

The U.S. Capital Account Surplus

The United States conducts a large number of trade and financial transactions with other countries. These transactions are recorded in the U.S. balance of payments accounts. The *balance of payments* consists of two subaccounts. One subaccount is the *current account*. The current account consists largely of the trade balance, which records U.S. imports and exports of goods and services. The second subaccount is the *capital and financial account* (hereafter called the capital account), which records U.S. net sales or purchases of assets—stocks, bonds, loans, foreign direct investment (FDI), and reserves—with other countries during the same time period.

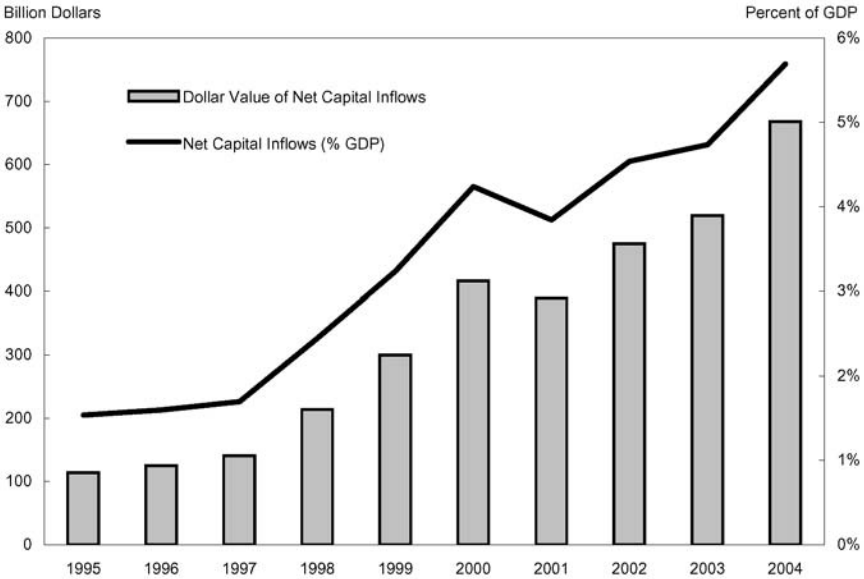
In 2004 (the most recent calendar year for which data exist), the United States ran a *current account deficit* of \$668 billion. This deficit meant the United States imported more goods and services than it exported. The counterpart to the U.S. current account deficit was a U.S. *capital account surplus*. This surplus meant that foreign investors purchased more U.S. assets than U.S. investors purchased in foreign assets, investing more in the United States than the United States invested abroad. By economic definition, a country's current and capital account balances must offset one another. Therefore, the U.S. current account deficit was matched by a capital account surplus of \$668 billion (including \$85 billion in net statistical discrepancies within the capital account, which are included in part to ensure the accounts sum to zero).

Because foreigners invested more in the United States than the United States invested abroad, the United States received *net foreign capital and financial inflows* (hereafter called net capital inflows). Countries like the United States that run capital account surpluses and current account deficits receive net foreign capital inflows. In contrast, countries that run capital account deficits and current account surpluses experience net foreign capital outflows.

Between 1980 and 2004, the United States ran a capital account surplus and a current account deficit in all but three years. More recently, net capital inflows to the United States have risen sharply (Chart 6-1). The \$668 billion in net inflows received in 2004 was nearly \$300 billion greater than the level of net inflows received only three years earlier. As a percent of U.S. Gross Domestic Product (GDP), net capital inflows rose from 1.5 percent in 1995 to 4.2 percent in 2000 to 5.7 percent in 2004. In 2005, U.S. net capital inflows are likely to have exceeded 6 percent of GDP and ranged from \$700 to \$800 billion in dollar terms.

Chart 6-1 Net Capital Inflows to the United States

Net U.S. inflows have risen in recent years in absolute terms and as a percent of GDP.



Note: Includes net inflows on the capital-financial accounts. Net statistical discrepancies in the financial account.

Source: Department of Commerce (Bureau of Economic Analysis).

Recent growth in U.S. net capital inflows has sparked debate about the causes of these inflows. As this chapter discusses, a variety of factors explain recent trends in U.S. capital inflows. One of these factors is the pattern of *national saving* (hereafter called domestic saving) and *domestic investment* in the United States and other countries. This perspective on foreign capital flows—linking domestic saving and investment balances—is consistent with, but somewhat different from, analyses that explain U.S. capital inflows by focusing narrowly and exclusively on the U.S. trade deficit. In a view that emphasizes trade flows, U.S. net capital inflows result directly from the excess of U.S. imports over U.S. exports. In contrast, a view that emphasizes domestic saving and investment balances highlights a wider range of factors within countries that can lead them to experience net capital inflows or outflows. Key points of this chapter are:

- The size and persistence of U.S. net capital inflows reflects a number of U.S. economic strengths (such as its high growth rate and globally competitive economy) as well as some shortcomings (such as its low rate of domestic saving).

- The recent rise in U.S. net capital inflows between 2002 and 2004 in part reflects global economic conditions (such as a large increase in crude oil prices) as well as policies (such as China's exchange rate policy) and weak growth in several other large economies (such as Germany) that led to greater net capital outflows from these countries.
- The United States is likely to remain a net foreign capital recipient for a long time. However, the magnitude of future U.S. net capital inflows is likely to moderate from levels observed in recent years.
- Encouraging greater global balance of capital flows would be helped by steps in several countries. The United States should raise its domestic saving rate. Europe and Japan should improve their growth performance and become more attractive investment destinations. Greater exchange rate flexibility in Asia, including China, and financial sector reforms could increase the role of domestic demand in promoting that region's future growth.

In addition, the chapter makes two broader points. First, global capital flows—the flow of saving and investment among countries—should be analyzed from a global perspective and not by considering U.S. economic policies alone. Global capital flows are *jointly* determined by the behavior of many countries. To understand why the United States receives large net capital inflows requires understanding why countries like Japan, Germany, China, and Russia experience large net capital outflows.

A second point is the need to distinguish between market-driven and policy-driven capital flows. For example, recent capital outflows from Germany have largely reflected market forces and private sector behavior. In contrast, China's recent net capital outflows largely reflect policy decisions. In the United States, capital inflows have reflected a combination of market forces and policy behavior. Separating market from policy-related sources of capital flows is important for understanding capital flow patterns and to consider how these flows may change in the future.

