

CHAPTER 5

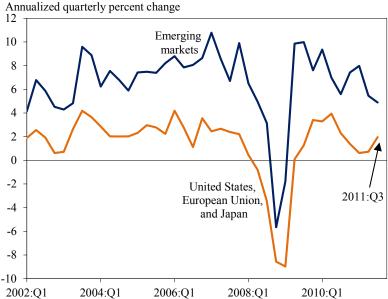
INTERNATIONAL TRADE AND FINANCE

Over the past year, global economic growth has slowed, largely due to a range of challenges in the advanced economies. These adverse shocks are, for the most part, unrelated to policies or business decisions undertaken within the borders of the United States. Nevertheless, in an integrated global economy, the United States cannot fully escape their impact.

One could hardly begin with a starker example of an adverse shock to the world economy than the massive earthquake that struck Japan's northeastern coast on March 11. This earthquake was the most powerful to have hit Japan in recorded history, triggering tsunami waves that leveled towns and claimed nearly 16,000 lives. Alongside the devastating human toll, the disaster also had a major impact on the Japanese economy. The International Monetary Fund (IMF) estimates that the Japanese economy contracted by 0.9 percent in 2011. The economic impact also extended far beyond Japan's borders. For months afterward, supply chains around the world, especially in the automotive industry, were disrupted by production slowdowns and parts shortages.

While Japan's severe economic slowdown in 2011 was driven by a natural disaster, those elsewhere in the developed world were largely a product of forces outside of nature. Slow growth has exacerbated sovereign debt and deficit problems in Europe, and austerity measures put into place in response have impeded near-term growth in a number of euro-area countries. In January, the IMF reported that the euro area's gross domestic product (GDP) grew 1.6 percent in 2011, down from 1.9 percent in 2010, and predicted that the euro area would contract by 0.5 percent in 2012. Growth in the United Kingdom has also slowed significantly, in part reflecting tight fiscal policies, and is estimated by the IMF to have been only 0.9 percent in 2011. With the European Union, Japan, and the United States collectively accounting for almost 60 percent of global GDP, slower growth

Figure 5-1 Real GDP Growth, 2000–2011



Note: Weights come from each nation's share of GDP within each aggregate. Source: Country sources; International Monetary Fund, World Economic Outlook, September 2011; CEA calculations.

in these economies was sufficient to lower growth at the global level in 2011, as Figure 5-1 illustrates.

In the face of the broad-based slowdown in economic growth in the developed economies, growth in emerging markets also decelerated. Slower growth in import demand in the large economies meant slower export growth in emerging markets. For example, growth in China is decelerating because of a decline in export growth as well as a slowdown in domestic real estate investment. Although the IMF predicts China is likely to grow more than 8 percent in 2012, its slowdown contributes to the loss of momentum in global growth.

¹ The growth slowdown in some emerging markets also reflected the impact of policy tightening in some countries to prevent overheating. As the year progressed, concerns about overheating tended to give way to concerns about the economic slowdown in the developed countries.

² The emerging markets aggregate in Figure 5-1 includes Argentina, Brazil, Chile, China, Colombia, Hong Kong, India, Indonesia, Israel, Malaysia, Mexico, Peru, Russia, Singapore, South Africa, South Korea, Taiwan, Thailand, Turkey, Ukraine, and Venezuela. Seventeen member states of the European Union (the EU-27) use the euro. They are Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, the Slovak Republic, Slovenia, and Spain.

Viewed in the context of these external challenges, the growth of U.S. exports over the past year has been a particular bright spot. Despite a slowing global economy, America's exports of goods and services have surpassed their pre-crisis peaks and have been growing more than fast enough to meet the President's goal of doubling the 2009 export level by the end of 2014. Many factors are contributing to this fast pace of growth, including continued productivity growth in manufacturing, a shift in unit labor costs that favors U.S. businesses over those in other advanced countries, and technological innovation in the energy sector, which is improving America's trade balance in petroleum products. A possible further weakening of foreign demand conditions, however, could pose a risk to future U.S. export growth.

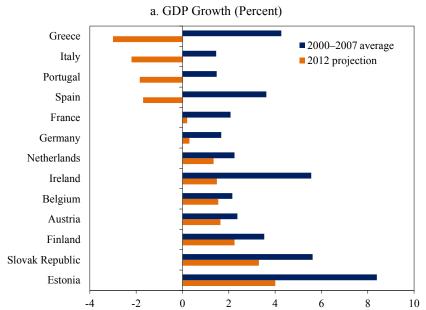
Global economic events could also affect the U.S. economy through financial links between the United States and the rest of the world. These links have increased dramatically in recent decades. U.S.-owned assets abroad and foreign-owned assets in the United States increased more than six-fold between 1994 and 2010.

"Global rebalancing" has been a major theme of U.S. international economic policy since the beginning of the Obama Administration. In the years before the global financial crisis erupted in 2008, large asymmetries had developed in the global economy. Several countries characterized by large, persistent current account surpluses, including Germany, Japan, and China, relied too heavily on unsustainable growth in net exports to drive economic growth. Several other countries characterized by large, persistent current account deficits, including the United States, relied on unsustainable growth in household consumption and construction of residential real estate. A more symmetric, better balanced pattern of growth is needed throughout the major economies. In the United States, future growth must be driven less by consumption and more by net exports and investment. Conversely, countries that have traditionally run large current account surpluses need to rely more on domestic consumption and less heavily on net exports. So far, the United States has made significant progress toward rebalancing. For progress to continue, however, U.S. exports must grow even more, and consumption in the surplus countries must increase.

THE EURO-AREA CRISIS AND ITS IMPLICATIONS FOR THE UNITED STATES

A key potential risk in 2012 to the U.S. and global economic recoveries remains the sovereign-debt and banking crises in Europe. Economic and fiscal conditions vary greatly among the 17 economies in the euro area, as illustrated in Figure 5-2. Although there is significant heterogeneity among

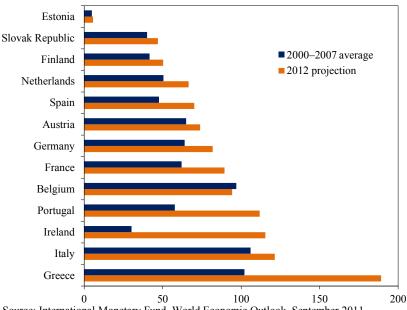
Figure 5-2 Economic and Fiscal Indicators for Selected Euro-Area Countries



Note: Projections include revisions as of January 2012.

Source: International Monetary Fund, World Economic Outlook, September 2011.

b. Public Debt-GDP Ratio (Percent)



Source: International Monetary Fund, World Economic Outlook, September 2011.

euro-area economies, economic and fiscal conditions in most of them deteriorated throughout 2011. In 2012, the economies of Estonia, Finland, and the Slovak Republic are predicted to grow by more than 2 percent, but those in Greece, Italy, Portugal, and Spain are predicted to shrink by more than 1.5 percent. Similarly, the ratio of general government gross debt to GDP is projected to be roughly 70 percent or below in Estonia, Finland, the Netherlands, the Slovak Republic, and Spain and above 110 percent in Greece, Ireland, Italy, and Portugal.

