Foreign Investment in U.S. Securities

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Summary

Foreign capital inflows play an important role in the U.S. economy by bridging the gap between domestic supplies of and demand for capital. Such inflows peaked in 2007 in nominal terms. In 2008 and 2009, foreign capital inflows dropped sharply as the financial crisis and global economic downturn unfolded. At times, foreign investors have looked to U.S. Treasury securities as a "safe haven" investment, while they sharply reduced their net purchases of corporate stocks and bonds. Since the financial crisis, foreign private investments generally have outpaced foreign official inflows, but foreign private purchases of U.S. corporate stocks and bonds generally have not rebounded to the level experienced prior to the financial crisis. 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, 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, 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 the rise in the personal rate of saving eased somewhat the need for foreign investment. The importance of capital inflows changes in relation to the overall saving-investment balance in the economy. 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 2008-2009 recession, foreign investors 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 be 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 and bonds into and out of the United States; the data are reported by the Treasury Department on a monthly basis.

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Introduction

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 was underscored by the financial crisis of 2008-2009, 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 has changed 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. 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 often tempers 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. In 2008, total foreign capital inflows totaled about $454 billion, or down by three-fourths from 2007. In 2009, such inflows fell to $318, 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 $31 billion, down from the $1.0 trillion they accounted for in 2007 as foreign investors pared back their holdings of corporate securities. Total capital inflows rebounded in 2013 and 2014, to reach around $1 trillion annually.

In 2008 and 2009, official inflows outpaced the net inflows by private investors, reflecting both the collapse in private investment and the actions by governments to stabilize capital markets. Other private capital inflows are associated with U.S. liabilities to foreigners reported by U.S. banks and such non-bank financial firms as investment and securities firms. These accounts registered net outflows, or negative amounts, in 2008 for banks, mostly as a result of a large reduction in foreign banks' deposits at banks in the United States, and negative amounts in 2007-2009 for non-bank financial firms. Since 2009, private capital inflows have outpaced official inflows as a result of a combination of foreign direct investment in U.S. business and investment in U.S. Treasury securities and corporate stocks and bonds. The value of foreign direct investment in 2014 dropped below that recorded for 2013, likely reflecting a large stock buy-back between Verizon and the French firm Vodafone.

In general, 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 the 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.

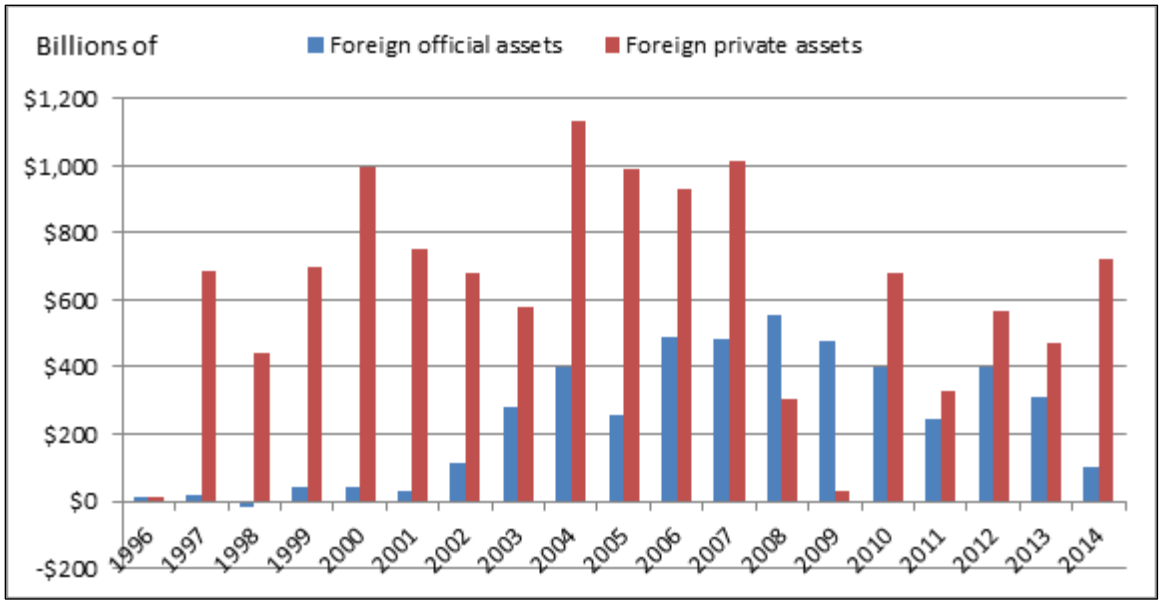
Table 1. Capital Inflows of the United States, 1996-2014

(in billions of dollars)

			Private assets					
	Total	Official 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	2,116.3	487.9	933.1	294.3	-58.2	720.7	2.2	695.3
2007	2,183.5	481.0	1,015.6	340.1	66.8	640.0	-10.7	686.9
2008	454.1	554.6	301.8	332.7	162.9	-39.8	29.2	-402.4
2009	318.4	480.2	30.9	153.8	-15.5	-17.5	12.6	-192.8
2010	1,386.3	397.2	682.5	259.3	298.3	103.9	28.3	306.6
2011	977.1	243.3	325.7	257.4	185.5	-57.8	55.0	408.0
2012	601.0	397.0	567.7	217.8	156.0	154.6	57.1	-362.8
2013	1,042.0	309.5	468.6	287.2	178.2	120.3	NA	252.8
2014	977.4	100.4	724.0	131.8	187.1	384.8	NA	140.6

Source: Bureau of Economic Analysis, *Survey of Current Business*, various issues.

Figure 1. Foreign Official and Private Capital Inflows to the United States, 1996-2014



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**.

As **Table 2** indicates, from 1996 through 1999 and from 2007 through 2014, the household sector ran a net surplus, or provided net savings to the economy. The business sector also provided a net surplus of funds to the economy at various times, or businesses earned more in profits than they invested. The government sector, primarily the federal government, experienced net deficits, which decreased until 2000, when the federal government and state and local governments experienced financial surpluses. Capital inflows from the rest of the world rose and fell during

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

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.