This chapter is structured in five parts. The first part explains the distinction between countries that are net capital importers (receiving net capital inflows) and countries that are net capital exporters (experiencing net capital outflows). One key theme is the link that exists between saving and investment balances *within* countries and capital flows *among* countries. The second part of the chapter examines recent trends in global capital flows. Next, the chapter examines four countries that were the world's largest net capital exporters in 2004—Japan, Germany, China, and Russia—to understand some of the factors driving their capital outflows. The chapter then examines recent U.S. capital inflows and their determinants. The final section discusses whether the United States can continue receiving net capital inflows indefinitely.

Global Capital Flows—Principles

Global capital flows reflect the matching of saving and investment opportunities in the global financial system. In any given period, countries can be classified as net capital exporters or net capital importers. Net capital exporters have supplies of domestic saving (which includes households, firms, and the government) that exceed domestic investment opportunities that are expected to be profitable. Because of their excess saving, these countries export some portion of their saving to other countries through net purchases of foreign assets—stocks, bonds, loans, FDI outflows, and reserves. In contrast, countries that are net capital importers have more domestic investment opportunities that are expected to be profitable than they can fund with their supply of domestic saving. These countries have excess demand for saving and import foreign saving through net sales of assets to foreign investors. Broadly speaking, therefore, global capital flows reflect the interaction between countries that are net capital importers and net capital exporters.

Stated differently, countries that are net capital exporters run *capital account deficits* and *current account surpluses*. Conversely, countries that are net capital importers run *capital account surpluses* and *current account deficits*. A country's capital account balance reflects its net sales or purchases of assets with other countries. Its current account balance reflects its net sales or purchases of goods and services with other countries along with net flows of income and transfer payments. The current account and capital account must exactly offset one another. This means the value of a current account surplus will be mirrored by the value of a capital account deficit, and a current account deficit will be mirrored by a capital account surplus of equal value.

Capital flows provide benefits to both groups of countries. For capital exporters, net outflows allow them to earn a higher return on their savings by investing abroad than they expect to earn by investing in their own countries. For capital importers, drawing on foreign savings allows domestic investment to be maintained at a higher level than would otherwise be possible given their level of domestic saving. Maintaining a high level of capital investment is critical for promoting future growth.

Changes in the rate of domestic saving or domestic investment will cause changes in a country's capital and current account balances. For example, a rise in domestic investment relative to saving will, all else equal, cause the capital account surplus to rise and the current account balance to fall. In this case, net capital inflows will increase (or, for countries already experiencing net capital outflows, net outflows will decrease). Conversely, an increase in domestic saving relative to investment will cause the capital account balance to decrease and the current account balance to increase. In that case, net foreign capital outflows will increase (or net capital inflows will decrease). Therefore, one way

of assessing changes in current and capital account balances is to examine changes in domestic saving and investment rates (see Box 6-1).

Box 6-1: Analyzing the Current and Capital Account Balances

There are two ways to analyze the current account balance. The more widely used perspective measures a country's imports and exports of goods, services, net income flows, and net current transfer payments. Net capital flows, which are recorded in the capital account, reflect financing from foreigners needed to pay for net import purchases on the current account. By accounting necessity, the current account and capital account must sum to zero. Therefore, a current account deficit will be matched by a capital account surplus of equal magnitude.

The table below shows the U.S. current and capital accounts in 2004. The current account deficit of \$668 billion was offset by an equivalent capital account surplus (including net statistical discrepancies, previously noted). Line items within the capital account specify the ways that foreigners invested in the United States. The largest net capital inflow component was portfolio investment (\$763 billion in gross inflows and \$103 billion in gross outflows, equaling \$660 billion in net inflows). Because the United States has a floating exchange rate, changes in its official reserve assets were small. For countries with fixed exchange rates, changes in reserves are typically much larger because reserves are bought or sold through foreign exchange intervention that is undertaken to manage the value of their exchange rate.

Current Account (billion dollars)		Capital Account (billion dollars)	
Goods	- \$665	Net capital transfers	- \$2
Services	+ \$48	Net foreign direct investment	- \$145
Net income	+ \$30	Net portfolio investment	+ \$660
Net current transfers	- \$81	Net banking and other flows	+ \$67
<i>Total</i>	- \$668	Net statistical discrepancies	+ \$85
		Net change in official reserve assets	+ \$3
		<i>Total</i>	+ \$668

Source: Bureau of Economic Analysis, International Monetary Fund, International Financial Statistics

Another perspective on the current account compares domestic saving with domestic investment. When domestic investment exceeds domestic saving, a country has excess demand for saving that is met by drawing on other countries' saving. Foreign capital inflows may reflect expectations by foreign investors that they will realize a higher

Box 6-1 — continued

return by investing in other countries than they will earn by investing in their own countries. In this case, capital inflows broadly reflect the attractiveness of investing in one economy relative to other economies.

The table below shows U.S. domestic saving and domestic investment in 2004. Because domestic investment exceeded saving, a current account deficit and capital account surplus resulted. The total sums to the same amount regardless of whether the current account is looked at through trade flows or through saving and investment flows.

U.S. Savings and Investment—2004 (billion dollars)

Gross domestic saving	+ \$1,572
Gross domestic investment	+ \$2,301
Net other flows	+ \$61
Total	\$ 668

Source: Bureau of Economic Analysis

Global Capital Flows—Recent Patterns

What is the current pattern of net capital inflows and outflows across countries? How has this pattern changed in the past decade? Chart 6-2 shows the United States was the largest net capital recipient in 2004. Spain, Great Britain, Australia, and Turkey were also net capital recipients. Japan, Germany, China, Russia, and Saudi Arabia were the largest net capital exporters.

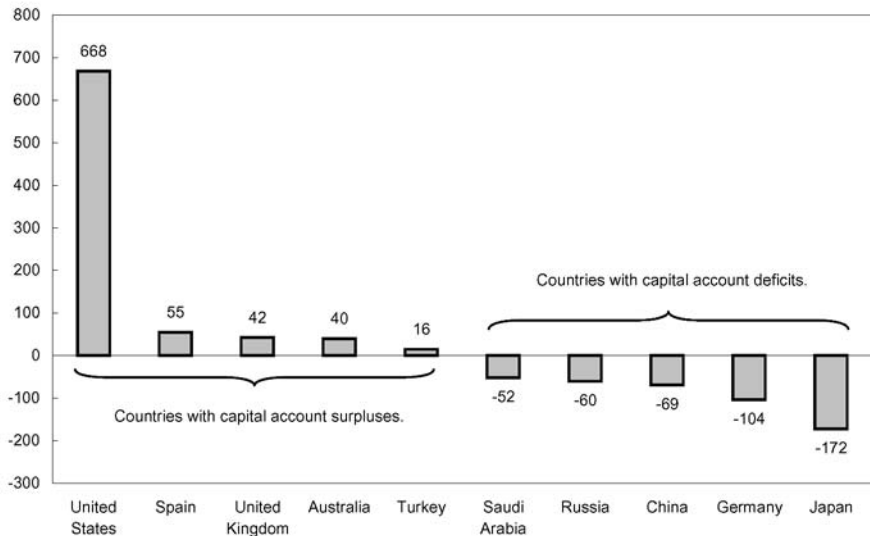
Between 1995 and 2004, global saving and investment patterns changed in a number of respects. Some of the more important changes were:

