a rate agreed upon on the date of the contract; a foreign exchange swap is a multi-part transaction which involves the exchange of two currencies on a specified date at a rate agreed upon at the time of the conclusion of the contract and then a reverse exchange of the same two currencies at a date further in the future at a rate generally different from the rate applied to the first transaction.

¹² Defined as transactions in foreign reserve accounts, interest rate swaps, cross currency interest rate swaps, and foreign exchange and interest rate options. A currency swap commits two counterparties to exchange streams of interest payments in different currencies for an agreed upon period of time and usually to exchange principal amounts in different currencies as a pre-agreed exchange rate; a currency option conveys the right to buy or sell a currency with another currency as a specified rate during a specified period.

¹³ *The Foreign Exchange and Interest Rate Derivatives Markets: Turnover in the United States April 2007*. The Federal Reserve Bank of New York, April, 2004. pp. 1-2. A copy of the report is available at http://www.newyorkfed.org/markets/triennial/fx_survey.pdf.

¹⁴ *Treasury Bulletin*, December 2007. Table OFS-2. p. 48.

Figure 2. Foreign Ownership Share of Publicly Held Treasury Securities, 2000-2010

Source: *Treasury Bulletin*, U.S. Department of the Treasury.

Purchases and Sales of U.S. Securities

A comprehensive set of data on capital flows, represented by purchases and sales of U.S. government securities and U.S. and foreign corporate stocks, bonds, into and out of the United States is published by the Treasury Department on a monthly basis.¹⁵ These data represent cross-border flows and positions between U.S. residents and foreign residents and include monthly data on transactions in long-term securities, monthly and quarterly data on long- and short-term securities reported by banks and securities brokers, annual position data on holdings of long-term and short-term securities, and comprehensive benchmark surveys. Cross-border transactions consist of only those transactions that involve both a U.S. seller and a foreign purchaser; they exclude transactions between strictly U.S. buyers and sellers and foreign buyers and sellers. The data also capture only those transactions that involve a defined panel of custodians (banks and other depository institutions, securities brokers and dealers, end-investors, security issuers, and nonfinancial institutions) above a certain threshold amount, specifically cross-border transactions of at least \$50 million per month. The custodial basis of the transactions means that some attribution of data to specific countries may distort the holdings data, because some foreign owners entrust the safekeeping of their securities to such financial centers as Belgium, the

¹⁵ These data are available through the World Wide Web at Treasury Department's Treasury International Capital (TIC) reporting site: <http://www.treas.gov/tic/>.

Caribbean banking centers, Luxembourg, Switzerland, and the United Kingdom, which would inflate the holdings of these custodians, rather than be attributed to the actual foreign owner. The data in the following tables reflect monthly transactions in long-term securities.¹⁶

As the data in **Table 5** show, foreign investors buy and sell large amounts of U.S. financial assets, although the annual accumulation, though large in dollar amounts, is generally small in relative terms when compared with the large amounts of assets that are traded. In 2009 foreigners purchased \$19 trillion dollars in U.S. financial assets and sold \$25 trillion dollars in assets, for a net decline in holdings of \$5.6 trillion in financial assets, or a decrease of nearly one-fourth of the trade securities, a large share compared with the data for recent years.

Marketable U.S. Treasury securities generally account for one of the largest shares of U.S. securities that are traded by foreign investors, whether measured in terms of the total amount of securities that are bought and sold, or in terms of the net annual accumulation of financial assets. The low risk associated with these securities makes them highly desired, especially during periods of market uncertainty. In 2009, foreign trading in Treasury securities accounted for more than half of all the U.S. securities traded by foreign investors during the year, and the net amount of Treasury securities that were accumulated comprise the largest category of securities that were accumulated during the year, reflecting the impact the financial crisis and the economic recession had on foreign investor's appetite for other, more risky, types of investments, such as corporate stocks and bonds. Demand for Treasury securities often remains strong during uncertain times as a "safe haven" investment, including during the period following the terrorist attacks of September 11, 2001, when important elements of the U.S. financial system were temporarily shut down.¹⁷

Table 5. Transactions in Long-Term U.S. Securities, 2009

(in billions of dollars)

| Total | Marketable Treasury Securities | U.S. Govt. Bonds | Corporate Bonds | Corporate Stocks | Foreign Bonds | Foreign Stocks |
|--------------------------------------|--------------------------------|------------------|-----------------|------------------|---------------|----------------|
| Gross Purchases by Foreigners | | | | | | |
| \$19,604.0 | \$11,593.4 | \$1,043.2 | \$1,189.5 | \$6,655.5 | \$1,952.1 | \$3,170.2 |
| Gross Sales by Foreigners | | | | | | |
| 25,162.4 | 11,054.9 | 1,054.7 | 1,230.2 | 6,502.7 | 2,090.4 | 3,229.5 |
| Net Purchases by Foreigners | | | | | | |
| -5,558.5 | 538.5 | -11.5 | -40.7 | 152.8 | -138.2 | -59.3 |

Source: Treasury Department International Capital data system, June, 2010.

Table 6 shows gross purchases, gross sales, and net sales of publicly traded long-term U.S. Treasury securities, corporate stocks, and corporate bonds over the seven-year period 2003 to 2009. At over \$11 trillion, Treasury securities were the most heavily traded of the three kinds of

¹⁶ Bertaut, Carol C., William L. Grier, and Ralph W. Tryon, Understanding U.S. Cross-Border Securities Data, Federal Reserve Bulletin, 2006. p. A59-A75.

¹⁷ For additional information, see CRS Report RS21102, *International Capital Flows Following the September 11 Attacks*, by James K. Jackson.

securities in 2009. From 1997 to 2001, foreign official and private net acquisitions of Treasury securities plummeted as the Federal government used its budget surpluses to retire large amounts of securities, as indicated in **Figure 3**. The Federal government's budget deficits from 2002 through 2009, however, provided new opportunities for foreign investors to build up their holdings of Treasury securities.