Table 2. Flow of Funds of the U.S. Economy, 1996-2014

(in billions of dollars)

			Government			
Year	Households	Businesses	Total	State and Local	Federal	ROW
1996	$283.2	$10.7	-$232.7	-$29.8	-$202.9	$736.6
1997	232.1	-64.4	-95.2	-8.2	-87.0	617.6
1998	262.4	-98.1	5.5	13.9	-8.3	807.4
1999	16.2	-81.5	34.8	-43.6	78.4	713.8
2000	-263.2	-100.4	146.4	-0.7	147.1	535.4
2001	47.9	28.2	-101.7	-89.2	-12.5	531.1
2002	-62.0	-0.8	-535.3	-193.4	-342.0	500.4
2003	109.7	18.5	-728.4	-197.5	-530.9	413.5
2004	235.3	97.2	-632.2	-158.1	-474.1	477.7
2005	-296.1	-74.9	-400.2	22.6	-422.8	698.5
2006	-366.4	-202.9	-311.8	-1.4	-310.4	529.8
2007	243.2	-265.2	-450.3	-59.7	-390.6	151.5
2008	1,081.5	-984.8	-1,121.0	-322.9	-798.1	765.2
2009	598.8	593.3	-1,734.2	-436.0	-1,298.2	28.0
2010	898.9	174.7	-1,722.3	-307.4	-1,414.9	268.2
2011	1,346.6	-415.9	-1,698.0	-345.6	-1,352.4	416.7
2012	1,094.5	-506.0	-1,387.9	-270.7	-1,117.2	446.6
2013	833.7	13.2	-935.1	-272.8	-662.3	371.8
2014	844.3	-309.1	-834.7	-235.1	-599.6	166.2

Source: Board of Governors of the Federal Reserve System, *Financial Accounts of the United States, Flow of Funds Balance Sheets, and Integrated Macroeconomic Accounts*, various issues.

Starting in 2000, 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 in 2000. 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 capital inflows. Those inflows can vary in size in nominal terms as households experience periods of saving and dissaving and government sector surpluses turned to deficits.

On a balance of payments basis, capital inflows in 2009 were $28 billion, a sharp drop from the $765 billion recorded in 2008. This drop in capital inflows reflected a sharp reversal in the behavior of households and firms from dissaving to saving, and an increase in the deficits experienced by federal and state and local governments as the effects of the economic slowdown became more pronounced. Households turned from a dissaving of $366 billion in 2006 to a net saving of $1.1 trillion in 2008 and $1.3 trillion in 2011, reflecting tight credit conditions, a sharp drop in household wealth, and concerns among households over the state of the economy. The

Federal Reserve reported that in 2008, households experienced a drop in their net worth from $65 trillion to $55 trillion, or about 15%. By the end of the first quarter of 2015, household net worth had grown by about $30 trillion from the end of 2009 to reach $85 trillion.[2]

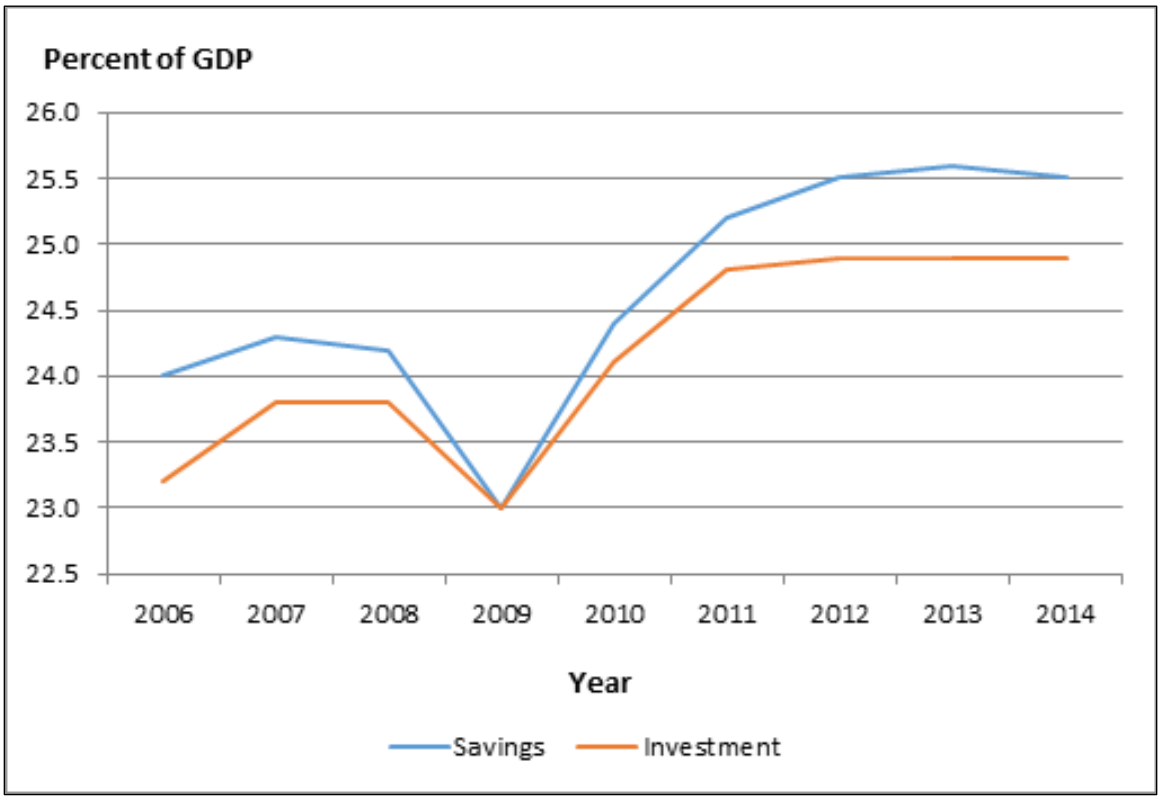
Foreign capital inflows augment domestic U.S. sources of capital, which, in turn, keep U.S. interest rates lower than they would be without the foreign capital. Indeed economists generally argue that it is this interplay between the demand for and the supply of credit in the economy that drives the broad 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 during the global financial crisis and 2010 and 2011 as a result of the European debt crisis.

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, as indicated in **Figure 2**. 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 half-decade, the United States experienced an increase in its overall rate of saving and in the rate of domestic investment expressed as a share of national gross domestic product (GDP), compared with the period prior to the financial crisis, as indicated in **Table 3**. The increase in saving relative to investment has lessened the requirement for capital inflows, especially in 2013 and 2014.

[2] Board of Governors of the Federal Reserve System, Financial Accounts of the United States, Flow of Funds Balance Sheets, and Integrated Macroeconomic Accounts, various issues.

Figure 2. Total Net Saving and Investment for All Countries, 2006-2014

Net Saving and Investment as a percent of GDP



Source: International Monetary Fund.