- *Declining concentration among net capital exporting countries.* Falling concentration means that a wider range of countries experienced net capital outflows. In 1995, the world's largest net capital exporter (Japan) accounted for 39 percent of global net capital outflows and the five largest net capital exporters accounted for 70 percent of net outflows. In 2000, the largest net capital exporter accounted for 24 percent of net outflows while the five largest net exporters accounted for 48 percent of net outflows. In 2004, the largest net exporter accounted for 20 percent of net outflows while the five largest net exporters accounted for 52 percent of net outflows.
- *Rising concentration among net capital importing countries.* Rising concentration means that a smaller number of countries received a larger

Chart 6-2 Largest Net Capital Importers and Exporters- 2004

The United States had the largest net capital inflows in dollar terms and Japan had the largest net capital outflows.

Billion Dollars



Note: Assumes net statistical discrepancies are in the capital and financial accounts.

Source: International Monetary Fund, *World Economic Outlook*, September 2005.

share of total net capital inflows. Most of this change reflected higher U.S. net capital inflows. The United States received 33 percent of global net capital inflows in 1995, 61 percent in 2000, and 70 percent in 2004. The five largest net capital recipients received 57 percent of global net capital inflows in 1995, 78 percent in 2000, and 86 percent in 2004.

- *A change in net capital flow positions for some large countries.* Germany experienced the largest change in its net capital flow position. In 1995 and 2000, Germany received \$30 billion in net capital inflows but had \$104 billion in net outflows in 2004. Saudi Arabia also went from small net capital inflows in 1995 (\$5 billion) to large net capital outflows in 2004 (\$52 billion).
- *A change in the regional composition of capital flows.* Developing Asian and Middle Eastern countries also became large net capital exporters. In 1995, developing Asian countries had net inflows of \$42 billion, but had net outflows of \$93 billion in 2004. China had \$2 billion of net capital outflows in 1995, \$21 billion of net outflows in 2000, and \$69 billion in net outflows in 2004. Rising crude oil prices also caused many oil-producing countries to become large net capital exporters. Middle Eastern countries had net capital inflows of \$1 billion in 1995 and \$103 billion of net outflows in 2004.

- *Net capital outflows from developing countries.* In 1995, developing and emerging market countries as a whole received \$84 billion in net capital inflows. In 2000, they experienced \$91 billion in net outflows. In 2004, they experienced \$367 billion in net outflows. While these countries remained net recipients of foreign direct investment (FDI) inflows, they became large net purchasers of foreign reserve assets. These purchases, made primarily by central banks, represent a capital outflow because domestic resources are being invested abroad rather than within these countries.
- *Rising global foreign reserve levels.* The value of global foreign reserves (held primarily by central banks) rose from roughly \$1.5 trillion to \$3.9 trillion between 1995 and 2004—a 160 percent increase in a period when the value of global GDP increased by roughly 40 percent. Global reserves increased by more than \$1.3 trillion in 2002-04 alone. Three countries accounted for nearly 60 percent of this reserve increase—Japan, China, and South Korea.

Global Capital Exporters

To understand global capital flow patterns, we can examine in more detail saving and investment patterns in some of the largest capital importers and exporters. The world's four largest net capital exporters in 2004 were Japan, Germany, China, and Russia. In total, these countries exported more than \$400 billion of domestic savings to other countries through their net purchases of foreign assets. Net capital outflows from these four countries represented 46 percent of outflows among all net capital exporting countries in 2004.

While these countries exported large amounts of their saving to other countries, they also differed in several respects. Recent capital outflows from Japan and Germany, for example, have been associated with weak growth while Russia and China have experienced rapid growth. Germany's capital outflows largely reflect private sector, market-driven behavior whereas China's outflows reflect policy behavior. Japan and Germany have run fiscal deficits while Russia has had a fiscal surplus. Japan and Germany have had falling rates of domestic investment while China has had a rising rate. What these countries have had in common, however, were supplies of domestic saving that exceeded their domestic investment.

Japan—Deflation and a Falling Investment Rate

With net capital outflows of \$172 billion, Japan was the world's largest net capital exporter in 2004. Between 1995 and 2004, Japan was the world's

largest net capital exporter every year, “pushing” more than \$1.1 trillion in excess saving into the global financial system. Moreover, the level of Japan’s net capital outflows increased each year from 2001 to 2004.

Recent growth in Japan’s net capital outflows has resulted primarily from a falling domestic investment rate rather than a higher saving rate. Between 1995 and 2004, Japan’s domestic saving rate fell from 30 percent to 28 percent of GDP. During this same period, Japan’s domestic investment rate fell from 28 percent to 24 percent of GDP. This widening gap between saving and investment—Japan’s excess supply of saving—led to higher net capital outflows and a corresponding rise in its current account surplus. Japan’s current account surplus rose from 2.1 percent of GDP in 1995 to 2.5 percent of GDP in 2000 to 3.7 percent of GDP in 2004.

Japan’s investment rate has fallen for several reasons. A declining population and slowing growth in its labor force has reduced Japan’s need for physical capital. Japan also arguably suffered from a large excess of capital investment in the late 1980s. This previous experience with overinvestment, growth in bad loans among Japan’s banks, and the slow growth Japan has experienced since the early 1990s following the collapse of its “bubble economy” have made Japanese firms more cautious about undertaking new domestic investment. Deflationary pressures (a decline in the overall price level) have also weakened private investment since firms are often more reluctant to initiate new investment when future prices are expected to fall.

The key source of Japan’s rising saving-investment imbalance has been its corporate sector. Between 1995 and 2004, Japan’s corporate sector went from being a net borrower of funds (investing more than it saved) between 2 percent to 3 percent of GDP to a net lender of funds (saving more than it invested) equivalent to nearly 15 percent of GDP. During this same period, the rate of net saving in Japan’s household sector fell by roughly 70 percent (from 10 percent to about 3 percent of GDP) while Japan’s public sector was a large net borrower of funds. Therefore, rising net savings by Japanese firms explain much of the recent growth in Japan’s net capital outflows.