Economic research shows that there are many determinants of sovereign credit risk or sovereign borrowing costs, including individual factors (Berg and Sachs 1988) and global financial factors (Eichengreen and Mody 2000; Longstaff et al. 2011). Since early 2010, both sets of factors raised borrowing costs for some smaller and a few larger economies in the euro area. The European Commission (EC) and the IMF negotiated assistance programs for Ireland (November 2010), Portugal (May 2011), and Greece (May 2010, July 2011, and October 2011). In October 2011, the sovereign-debt crisis intensified in Italy and Spain, the third- and fourth-largest economies in the euro area.3

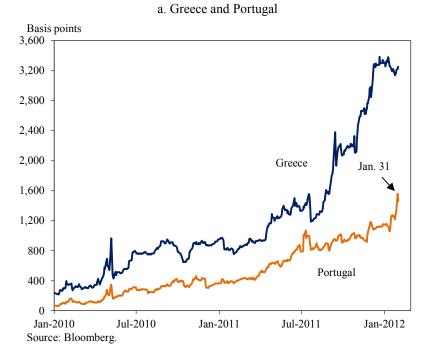
In response to the marked increase in sovereign borrowing costs, the European Central Bank (ECB) intervened, resuming its Securities Markets Program, in an effort designed to lower sovereign bond yields by purchasing government debt in secondary markets. European leaders and institutions have also introduced and expanded various measures to inhibit contagion, such as the European Financial Stability Facility. While these measures have helped contain the sovereign-debt crisis in Europe, significant risks remain. Market participants are expressing ongoing concerns about the fiscal conditions of Italy and Spain, as well as Greece and Portugal, in part because of fears that economic growth in these countries is likely to be sluggish for a prolonged period, exacerbating their fiscal situation.

European banks are among the largest holders of European government debt. (See Financial Stability Oversight Council 2011 for a discussion of the interconnections between U.S. banks, European banks, and European government debt.) As concerns about sovereign debt rose, spreads widened on sovereign bond yields relative to German bond yields in June 2011 (as highlighted in Figure 5-3), leading to deteriorating conditions of both solvency and liquidity among European banks. Toward the end of 2011, many European banks were facing shortened maturities and higher costs of funding in the interbank market, an important source of bank liquidity.

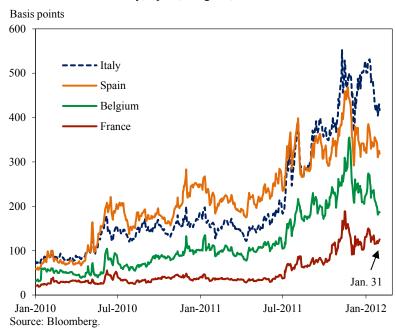
In December 2011, after two successive cuts in interest rates, the ECB took major steps to provide increased liquidity to euro-area banks. Among

³ Assistance programs for Greece negotiated in 2011 have not yet been implemented.

Figure 5-3 10-Year Bond Spreads Over German Bonds, 2010–2012



b. Italy, Spain, Belgium, and France



other measures, the ECB's new longer-term refinancing operation extended the maturity of loans offered to banks from one year to three years, and the ECB eased collateral requirements for those loans. The Federal Reserve also extended and reduced the cost of dollar liquidity swap arrangements to the ECB, as it had done during the credit freeze of 2008-09. A currency liquidity swap is an agreement between two or more parties to exchange a set amount of a given currency for another currency at a given price until a specific date in the future. In this case, the Federal Reserve provides dollars for periods ranging from overnight to as long as three months in exchange for the currency of the foreign central bank. In turn, the foreign central bank can lend the dollars during the specified period in its local markets, helping to relieve funding pressures in those markets and to prevent the spread of strains to markets elsewhere.

Given the interconnectedness of European and U.S. banks and the presence of branches, agencies, and subsidiaries of European banks in the United States, adverse financial conditions in Europe can be transmitted to American financial institutions. According to the Federal Reserve's Senior Loan Officer Opinion Survey, several European branches tightened standards on commercial and industrial (C&I) loans over the second half of 2011, in contrast to U.S. and other foreign banks. The C&I loans on the books of European branches in the United States have in fact declined noticeably since the middle of 2011. Such financial data are being monitored closely. One of the goals of recent financial oversight embedded in the Dodd-Frank Wall Street Reform and Consumer Protection Act is to reduce systemic risk by increasing transparency. Among other things, the new law supports trading of financial instruments on central exchanges, including derivatives. (For a discussion of the role of the Office of Financial Research in fostering transparency, see Data Watch 5-1.)

Similarly, trade and investment links between the United States and Europe are broad and deep, and, in recent years, of growing importance relative to the rest of the world. Europe is a significant destination for U.S. exports, accounting for more than 20 percent of U.S. goods exports and nearly 40 percent of U.S. service exports. In addition, sales by European affiliates of U.S. multinational firms totaled \$3.1 trillion in 2008, making up more than half of the \$6.1 trillion in total sales abroad by U.S. multinational firms. Furthermore, Europe is the leading foreign source of investment and jobs in America, accounting for \$173.2 billion, or 76 percent, of all foreign direct investment (FDI) inflows into the United States in 2010.

Data Watch 5-1: The Significance of the Office of Financial Research (OFR) in Combating Global Risks to the U.S. Financial System

The recent financial crisis presented a stark example of the need for comprehensive data on the financial system. While the initial catalyst for the financial crisis was a decline in U.S. housing prices that in 2007 led to a dramatic rise in subprime mortgage defaults (Brunnermeier 2009), neither market participants nor policymakers were aware of the extent to which leverage, reliance on ultra-cheap short-term funding, and a web of interconnected transactions and claims had built up in the financial system prior to that time. It became clear that investors had placed too high a value on the underlying homes, real estate, and other assets that were supposed to stand behind their investments. Consequently, as defaults on mortgages multiplied, they triggered a wholesale flight from related financial securities, which spread across countries and financial markets. The inadequacy of information available to assess risks properly magnified that flight from risk (Squam Lake Working Group 2009). The resulting credit crunch ultimately triggered a global economic recession from which many countries are still recovering.

Responding to the devastating effects of the financial crisis, on July 21, 2010, Congress enacted the Dodd-Frank Wall Street Reform and Consumer Protection Act (PL 111-203). The creation of the OFR in that Act addresses two glaring deficiencies in the financial data infrastructure that were revealed by the crisis. First, the OFR is charged with increasing the availability of financial information so that policymakers can better identify, analyze and monitor potential risks to the U.S. financial system. Critically, given the interconnectedness of global financial markets, this legislation permits the acquisition of data from financial institutions related to their activities globally that may pose a threat to the financial stability of the United States. Second, OFR is charged with improving the quality of financial information, in part by standardizing the types and formats of data that are reported to regulators. Standardized data would make it easier for policymakers to accurately evaluate whether a financial institution or group of institutions—located either domestically or abroad—or certain financial activities in which they may be engaged pose a threat to the U.S. financial system.