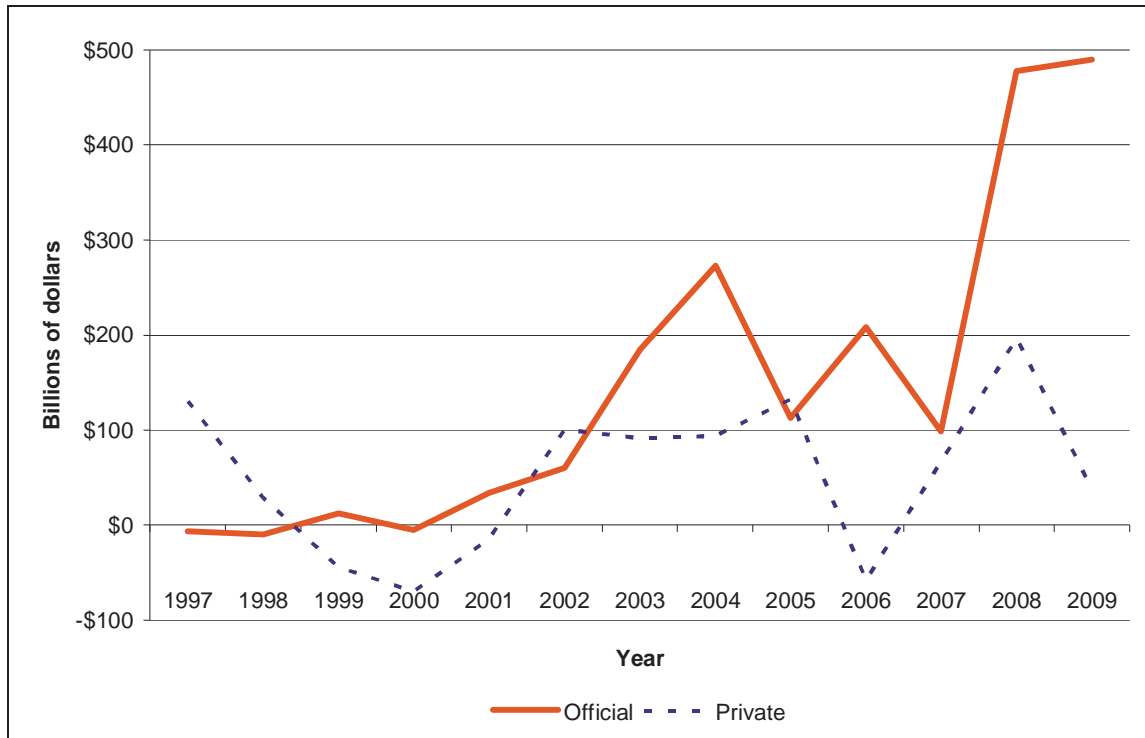
Table 6. Foreign Transactions in U.S. Securities, 2003-2009

(in billions of dollars)

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|----------------------------|-----------|-----------|------------|------------|------------|------------|------------|
| Treasury Securities | | | | | | | |
| Purchases | \$8,001.5 | \$8,936.0 | \$10,051.2 | \$10,957.9 | \$15,127.5 | \$14,627.5 | \$11,593.4 |
| Sales | 7,737.9 | 8,584.0 | 9,713.1 | 10,762.4 | 14,929.6 | 14,311.5 | 11,054.9 |
| Net | 263.6 | 352.1 | 338.1 | 195.5 | 198.0 | 316.0 | 538.5 |
| Corporate Stocks | | | | | | | |
| Purchases | 3,104.2 | 3,862.0 | 4,731.7 | 6,868.6 | 10,639.7 | 11,990.6 | 6,655.5 |
| Sales | 3,069.5 | 3,833.6 | 4,649.8 | 6,718.2 | 10,443.8 | 11,949.9 | 6,502.7 |
| Net | 34.7 | 28.5 | 82.0 | 150.4 | 195.5 | 40.8 | 152.8 |
| Corporate Bonds | | | | | | | |
| Purchases | 979.9 | 1,171.4 | 1,277.0 | 1,678.5 | 1,913.3 | 1,467.1 | 1,189.5 |
| Sales | 714.2 | 861.9 | 904.8 | 1,167.7 | 1,520.0 | 1,373.5 | 1,230.2 |
| Net | 265.7 | 309.5 | 372.2 | 510.8 | 393.4 | 93.5 | -40.7 |

Source: Treasury Department International Capital data system, June, 2010.

As **Figure 3** indicates, foreign private purchases of Treasury securities turned negative between 1998 and 2001 and again in 2006 as foreign private investors experienced net sales of Treasury securities. From 2002 to 2006 and again in 2007, foreign private investors returned to acquiring Treasury securities, but the amount they acquired remained relatively level at \$100 billion per year. In contrast, foreign official net acquisitions of Treasury securities trended slightly upward between 2000 and 2002, but such net acquisitions more than doubled over the 2002 to 2004 period, rising to \$261 billion in 2004. In 2005, though, official purchases of Treasury securities plummeted to less than \$100 billion and were less than private purchases. In 2006, private foreign investors again reduced their net holdings of Treasury securities. This action was offset by a large increase in acquisitions of Treasury securities by foreign governments, directed at least in part to slow the decline in the international exchange value of the dollar. In 2009, foreign private investors sharply reduced their acquisitions of treasury securities, with foreign official purchases rising to over \$500 billion.

Figure 3. Foreign Official and Private Purchases of U.S. Treasury Securities, 1997-2009

Source: Department of Commerce.

Generally, the nominal amount of total purchases and sales of corporate bonds on an annual basis are much lower than that for Treasury securities, at times the net accumulation of corporate bonds has surpassed that of Treasury securities, as was the case in 2007. The financial crisis and the economic recession, however, have reduced net foreign acquisitions in corporate stocks and bonds and corporate profits have declined and as uncertainty concerning the economic recovery has tested investors' confidence. Generally, corporate bonds are attractive to investors when interest rates are low, since the price of a bond is inversely related to the interest rate, so lowering interest rates raises the price of a bond and makes the bond more valuable. Net accumulations of corporate stocks has been the most volatile of the three groups of securities over the decade. High levels of stock accumulation at the beginning and end of the period may well reflect low levels of accumulation of Treasury securities and a rise in stocks prices that marked those periods. Economic uncertainties and lower rates of national economic growth, however, characterized the years during the middle part of the period.