After a long period of slow growth, Japan’s economy showed some signs of improvement in 2005. Financial ratios among firms improved, and growth prospects appeared to improve. Japan’s central bank forecast that deflation is likely to end in 2006. Business confidence strengthened and commercial bank lending began to resume. Japan’s labor market also showed some signs of strength. The re-election of Prime Minister Koizumi strengthened prospects for future economic reform. To the extent Japan can achieve sustained growth, its future net capital outflows are likely to slow. Stronger growth in Japan will encourage a larger share of its savings to remain at home rather than being invested abroad.

Germany—Structural Rigidities and a Falling Investment Rate

With \$103 billion in net capital outflows, Germany was the world's second largest net capital exporter in 2004. Between 1990 and 2000, Germany received total net foreign capital inflows of \$175 billion. Between 2001 and 2004, in contrast, Germany experienced net capital outflows of more than \$200 billion. Germany's rising net capital outflows have been mirrored by its rising current account surpluses. Between 2001 and 2004, Germany's current account surplus rose from 0.2 percent to 3.8 percent of GDP.

Like Japan, Germany's rising saving surpluses and net capital outflows have stemmed from a falling rate of domestic investment rather than a rising rate of domestic saving. At 21 percent of GDP, Germany's saving rate has been broadly stable over most of the past decade (though it did rise from 2003 to 2004). Domestic investment during this period, however, fell from 22 percent to 17 percent of GDP—the second lowest investment rate among G8 countries (the world's most advanced economies).

Why has Germany's investment rate declined? One factor has been structural rigidities in its economy that have slowed Germany's rate of growth and opportunities for profitable investment. These rigidities result in part from legal and microeconomic barriers that limit economic flexibility. Inflexibility can prolong periods of slow growth because an economy is less able to adjust effectively to changing conditions in its labor and product markets and achieve full levels of employment. According to the Organization for Economic Cooperation and Development (OECD), barriers to new business formation and investment are higher in Germany than the OECD average. A World Bank "employment rigidity index" scored Germany's labor market at 55 (scaled from 0-100, with higher scores implying greater rigidity) compared to 17 for Australia, 14 for Great Britain, and 3 for the United States. Germany's standardized unemployment rate is high (9.5 percent in 2005) and its long-term unemployment rate (measuring workers unemployed for a year or more) was more than 50 percent higher in 2004 than the average OECD rate.

Germany has taken some recent steps to reduce unemployment and accelerate its growth. Laws limiting temporary and part-time work have been relaxed. Passage of "Hartz IV" labor reforms in 2004 was aimed at reducing long-term unemployment by requiring unemployed workers to seek work more actively. Unit labor costs, which are one widely used indicator of competitiveness, have recently fallen relative to several other European countries. It is also hoped that Germany's new government, which took office in November 2005, may strengthen other growth incentives. Like Japan, stronger growth in Germany will encourage a larger share of its domestic savings to be used at home rather than invested abroad.

China—Exchange Rate Management and a Rising Saving Rate

With \$69 billion in net outflows, China was the world's third largest net capital exporter in 2004. China's role as a net capital exporter may seem surprising given the large foreign investment inflows it experiences. While China does receive substantial foreign investment, it experiences even larger capital outflows due to foreign reserve accumulation by its central bank that results from its foreign exchange regime. As China's reserves have risen in recent years, its capital account balance has moved toward larger deficits and its current account toward larger surpluses. In 2004, China's current account surplus was equivalent to 4 percent of GDP (note that in December 2005, China increased the estimate of its 2004 GDP, which is likely to reduce the size of this current account surplus relative to GDP). Current projections indicate China's current account surplus is likely to have exceeded 6 percent of GDP in 2005.

China's reserves have increased due to its rising current account surpluses, net private capital inflows, and tightly managed pegged exchange rate system. China first adopted its currency peg in 1994, linking its currency (the renminbi) to the U.S. dollar at a rate of 8.3 renminbi-per-dollar. To maintain this peg, China's central bank has purchased large amounts of foreign currency assets in recent years to prevent its currency from appreciating. Even after modifying its exchange rate peg in July of 2005, however, (linking the renminbi to a basket of currencies rather than the U.S. dollar alone) China's foreign reserves have continued to rise. By the end of 2005, China's foreign reserve level exceeded \$800 billion and may rise to \$900-\$1000 billion by the end of 2006. Between 2000 and 2005, China's foreign reserves increased by more than \$600 billion.

In terms of its saving and investment balance, China's net capital outflows have resulted primarily from a rising saving rate. While China's rate of domestic investment has also been rising (projected 46 percent of GDP in 2005 prior to its GDP revision), its saving rate has risen even more rapidly. At roughly 52 percent of GDP, China's saving rate is the highest in the world.

Several factors contribute to China's high saving rate. China's "one child" policy, enacted to control its population growth, has contributed to its aging population by reducing the share of younger groups within its population. Because older workers typically earn and save more than younger workers, China's saving rate has increased as its workforce has aged. The absence of a strong social safety net (including adequate public pensions and health care) increases the need for precautionary household saving. The absence of well-developed financial markets and consumer credit mechanisms contribute to high saving by forcing many people in China to save large amounts of cash before making purchases rather than by taking consumer loans that can be repaid gradually. China's tightly managed exchange rate and foreign exchange

intervention to limit currency appreciation also contribute indirectly to its high saving rate. Saving is encouraged, in effect, because consumption is discouraged by China's exchange rate policy. With a stronger currency, the global purchasing power of China's currency would rise, raising its income (in global terms) and consumption share, and thus reducing its rate of domestic saving.

Greater exchange rate flexibility would encourage China's productive resources to move toward domestic rather than export production. Greater financial development would help to raise consumption spending (and reduce saving) by providing credit mechanisms for purchases that are currently paid for with cash. A reduction in China's saving rate and greater reliance on domestic demand are essential for China to sustain its future growth. At roughly 45 percent of its GDP, China's domestic investment rate could create future risks for its economy (see Box 6-2).

Russia—Growth in “Petrodollars” and a Rising Saving Rate

With \$60 billion in net outflows, Russia was the world's fourth largest capital exporter in 2004. Russia's net capital exports have been closely linked to higher export revenues resulting from rising oil and natural gas prices. Oil export revenues are sometimes referred to as “petrodollars.” With oil sales accounting for over 40 percent of its exports, Russia's export revenues rose by more than 50 percent between 2002 and 2004 (\$107 billion to \$183 billion) while its current account surplus rose to more than 10 percent of GDP.