Over the past eighteen months, the OFR has laid the critical groundwork for enhancing both the quantity and the quality of financial information that is available to U.S. policymakers. The OFR is in the midst of comprehensively cataloguing the data that are currently held and collected by U.S. financial regulators. Concurrently, the OFR will collaborate with the member agencies of the Financial Stability Oversight Council to identify and fill deficiencies in the collection of data on financial markets. Likewise, the OFR has taken an important step toward enhancing the quality of the financial data infrastructure through the promotion of a global Legal Entity Identifier (LEI) for financial institutions. At the G-20 Cannes Summit, leaders supported the development of a global LEI and tasked the Financial Stability Board with coordinating this work. U.S. policymakers have partnered with the global financial services industry, foreign regulators, and associations such as the International Organization for Standardization to develop and begin to implement a universal standard for identifying counterparties to financial transactions (Department of Treasury 2011). In time, further initiatives will be undertaken to meet the information needs of regulators in fulfilling the mandate of the Dodd-Frank Wall Street Reform Act and responding to potential threats to the financial stability of the United States.

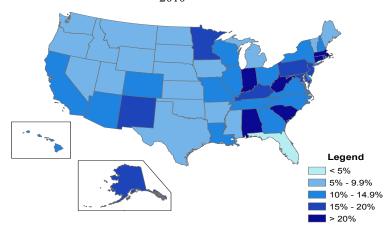
Outlook for Europe and Implications for the U.S. Economy

As noted, the crisis in Europe has slowed both current and predicted growth. The IMF estimates that euro-area growth in 2011 was 1.6 percent, but for 2012, the IMF forecasts that economies in the euro area will contract by 0.5 percent.

Faltering consumer confidence in Europe has spread to countries outside the euro area. Britain's Nationwide Consumer Confidence Index fell for the fifth month in a row in November 2011, reaching an all-time low of 36 points, compared with a historical average of 77. Economic growth projections for the European Union for 2012 are lower than for 2011: -0.1 percent in 2012 compared with 1.6 percent for 2011 (IMF 2012). A slowdown in Europe could affect the U.S. economy through two channels in addition to the finance channel mentioned above: trade and direct investment.

Exports. The share of U.S. goods exports to Europe has been over 20 percent for decades. A severe financial episode in Europe could reduce exports from businesses throughout the United States. As is the case with flows of inward investment, exports to Europe are distributed broadly across the United States, as displayed in Figure 5-4. The European Union is the destination for more than 20 percent of total goods exports from Alabama, Connecticut, Indiana, Massachusetts, South Carolina, and West Virginia. Exports range from cars, aircraft, and semiconductors, to coal, gold, soybeans, kaolin, and live chickens. Moreover, export data for commodities underestimate the extent of U.S. trade with Europe because, as noted, more than one-third of U.S. service exports go to Europe. Shrinking purchases of

Figure 5-4 Share of Each State's Goods Exports to the European Union by State, 2010



Note: This map depicts the state from which the product is last shipped, which is not necessarily the state in which the product is produced. Products with multiple stages of production often move across state boundaries more than once before leaving the country. Source: U.S. Census Bureau, Foreign Trade Data.

American goods and services by Europeans could have a significant impact on U.S. employment in several states.

Foreign Direct Investment. Declines in output, profit, and investor confidence in Europe could have an adverse effect on the ability and willingness of European firms to invest in American firms and jobs. The United States received more than \$228 billion in FDI from all foreign sources in 2010, over 75 percent of which came from Europe. Between 2004 and 2010, FDI flowed into every state, with Texas receiving the most, followed by Alaska, California, New York, Indiana, Illinois, Ohio, Alabama, South Carolina, and Georgia.

International Cooperation in Resolving Crises

The data in Figure 5-3 starkly reflect growing concerns of market participants regarding the scope and magnitude of euro-area bank and sovereign-credit risk. In the last decade, systemic risk related to financial crises has received more attention in the economics literature, including studies by Allen and Gale (2000), Kaminsky, Reinhart, and Vegh (2003), Frankel and Wei (2005), Reinhart and Rogoff (2009), and Ang and Longstaff (2011).

While Europe has the capacity to take responsibility for addressing its crisis through decisive policy action and a credible financial backstop, the United States has made clear that the international community has a strong interest in the successful resolution of the crisis. The Administration

is engaging with European governments both bilaterally and in multilateral forums. The United States has also been involved in the response to the crisis through its role in the IMF.

The Administration continues to urge movement along several dimensions in Europe: robust implementation of countries' agreed fiscal and structural reform programs, in the context of steps that euro-area leaders have outlined to reform fiscal governance in the euro area; a more substantial financial firewall to ensure that governments can borrow at sustainable interest rates while executing policies to strengthen the foundations for growth and to reduce their debts; and measures to ensure that European banks have sufficient liquidity and are adequately capitalized to maintain the full confidence of depositors and creditors.

Global and U.S. economic performance will depend, in part, on the swift resolution of problems in the euro area. In such times of global economic and financial disequilibrium, U.S. coordination with international partners remains essential.

FOREIGN DIRECT INVESTMENT, INTERNATIONAL TRADE, AND THE U.S. ECONOMY

Experience and economic theory suggest that a global economy can provide enormous advantages for American workers, consumers, and firms. In the absence of international trade and investment, a country can consume only what it produces, it can invest only what it saves, it can use only the technology that it creates, and it can take advantage of only those natural resources within its borders. Countries that have deliberately cut themselves off from international trade and investment for extensive periods of time have paid a stiff price in forgone opportunities for investment, consumption, and growth. North Korea, a nation that has pursued this kind of isolation assiduously, illustrates this point in a powerful and tragic way. Before Kim Il-Sung seized power in northern Korea, it was at least as rich as southern Korea. Today, per capita GDP in South Korea is over 17 times higher than that of North Korea.

One of America's achievements after World War II was helping to build the open and integrated global trading and investment system that now incorporates almost all of the world's economies. Of course, this system brings challenges, along with opportunities. The Obama Administration has focused on meeting the challenges of this system in ways that enable American workers and firms to make the most of the rich opportunities provided by a more open global trading and investment system. At the same time, the Administration has sought to ensure, through strong enforcement efforts, that other countries play by the rules of the system, and it has sought to protect those who are potentially adversely affected by global competition with a stronger safety net and an improved training and reemployment system (discussed in Chapters 6 and 7).