Table 3. Saving and Investment in Selected Countries and Areas; 2001-2008, 2009-2013, and 2014

(percentage of Gross Domestic Product)

Area/Country	Average, 2001-2008	Average, 2009-2013	2014	Change
World				
Saving	23.7%	24.7%	25.5%	0.8%
Investment	23.7%	24.3%	24.9%	0.6%
United States				
Saving	17.8	16.2	17.9	1.7
Investment	22.2	18.6	19.8	1.2
Other Advanced Economies				
Saving	21.7	20.3	21.1	0.8
Investment	22.6	20.4	20.7	0.3
Eurozone				
Saving	23.0	21.8	22.5	0.7
Investment	22.6	20.4	19.2	-1.2

Area/Country	Average, 2001-2008	Average, 2009-2013	2014	Change
Japan				
Saving	26.3	22.5	22.4	-0.1
Investment	22.8	20.3	21.8	1.5
Emerging Developing Economies				
Saving	29.7	32.7	32.3	-0.4
Investment	27.1	31.5	31.6	0.1
Developing Asia				
Saving	39.0	44.0	43.0	-1.0
Investment	35.5	42.2	41.6	-0.6
Middle East				
Saving	35.1	35.3	31.7	-3.6
Investment	25.8	27.4	25.4	-2.0

Source: *World Economic Outlook*, International Monetary Fund, April 2015, Table A-14.

Note: The change indicated in the final column represents the change between the value of the respective line in 2014 and the average amount in the preceding five-year period.

As **Table 3** indicates, world saving and investment in 2014, compared with the 2009-2013 period, increased by 0.8% and 0.6% of GDP, respectively. The shift toward more saving relative to investment in 2014 compared with the average of 2009-2013 and the 2009-2013 period compared with the previous period reflects the far-reaching impact of the economic recession on the performance of economies world-wide. In some areas, economic activity has not fully recovered from the recession and saving by households has increased as a share of GDP. Similarly, in the United States both saving and investment increased in 2014 relative to the average of the previous five-year period. Although saving as a share of GDP increased more than investment, investment continued to account for a larger share of GDP than saving. Among other advanced economies saving and investment increased in 2014 compared with the previous five-year period. In the Eurozone area, continued concerns over the sovereign debt crisis and limited access to financing restrained business investment in 2014 below the average of the previous five-year period and relative to the period prior to the financial crisis. In Japan, saving fell as a share of GDP, perhaps reflecting the sharp rise in sales taxes in Japan, although business investment increased in 2014 relative to the average of the previous period. In the emerging developing economies of Asia, investment increased at a faster rate than saving in 2013 compared with the previous five-year period. In the Middle East, both saving and investment in 2014 fell relative to the previous five-year period, although saving still outstripped investment, continuing to supply an excess amount of saving to the rest of the world. Similarly, the developing economies of Asia (which includes China) continued to save more than they invested in 2014 compared with the previous period, 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 2014, the United States received $823 billion in income receipts on its investments abroad and paid out $585 billion in income payments on foreign-owned assets in the United States for a net surplus of $238 billion in income receipts, up slightly from the net surplus in income receipts experienced in 2013. 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, 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

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

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 2013[7] indicates that the **daily** trading of foreign currencies through traditional foreign exchange markets[8] totals $5.3 trillion, after adjusting for double-counting, up 36% from the $4.0 trillion reported in the previous survey conducted in 2010, 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 $2.0 trillion in April 2013. The combined amount of $7.3 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 87.0% of the global foreign exchange turnover in April 2013 was in U.S. dollars, slightly higher than the 84.9% share reported in a similar survey conducted in 2010.

Table 4. Foreign Exchange Market Turnover

(daily averages in April of the year indicated, in billions of U.S. dollars)

	1998	2001	2004	2007	2010	2013
Foreign Exchange Market Turnover						
Instrument						
Spot transactions	$568	$386	$631	$1,005	$1,490	$2,046
Outright forwards	$128	$130	$209	$362	$475	$680
Foreign exchange swaps	$734	$656	$954	$1,714	$1,765	$2,228
Reporting gaps	$61	$28	$107	$129	NA	NA
Total "traditional" turnover	$1,527	$1,239	$1,934	$3,324	$3,981	$5,345
Over the Counter Derivatives Market Turnover						
Foreign exchange instruments	$97	$87	$140	291	NA	
Interest rate instruments	$265	$489	$1,025	$1,686	$2,054	$2,343
Reporting gaps	$13	$19	$55	$113	NA	

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

[7] Rime, Dagfinn, and Andreas Schrimpf, the Anatomy of the Global FX Market Through the Lens of the 2013 Triennial Survey, *BIS Quarterly Review*, Bank for International Settlements, December 2013.

[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.

	1998	2001	2004	2007	2010	2013
Total OTC turnover	$375	$575	$1,220	$1,990	$2,083	$2,343
Total market turnover	$1,865	$1,775	$3,100	$5,300	$6,064	$7,688
United States						
Foreign exchange turnover	$351	$254	$499	$746	$864	$1,263
OTC derivatives turnover	$91	$135	$318	$526	$614	$628
Total	**$442**	**$389**	**$817**	**$1,272**	**$1,478**	**$1,891**

Source: Triennial Central Bank Survey: Foreign Exchange Turnover in April 2013: Preliminary Global Results, Bank for International Settlements, September 2013; The Foreign Exchange and Interest Rate Derivatives Markets: Turnover in the United States, April, 2013, Federal Reserve Bank of New York.

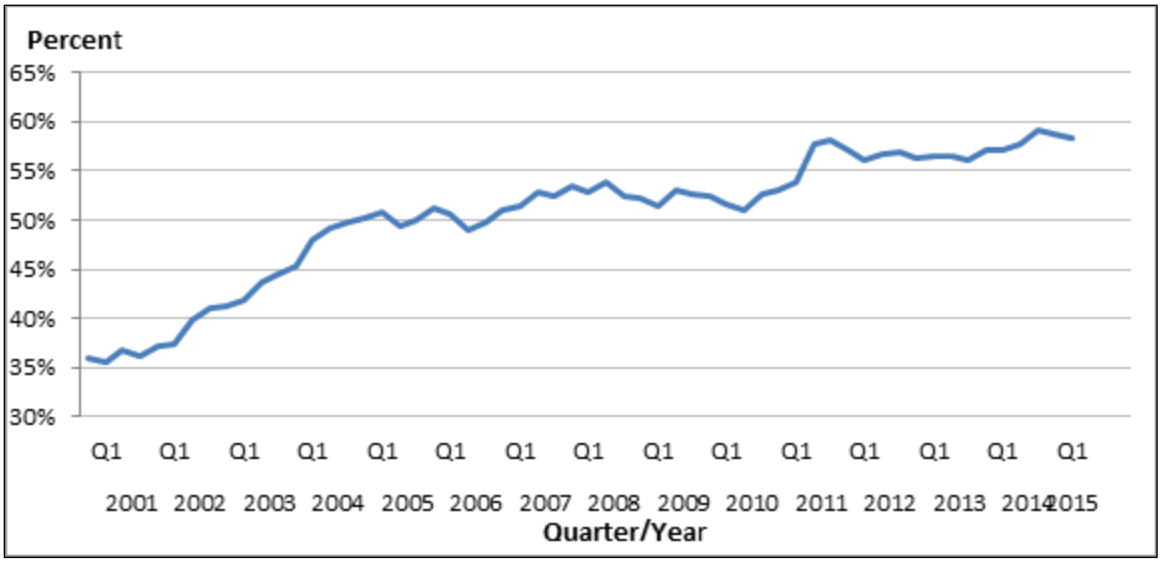
In the U.S. foreign exchange market, the value of the dollar is followed closely by multinational firms, international banks, and investors who are attempting to offset some of the inherent risks involved with foreign exchange trading. On a daily basis, turnover in the U.S. foreign exchange market[10] averages $1.3 trillion, an increase of 46% over similar transactions recorded in the 2010 survey. Similar transactions in the U.S. foreign exchange derivative markets[11] averaged $628 billion per day in 2013, up slightly from the daily average of $614 billion reported in a similar survey conducted in 2010. Foreigners also buy and sell U.S. corporate bonds and stocks and U.S. Treasury securities. Foreigners now own about 58% of the total amount of outstanding U.S. Treasury securities that are publicly held and traded, as indicated in **Figure 3**.[12]

[10] 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.