In terms of its domestic saving and investment balance, Russia's growing net capital outflows have resulted primarily from higher saving. Between 2002 and 2004, domestic saving rose from 29 percent to 31 percent of GDP. A higher saving rate has been reflected by rising fiscal surpluses. Between 2002 and 2004, Russia's fiscal surplus rose from 1 to 5 percent of GDP while its rate of net private sector saving declined from 8 to 5 percent of GDP.

Large petrodollar increases have also occurred in other oil producers. Chart 6-3 shows current account surplus levels among 12 of the world's largest oil exporters, whose combined current account surplus and net capital outflows rose by 134 percent between 2002 and 2004.

The United States and Net Capital Inflows

Overview

The United States received \$668 billion in net foreign capital inflows in 2004 (including \$85 billion in net statistical discrepancies recorded in its capital account). This capital account surplus was the counterpart to the U.S. current account deficit. This section examines four questions about the U.S.

Box 6-2: High Saving and Financial Sector Inefficiency

Can a country save too much? While a higher saving level might always seem beneficial, higher saving can create costs if those savings are poorly used. Excess saving can sometimes lead to overinvestment that reduces the quality and efficiency of new capital investment and can sometimes create problems in a country's banking system by increasing the share of non-performing loans (NPLs).

An NPL is a loan that cannot be fully repaid by a borrower. Higher NPL ratios imply that investment spending may be inefficient because loans are not being fully repaid. High NPLs can create a number of problems. One problem is that banks often become more cautious about new lending as NPL ratios rise. New loans are unlikely to be approved if previous loans are not being repaid. Slower bank lending, in turn, can slow economic growth more broadly.

Another more direct problem can result when NPL ratios become so high that banks themselves face bankruptcy due to widespread loan defaults and falling bank capital adequacy ratios. In this case, governments must sometimes recapitalize weak banks or pay off insured depositors of banks they close. The cost of closing U.S. savings and loan institutions that failed in the 1980s was \$150 billion, or roughly 3 percent of GDP. In Chile, bank failures in the early 1980s cost more than 40 percent of GDP. Spain paid costs equivalent to nearly 20 percent of its GDP following a banking crisis in the late 1970s and early 1980s.

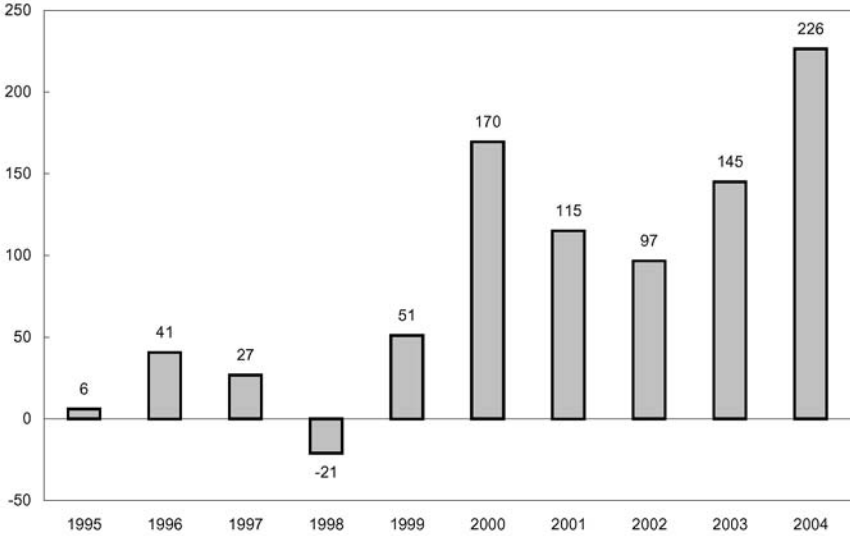
High saving rates can increase NPLs by encouraging banks to take imprudent risks. For example, lending standards may be reduced. Loans for weak borrowers that otherwise lack creditworthiness are more likely to be approved when saving is high and interest rates are low. If interest rates later rise, however, borrowers whose rates rise may not repay their loans, causing NPL ratios to rise. If in contrast interest rates that borrowers pay remain fixed, then banks can again suffer losses because they must pay higher rates to their depositors but cannot charge higher interest rates on loans to their current borrowers.

Japan arguably experienced a large capital overhang in the 1990s after a long period of high saving and investment as well as the emergence of its "bubble economy" in the late 1980s. Average saving and investment rates in Japan were roughly 35 percent of GDP in the 1970s and 30 percent of GDP in the 1980s. China, however, likely has even higher saving rates. Not surprisingly, China's NPL ratio is also believed to be high. While China's official statistics report NPLs are roughly 10 percent of outstanding loans, unofficial estimates suggest China's NPL ratio may be closer to 25 percent (by comparison, NPLs among U.S. banks are less than 1 percent).

Chart 6-3 Current Account Balances of Oil-Producing Countries

Oil producers have experienced large recent increases in their current account surpluses.

Billion Dollars



Note: Includes Algeria, Iran, Indonesia, Kuwait, Libya, Nigeria, Norway, Qatar, Russia, Saudi Arabia, United Arab Emirates, and Venezuela.

Source: International Monetary Fund, *World Economic Outlook*, September 2005.

capital account: (1) How do U.S. capital inflows compare with other countries? (2) Has the U.S. share of global capital inflows changed? (3) Has the composition of U.S. capital inflows changed? (4) What factors encourage foreign capital flows into the United States?

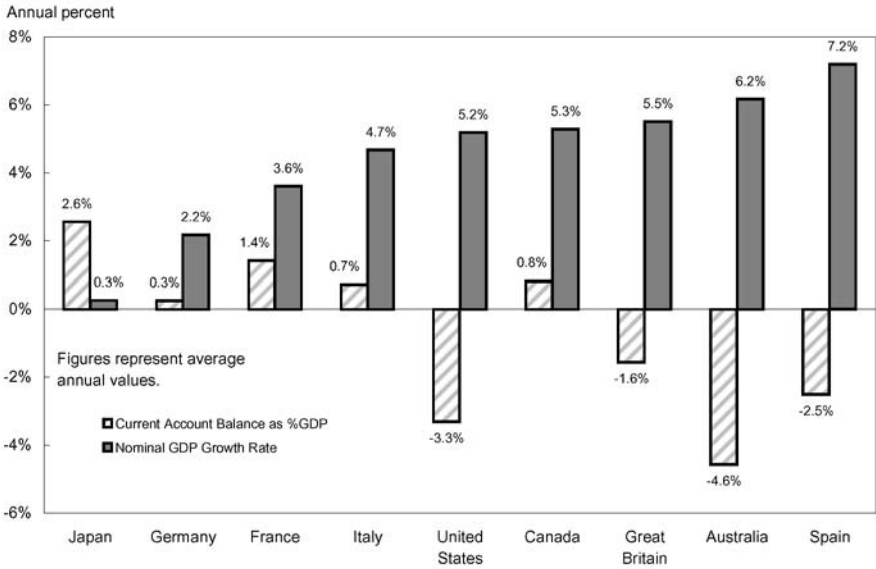
Most of this section focuses on the final question. One conclusion is that a high rate of growth relative to many other advanced economies has contributed to U.S. net capital inflows. Among advanced economies, capital flow patterns in the past decade have tended to be positively correlated with growth performance. Countries with higher rates of growth have tended to run current account deficits (and received net capital inflows), while countries with lower growth rates have tended to run current account surpluses (and experience net capital outflows—Chart 6-4).