Purchases and Sales of U.S. Securities by Foreign Investors

Some foreign investors are more active in U.S. securities markets—U.S. Treasury securities, U.S. corporate stocks and bonds—than are others. Over the period from 2003 to 2009, foreign investors are estimated to have accumulated about \$5 trillion in U.S. securities. As **Table 7** indicates, the United Kingdom is estimated to have accumulated \$1.8 trillion U.S. securities over the 2003-2009 period.

Table 7. Net Purchases of U.S. Securities by Foreigners
(in billions of dollars)

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | Total |
|----------------------|---------|---------|---------|---------|---------|---------|---------|-----------|
| Total | \$663.3 | \$763.6 | \$839.1 | \$892.3 | \$776.6 | \$514.6 | \$441.5 | \$4,890.9 |
| Total Europe | 279.6 | 239.4 | 428.8 | 378.1 | 328.3 | 272.0 | 171.0 | 2,096.8 |
| France | -0.4 | -9.1 | 19.7 | 36.2 | 9.0 | 4.8 | 43.1 | 103.0 |
| Germany | 12.5 | 16.8 | 23.8 | -5.3 | 8.8 | -1.2 | 14.7 | 69.6 |
| Italy | -2.4 | -2.1 | 1.0 | -3.2 | -1.1 | 5.8 | 8.1 | 6.1 |
| Netherlands | 3.6 | 0.5 | -6.7 | 4.2 | 14.0 | -3.7 | 2.6 | 14.4 |
| Sweden | 2.9 | -3.5 | -9.5 | 5.7 | 7.1 | 17.7 | 6.9 | 27.4 |
| Switzerland | 13.0 | 13.7 | -4.7 | 7.7 | -8.9 | 14.6 | 12.6 | 48.1 |
| United Kingdom | 159.8 | 142.6 | 317.2 | 314.7 | 391.7 | 330.5 | 190.5 | 1,847.4 |
| Canada | 32.4 | 24.0 | 48.2 | 25.4 | 10.4 | 17.2 | 7.0 | 164.7 |
| Latin America | 108.5 | 149.4 | 146.1 | 217.2 | 156.8 | -51.2 | -0.3 | 92.7 |
| Mexico | 10.8 | 28.2 | 18.9 | 14.6 | 8.3 | 12.3 | -34.1 | 205.0 |
| Asia | 234.4 | 364.7 | 221.5 | 266.3 | 261.5 | 326.2 | 313.2 | 1,988.0 |
| China | 68.9 | 49.4 | 89.2 | 117.3 | 122.5 | 142.4 | 111.5 | 701.1 |
| Hong Kong | 16.4 | 22.2 | 33.6 | 42.9 | 90.4 | 78.7 | 10.9 | 295.0 |
| Indonesia | 1.6 | 2.8 | -1.4 | 1.7 | 2.7 | -6.2 | -4.2 | -3.1 |
| Japan | 137.1 | 226.5 | 47.0 | 60.2 | 3.7 | 74.1 | 130.1 | 678.7 |
| Korea | 12.2 | 15.7 | 6.1 | 14.5 | 6.2 | -18.0 | 11.4 | 48.1 |
| Malaysia | -1.4 | -0.7 | 4.5 | -0.0 | 5.1 | 3.3 | 1.0 | 11.8 |
| Philippines | 0.3 | -0.6 | 1.2 | -0.7 | 4.8 | -1.7 | -1.8 | 1.6 |
| Singapore | 8.7 | 17.0 | 13.2 | -1.5 | 10.2 | 7.6 | 20.9 | 76.1 |
| Taiwan | -1.9 | 10.7 | 10.7 | 4.9 | 8.0 | 11.8 | 28.3 | 72.6 |
| Thailand | -5.6 | -0.2 | 7.7 | 0.8 | 1.9 | -1.4 | 3.8 | 7.0 |
| Australia | 4.3 | -8.5 | -6.9 | -2.5 | 6.1 | -14.2 | -48.2 | -69.9 |

Source: Developed by CRS from the Treasury Department's International Capital data system. June, 2010.

A large accumulation of securities by British investors is not surprising given the long historical involvement of British investors in the U.S. economy. Other foreign investors have started acquiring U.S. securities more recently. Some, such as Chinese investors, have moved rapidly to become major investors in some U.S. securities markets. In terms of the overall value of their holdings, British investors are followed by Chinese investors as the second largest foreign investors with over \$700 billion accumulated in U.S. securities during the 2003-2009 period, or about one-third the amount owned by British investors. During the seven year period, Japanese investors were the third most active investors in U.S. securities, with \$680 billion in securities holdings. Following Japan, Hong Kong (\$295 billion), Mexico (\$205 billion), Canada (\$165), Singapore (\$76 billion), Taiwan (\$72 billion), and Germany (\$70 billion) accumulated the largest amounts of U.S. securities over the 2003-2009 period.

Treasury Securities

As previously indicated, foreign investors are active participants in the U.S. Treasury securities market. Over the seven-year period of 2003-2009, foreign investors acquired on net (purchases less sales) about \$1.7 trillion dollars in Treasury securities, as indicated in **Table 8**. The United Kingdom acquired an estimated \$734 billion in U.S. publicly held and traded Treasury securities over the 2003-2009 period, followed by Japan, which accumulated \$267 billion during the period. China, a recent participant in the U.S. Treasury securities market accumulated the third largest amount of these securities with \$204 billion in holdings. Most of China's holdings were acquired during 2008 and 2009. Canada (\$54 billion) accumulated the next largest amount of Treasury securities, followed by Hong Kong (\$44 billion).