[11] 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.

[12] *Treasury Bulletin*, June 2015. Table OFS-, p. 43.

Figure 3. Foreign Ownership Share of Publicly Held Treasury Securities, 2001-2015



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.[13] 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.[14] 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

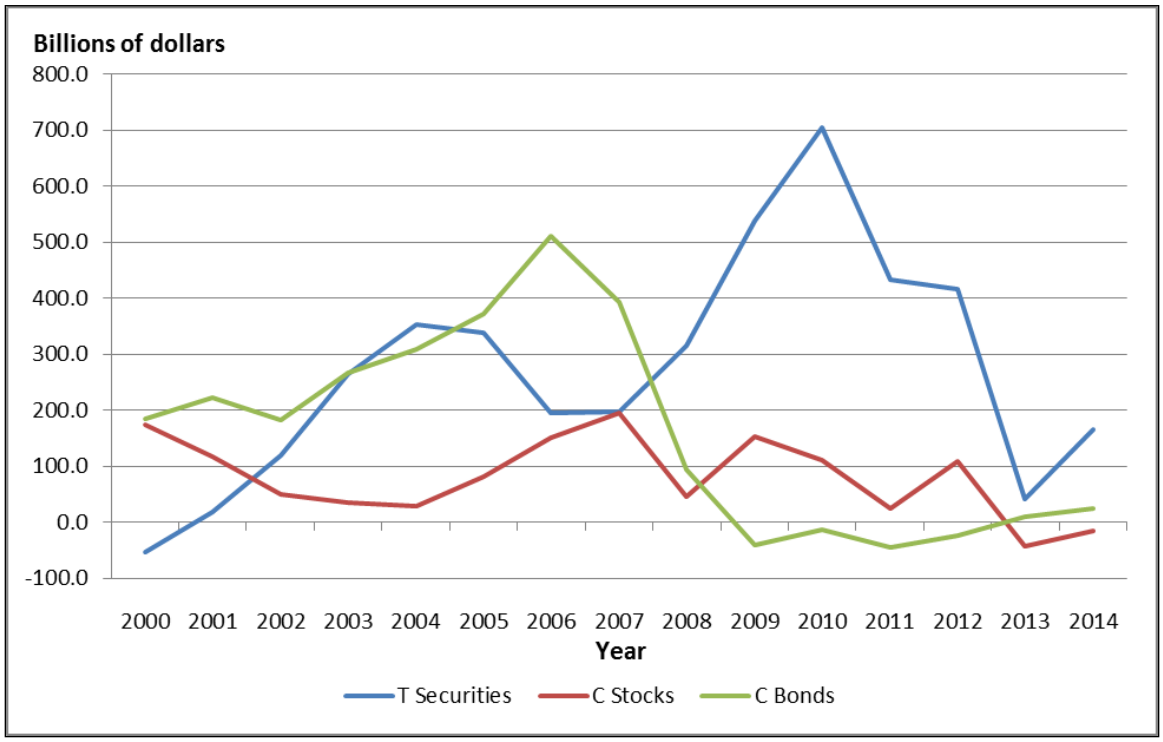
[13] These data are available through the World Wide Web at Treasury Department's Treasury International Capital (TIC) reporting site: http://www.treas.gov/tic/.

[14] According to the Bureau of Economic Analysis (BEA), data in the U.S. Department of the Treasury's International Capital (TIC) report do not correspond directly to data on financial transactions that are reported in the BEA's balance of payments accounts. BEA adjusts the TIC data on the differences in the outstanding amount, or holdings, of securities (rather than data on the purchases and sales of securities that are used in this report) between the beginning and end of the reporting period, whether quarterly or annually, to account for changes in the value in the outstanding amount of securities that reflect: 1) changes in prices; 2) changes in exchange rates; and 3) changes caused by other changes in the volume and value of securities. BEA also adjusts the TIC data to remove changes that are reflected in other data sources for direct investment and official reserve assets. BEA also reclassifies short-term securities and negotiable certificates of deposit of any maturity that are classified as other investment to portfolio investment. In addition, certain U.S. financial intermediaries that are not banks, securities brokers, bank holding companies, or financial holding companies report their holdings of debt with affiliates on BEA surveys of direct investment rather than to the TIC system; these data are reported as financial intermediaries. BEA also uses partner country counterparty claims and liabilities provided by foreign banking authorities to close gaps in coverage of U.S. nonbanking concerns. Finally, BEA collects and adds holdings in other investment claims and liabilities of the U.S. central bank sector (Federal Reserve System) and the U.S. general government. How BEA Aligns and Augments Source Data From the U.S. Treasury Department for Inclusion in the International Transactions Accounts, *Survey of Current Business*, September 2014.

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 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 annualized and quarterly monthly transactions in long-term securities.[15]

As the data in **Table 5** show, foreign investors buy and sell large amounts of U.S. financial assets, although the annual accumulation, or net amount, though large in nominal dollar amounts, is generally small in relative terms when compared with the large amounts of assets that are traded. The net accumulation of these securities can vary sharply over time, as indicated in **Figure 4**. In 2014, foreigners purchased over $37 trillion dollars in U.S. securities, including transactions in foreign stocks and bonds, and sold $36.7 trillion dollars in assets, for a net increase in holdings of $275 billion, primarily as a result of net purchases of Treasury securities, other government agency bonds, corporate bonds, and foreign bonds.

Figure 4. Net Foreign Purchases of U.S. Domestic Securities, 2000-2014



Source: Treasury International Capital database.

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.