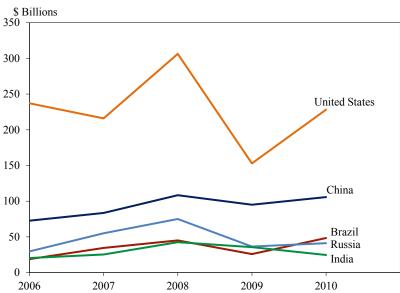
Investment in the United States by Foreign Companies

The United States had the largest annual flow of inbound FDI of any economy in the world in every year between 2006 and 2010. By 2010, the cumulative FDI stock in the United States had reached nearly \$3.5 trillion more than three times the FDI stock in each of the next three largest recipients (Hong Kong, France, and the United Kingdom) and more than five times China's cumulative inbound FDI stock (\$579 billion). Given the rapid GDP growth of large emerging markets such as Brazil, India, and China, both before and after the global financial crisis, it is not surprising that these countries and other emerging markets are absorbing an increasing fraction of the world's FDI. Nevertheless, their inflows remained substantially below those into the United States throughout this period.

Like trade flows, FDI flows tend to be procyclical, rising when the global economy expands and contracting when it shrinks. In late 2008 and 2009, as the global economy sank into its deepest postwar recession, FDI inflows around the world contracted (Figure 5-5); by 2009, total FDI flows were roughly 60 percent of their 2007 levels. Nonetheless, the United States remained the largest destination for new FDI inflows. As both the U.S. and global economies recovered from the recession, FDI inflows into the United States increased 49 percent from 2009 to 2010. Then, as global growth slowed again in 2011, FDI into the United States also decelerated. Through the third quarter of 2011, FDI inflows into the United States were running roughly 4 percent below 2010 levels.

If the global economy returns to normal growth rates, FDI inflows into the United States will likely resume their growth. The Nation continues to offer a set of "fundamental attractors" to foreign investors that other countries struggle to match. One such attractor is the sheer size of America's domestic market. In 2010, America's GDP was nearly two-and-a-half times larger than that of China, the world's second-largest economy. The United States also offers potential investors a strong rule of law, a highly skilled, motivated workforce, a highly developed financial system, and effective protection of property rights. The United States continues to lead the world in key technologies, attracting investment by firms eager to conduct worldclass research in close proximity to the world's top universities. For all of these reasons, leading companies around the world continue to be attracted to investment opportunities within the borders of the United States.

Figure 5-5 Annual FDI Inflows, Selected Countries, 2006–2010



Source: United Nations Conference on Trade and Development (UNCTAD).

The Benefits of FDI. U.S. affiliates of foreign firms make significant contributions to U.S. employment, output, investment, research and development (R&D), and exports. The Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce surveys the activities of foreign-owned affiliates in the United States. According to its data, in 2008, subsidiaries of foreign companies accounted for nearly 5 percent of U.S. private-sector jobs, more than 11 percent of all U.S. private capital investment, more than 14 percent of all U.S. private-sector R&D, and 19 percent of all U.S. goods exported. In that year, the U.S. employees of these global companies earned an average annual compensation of about \$73,000—about one-third more than the economy-wide average.

Economic research shows that the benefits of foreign investment are even greater than these measures indicate. When foreign subsidiaries use advanced technologies and effective management to achieve high levels of productivity in their U.S. operations, the benefits can "spill over" to their American competitors (Keller and Yeaple 2009). As U.S. firms increasingly interact in their home market with highly productive foreign subsidiaries, the U.S. firms may be able to learn from their competitors' strengths. Keller and Yeaple find that 14 percent of the aggregate productivity growth between 1987 and 1996 (a period of rapidly rising FDI in the United States) resulted from FDI-related productivity spillovers. These spillovers were

particularly valuable for small firms, which do not routinely encounter these competitors in markets outside the United States. One reason proximity matters is that employees who move from foreign firms to domestic firms are often an important conduit through which knowledge diffuses from foreign to domestic firms (Poole forthcoming).

While foreign firms sometimes establish entirely new enterprises in the United States, with newly constructed plants and newly hired workers (known as "greenfield" investment), they more often gain a foothold in the U.S. market by merging with or acquiring existing domestic businesses. These transactions can be beneficial. Finally, FDI can help connect domestic firms to export networks and opportunities. The importance of such connections is well documented in developing countries (Aitken, Hanson, and Harrison 1997), but the United States can also benefit from such connections.

Encouraging FDI in the United States. The Obama Administration has taken vigorous steps to facilitate and promote inward FDI in the United States. As emerging markets expand, the forces of economic gravity are likely to pull more and more of the world's FDI inflows into these economies. Recognizing the reality of greater global competition for FDI, the Obama Administration has set up SelectUSA, a "one-stop shop" based in the Department of Commerce that helps both foreign and U.S. investors find the best options for their prospective businesses within the borders of the United States. SelectUSA is the first systematic Federal Government initiative to identify, inform, assist, and attract potential investors to the United States. It is also finding ways to partner with state and local economic development agencies, so that governments at all levels can coordinate efforts to attract investment. In the United States, state, local, and regional economic development organizations (EDOs) facilitate business investment attraction, retention, and expansion. SelectUSA can help these organizations compete more successfully with alternative production sites outside the United States; it can also function as an important resource for these organizations on international investment issues.

SelectUSA's activities cover a broad range of investment promotion functions. Staff respond to investment inquiries, help connect investors to appropriate federal and state agencies, and educate investors regarding relevant U.S. policies and procedures. SelectUSA staff and senior leadership also serve as ombudsmen for the investment community in Washington, working across the Federal Government to address investor concerns and issues involving federal agencies. Finally, SelectUSA works with U.S. EDO officials and U.S. embassies and consulates to organize events abroad that enable U.S. locales to promote themselves as a destination for FDI. President Obama has recently called for a substantial increase in support for SelectUSA, proposing \$12 million in new resources and an increase in staff to 35 full-time employees. Complementing this investment, President Obama has proposed to increase the presence of the Department of Commerce's U.S. and Foreign Commercial Service officers in key markets. These new officers will enhance the ability of the U.S. global network of embassies and consulates to promote FDI in the United States.

President Obama has also called for tax reforms that will help attract more FDI. These proposals include a decrease in the United States' corporate income tax rate, as well as additional tax incentives for firms that manufacture, conduct R&D, or invest in the capability to produce clean energy products within the borders of the United States. At the same time, the President's proposals eliminate incentives for U.S. firms to move jobs and production offshore. By complementing the United States' fundamental attractors with well-targeted FDI promotion efforts, the Federal Government can help ensure that the United States remains a premier destination for foreign direct investment for many years to come.

The National Export Initiative

In his January 2010 State of the Union address, President Obama set a goal of doubling U.S. exports of goods and services in five years, meaning that nominal exports would double from their 2009 level of \$1.58 trillion to an annual level of \$3.16 trillion by the end of 2014. To meet that goal, nominal U.S. exports must grow an average of 15 percent a year. So far, exports have grown even faster, putting the U.S. economy on track to meet the President's goal. In fact, the United States is currently ahead of schedule, despite the recent global trade slowdown. Over the 12 months ending in November 2011, total U.S. exports of goods and services exceeded \$2.08 trillion, surpassing the pre-crisis peak level of \$1.7 trillion and establishing a historical record. Current data suggest that the ratio of exports to GDP nearly reached 14 percent in 2011, another historical record.