Table 8. Net Foreign Purchases of Publicly Traded U.S. Treasury Securities
(in billions of dollars)

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | Total |
|----------------------|---------|---------|---------|---------|---------|---------|---------|-----------|
| Total | \$263.6 | \$352.1 | \$338.1 | \$195.5 | \$198.0 | \$316.0 | \$538.5 | \$1,663.3 |
| Total Europe | 48.7 | 88.4 | 173.6 | 99.0 | 177.3 | 196.6 | 206.5 | 783.6 |
| France | -7.0 | -10.2 | 9.6 | -1.6 | -7.8 | -15.4 | 17.8 | -32.5 |
| Germany | 11.0 | 8.8 | 14.5 | 2.1 | -3.5 | 0.7 | -1.3 | 33.7 |
| Italy | -2.9 | 0.0 | 3.8 | 0.2 | -1.5 | 0.8 | 2.8 | 0.4 |
| Netherlands | 0.4 | -3.2 | -6.1 | 0.7 | 1.5 | -4.8 | 1.4 | -11.5 |
| Sweden | 0.4 | 3.2 | 1.8 | 0.7 | 2.2 | -3.1 | 4.6 | 5.2 |
| Switzerland | 4.9 | 5.3 | -4.9 | -2.9 | -2.6 | 1.2 | 15.8 | 1.0 |
| United Kingdom | 32.8 | 78.7 | 134.1 | 91.8 | 208.6 | 188.6 | 171.0 | 734.5 |
| Canada | 10.4 | 16.1 | 21.5 | 14.2 | -1.9 | 9.1 | 41.3 | 54.3 |
| Latin America | 17.1 | 33.5 | 68.4 | 12.0 | 88.5 | 23.2 | -3.7 | 144.5 |
| Mexico | 5.3 | 8.4 | 9.8 | -0.3 | 1.5 | -7.1 | 9.7 | 17.5 |
| Asia | 181.1 | 214.8 | 68.3 | 68.7 | -69.3 | 98.9 | 280.4 | 562.5 |
| China | 30.4 | 18.9 | 37.4 | 40.6 | -8.0 | 84.7 | 123.5 | 204.1 |
| Hong Kong | 6.1 | 1.1 | 12.3 | 16.3 | 2.0 | 6.2 | -0.9 | 44.0 |
| Indonesia | 0.7 | 1.2 | 1.2 | 2.1 | 4.5 | -5.9 | -3.6 | 3.8 |
| Japan | 146.5 | 166.4 | -5.0 | 1.3 | -48.7 | 6.1 | 129.5 | 266.6 |
| Korea | 4.5 | 5.9 | 1.5 | 6.2 | -17.9 | -11.2 | 7.7 | -11.1 |
| Malaysia | -0.3 | 0.4 | 1.1 | -2.4 | 0.4 | -0.9 | 2.0 | -1.8 |
| Philippines | 0.4 | 0.1 | 1.1 | -0.2 | 3.1 | -2.1 | 0.0 | 2.4 |
| Singapore | -1.4 | 3.5 | 2.4 | -2.2 | 2.5 | -7.0 | 5.2 | -2.3 |
| Thailand | -6.1 | -0.4 | 8.4 | 1.3 | 0.8 | -2.9 | 7.8 | 1.2 |
| Australia | 6.6 | -2.2 | 0.1 | -2.6 | -1.4 | -3.0 | 4.8 | -2.4 |

Source: Developed by CRS from the Treasury Department's International Capital data system, June, 2010.

Corporate Stocks

Net foreign acquisitions of U.S. corporate stocks fell sharply in 2008, after reaching a record high in 2007, as foreign investors acquired \$41 billion in corporate stocks, as indicated in **Table 9**. Such investments rebounded in 2009, however, as the U.S. stock market revived from the sharp drop in market indexes experienced during the financial crisis in 2008. In total, foreign investors accumulated \$685 billion in U.S. corporate stocks in the 2003-2009 period, most of which was acquired in the 2006-2009 period. British investors are by far the largest investors in U.S. corporate stocks, with estimated holdings acquired over the 2003-2009 period totaling \$245 billion, reflecting the interdependence between the U.S. and U.K. financial markets.. Over the 2003-2009 period, Hong Kong, Canada and France were the next three largest foreign acquirers of U.S. corporate stocks with such investments estimated to total \$70 billion, \$55 billion, and \$47 billion, respectively. Japan (\$30 billion), Singapore (\$19 billion) and Sweden (\$13 billion), followed by and Switzerland (\$10 billion) are the next largest foreign investors in U.S. corporate stocks.

Table 9. Net Foreign Purchases of U.S. Corporate Stocks

(in billions of dollars)

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | Total |
|----------------------|--------|--------|--------|---------|---------|--------|---------|---------|
| Total | \$34.7 | \$28.5 | \$82.0 | \$150.4 | \$195.5 | \$40.7 | \$152.8 | \$684.7 |
| Total Europe | 21.4 | 19.6 | 39.6 | 97.1 | 89.3 | 11.6 | 68.4 | 347.0 |
| France | 6.2 | -0.9 | 7.7 | 21.7 | 19.5 | -7.2 | 0.2 | 47.3 |
| Germany | -3.8 | -2.4 | -3.3 | -8.0 | 0.6 | -19.3 | 0.8 | -35.4 |
| Italy | 0.4 | -1.7 | -2.6 | -2.3 | -4.3 | -1.8 | -0.3 | -12.6 |
| Netherlands | 0.0 | 1.7 | -2.3 | -5.4 | 6.9 | -1.5 | 3.3 | 2.8 |
| Sweden | 3.4 | 0.8 | -0.5 | 0.7 | 0.3 | 5.1 | 3.5 | 13.2 |
| Switzerland | -2.1 | -1.2 | 1.3 | 1.2 | -3.0 | 5.4 | 8.7 | 10.3 |
| United Kingdom | 0.7 | 15.2 | 19.8 | 75.8 | 69.5 | 29.9 | 33.8 | 244.6 |
| Canada | 11.7 | 1.3 | 16.5 | 11.8 | 8.1 | 7.4 | -1.6 | 55.2 |
| Latin America | -0.9 | 0.6 | 15.3 | 37.2 | 49.4 | -35.0 | 5.5 | 13.1 |
| Mexico | -0.3 | -0.2 | -0.3 | 1.8 | 0.1 | 0.5 | 2.1 | 3.7 |
| Asia | 2.8 | 6.2 | 10.2 | 3.5 | 44.0 | 65.3 | 42.8 | 174.7 |
| China | -0.1 | -0.3 | -0.5 | 0.5 | 4.0 | -0.7 | 4.0 | 6.9 |
| Hong Kong | 0.8 | -0.8 | 1.1 | -0.5 | 35.4 | 27.5 | 6.3 | 69.9 |
| Indonesia | 0.1 | 0.0 | -0.1 | -0.0 | -0.1 | -0.0 | 0.0 | 0.0 |
| Japan | -2.2 | 2.8 | 0.1 | -0.7 | -5.0 | 21.4 | 13.8 | 30.2 |
| Korea | -0.0 | -0.0 | -0.1 | -0.1 | 0.1 | 2.8 | 1.7 | 4.3 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | Total |
|-------------|------|------|------|------|------|------|------|-------|
| Malaysia | -0.0 | -0.1 | -0.2 | -0.0 | 0.3 | 0.0 | 0.2 | 0.3 |
| Philippines | -0.0 | 0.0 | 0.1 | 0.0 | 0.0 | -0.0 | 0.0 | 0.2 |
| Singapore | 3.5 | -1.7 | 7.2 | -4.5 | -2.5 | 4.7 | 12.0 | 18.7 |
| Thailand | -0.0 | 0.0 | -0.0 | -0.0 | -0.0 | 0.0 | 0.0 | -0.1 |
| Australia | -0.6 | 0.3 | 0.1 | 1.0 | 4.8 | 0.3 | 3.0 | 9.0 |