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

From 1998 to 2007, however, the net accumulation of equities and corporate bonds by foreign investors surpassed the net accumulation of Treasury securities. After 2007, as the rate of growth of the U.S. economy began to slow and in the period following the financial crisis, the net accumulation of Treasury securities by foreign investors has surpassed the net accumulation of equities and corporate bonds. During the fourth quarter of 2014 and the first quarter of 2015, this trend reversed as the net accumulation of corporate securities by foreign investors surpassed their net accumulation of Treasury securities. The low risk associated with Treasury securities generally makes them highly desirable, especially during periods of market uncertainty. Demand for Treasury securities often remains strong during uncertain times as a "safe haven" investment, including during the financial crisis of 2008-2009 and the period following the terrorist attacks of September 11, 2001, when important elements of the U.S. financial system were temporarily shut down.[16]

Table 5. Transactions in Long-Term U.S. Securities, 2014

(in billions of dollars)

Total	Marketable Treasury Securities	U.S. Govt. Bonds	Corporate Bonds	Corporate Stocks	Foreign Bonds	Foreign Stocks
Gross Purchases by Foreigners						
$37,012.8	$16,744.9	$1,114.7	$1,084.3	$8,924.0	$4,752.8	$4,392.1
Gross Sales by Foreigners						
36,737.5	16,579.3	1,040.1	1,059.0	8,940.1	4,621.1	4,497.9
Net Purchases by Foreigners						
275.3	165.5	74.6	25.3	-16.1	131.7	-105.7

Source: Treasury Department International Capital data system, June, 2015.

Table 6 shows gross purchases, gross sales, and net sales of publicly traded long-term U.S. Treasury securities, corporate stocks, and corporate bonds in 2013 and 2014 and the first quarter of 2015. At nearly $17.6 trillion, Treasury securities were the most heavily traded of the three kinds of securities in 2014. 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 5**. The Federal government's budget deficits from 2002 through 2013, however, provided new opportunities for foreign investors to build up their holdings of Treasury securities. In the first quarter of 2015, foreign investors sold $51 billion more in Treasury securities than they acquired and they reduced their holdings of U.S. corporate stocks, while increasing their holdings of corporate bonds. Similarly, foreign investors reduced their holdings of foreign stocks and increased their holdings of foreign bonds. The decline in the value of the euro relative to the dollar and low interest rates in Europe have enticed U.S. firms to issue a large number of euro-denominated bonds in European capital markets in the first quarter of 2015, offering an alternative to investing in U.S. securities.[17]

[16] For additional information, seeCRS Report RS21102, *International Capital Flows Following the September 11 Attacks*, by James K. Jackson, International Capital Flows Following the September 11 Attacks, by James K. Jackson.

[17] Moore, Phil, Does QE Stand for Quick Euros? *Euromoney*, June 2015, p. 100.

Table 6. Foreign Transactions in U.S. Domestic Securities, 2013-2015

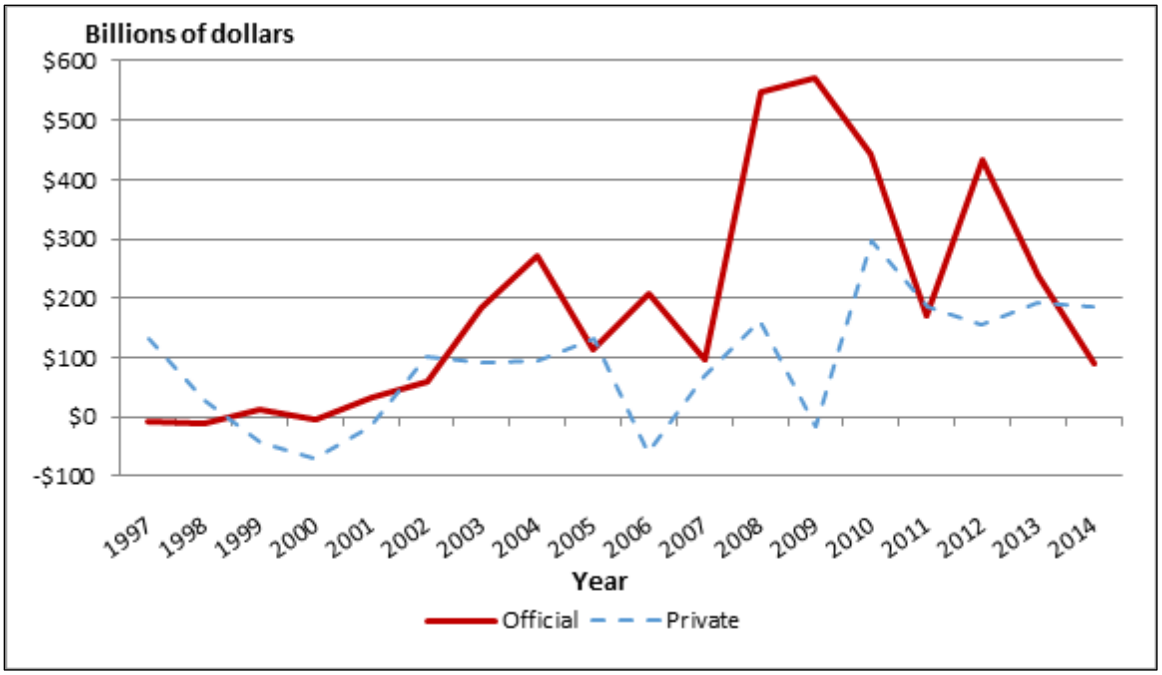
(in billions of dollars)

	2013	2014	2014-I	2014-II	2014-III	2014-IV	2015-I
Treasury Securities							
Purchases	$17,568.2	$16,744.8	$4,467.9	$4,208.6	$3,924.6	$4,143.8	$4,308.5
Sales	17,525.3	16,579.3	4,352.1	4,211.9	3,851.6	4,163.7	4,359.8
Net	42.9	165.5	115.7	-3.3	73.0	-19.9	-51.2
Corporate Stocks							
Purchases	7,677.0	8.924.0	2,164.7	2,236,6	1,937.4	2,585.3	2,553.9
Sales	7,717.3	8,940.1	2,186.6	2,213.0	1,938.6	2,601.8	2,567.4
Net	-40.2	-16.1	-21.9	23.6	-1.2	-16.6	-13.6
Corporate Bonds							
Purchases	934.9	1,084.3	247.8	275.8	269.1	291.5	317.1
Sales	919.3	1,059.0	248.3	295.7	262.8	252.1	283.2
Net	15.6	25.3	-0.5	-19.9	6.3	39.4	33.8

Source: Treasury Department International Capital data system, June, 2015.

As **Figure 5** indicates, foreign private purchases of Treasury securities turned negative between 1998 and 2001 and again in 2006 and 2009 as foreign private investors experienced net sales of Treasury securities. From 2002 to 2006 and again in 2007 to 2014 (except for 2009), foreign private investors returned to acquiring Treasury securities. In contrast, foreign official net acquisitions of Treasury securities have been strong since 2004 and generally outpaced foreign private purchases through 2013. Official purchases were particularly strong in 2008 and 2009, when they reached $549 and $570 billion, respectively, far outpacing foreign private net purchases. In 2014, foreign official net purchases dropped to $88 billion, about half the amount of private net purchases. Often, the purchases of Treasury securities by foreign governments are directed at least in part to shore up the international exchange value of the dollar.