Anatomy of Recent Growth in Goods Exports. U.S. trade data provide an interesting picture of the markets and goods in which America's export growth has been concentrated since the global financial crisis. Table 5-1 ranks U.S. export goods categories in order of the biggest increases in export value between the first half of 2009 and the first half of 2011. The top 10 categories collectively account for 72 percent of the total value increase in exports between the two periods.

The biggest increases have been concentrated in manufacturing industries characterized by high technology and capital intensity and in primary products, reflecting America's abundant endowments of human and physical capital, its technological prowess, and its natural-resource wealth.

Between the first half of 2009 and the first half of 2011, the United States increased its exports of vehicles by more than \$26 billion (83 percent); its exports of engines, appliances, and general machinery by more than \$25 billion (35 percent); and its exports of electrical machinery by more than \$19 billion (33 percent). Exports of plastics, organic chemicals, and steel and ferrous metals increased by 53 percent, 57 percent, and 78 percent, respectively. These data point to America's competitiveness in important sectors of manufacturing.

At the same time, the data reaffirm the United States' strength as an exporter of natural-resource-intensive goods. Exports of mineral fuels and oils (a commodity dominated by shale oil) surged by 150 percent, or more than \$35 billion, over the two-year period. That surge stems from technological breakthroughs in horizontal drilling and hydraulic fracturing that are allowing U.S. producers to extract oil from previously unusable areas; these technological developments are reviewed further in Chapter 8. Fuel exports have grown so much that the United States became a net exporter in 2011, for the first time in decades. The United States remains the world's largest importer of crude oil, and U.S. net imports of crude remain large relative to net exports of fuel products, but increased domestic production is offsetting some crude oil imports. Exports of gold, diamonds, and precious metals grew 94 percent, reflecting the high prices of those commodities on international markets.

Exports of cereals grew 77 percent, reflecting America's strength as a producer of agricultural commodities. This strength is also reflected in the impressive growth of total agricultural exports, a broader category not shown in the table, which increased by 51.8 percent over the same period, an expansion of \$24 billion in dollar terms. The U.S. Department of Agriculture reports that U.S. agricultural exports reached a record high of \$137.4 billion in Fiscal Year 2011, and that America's agricultural sector recorded a trade surplus of \$42 billion over that period. America's ranchers, farmers, and producers are benefiting from the Administration's focus on free trade agreements and increased market access abroad.

Trends Driving Growth in Goods Exports. The sharp growth in goods exports reflects, in part, the impact of recovering from the depth of the global financial and economic crisis. It also reflects the impact of coordinated Federal Government action flowing from the President's National Export Initiative. These actions amplify the positive influence of longer-term trends that are enhancing the competitiveness of the U.S. tradable goods sector, particularly in manufacturing. U.S. workers are more productive than those of any other G-20 economy, and U.S. productivity growth has been especially strong in the manufacturing sector. However, highly productive

Table 5-1 Growth in U.S. Goods Exports, by Product

		Export growth, 2009:H1–2011:H1		12-month sum	
Product	HS-code	Change (\$ Billions)	Change (%)	(Sept. 2010– Aug. 2011) (\$ Billions)	
Mineral fuels (including shale oil)	27	35.8	150	113.3	
Vehicles and parts	87	26.3	83	112.7	
Engines, appliances, and general machinery	84	25.7	35	198.7	
Electrical machinery and equipment accessories	85	19.1	33	157.3	
Precious metals and gems	71	16.6	94	64.9	
Plastics	39	10.2	53	57.5	
Organic chemicals	29	8.0	57	44.4	
Optical equipment and medical devices	90	7.4	24	78.0	
Cereals	10	6.7	77	27.8	
Iron and steel	72	5.5	78	23.8	

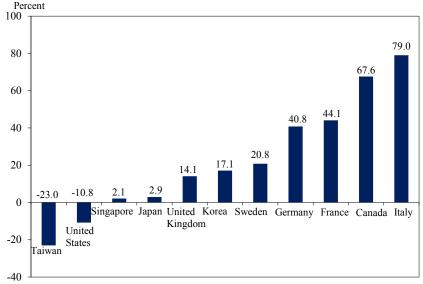
Note: Export growth is measured between the first half of 2009 (2009:H1) and the first half of 2011 (2011:H1). Source: U.S. International Trade Commission.

U.S. workers can be placed at a competitive disadvantage because of low labor costs abroad. This disadvantage was especially severe in the early years of the 2000s when the enduring effects of earlier financial crises in many parts of the world depressed production costs in much of Asia, Brazil, Russia, and elsewhere.

Since then, continued robust productivity growth in the United States, particularly in the manufacturing sector, has been reinforced by a gradual realignment of the currencies of many U.S. trading partners. The result has been a sharp improvement in relative unit labor costs in the United States. For example, the U.S. Bureau of Labor Statistics (BLS) tracks changes over time in the unit labor cost of manufacturing in the United States and in key trading partners. U.S. hourly compensation in manufacturing has grown over the past decade, but rapid productivity growth in the United States has reduced the cost of producing a unit of manufactured output. Meanwhile, measured in U.S. dollars, the cost of producing a unit of manufactured output in key trading partners has risen, in some cases substantially. Of the 19 economies tracked by the BLS, only Taiwan managed to improve its unit labor cost position more than the United States did.⁴ Figure 5-6 displays changes in manufacturing unit labor costs for some of the key economies tracked by the BLS.

⁴ Although the BLS does not track Chinese unit labor costs, it has tracked an index of import prices from China since 2003, and the most recent movements in this index suggest that Chinese unit labor costs are also rising.

Figure 5-6 Change in Manufacturing Unit Labor Costs, 2002–2010



Source: Bureau of Labor Statistics.

The impact of these shifts can be seen in a number of industries including the auto industry. As U.S. auto demand recovers, the Big 3 domestic auto companies and the foreign-domiciled companies have been expanding U.S. production. This expansion is designed not only to serve the U.S. market but also to use U.S. production sites as an export platform from which to serve other markets within the Americas and beyond. Ford has announced intentions to increase investment in the United States, both to serve the U.S. market and to export. Such plans include insourcing production of its F-650 and F-750 medium-duty trucks to Ohio from Mexico; it also reportedly plans to move manufacture of components like transmission oil pumps from China to Michigan.

Improved competitiveness also appears to be reflected in employment data. U.S. manufacturers have added jobs for two consecutive years, something that had not happened since the late 1990s. Manufacturing employment has grown faster in the United States than in any other leading developed economy since the start of the recovery. As of the most recent period for which comprehensive data are available, the United States has added more net manufacturing jobs since the start of 2010 than the rest of the Group of 7 countries put together, with over 300,000 created since December 2009. While the economy is still far from recovering all the manufacturing jobs lost during the recession, signs suggest that the United

States may be experiencing a manufacturing revival. Between 2010:Q1 and 2011:Q3, manufacturing employment rose 2.5 percent in the United States compared with 2.4 percent in Germany and 1.8 percent in Canada.