Source: Developed by CRS from the Treasury Department's International Capital data system. June, 2010.

Corporate Bonds

As **Table 10** indicates, foreign investors have shown particular interest in U.S. corporate bonds over the 2003-2009 period and accumulated about \$1.9 trillion in such securities during the seven-year period. A large share of these accumulations is concentrated among a few large holders. For instance, British investors hold nearly half of the foreign-owned U.S. corporate bonds, with an estimated accumulation of \$866 trillion over the 2003-2009 period. Japanese investors trail behind their British counterparts, but acquired an estimated \$142 billion in corporate bonds in the 2003-2009 period. China (\$141 billion), Hong Kong (\$59 billion), France (\$45 billion), Switzerland (\$37 billion), and Australia (\$21 billion), and are estimated to be the next largest foreign investors in U.S. corporate bonds during the 2003-2009 period. Investors acquired \$415 billion in U.S. corporate bonds over the 2003-2009 period, substantially more than the \$60 billion acquired by investors in Latin American and Caribbean countries.

Table 10. Net Foreign Purchases of U.S. Corporate Bonds
(in billions of dollars)

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | Total |
|----------------------|---------|---------|---------|---------|---------|--------|---------|-----------|
| Total | \$265.7 | \$309.5 | \$372.2 | \$510.8 | \$393.4 | \$93.5 | -\$40.7 | \$1,904.4 |
| Total Europe | 169.2 | 172.0 | 241.7 | 316.1 | 207.5 | -5.8 | -52.4 | 1,048.3 |
| France | 4.0 | 7.6 | 13.2 | 22.1 | 4.3 | -2.0 | -3.9 | 45.3 |
| Germany | 3.5 | 12.2 | 6.5 | -11.8 | 5.4 | 5.0 | -1.7 | 19.1 |
| Italy | 2.0 | 0.7 | -0.1 | -0.5 | -0.1 | 0.2 | 0.1 | 2.4 |
| Netherlands | 2.3 | 2.1 | 2.8 | 3.2 | -0.7 | -0.4 | -1.7 | 7.6 |
| Sweden | 0.2 | 1.1 | -0.4 | 2.2 | 1.7 | -0.5 | -1.8 | 2.4 |
| Switzerland | 5.7 | 4.0 | 3.7 | 9.7 | 3.6 | 11.9 | -1.5 | 37.1 |
| United Kingdom | 107.7 | 107.1 | 168.9 | 253.8 | 209.0 | 31.9 | -12.3 | 866.0 |
| Canada | 5.3 | 6.1 | 2.2 | 8.1 | 12.3 | 7.2 | 6.8 | 48.0 |
| Latin America | 6.6 | 19.9 | 7.2 | 10.0 | 5.1 | 4.2 | 7.5 | 60.5 |
| Mexico | 3.0 | 15.1 | 1.6 | 3.9 | 1.9 | 1.7 | 3.7 | 30.9 |
| Asia | 27.8 | 60.1 | 70.9 | 76.9 | 120.0 | 64.6 | -5.2 | 415.2 |
| China | 4.8 | 12.3 | 26.1 | 31.2 | 41.7 | 29.6 | -4.1 | 141.6 |
| Hong Kong | 4.5 | 5.7 | 11.0 | 14.8 | 12.8 | 7.0 | 2.9 | 58.7 |
| Indonesia | 0.0 | -0.1 | 0.0 | 0.2 | 0.4 | 0.0 | 0.2 | 0.9 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | Total |
|-------------|------|------|------|------|------|------|------|-------|
| Japan | 10.6 | 33.5 | 25.6 | 12.6 | 39.6 | 22.3 | -1.6 | 142.5 |
| Korea | 0.5 | 1.6 | 0.8 | 3.2 | 11.3 | 0.6 | -0.2 | 17.8 |
| Malaysia | 0.0 | 0.1 | 1.3 | 1.1 | 2.1 | 0.3 | 0.5 | 5.4 |
| Philippines | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | -0.2 | 0.6 |
| Singapore | 3.0 | 4.2 | 1.0 | 6.0 | 6.9 | -1.1 | -3.1 | 17.0 |
| Thailand | 0.4 | 0.1 | -0.0 | 0.1 | 0.0 | 0.2 | 0.0 | 0.8 |
| Australia | 0.4 | 1.4 | 6.3 | 7.2 | 5.0 | 0.3 | 0.4 | 21.1 |

Source: Developed by CRS from the Treasury Department's International Capital data system, June, 2009.