Figure 5. Foreign Official and Private Purchases of U.S. Treasury Securities, 1997-2014



Source: Department of Commerce.

Generally, the nominal amount of total purchases and sales of corporate bonds on an annual basis is much lower than that for Treasury securities. At times, however, the *net* accumulation of corporate bonds has surpassed that of Treasury securities, as was the case from 2005-2007. The financial crisis and the economic recession, however, reduced net foreign acquisitions in corporate stocks and bonds, likely propelled by reduced corporate profits and uncertainty concerning the economic recovery, which 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 have 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 between 2000 and 2014 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 2000-2010 period.

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

Some foreign investors are more active in U.S. domestic securities markets—U.S. Treasury securities, U.S. corporate stocks and bonds—than are others. As **Table 7** indicates, in 2013 and 2014, China surpassed the United Kingdom in annual net accumulation of U.S. domestic securities to become the largest foreign investor in U.S. securities.

Table 7. Net Purchases of U.S. Domestic Securities by Foreigners

(in billions of dollars)

	2012	2013	2014	2014-I	2014-II	2014-III	2014-IV	2015-I
Total	**$634.1**	**$79.4**	**$249.3**	**$82.9**	**$8.2**	**$116.8**	**$41.3**	**$4.5**
Total Europe	199.6	-21.8	-54.5	1.2	-23.6	-8.3	-23.9	-35.7
France	93.8	70.3	81.1	35.4	1.9	26.5	17.4	13.8
Germany	7.7	2.0	2.1	0.0	4.8	-2.8	0.1	-0.6
Italy	-2.2	-4.7	-8.1	-1.9	-1.3	-2.4	-2.6	-2.3
Netherlands	-5.1	-2.4	-6.9	-3.4	-5.1	-0.2	1.7	-2.4
Sweden	-2.8	1.2	1.6	1.3	2.4	-2.6	0.4	-0.5
Switzerland	65.2	-23.2	-8.5	-5.1	-1.3	0.3	-2.4	20.2
United Kingdom	126.4	124.8	90.8	-6.9	12.9	-0.2	6.6	2.8
Canada	75.7	-11.7	12.4	-6.9	12.9	-0.2	6.6	2.8
Latin America	55.6	-129.2	-2.2	-45.4	-7.9	16.1	34.9	27.0
Mexico	22.9	-21.2	15.8	-6.5	13.0	12.9	-3.5	0.2
Asia	240.6	154.7	226.3	73.1	88.0	49.0	16.1	7.7
China	84.6	166.9	210.7	63.7	76.9	33.2	37.0	22.1
Hong Kong	-3.0	-23.1	15.8	9.9	8.5	11.0	-13.7	-5.0
Indonesia	3.4	-2.8	1.8	-0.3	1.8	0.4	-0.7	0.0
Japan	103.0	-3.3	-9.9	6.2	-5.8	-6.4	-3.9	-5.1
Korea	14.9	4.0	3.0	-2.6	2.1	1.2	2.4	-1.2
Malaysia	3.7	-1.3	-2.8	-0.9	-0.8	0.0	-1.1	-0.3
Philippines	2.8	3.3	3.3	0.6	-0.1	0.3	2.5	-1.3
Singapore	5.4	-10.5	-10.7	-3.5	-2.1	3.6	-8.7	5.2
Taiwan	-8.1	10.1	29.1	34.1	2.5	13.9	19.8	101.5
Thailand	1.5	-2.4	-3.0	-1.3	-0.1	-1.6	0.1	-1.2
Australia	7.6	5.1	0.2	-0.2	2.8	1.6	-3.9	3.6

Source: Developed by CRS from the Treasury Department's International Capital data system. June, 2015.

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. Treasury Securities

As previously indicated, foreign investors are active participates in the U.S. Treasury securities market, as indicated in **Table 8**. Total net foreign purchases of Treasury securities varied sharply over the 2012-2014 period, dropping from $416 billion in 2012 to $40 billion in 2013, before rising to $165 billion in 2014. In addition, during the fourth quarter of 2014 and the first quarter of 2015, foreign investors sold a net amount of $20 billion and $51 billion, respectively, in treasury securities. European investors as a whole turned from net purchases of Treasury securities to net sellers in 2014 and also were net sellers in the last quarter of 2014 and the first quarter of 2015. Chinese investors, however, had large net purchases of Treasury securities

throughout the 2012-2014 period and every quarter in 2014 and 2015. Until 2014, the United Kingdom also had large net purchases of Treasury securities on an annual basis, but it was replaced as the largest net purchaser of Treasury securities on an annual basis by Chinese investors in 2013.

Table 8. Net Foreign Purchases of Publicly Traded U.S. Treasury Securities

(in billions of dollars)

	2012	2013	2014	2014-I	2014-II	2014-III	2014-IV	2015-I
Total	**$416.4**	**$40.9**	**$165.5**	**$115.7**	**-$3.3**	**$73.0**	**-$19.9**	**-$51.2**
Total Europe	148.6	10.1	-6.9	3.1	2.8	8.1	-20.9	-19.7
France	84.2	81.6	88.7	30.0	16.5	34.6	7.6	19.4
Germany	7.1	-0.9	3.5	-2.0	4.2	-3.9	5.2	-0.2
Italy	0.7	-0.6	-5.6	-1.5	-0.7	-1.4	-2.0	-0.8
Netherlands	-1.7	-2.1	-6.6	-1.8	-3.9	-0.6	-0.3	-0.1
Sweden	-4.4	-1.8	-0.4	0.0	1.2	-1.9	0.4	-0.3
Switzerland	52.9	-13.3	4.4	-2.0	1.8	5.3	-0.6	16.9
United Kingdom	98.4	63.5	-3.3	67.1	-95.9	29.9	-4.5	-41.8
Canada	56.6	-2.4	4.2	-2.8	11.9	-5.2	0.2	7.5
Latin America	-5.3	-116.3	-12.3	-19.7	-24.7	5.9	26.3	7.7
Mexico	26.2	-10.9	21.7	-4.3	12.5	13.9	-0.3	0.7
Asia	167.0	109.4	212.5	79.4	91.1	33.0	9.0	-6.1
China	73.2	81.1	185.7	55.8	75.0	24.7	30.2	18.2
Hong Kong	-0.1	-18.0	23.1	11.7	9.8	3.4	-1.9	-6.6
Indonesia	0.5	-2.5	2.1	0.3	1.9	0.5	-0.6	0.4
Japan	86.3	62.6	10.7	14.1	0.6	2.4	-6.4	-7.7
Korea	1.3	-2.9	-1.5	-2.5	0.4	0.0	0.5	-4.8
Malaysia	-0.7	-4.2	-1.2	-0.8	0.1	0.1	-0.6	0.1
Philippines	2.3	3.6	3.1	0.6	-0.1	0.2	2.4	-1.4
Singapore	0.7	-12.6	1.0	2.1	1.8	3.1	-6.0	6.2
Taiwan	0.0	-4.1	-11.5	-3.2	-1.8	-4.3	-2.1	-10.6
Thailand	1.1	-1.7	-3.3	-1.1	-0.3	-1.9	-0.1	-1.4
Australia	6.6	3.6	-2.1	-2.1	1.1	-0.7	-0.4	3.0

Source: Developed by CRS from the Treasury Department's International Capital data system, June, 2015.