Net Capital Importers—International Comparisons

Since 1995, three countries have been consistent recipients of net capital inflows—the United States, Australia, and Great Britain. Average annual net capital flows to Australia have been largest (4.6 percent of GDP), second largest for the United States (3.3 percent of GDP), and third largest for Great Britain (1.6 percent of GDP). Spain also received average annual net capital inflows (2.5 percent of GDP) during this period. Australia has the longest

Chart 6-4 Annual Growth and Current Account Balances - 1995-2004

Among advanced economies, countries with higher rates of growth have tended to run current account deficits.



Source: International Monetary Fund, *World Economic Outlook*, September 2005.

record of capital account surpluses (and current account deficits), receiving net foreign capital inflows every year since 1974.

Between 2001 and 2004, net capital inflows increased for most of these countries. Spain's net inflows rose by 1.4 percent of GDP (to 5.3 percent of GDP). U.S. inflows rose by 1.9 percent of GDP (to 5.7 percent of GDP). Australia experienced the largest increase, where net inflows rose by 4.1 percent of GDP (to 6.4 percent of GDP). Net inflows to Great Britain slowed slightly (to 2.0 percent of GDP).

U.S. Share of Global Flows and the Asset Composition of U.S. Capital Inflows

The U.S. share of net global capital inflows has risen over the past decade. The United States received 33 percent of global net capital inflows in 1995, 62 percent in 2000, and 70 percent in 2004. The composition of net foreign capital inflows to the United States has varied. Between 1995 and 2004, foreign official sector holdings of U.S. assets averaged 14 percent of foreign asset holdings (ranging from a high of 16 percent to a low of 11 percent). Gross foreign direct investment (FDI) inflows to the United States, representing larger foreign equity purchases, averaged 26 percent of foreign holdings in this period (ranging from a high of 33 percent to a low of

22 percent). Foreign holdings of U.S. Treasury securities averaged 15 percent of foreign holdings (ranging from a high of 21 percent to a low of 11 percent).

Causes of U.S. Capital Inflows

What factors encourage large and persistent U.S. foreign capital inflows? Several factors, which reflect U.S. economic strengths, encourage these inflows. In particular, a high rate of U.S. growth encourages foreign capital to be “pushed” toward the United States. In contrast, one U.S. shortcoming that “pulls” foreign capital to the United States is its low rate of domestic saving.

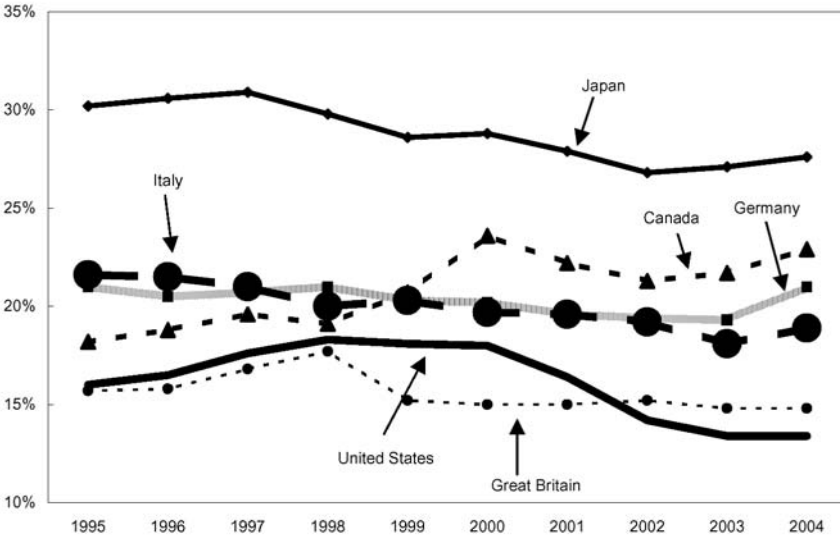
Low and Declining U.S. Saving

At 13 percent of GDP, the U.S. domestic saving rate is the lowest among the advanced economy countries (Chart 6-5). Moreover, the U.S. domestic saving rate has declined in recent years. With a domestic investment rate equivalent to 20 percent of GDP, low U.S. saving requires the United States to draw on foreign saving to fund a part of its domestic investment. This excess U.S. demand for saving is reflected by the U.S. current account deficit.

Chart 6-5 Gross National Saving Rates - 1995-2004

The United States has had the lowest rate of national saving among advanced economies since 2002.

Percent of GDP



Source: International Monetary Fund, *World Economic Outlook*, September 2005.

When we disaggregate the decline in U.S. domestic saving into its three parts—personal saving, corporate saving, and public saving—we see the personal saving rate has declined from 3.4 percent of GDP in 1995 to 1.3 percent of GDP in 2004 (for more discussion, see Chapter 3 in this report on Saving for Retirement). This decline in personal saving is mirrored by a rise in personal consumption spending, whose share of GDP has risen from 67 percent to 70 percent of U.S. GDP. U.S. corporate saving has remained relatively stable at between 18 and 19 percent of GDP.

Public sector saving also declined. Between 2000 and 2004, the federal budget balance went from a surplus equivalent to 2.4 percent of GDP to a deficit equivalent to 3.6 percent of GDP. Fiscal deficits represent dissaving, or net borrowing, which requires the public sector to draw on domestic private sector resources (firms and households) and the foreign sector. While a growing fiscal deficit has contributed to U.S. demand for foreign saving, and thus affected the U.S. current account deficit, the extent to which it has done so is unclear (Box 6-3).