Major Foreign Holdings of U.S. Long-Term Securities

As **Table 11** indicates, total foreign holdings, or the cumulative amount, of marketable and non-marketable U.S. Treasury bills, bonds, and notes amounted to over \$3.7 trillion at year-end 2009. These holdings are divided into foreign private holdings designated by the individual country data and holdings by foreign official institutions, which amounted to \$2.7 trillion in 2009, or more than the \$1 trillion accumulated by private investors. The data for foreign official institutions consist of more than the foreign reserve asset holdings of central banks and of other foreign government institutions involved in the formulation of international monetary policy. These holdings also include the holdings of foreign government-sponsored investment funds and other foreign government investment funds. Distinguishing between foreign private and official holdings, however, can be difficult, because chains of intermediaries can obscure the country and the type of foreign holder. As a result, foreign official holdings likely are undercounted in these data.

With \$895 billion in long-term Treasury securities holdings accumulated over the 2003-2009 period, China is the single largest holder of such securities. Over the same period, Japan had accumulated \$766 billion in such holdings by 2009. Between 2003 and 2009, China increased its holdings of Treasury securities by more than five times. With \$207 billion accumulated by the oil exporting countries, they ranked third and just ahead of the United Kingdom with \$180 billion in treasury securities holdings.¹⁸

Table 11. Major Foreign Holdings, or Cumulative Amounts, of Long-Term U.S. Treasury Securities

(in billions of dollars)

| Country | 2009 | 2008 | 2007 | 2006 | 2005 | 2004 | 2003 |
|---------------|---------|---------|---------|---------|---------|---------|---------|
| China | \$894.8 | \$727.4 | \$477.6 | \$396.9 | \$310.0 | \$222.9 | \$159.0 |
| Japan | 765.7 | 626.0 | 579.9 | 622.9 | 670.0 | 689.9 | 550.8 |
| Oil Exporters | 207.4 | 186.2 | 137.9 | 110.2 | 78.2 | 62.1 | 42.6 |

¹⁸ Oil exporters include Ecuador, Venezuela, Indonesia, Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, the United Arab Emirates, Algeria, Gabon, Libya, and Nigeria.

| Country | 2009 | 2008 | 2007 | 2006 | 2005 | 2004 | 2003 |
|-----------------------|---------|---------|---------|---------|---------|---------|---------|
| United Kingdom | 180.3 | 130.9 | 157.9 | 92.6 | 146.0 | 95.8 | 82.2 |
| Brazil | 169.3 | 127.0 | 129.9 | 52.1 | 28.7 | 15.2 | 11.8 |
| Hong Kong | 148.7 | 77.2 | 51.1 | 54.0 | 40.3 | 45.1 | 50.0 |
| Russia | 141.8 | 116.4 | 32.7 | 7.0 | N.A. | N.A. | N.A. |
| Carib Banking Centers | 128.4 | 197.5 | 117.4 | 72.3 | 77.2 | 51.1 | 47.3 |
| Taiwan | 116.5 | 71.8 | 38.2 | 59.4 | 68.1 | 67.9 | 50.9 |
| Switzerland | 89.7 | 62.3 | 38.9 | 34.3 | 30.8 | 41.7 | 46.1 |
| Luxembourg | 88.4 | 97.4 | 69.0 | 60.0 | 35.6 | 41.4 | 25.4 |
| Canada | 52.8 | 8.4 | 24.0 | 26.9 | 27.9 | 33.3 | 24.2 |
| Germany | 47.8 | 56.1 | 41.3 | 46.0 | 49.9 | 50.3 | 47.8 |
| Ireland | 43.6 | 54.3 | 18.7 | 11.6 | 19.7 | 16.2 | 14.9 |
| Korea | 40.3 | 31.3 | 39.2 | 66.7 | 69.0 | 55.0 | 63.1 |
| Singapore | 39.2 | 40.8 | 39.8 | 31.3 | 33.0 | 30.4 | 21.2 |
| Mexico | 36.8 | 34.8 | 34.2 | 34.9 | 35.0 | 32.8 | 27.4 |
| Thailand | 33.3 | 32.4 | 27.4 | 16.9 | 16.1 | 12.5 | 11.7 |
| India | 32.5 | 29.2 | 14.9 | 14.6 | N.A. | 15.0 | 16.7 |
| France | 30.5 | 16.8 | 9.8 | 26.4 | 30.9 | 20.1 | 17.2 |
| Turkey | 28.1 | 30.8 | 25.6 | 23.0 | 17.4 | 12.0 | 15.7 |
| Poland | 22.9 | N.A. | 15.4 | 13.9 | N.A. | N.A. | N.A. |
| Italy | 21.1 | 16.0 | 14.6 | 13.2 | 15.4 | 12.9 | 13.2 |
| Netherlands | 20.4 | 15.4 | 15.2 | 20.7 | 15.7 | 16.0 | 12.3 |
| Egypt | 18.9 | 17.2 | 10.4 | N.A. | N.A. | N.A. | N.A. |
| Belgium | 17.3 | 15.9 | 13.2 | 16.3 | 17.0 | 17.0 | 14.4 |
| Colombia | 17.3 | 11.1 | 7.3 | N.A. | N.A. | N.A. | N.A. |
| Australia | 16.3 | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. |
| Sweden | 15.2 | 12.7 | 13.7 | 12.0 | 16.3 | 17.0 | 9.9 |
| Israel | 13.8 | 18.8 | 5.6 | 15.6 | 12.5 | 13.7 | 12.2 |
| Norway | 12.1 | 23.1 | 26.2 | N.A. | N.A. | 22.6 | 5.2 |
| Philippines | 11.7 | 11.7 | 10.1 | N.A. | N.A. | N.A. | N.A. |
| Spain | 13.7 | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. |
| Chile | 12.4 | 15.2 | 8.7 | N.A. | N.A. | N.A. | N.A. |
| Malaysia | 11.7 | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. |
| All Other | 150.6 | 173.1 | 144.6 | 148.0 | 159.4 | 128.9 | 119.2 |
| Grand Total | 3,691.5 | 3,076.9 | 2,351.1 | 2,103.0 | 2,033.9 | 1,849.3 | 1,523.1 |
| Foreign Official | 2,706.3 | 2,138.7 | 1,643.2 | 1,449.0 | 1,279.9 | 1,233.3 | 933.9 |

| Country | 2009 | 2008 | 2007 | 2006 | 2005 | 2004 | 2003 |
|-----------------|---------|---------|---------|---------|---------|-------|-------|
| Treasury Bills | 534.3 | 457.9 | 198.4 | 176.8 | 201.9 | 245.2 | 212.0 |
| T-Bonds & Notes | 2,172.0 | 1,680.8 | 1,444.8 | 1,272.0 | 1,078.1 | 988.1 | 721.9 |

Source: U.S. Department of the Treasury. Data represent estimated foreign holdings of U.S. Treasury marketable and non-marketable bills, bonds, and notes. Data represent totals as of the end of December of the year indicated.