In some industries, the advantage created by high U.S. productivity is reinforced by the additional advantage of abundant, domestic, low-cost natural gas. Only a few years ago, leaders of the domestic organic chemical industry predicted that shortages in natural gas would dramatically raise the domestic price of natural gas, one of their key inputs. Without adequate domestic supplies of natural gas at reasonable prices, it seemed likely that chemical production would have to shift overseas.

Since the mid-2000s, however, the discovery of new natural gas reserves, such as those within the Marcellus Shale Formation, and the development of hydraulic fracturing techniques to extract natural gas from these reserves have led to rapidly growing domestic production and relatively low domestic prices for households and downstream industrial users. By keeping domestic energy costs relatively low, the increased supply from this resource supports energy-intensive manufacturing in the United States. In fact, companies such as Dow Chemical and Westlake Chemical have announced intentions to make major investments in new U.S. facilities over the next several years. In the longer run, the scale of America's natural gas endowment appears to be large enough that exports of natural gas to other major markets could be economically viable. The Obama Administration is taking steps to ensure that this resource is developed in a safe and environmentally responsible way.

However, in most of the manufacturing industries where American firms continue to enjoy robust export sales, U.S. producers rely principally on high productivity, rather than inexpensive inputs, to offset the higher wages and other labor compensation they pay their U.S. workers. The openness and competitive intensity of the American economy have been a key source of our national strength, since they have increased the efficiency of U.S. firms and industries. (See Hsieh and Klenow 2009, 2011 for recent research.) As a consequence, even extremely low wages in developing countries are not sufficient to provide a commanding cost advantage with respect to U.S. firms, at least in some product categories.

Exports can also be measured by looking at major destination markets. Table 5-2 ranks destination markets by the increase in value of exports between the first half of 2009 and the first half of 2011. The top 10 markets collectively accounted for 70 percent of the total increase in export value. Export flows to Canada and Mexico increased by nearly \$80 billion. Much of the rest of the U.S. export expansion was driven by exports to Asia. Even the tsunami-battered Japanese economy purchased nearly \$8 billion more

Table 5-2 Dissection of U.S. Goods Export Growth, by Market

Market	Export 2009:H1	12-month sum (Sept. 2010–Aug.	
	Change (\$ Billions)	Change (%)	2011) (\$ Billions)
Canada	43.1	45	272.2
Mexico	36.3	62	187.1
China, Mainland	19.2	63	102.2
Euro Area	16.1	20	193.2
Republic of Korea	9.0	72	42.1
Brazil	8.4	71	40.2
Japan	7.7	31	64.3
Hong Kong	6.9	71	31.9
Taiwan	6.0	80	27.5
Singapore	5.0	51	30.5

Note: Export growth is measured between the first half of 2009 (2009:H1) and the first half of 2011 (2011:H1). Source: U.S. International Trade Commission.

in U.S. exports in the first half of 2011 than it did in the first half of 2009. Outside of North America and Asia, Brazil continued to display its emerging economic importance, absorbing a 71 percent increase in U.S. exports that, in dollar terms, slightly exceeded export growth to Japan.

The Role of Services in Export Growth and America's Current Account Balance

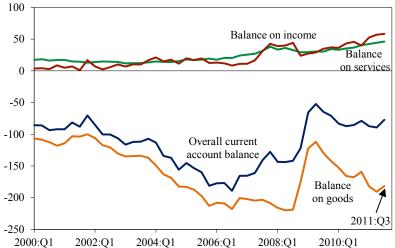
While export growth is critical, exports are just one component of the current account balance, the most comprehensive measure of the Nation's exchange of goods and services with the rest of the world. The main components of the current account include exports and imports of goods, exports and imports of services, and the income balance—the difference between the income American firms earn from their foreign businesses and the income foreign firms earn from their U.S. businesses.

A look at the recent history of the U.S. current account balance and its key components reveals some interesting patterns. Although U.S. exports of goods are at historical highs, reflecting in part the improved competitiveness of American manufacturers, the U.S. trade deficit in goods (which does not include trade in services) has nevertheless widened significantly since early 2009, as an expanding economy has boosted demand for imports (Figure 5-7). The trajectory of the U.S. current account, however, is following a different path now than it did in the previous recovery, and the difference primarily reflects the impact of the other two main elements of the current account—services trade and the U.S. income balance.

From the early 2000s through 2006, the current account balance tracked the trade balance in goods quite closely. The two series began to diverge in late 2007. The balance on goods remained in deep deficit, but the trade surplus in services began to increase, and the income balance grew even more rapidly. When the global financial crisis hit in earnest in the third quarter of 2008, U.S. growth and import demand dried up, and the two series moved closely together (this time rapidly toward balance) through early 2009. Then, as financial markets stabilized and growth resumed, a gap opened up once again. The balance on goods deteriorated, but the services surplus expanded and the income balance grew even more sharply, largely offsetting the declining balance in goods and keeping the current account relatively stable. More recently, the goods trade balance appears to have broadly stabilized, whereas the services surplus and the income balance continue to grow. With a need to further strengthen the current account balance, federal policymakers recognize the need not only to encourage exports of goods, but also to expand the important role that services trade can play in that process.

The Prospects for Trade Growth in Services. Like most other advanced economies, U.S. GDP is dominated by service industries. According to the Bureau of Economic Analysis, services, broadly defined, account for more than 60 percent of U.S. GDP. However, the role of business services within

Figure 5-7 U.S. Current Account Balance and Its Components, 2000–2011 \$ Billions Balance on income



Note: The current account balance above includes goods, services, and income, but does not include unilateral transfers.

Source: Bureau of Economic Analysis.

the U.S. economy is less widely recognized. In 2007, a year unaffected by the recent severe downturn and gradual recovery, business services, a collection of industries that includes finance, engineering services, research and development services, and software production, employed 25 percent of the U.S. workforce according to data from the Economic Census. The share of employment in business services was substantially larger than in the entire manufacturing sector in that year (10 percent), and the average wage in business services, \$56,000, was significantly higher than in manufacturing (\$46,000) (Jensen 2011).

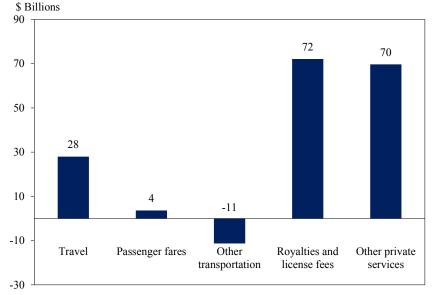
While services remain more difficult to trade than goods, advances in communications technologies and the growing ease and declining expense of international travel are making business services increasingly tradable across countries. As this trend gained strength, employment in the business service sector increased almost 30 percent between 1997 and 2007, while manufacturing employment decreased more than 20 percent. Most tradable business services rely intensively on highly skilled experts, which the United States has in large numbers. In other words, the growing tradability of business services plays to America's comparative advantage. Some evidence of this potential is apparent when one looks at the broader context of America's trade across the full range of service industries.