Box 6-3: The Link Between Fiscal and Trade Deficits

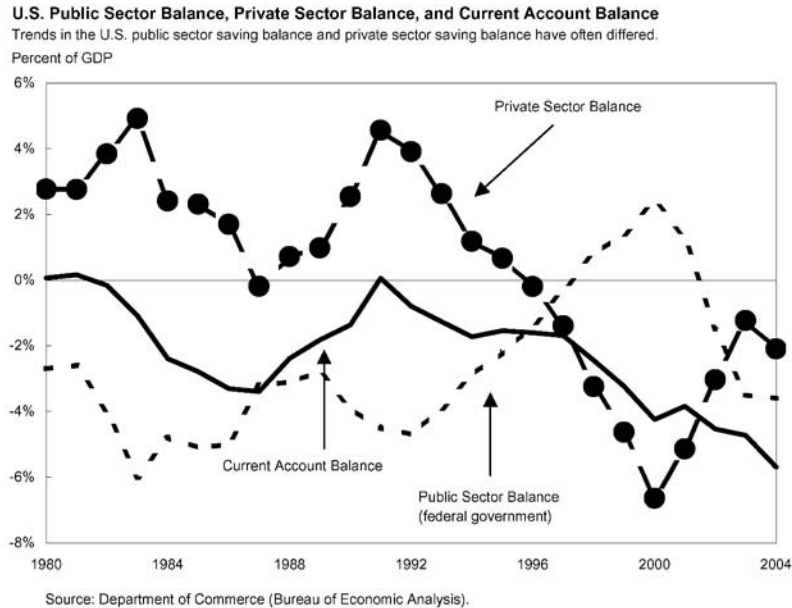
Most economists agree that fiscal deficits will, all else equal, lead to an increase in a country's trade and current account deficits. Fiscal deficits are a form of "dissaving," so fiscal deficits reduce the availability of domestic saving to fund investment. Unless this decline is matched by an equal decline in domestic investment, net demand for foreign saving will rise. Fiscal deficits will thus cause net capital inflows to increase.

However, the effect of fiscal deficits on trade and current account deficits may be considerably less than dollar-for-dollar. For example, one study by the Federal Reserve has estimated that each dollar change in the fiscal deficit leads to a change in the trade deficit of approximately 20 percent. This means that reducing the U.S. fiscal deficit by \$100 billion would reduce the trade deficit by only \$20 billion.

The relationship among fiscal deficits, the current account, and the capital account is complex because the current and capital accounts also depend on private sector behavior. In Japan and Germany, for example, recent current account surpluses and capital outflows have been associated with large fiscal deficits because private saving balances in those countries have been large and outweighed public sector dissaving.

Box 6-3 — continued

As the chart below indicates, U.S. fiscal and current account balances have sometimes moved in the same direction and other times in different directions. For example, between 1997 and 2000 the U.S. Federal public sector balance moved from a deficit of 0.3 percent of GDP to a surplus of 2.4 percent of GDP. During this same period, the current account deficit widened from 1.7 percent to 4.2 percent of GDP. In the early 1980s and early 1990s, the United States came close to current account balance even though the public sector ran large fiscal deficits because a large private sector saving surplus existed then.



High U.S. Economic and Productivity Growth

Other factors that attract foreign capital inflows to the United States reflect strengths of the U.S. economy. One factor is the high rate of U.S. growth. Between 1995 and 2004, annual real GDP growth in the United States averaged 3.2 percent compared to 1.1 percent in Japan, 1.4 percent in Germany, and 2.3 percent among Eurozone economies (the group of 12 European countries with a common currency). In the most recent years within this period, these growth differentials widened further.

Higher growth tends to attract foreign capital for two reasons. First, higher growth leads to a higher rate of import growth. All else equal, higher import growth will lead to a decline in a country's trade balance and increase its demand for foreign saving. Second, higher growth attracts foreign capital inflows because growth contributes to higher potential corporate earnings and investment returns.

High Productivity Growth

High U.S. growth and capital inflows are supported by high productivity growth. The broadest measure of productivity is *multi-factor productivity* (which broadly measures the efficiency with which capital and labor inputs are used). OECD data comparing multi-factor productivity across countries for the period 1995-2003 indicate that the United States and Australia had relatively high rates of productivity growth, Canada, Great Britain, and Germany had more modest rates of growth, while Japan had a low rate of productivity growth.

Favorable U.S. Business Climate and Global Competitiveness

A sound business climate can also support high growth and foreign capital inflows. A sound business climate can enhance efficiency by strengthening competition. It can reinforce profit maximizing incentives and effective corporate governance. A sound business climate can also encourage entrepreneurship by reducing the administrative burdens of new business formation. It can enhance the flexibility of industries through laws that facilitate rapid restructuring or liquidation of bankrupt firms. In addition, it can promote efficiency and specialization by reducing international trade barriers.

Several organizations compare business climates across countries. The World Bank publishes an annual "Doing Business" survey that compares legal frameworks and business practices. Countries are ranked in part by an "ease of doing business index." Results from the World Bank's most recent survey ranked New Zealand 1st, the United States 3rd, Australia 6th, Great Britain 9th, Japan 10th, Germany 19th, Spain 30th, Russia 79th, and China 91st. Another competitiveness survey is published by the World Economic Forum (WEF). In the WEF's most recent survey, the United States ranked second in overall competitiveness (Finland was first). The report ranked Japan 12th, Great Britain 13th, Germany 15th, China 49th, and Russia 75th.

Financial Market Size

The size of U.S. financial markets also attracts foreign capital by encouraging investors to hold dollar-denominated assets. Large and efficient financial markets reduce transaction costs and liquidity risk (the risk that assets cannot be sold at fair value on short notice) and increase the ability to diversify asset

holdings. In 2004, U.S. financial markets comprised 32 percent of global financial markets compared to 26 percent for Eurozone countries and 15 percent for Japan. U.S. stock market capitalization represented 44 percent of global equity markets compared to 16 percent for Eurozone countries. U.S. bond markets represented 39 percent of global bond markets compared to 27 percent for Eurozone countries.

Global Role of the U.S. Dollar

Widespread use of the dollar in the global economy also contributes to U.S. capital inflows. The dollar's role can be seen in terms of the three classic functions of money. First, the dollar serves as a *medium of exchange*. Private firms in different countries use dollars to settle transactions. Second, the dollar serves as a *unit of account*. Globally traded goods like oil are denominated in dollars. Many global debt securities are also dollar-denominated. A number of countries also use the dollar either as their own currency or as an exchange rate peg to which their own currencies are tied. Third, the dollar is a *store of value*. Private firms hold dollars to help hedge financial risks. Central banks hold dollars as reserves to intervene in foreign exchange markets, meet foreign currency demand for debt servicing payments, or help maintain general financial confidence.