Table 12 shows the relative shares of foreign holdings of total U.S. securities from 1974 to 2000. These data indicate that between 1974 and 1984, there was little growth in the relative shares of foreign holdings of various types of U.S. long-term securities. Since 1984, however, there has been significant growth in the foreign share of all types of long-term securities, particularly in the foreign share of long-term marketable U.S. Treasury securities, which grew from 13% of the total amount outstanding in 1984 to 35% of the total in 2000. In total, foreign investors hold 10% of the combined value of outstanding U.S. corporate equity, corporate and municipal bonds, marketable Treasury securities, and other U.S. government securities.

Table 12. Market Value of Foreign Holdings of U.S. Long-Term Securities, by Type of Security
(in billions of dollars)

| | Total outstanding | Foreign owned | Percent foreign owned |
|--|-------------------|---------------|-----------------------|
| Corporate equity | | | |
| 1974 | \$663 | \$25 | 3.8% |
| 1978 | 1,012 | 48 | 4.7% |
| 1984 | 1,899 | 105 | 5.5% |
| 1989 | 4,212 | 275 | 6.5% |
| 1994 | 7,183 | 398 | 5.5% |
| 2000 | 23,038 | 1,711 | 7.4% |
| Corporate and municipal debts | | | |
| 1974 | 458 | N.A. | N.A. |
| 1978 | 680 | 7 | 1.0% |
| 1984 | 1,149 | 31 | 2.7% |
| 1989 | 2,400 | 190 | 7.9% |
| 1994 | 3,342 | 276 | 8.3% |
| 2000 | 5,404 | 712 | 13.2% |
| Marketable U.S. Treasury securities | | | |
| 1974 | 163 | 24 | 14.7% |
| 1978 | 326 | 39 | 12.0% |
| 1984 | 873 | 118 | 13.5% |
| 1989 | 1,599 | 333 | 20.8% |
| 1994 | 2,392 | 464 | 19.4% |

| | Total outstanding | Foreign owned | Percent foreign owned |
|--|-------------------|---------------|-----------------------|
| 2000 | 2,508 | 885 | 35.3% |
| U.S. government corporation and federally sponsored agency securities | | | |
| 1974 | 106 | N.A. | N.A. |
| 1978 | 188 | 5 | 2.7% |
| 1984 | 529 | 13 | 2.5% |
| 1989 | 1,267 | 48 | 3.8% |
| 1994 | 2,199 | 107 | 4.9% |
| 2000 | 3,968 | 257 | 6.4% |
| Combined market | | | |
| 1974 | 1,390 | 67 | 4.8% |
| 1978 | 2,206 | 99 | 4.5% |
| 1984 | 4,450 | 268 | 6.0% |
| 1989 | 9,478 | 847 | 8.9% |
| 1994 | 15,116 | 1,244 | 8.2% |
| 2000 | 34,918 | 3,576 | 10.2% |

Source: Griever, William L., Gary A. Lee, and Francis E. Warnock, The U.S. System for Measuring Cross-Border Investment in Securities: A Primer with a Discussion of Recent Developments. *Federal Reserve Bulletin*, October 2001. 639.

Economic Implications

The large foreign accumulation of U.S. securities, particularly of U.S. Treasury securities, has spurred some observers to consider the potential for a financial crisis. Such a crisis could result from a coordinated withdrawal from U.S. financial markets staged by foreign investors for economic or political reasons or a sharp drop in U.S. equity prices as a result of an uncoordinated correction in market prices.¹⁹ Congress likely would find itself embroiled in any such crisis through its direct role in conducting fiscal policy and in its indirect role in the conduct of monetary policy through its supervisory responsibility over the Federal Reserve. A coordinated withdrawal from U.S. securities markets by foreign investors seems highly unlikely, particularly since the vast majority of the investors are private entities that presumably would find it difficult to coordinate a withdrawal.

It is uncertain what events could provoke a coordinated withdrawal from U.S. securities markets. Some surmise that international concern over the ability of the economy to service its large foreign debt could spur foreign investors to rein in their purchases of U.S. financial assets, or that a loss of confidence in the ability of national U.S. policymakers to conduct economic policies that are perceived abroad as prudent and stabilizing could cause foreign investors to reassess their estimates of the risks involved in holding dollar-denominated assets. In other cases, the international linkages that connect national capital markets could be the conduit through which

¹⁹ For a longer presentation of this topic, see CRS Report RL34319, *Foreign Ownership of U.S. Financial Assets: Implications of a Withdrawal*, by James K. Jackson.

events in one market are quickly spread to other markets and ignite an abrupt, seemingly uncoordinated decline in equity prices. Such a market correction, or a market panic, is expected to be short-lived, however, as investors would likely move to take advantage of a drop in equity prices to acquire equities that would be deemed to be temporarily undervalued. For instance, concerns in U.S. capital markets in early June 2006 over prospects that a rise in consumer prices and in the core inflation rate would push the Federal Reserve to raise key U.S. interest rates sparked a drop in prices in U.S. capital and equity markets where inflation concerns quickly spread to markets in Europe and Asia, where equity prices fell as well.²⁰

Foreign capital inflows are playing an important role in the economy. Such inflows bridge the gap between U.S. supplies and demands for credit, thereby allowing consumers and businesses to finance purchases at interest rates that are lower than they would be without the capital inflows. Similarly, capital inflows allow federal, state, and local governments to finance their budget deficits at rates that are lower than they would be otherwise. The global financial crisis and the accompanying economic recession have reduced U.S. demands for capital inflows. A decrease in U.S. liabilities to foreigners by U.S. banks likely reflects the continued tight credit conditions and bodes especially poorly for developing countries with less access to financial markets.