Corporate Stocks

Net foreign acquisitions of U.S. corporate stocks were negative in both 2013 and 2014, after recording a positive net balance in 2012, as indicated in **Table 9**. European investors continued to post positive net accumulations of U.S. corporate stocks through 2012-2014, before experiencing net sales of such stocks in the first quarter of 2015. Chinese investors were generally more bearish on a quarterly basis, slightly reducing their overall holdings of such stocks. Foreign

investments in U.S. stocks were strong in 2009, 2010 and 2012 as the U.S. stock market revived from the sharp drop in market indexes experienced during the financial crisis in 2008.

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

(in billions of dollars)

	2012	2013	2014	2014-I	2014-II	2014-III	2014-IV	2015-I
Total	**$108.8**	**$-43.2**	**$-16.1**	**$-21.9**	**$23.6**	**$-1.2**	**$-16.8**	**$-13.6**
Total Europe	72.6	8.1	24.2	13.3	-1.5	7.0	5.3	-12.1
France	15.7	0.1	17.6	8.3	-4.4	7.0	6.6	-6.7
Germany	3.3	1.0	-2.0	1.5	0.1	0.0	-3.5	-1.1
Italy	-2.3	-0.9	-0.9	0.3	-0.1	-0.3	-0.8	-1.3
Netherlands	-3.7	0.6	3.8	-0.2	1.0	1.1	1.9	-1.5
Sweden	2.5	3.3	2.3	1.5	1.4	-0.3	-0.3	0.6
Switzerland	11.6	-0.4	-6.2	-0.8	-0.6	-2.8	-2.0	2.2
United Kingdom	34.2	-0.3	-19.7	-6.2	6.0	-8.5	-11.0	-4.0
Canada	14.7	-3.2	10.2	-2.1	6.6	-0.2	5.9	-7.6
Latin America	14.3	-19.0	-11.7	-23.2	12.7	0.0	-1.2	7.4
Mexico	3.2	0.7	1.8	0.2	1.3	0.3	0.0	-0.2
Asia	-2.3	-29.8	-27.7	-4.7	-6.9	0.1	-16.2	-1.4
China	-1.5	2.8	-1.7	0.8	-2.1	0.3	-0.7	-0.3
Hong Kong	0.1	-4.0	-6.6	-0.7	-1.4	6.8	-11.3	0.9
Indonesia	-0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Japan	-8.1	-26.4	-9.2	-0.8	-2.8	-5.8	0.2	1.9
Korea	0.9	2.2	1.8	0.7	0.9	0.4	-0.2	1.1
Malaysia	1.9	1.3	-0.2	0.1	-0.3	0.1	-0.2	-0.3
Philippines	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Singapore	-0.9	-3.8	-11.0	-5.3	-3.0	-0.6	-2.1	-0.2
Taiwan	1.0	-1.2	-0.6	0.4	0.2	-0.5	-0.7	-0.4
Thailand	-0.1	-0.3	-0.2	-0.2	0.0	-0.1	0.0	0.1
Australia	1.0	-0.6	0.9	1.8	2.3	-0.4	-2.9	0.9

Source: Developed by CRS from the Treasury Department's International Capital data system. June, 2015.

Corporate Bonds

As **Table 10** indicates, foreign investors generally reduced their holdings of U.S. corporate bonds over the 2007-2013 period, but did accumulate about $380 billion 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 accounted for over half of the net foreign purchases of U.S. corporate bonds during the 2007-2013 period, with an estimated accumulation of $199 billion over the period. Chinese investors trail behind their British counterparts, but acquired an estimated $85 billion in corporate bonds in the 2007-2013 period. Japan ($77 billion), Canada ($32 billion), Hong Kong ($23 billion), Switzerland ($32 billion), Singapore ($25 billion), and

Taiwan ($24 billion) are estimated to be the next largest foreign acquires in U.S. corporate bonds during the 2007-2013 period. Investors in Europe sold a net amount of $42 billion in U.S. corporate bonds over the 2007-2013 period, reflecting the European sovereign debt crisis.

Table 10. Net Foreign Purchases of U.S. Corporate Bonds

(in billions of dollars)

	2012	2013	2014	2014-I	2014-II	2014-III	2014-IV	2015-I
Total	**$-24.1**	**$10.3**	**$25.3**	**$-0.5**	**$-19.9**	**$6.3**	**$39.4**	**$33.8**
Total Europe	-46.0	-44.2	-69.0	-14.1	-22.7	-25.1	-7.2	-5.2
France	-5.6	-9.3	-32.1	-4.6	-11.7	-16.3	0.5	0.0
Germany	-3.2	0.3	-2.8	0.1	-0.1	-0.6	-2.2	-0.3
Italy	-0.6	-2.9	-0.7	-0.4	-0.1	-0.5	0.3	-0.1
Netherlands	0.6	-0.6	-4.9	-1.2	-1.9	-1.1	-0.6	-0.9
Sweden	-0.7	-0.2	-0.3	-0.1	-0.2	-0.4	0.4	-0.7
Switzerland	0.1	-7.3	-4.5	-1.3	-2.1	-1.9	0.8	0.9
United Kingdom	-10.8	19.1	77.2	15.5	6.6	19.0	36.0	30.9
Canada	-0.8	-3.2	-5.6	-2.1	-5.9	3.8	-1.3	-1.3
Latin America	9.1	15.6	22.4	2.3	5.6	6.0	8.5	9.4
Mexico	-2.5	-1.2	-0.4	0.2	-0.3	0.2	-0.5	0.1
Asia	17.9	23.3	-10.2	-4.0	-2.7	-3.1	-0.3	-3.8
China	5.7	9.7	0.5	-0.4	0.3	0.7	-0.1	0.4
Hong Kong	-0.6	2.8	2.3	0.8	0.7	0.2	0.5	0.8
Indonesia	0.1	0.1	-0.3	0.0	0.0	0.0	-0.3	-0.1
Japan	2.7	0.3	-11.5	-3.9	-2.7	-3.9	-0.9	-3.3
Korea	0.8	3.5	2.8	1.6	0.6	-0.2	0.8	0.3
Malaysia	0.3	0.4	-0.3	0.0	-0.2	-0.2	0.1	0.1
Philippines	0.1	-0.4	0.0	0.0	0.0	0.0	0.0	0.1
Singapore	4.4	6.5	0.1	-0.1	-0.6	1.2	-0.4	-0.5
Taiwan	0.0	-0.1	0.4	0.1	0.0	0.3	0.0	0.0
Thailand	0.0	-0.1	0.4	0.1	0.0	0.3	0.0	0.0
Australia	-1.4	2.1	2.2	0.3	-0.2	2.7	-0.6	-0.3

Source: Developed by CRS from the Treasury Department's International Capital data system, June, 2015.