In recent years, the dollar's future role as a global reserve currency has been debated. Some have argued this role may diminish. One argument is that the dollar will face competition from the euro. However, recent estimates indicate the dollar's role as a reserve currency has been broadly stable over the past decade. In 1995, 59 percent of global reserve holdings consisted of dollar-denominated assets. In 1999, this figure rose to 71 percent and then declined to 66 percent in 2004.

U.S. Capital Flow Sustainability

In principle, the United States can continue to receive net capital inflows (and run current account deficits) indefinitely provided it uses these inflows in ways that promote its future growth and help the United States to remain an attractive destination for foreign investment. The key issue concerning U.S. foreign capital inflows is not their absolute level but the efficiency with which they are used. Provided capital inflows promote strong U.S. investment, productivity, and growth, they provide important benefits to the United States as well as to countries that are investing in the United States.

To evaluate the *sustainability* of these inflows, economists often evaluate a country's *external debt burden*. This debt burden can be seen in terms of a *stock* and a *flow* burden. One stock measure that is sometimes examined is

a country's *net foreign asset position*. Net foreign assets measure the value of a country's foreign assets relative to the liabilities it owes to foreigners. When foreign assets exceed liabilities, a country is a *net foreign creditor*. When foreign liabilities exceed foreign assets, it is a *net foreign debtor*. Net capital inflows contribute to net foreign debt because some share of these inflows reflect foreign purchases of debt instruments. A rising level of net foreign debt may be a warning sign that debt could become unsustainable in the future.

U.S. current account deficits in recent years have caused its level of net foreign debt to rise from negative 4 percent of GDP in 1995 to negative 22 percent in 2004. Other countries vary in their net foreign asset or debt positions. For example, Japan is a net foreign creditor (foreign assets exceeding foreign liabilities) with net foreign assets equivalent to 38 percent of its GDP. In contrast, Australia is a net debtor with net foreign debt equivalent to 64 percent of its GDP. Great Britain's net foreign debt is equivalent to 13 percent of its GDP. While net foreign debt or asset positions can be a useful indicator, however, these figures must be interpreted cautiously since what constitutes an "excessive" amount of net foreign debt is far from clear.

One *flow measure* of the external debt burden is a country's *net foreign income*. Countries either receive or pay foreign income depending on their foreign asset and liability levels as well as the rate of return they earn and pay on these assets and liabilities. When a country receives more in interest, dividends, profit remittances, and royalties on its foreign assets than it pays on its foreign liabilities, it is a *net foreign income recipient*. When payments exceed receipts, a country makes *net foreign income payments*.

One striking feature of the U.S. balance of payments accounts is that the United States has continued to earn net foreign income despite its rising level of net foreign debt. For example, the United States earned \$30 billion in net foreign income in 2004 despite a stock of net foreign debt equivalent to \$2.5 trillion. By comparison, Japan received \$86 billion in net foreign income payments in 2004 despite the fact that it held \$1.8 trillion in net foreign assets. Between 1995 and 2004, the United States earned over \$200 billion in net foreign income despite current account deficits that totaled more than \$3 trillion during this period. Therefore, U.S. external debt has not appeared burdensome by this measure because its net foreign income flows have remained positive.

While U.S. capital inflows can continue indefinitely, recent levels of net inflows received are likely to moderate in the future. At more than 6 percent of GDP, U.S. net capital inflows are unusually high by historical standards. While no specific "critical value" exists beyond which a country can no longer necessarily receive net foreign capital inflows, recent growth in U.S. net inflows has attracted substantial attention. The key questions concern the rate and magnitude by which U.S. net inflows moderate in the future. In one scenario, U.S. net capital inflows might drop quickly. In another "soft

landing” scenario, the adjustment process would occur in a more gradual manner. While a large share of U.S. net capital inflows reflects foreign private sector investment that believes a higher risk-adjusted return can be earned by investing in the United States than can be earned by investing elsewhere, some policy adjustments (see below) in the United States and abroad could nonetheless help to increase the likelihood of a soft landing.

Conclusion

This chapter has emphasized the interdependent nature of the global financial system. To understand U.S. net capital inflows, one must also understand factors that underlie net capital outflows from countries like Japan, Germany, China, and oil-producing and exporting countries like Russia. Global capital flows reflect a wide array of conditions in many countries rather than developments in the United States alone. In some instances, global capital flows reflect expectations among market participants who invest in countries where they expect to earn the highest level of risk-adjusted returns. In other instances, capital flows reflect policy decisions by central banks to manage their exchange rates.

In both instances, global capital flows provide important benefits for net capital importers as well as net capital exporters. Net capital importers like the United States benefit because they can maintain a level of domestic investment they would otherwise have to reduce given their levels of domestic saving. Net capital exporters benefit because they can earn higher returns on the saving they invest abroad than they expect to earn by investing in their own countries.

The interdependence of the global financial system implies that no one country can reduce its external imbalance through policy action on its own. Instead, reducing external imbalances requires action by several countries. Specifically, at least four steps may help to reduce these imbalances.

First, the United States must work to raise its domestic saving rate. Higher U.S. saving will reduce U.S. demand for other countries’ savings. To increase saving, the United States should continue its efforts to reduce its fiscal deficit and raise its personal saving rate. Sections of the U.S. tax code that discourage saving should be reformed as appropriate. Health care, social security, and other entitlement programs will require reforms given their large projected impact on future public spending.

Second, China and other Asian countries should reduce their excess saving through policies and reforms that promote higher domestic demand. Financial systems can be reformed and modernized to help expand consumer credit and reduce the need for high levels of precautionary saving. Managed

exchange rate regimes should be liberalized more fully. Greater exchange rate flexibility would provide China with a useful policy tool to help stabilize its business cycle. It would also help China to reorient its future growth away from net exports and toward higher domestic demand.

Third, Japan, Germany, and several other large countries should reduce their supplies of excess saving by promoting higher private domestic demand and improving their economic growth performance. Raising private domestic demand will require the implementation of further structural reforms in these countries that strengthen incentives for private consumption and private investment. In turn, higher consumption and investment will help to reduce their external surpluses. While structural reforms are often politically difficult to enact, they are essential if long-term growth performance in these countries is to improve.

Finally, oil producing and exporting countries could increase their domestic investment levels. At least some of this spending could be used to expand oil sector production that would reduce excess saving in these countries, enhance the future productive capacity of these economies, and help to ensure adequate future supplies of oil for the global economy.