Capital inflows, however, are not without some cost to the economy. Foreign ownership of U.S. securities means that foreigners receive any dividend or interest payments that arise from those securities and that the economy experiences a transfer of wealth associated with flows of goods and capital across borders. To the extent that foreign investors repatriate their earnings, financial resources within the economy are reduced. Increased foreign ownership of corporate stocks and bonds also blurs the distinction between domestic and foreign-owned firms and may well influence the way firms view trade, economic, and other types of public policies, thereby affecting their relationships with Congress. In addition, as long as credit demands in the economy outstrip domestic supplies of credit, foreign sources of capital will be necessary to reduce pressure on U.S. interest rates. To the extent that foreign investors become reluctant for any reason to continue to supply the economy with capital, Congress could find it more difficult to finance a budget deficit by drawing on domestic capital markets without the economy feeling the impact of such borrowing.

The prospect of continued high levels of U.S. borrowing from the rest of the world concerns various international organizations, such as the International Monetary Fund (IMF) and the Organization for Economic Cooperation and Development (OECD). In its April 2006 edition of *World Economic Outlook*,²¹ the IMF highlighted the role U.S. economic policies played in the short run in stemming a potentially serious economic slowdown in both the United States and the global economy. Over the long run, however, the IMF argues that the saving-investment imbalance in the U.S. economy threatens to affect global interest rates, productivity and income, and the growing deficits in the nation's already large current account (exports, imports, and official capital flows) as a result of sustained high levels of capital inflows. These effects could be especially serious for many of the developing nations that rely on borrowing in global financial markets. Rising interest rates in the United States could raise interest rates globally, which would raise borrowing costs to developing countries. The IMF argues that, "over time changes in U.S.

²⁰ Masters, Brooke A., *Pondering the Bear Necessities*, *The Washington Post*, June 7, 2006, p. D1; Samuelson, Robert J., *Global Capital On the Run*, *The Washington Post*, June 14, 2006, p. A23.

²¹ *World Economic Outlook*, International Monetary Fund. Washington, DC, April 2006.

interest rates feed through about one-to-one to foreign interest rates, implying that, in the long run, the rest of the world is affected in a similar manner to the United States.”²²

In a May 2004 publication,²³ the OECD also questioned the feasibility of sustaining large trade deficits given that the deficits are accommodated by foreign investors who must remain willing to hold dollar-denominated assets. Foreign investors essentially engage in cross-border risk management and will assess their estimates of risk based on a broad range of factors, including the ability of the economy to support a potentially increasing level of debt. According to the OECD, “While the United States remains an attractive investment destination in many respects, it is uncertain for how long foreigners will continue to accommodate debt and equity claims against U.S. residents at the recent pace.”²⁴

The highly evolved state of financial and economic linkages between the United States and other foreign economies significantly reduces the prospects of a financial collapse in the United States should foreigners attempt a coordinated withdrawal from U.S. securities markets. A withdrawal by any single large foreign investor, or a group of investors, from the U.S. financial markets at a time when those funds are necessary for closing the gap between domestic demand and supply of funds would likely have significant short-run effects. Any such coordinated attempt to withdraw substantial amounts of funds abruptly from the U.S. markets would ordinarily be noticed quickly by domestic and international financial markets. As investors became aware of any large withdrawals, they likely would follow suit, driving the prices of the asset down sharply and causing U.S. interest rates to rise abruptly. Any investor selling assets at this point likely would experience a significant loss in the value of those assets.

A similar downward spiral would occur over the short-run in the value of the dollar if foreign investors attempted to convert their dollar holdings into foreign currency. The financial and currency markets likely would adjust quickly to the demands of foreign sellers of dollars by driving up the price of foreign currencies. This likely would result in a decline in the value of the dollar and a further erosion in the value of the assets of foreigners attempting to withdraw from the U.S. markets.

Over the long run, the economic and financial effects of a foreign withdrawal from U.S. financial markets would be limited because those factors which allowed foreigners to withdraw would attract other foreign investors to the U.S. markets. As U.S. interest rates rose in response to the selling of securities, other investors likely would be attracted to the higher returns of the assets, which would curb the decline in the prices in the securities. Also, the rise in U.S. interest rates would attract foreign capital, which would limit the rise in interest rates. A decline in the value of the dollar against other currencies would also improve the international price competitiveness of U.S. goods. As a result, U.S. exports would increase, likely narrowing the gap between the earnings on U.S. exports and the amount Americans spend on imports, thereby reducing the amount of foreign capital the U.S. economy would need. Furthermore, those foreign investors who are successful in withdrawing their funds from the U.S. markets would have to find suitable alternatives. Even if they did not reinvest their funds in the United States, the infusion of capital

²² *World Economic Outlook*, International Monetary Fund. Washington, DC, April 2004. pp. 69-70.

²³ The Challenges of Narrowing the U.S. Current Account Deficit. *OECD Economic Outlook* No. 75, May 2004. Available at <http://www.oecd.org/dataoecd/4/58/31920358.pdf>.

²⁴ *Ibid.*, p. 31.

back into foreign capital markets likely would have spillover effects on the United States and on U.S. securities.

It is evident that the Federal Reserve will not idly sit on the sidelines watching while the U.S. economy suffers a financial collapse. In the immediate aftermath of the September 11, 2001 terrorist attacks, the U.S. financial and foreign exchange market activities were slightly out of the norm, but actions by the Federal Reserve and by other central banks helped head off a financial panic and a loss of confidence by ensuring that the financial system was supplied with liquidity through coordinated actions. Such coordination also was key to the global response to the current financial crisis. Central bank coordination in times of crises is not uncommon, but the speed with which the coordination was reached and the aggressiveness of the banks to stem any loss of confidence in the financial system demonstrate the recognition that national economies have become highly interconnected and that a shock to one can create spillover effects onto other economies and markets.²⁵

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²⁵ Jackson, *International Capital Flows Following the September 11 Attacks*.