Services exports have expanded dramatically, growing by 114 percent between 1997 and 2010, according to official data. They now account for nearly 30 percent of total U.S. exports. Imports of services have also expanded rapidly, but the U.S. surplus in services trade, already large, has more than tripled since 2003.

What are the categories of services exports, and what is their relative contribution to the surplus? Figure 5-8 depicts the aggregate service trade flows in the five main categories tracked by official statistics and measures their contribution to America's overall services trade surplus.

Travel exports reflect the spending of foreign tourists and business travelers to the United States who purchase goods and services here, while travel imports reflect purchases made by U.S. residents traveling abroad. The United States remains among the world's leading tourist destinations and runs a surplus in travel trade. The Obama Administration has sought to expand U.S. travel exports with unprecedented federal action to promote international tourism in the United States. In 2010, the President signed into law the Travel Promotion Act, which established the Corporation for Travel Promotion, now known as Brand USA, a public-private partnership dedicated to promoting travel to the United States. The State Department has also increased its visa-processing capacity in priority countries like Brazil

Figure 5-8 Contribution to Services Surplus by Service Sector Category, 2010



Source: Bureau of Economic Analysis.

and China to ensure that the United States benefits from the rapid expansion of outbound tourism from these emerging markets.

Moreover, on January 19, the President established a Task Force on Travel and Competitiveness that will develop a National Travel and Tourism Strategy with a goal of making the United States the world's top travel and tourism destination. The benefits of that strategy include not only the potential increase in travel exports, but also lower travel imports as it will provide Americans with more and better choices of travel and tourism destinations within the United States. Because of their value as public goods, the government has an important role in ensuring that national treasures such as Yellowstone National Park and the Statue of Liberty are appropriately maintained and made accessible to domestic and international tourists. While there are many private, state, and local destinations in the United States, public expenditures on the National Park System (NPS) are much lower than the benefits they provide to all Americans, even to those who are not necessarily planning a vacation or visit to one of the 397 destinations that make up the NPS (National Research Council 1996). This provides yet another example of the ways in which investments in the environment yield benefits for the economy (Chapter 8).

In the category of passenger fares, exports are those received by U.S. carriers from foreign residents; imports are those paid by U.S. residents

to foreign carriers. Other transportation exports and imports include U.S. international transactions arising from the transportation of goods by ocean, air, land, pipeline, and inland water carriers.

Royalties and license fees cover transactions with nonresidents that involve intangible assets, including patents and trade secrets, which are involved in the production of goods. This category also includes copyrights, trademarks, franchises, rights to reproduce or distribute motion pictures and television recordings, rights to broadcast live events, software licensing fees, and other intellectual property rights. In 2010, this category was the largest single contributor to the services surplus, highlighting the importance to the United States of enforcement of strong intellectual property rights in other countries.5

The final category, other private services (OPS), generates by far the highest level of exports, and it is this category in which the promise of business services exports is seen. The main services included in OPS are education, financial, insurance, telecommunications, and business, professional, and technical services. The most important subcategory—business, professional, and technical services—accounts for more than half of OPS exports. Altogether, OPS exports expanded by about 150 percent from 2000 through 2010—a compound average growth rate of nearly 10 percent a year.

The additional detail on service exports and imports presented in Table 5-3 and Table 5-4 underlines two important facts about U.S. services trade. First, the other advanced industrial countries are still America's dominant trading partners in this sector, both as markets and as suppliers. As rapid economic growth raises income levels in large emerging markets, however, U.S. service export flows to these countries are likely to grow. Second, as noted, the surplus in services is disproportionately driven by two categories—other private services and royalties and licensing—that are skillintensive and thus conform to America's comparative advantage as a technologically advanced nation with an abundant supply of highly educated workers. This supply of skilled workers and the broader role that education plays in the U.S. labor market is discussed in Chapter 6.

In addition to exporting services, U.S. firms provide services through affiliates in foreign markets. Over the past decade, services provided through affiliates have grown rapidly, and in 2009, the most recent year for which comprehensive data are available, services supplied through the foreign affiliates of U.S. firms totaled \$1.1 trillion. Of course, U.S. customers also

⁵ In fact, the official numbers for royalty and license fees may understate, perhaps substantially, America's receipts for the use of its intangible assets. A report submitted last year by leading international economists (Feenstra et al. 2010) noted the ability of multinational corporations to effectively locate their intellectual property in low-tax jurisdictions, minimizing their global tax liability as well as measured U.S. royalties and license fees.

purchase services from the U.S. affiliates of foreign firms. These purchases totaled \$668.8 billion in 2009. The difference between services received from and supplied to the United States via the channel of affiliate sales was \$407.6 billion, providing yet another reflection of America's comparative advantage in this domain (Koncz-Bruner and Flatness 2011).

Policy Initiatives to Support Export Growth in Goods and Services

Recent economic research has focused on U.S. firm productivity and the fixed cost of exporting as fundamental determinants of U.S. exports at the firm and product level (Bernard et al. 2003; Melitz 2003). Fixed costs for firms are associated not only with the decision to begin exporting but also with the decision to export to a specific country. Before significant exports to a given country can begin, a prospective exporting firm must develop a strategy that allows it to compete successfully against experienced rivals in that country, which operates under a different legal system and may use a different language. Successful exporters must invest considerable management attention and time to developing this strategy before they can begin to earn any returns from exporting. The costs of serving a particular foreign market may also increase if the firm's products and complementary services must be significantly altered to meet the demands and tastes of customers in that market. Exporters also must incur the costs of finding distribution channels in the foreign country and the ongoing costs of transporting their goods across national borders and contending with tariff or nontariff barriers to trade. These costs are worth incurring only if the firm is dynamic and productive enough to have a high probability of success.