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 long-term U.S. Treasury bills, bonds, and notes amounted to over $6.1 trillion at the end of the first quarter of 2015. These holdings are comprised of foreign private holdings and foreign official holdings for each country listed. Of the total accumulated amount, foreign official institutions held $4.1 trillion in 2015, or more than double the $2.0 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 $1.3 trillion in accumulated holdings of long-term Treasury securities, China is the single largest holder of such securities. At the end of the first quarter of 2015, Japan had accumulated $1.2 trillion in such holdings. With $296 billion accumulated in long-term Treasury securities, Caribbean banking centers rank as the third largest holders of such securities, although they often act as intermediaries for other investors seeking to place their holdings in offshore accounts. They rank ahead of the oil exporting countries with $293 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)

2015		2014		2013		2012	
China	$1,263.4	China	$1,244.3	China	$1,268.9	China	$1,220.4
Japan	1,215.7	Japan	1,230.9	Japan	1,182.5	Japan	1,111.2
Carib Bnkng Ctrs	295.5	Belgium	335.4	Carib Bnkng Ctrs	290.9	Carib Bnkng Ctrs	268.3
Oil Exporters	292.9	Oil Exporters	285.9	Belgium	256.8	Oil Exporters	262.0
Brazil	262.7	Carib Bnkng Ctrs	272.4	Brazil	245.4	Brazil	253.3
Belgium	228.9	Brazil	255.8	Oil Exporters	238.3	Taiwan	195.4
Switzerland	215.8	Ireland	202.0	Taiwan	182.2	Switzerland	195.4
Ireland	215.7	Switzerland	190.1	Switzerland	175.1	Russia	161.5
United Kingdom	194.8	United Kingdom	188.9	United Kingdom	163.6	Luxembourg	154.7
Hong Kong	783.1	Taiwan	174.4	Hong Kong	158.8	Hong Kong	141.9
Luxembourg	171.0	Hong Kong	172.6	Russia	138.6	Belgium	138.8
Taiwan	170.3	Luxembourg	171.8	Luxembourg	134.4	United Kingdom	132.6
India	110.3	Singapore	110.0	Ireland	125.1	Ireland	103.1
Singapore	109.7	Russia	86.0	Norway	97.2	Singapore	99.3
Mexico	87.4	Mexico	84.8	Singapore	86.2	Norway	75.1
Turkey	77.8	India	83.0	India	68.5	Canada	66.2
Germany	76.3	Norway	81.6	Germany	67.2	Germany	63.2
France	75.0	France	79.2	Mexico	65.1	Mexico	61.1

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

2015		2014		2013		2012	
Canada	72.5	Turkey	77.0	Canada	55.7	India	59.5
Korea	71.8	Germany	72.7	Korea	53.9	Turkey	57.6
Norway	66.6	Canada	69.0	France	53.6	Thailand	53.6
Russia	66.5	Korea	68.3	Turkey	52.2	France	51.4
Philippines	39.4	Philippines	40.6	Thailand	51.7	Korea	47.6
Sweden	38.9	Sweden	39.6	Philippines	40.2	Philippines	36.8
Netherlands	37.6	Netherlands	36.2	Netherlands	36.9	Chile	33.0
Colombia	35.6	Colombia	34.7	Sweden	33.9	Netherlands	32.0
Australia	33.8	Australia	34.5	Australia	33.8	Poland	31.5
Italy	32.7	Thailand	33.2	Colombia	33.0	Colombia	30.2
Spain	31.4	Italy	31.9	Poland	30.9	Sweden	27.8
Thailand	29.0	Kazakhstan	31.6	Italy	30.3	Italy	27.5
Chile	28.3	Spain	27.7	Chile	26.1	Spain	27.4
Poland	27.6	Poland	27.7	Israel	23.7	Australia	27.4
Kazakhstan	27.1	Chile	25.5	Spain	23.0	Israel	24.1
Israel	20.9	Israel	25.2	Peru	14.8	Malaysia	19.3
Denmark	16.4	Denmark	16.7	Denmark	14.5	Peru	14.5
Vietnam	13.4	Vietnam	14.0	Malaysia	11.8	Denmark	13.8
Peru	10.8	Peru	10.9	South Africa	11.3	South Africa	13.1
South Africa	10.3	South Africa	9.3	Uruguay	10.7	All Other	242.4
All Other	180.4	All Other	180.5	All Other	208.0	Grand Total	$5,573.8
Grand Total	$6,137.3	Grand Total	$6,156.0	Grand Total	$5,794.9		
Of which:		Of which:		Of which:		Of which:	
For. Official	4,132.2	For. Official	4,113.1	For. Official	4,054.4	For. Official	4,032.2
Treasury Bills	367.6	Treasury Bills	335.3	Treasury Bills	398.3	Treasury Bills	372.7
T-Bonds & Notes	3,764.6	T-Bonds & Notes	3,777.8	T-Bonds & Notes	3,656.1	T-Bonds & Notes	3,659.5

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, except for 2015, which is the value at the end of the first quarter.

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 to 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%
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%

	Total outstanding	Foreign owned	Percent foreign owned
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. The sovereign debt crisis in Europe also has called into question the presumption by most financial investors that government securities are risk-less. In other cases, the international linkages that connect national capital markets could be the conduit through which events in one market could spread quickly 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. In turn, 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 reduced U.S. demands for capital inflows. A decrease in U.S.

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

[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.

liabilities to foreigners by U.S. banks likely reflected tight credit conditions, which proved to be especially difficult for developing countries that have a more limited 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 argued that, "over time changes in U.S. 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

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

[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.

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. In fact, the United States continues to be viewed as a "safe haven" for international investors, as was evident during the 2008-2009 financial crisis.

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 finds in the United States, the infusion of capital 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. During the financial crisis of 2008-2009, the Federal Reserve acted aggressively, including negotiating emergency swap arrangements with other central banks to assure an adequate supply of dollars, and serving as the lender of last resort by providing credit and liquidity to financial markets. Also, 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 2008-2009 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]

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

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