Federal programs exist to help firms deal with these costs. While private firms must take the lead in crafting their export strategies, the Department of Commerce's International Trade Administration maintains offices of trade professionals in more than 100 U.S. communities and 77 foreign countries to help U.S. firms become export-ready, identify target markets, and navigate the demands of foreign regulation and cultural differences. The Federal Government can also use effective multilateral, bilateral, or regional trade negotiations to reduce the costs imposed on U.S. firms by foreign tariff and nontariff barriers. It can also seek to ensure that American firms face a level playing field by insisting that U.S. trading partners honor their treaty commitments regarding market access for U.S. firms. Finally, in circumstances in which a particular exporter faces financing constraints or the threat of subsidized finance for international competitors, the Federal Government can seek to alleviate these constraints and counter foreign

Table 5-3 Cross-Border Services Exports by Type and Country, 2010

	2010 Exports (\$ Millions)					
Country	Total private services	Travel	Passenger fares	Other transportation	Royalties and license fees	Other private services
All countries	530,274	103,505	30,931	39,936	105,583	250,320
Total for the top 10 countries	290,680	59,489	19,659	20,395	65,607	125,530
Canada	50,521	16,641	4,182	2,984	8,287	18,427
United Kingdom	48,535	8,765	2,801	3,641	6,864	26,464
Japan	44,750	10,198	4,360	3,555	10,721	15,916
Ireland	24,840	1,033	280	300	12,850	10,377
Germany	24,118	4,534	1,248	2,779	6,181	9,376
Mexico	24,110	6,117	2,612	1,226	2,526	11,629
China	21,135	3,780	1,225	2,296	3,333	10,501
Switzerland	20,313	1,043	320	1,169	8,281	9,500
Brazil	16,515	4,236	1,683	998	3,123	6,475
France	15,843	3,142	948	1,447	3,441	6,865
Other countries	239,594	44,016	11,272	19,541	39,976	124,790

Source: Bureau of Economic Analysis.

Table 5-4 Cross-Border Services Imports by Type and Country, 2010

	2010 Imports (\$ Millions)					
Country	Total private services	Travel	Passenger fares	Other trans- portation	Royalties and license fees	Other private services
All countries	368,036	75,507	27,279	51,202	33,450	180,598
Total for the top 10 countries	215,078	33,704	11,410	25,382	25,071	119,511
Canada	39,652	4,324	3,705	3,107	3,031	25,485
United Kingdom	31,740	245	_	974	16	30,505
Japan	25,579	6,539	501	4,404	1,036	13,099
Ireland	23,541	3,278	1,331	5,670	7,817	5,445
Germany	22,476	2,606	2,562	3,632	3,187	10,489
Mexico	19,665	630	399	1,748	5,272	11,616
China	15,067	2,409	1,473	1,887	4,016	5,282
Switzerland	13,730	8,999	697	904	379	2,751
Brazil	13,661	2,108	207	156	141	11,049
France	9,967	2,566	535	2,900	176	3,790
Other countries	152,958	41,803	15,869	25,820	8,379	61,087

Source: Bureau of Economic Analysis.

government efforts. Over the past three years, the Obama Administration has placed renewed emphasis on all of these policy domains.

Free Trade Agreements with Colombia, Panama, and Korea. The Obama Administration has worked to restore the Nation's economic stability and support jobs for more Americans with the expansion of smart, responsible trade policy. From day one, the Obama Administration has insisted on higher standards for trade agreements. The President moved to address important concerns that the Administration, certain stakeholders, and Members of Congress had with respect to the situations in Colombia, Panama, and Korea. This domestic consultation and further consultations with U.S. trading partners took time, as did negotiations with Congress to ensure that the passage of the free trade agreements was accompanied by a strengthening of America's Trade Adjustment Assistance program for workers adversely impacted by international competition and by an extension of key trade preference programs. Once this process was complete, Congress passed the three agreements in quick succession in the fall of 2011, marking the biggest step forward in American trade liberalization in nearly two decades. Of the three agreements, the most economically significant was the Korea-United States free trade agreement, which was expected to boost annual U.S. goods exports to Korea by as much as \$11 billion. The agreement also included Korean commitments expected to result in considerable expansion of U.S. services exports.

The Trans-Pacific Partnership. In November 2009, President Obama announced the Administration's intention to participate in Trans-Pacific Partnership (TPP) negotiations to conclude a free trade agreement with key trading partners in the Asia-Pacific region. The agreement aims to set a new and higher standard for regional free trade agreements, not only addressing the traditional core issues in such agreements but broadening the scope to include regulatory coherence and priorities for small and medium-size enterprises. In addition to the United States, the other countries participating in the negotiations currently include Australia, Brunei Darussalam, Chile, Malaysia, New Zealand, Peru, Singapore, and Vietnam.

At the November 2011 APEC meeting in Honolulu, TPP leaders announced the broad outlines of a TPP agreement. In addition to existing negotiating partners, Japan, Canada, and Mexico have formally expressed their interest in joining TPP negotiations. While no decision has been made yet by the TPP countries regarding expanding negotiations, interest by Japan, Canada, and Mexico in the TPP demonstrates the economic and strategic importance of this initiative to the Asia-Pacific region.

Support for Small Exporters. In a world of imperfect financial markets, the costs of financing export operations pose an additional barrier for

smaller firms. Given that export opportunities can come to small exporters with significant risks attached, domestic financial institutions may regard a small firm that is highly dependent on exports as a riskier (and therefore less creditworthy) borrower than one with an exclusively domestic focus. The relatively modest financing needs of small exporters are a further disincentive to private financial institutions, which would have to engage in timeconsuming assessments of the firm, its products, and the country-specific risks involved in a transaction to originate only a small loan with limited value for the lending institution. Unless it is obvious to the lender that the firm has excellent prospects for significant export growth, and brings with it the near certainty of rapid expansion in loan volume, the money a private bank can make on such a transaction is limited relative to the transaction costs themselves.

To address these issues the Federal Government has directed the Export-Import Bank of the United States to proactively support small and medium-size firms. First established in the 1930s to finance U.S. international trade when and where private-sector financing was difficult or unreasonably costly to obtain, the Ex-Im Bank has historically focused much of its lending activity on larger, established exporters. The Obama Administration, however, has encouraged the bank to substantially increase lending to smaller firms, and in Fiscal Year 2010, the Ex-Im Bank authorized \$5 billion—20 percent of its total authorizations—to support small businesses as primary exporters. The Ex-Im Bank approved 3,091 transactions involving small business exporters—88 percent of total authorizations. In the same year, the bank issued 2,524 insurance policies to small business exporters, 90 percent of such policies for the year. The bank also authorized a record \$2.2 billion in working-capital guarantees, 70 percent of which supported small business.

Financial support for the expanding international activities of small business extends beyond the Ex-Im Bank. The Overseas Private Investment Corporation (OPIC), the U.S. Government's development finance institution, extends medium- to long-term financing through direct loans, loan guaranties, political risk insurance, and support for investment funds to eligible investment projects in developing and emerging markets, where conventional financial institutions often are reluctant or unable to lend. In Fiscal Year 2011, 78 percent of OPIC's projects, representing nearly \$1 billion in commitments, involved American small and medium-sized businesses.⁶

⁶ The Ex-Im Bank and OPIC follow the Small Business Administration's definition of a small business, using guidelines that reflect, among other things, sales, employment levels, and sector of economic activity. These guidelines are available online at http://www.sba.gov/sites/default/files/Size_Standards_Table.pdf.

Promoting U.S. Economic Interests Abroad. Even as it seeks to open up new markets for American business through new trade agreements, the Obama Administration is also working to protect American commercial interests under existing trade agreements. An historic victory came in May 2011, when the World Trade Organization (WTO) issued a final ruling siding with the United States in its case against the European Union over illegal subsidies to Airbus. After decades of dispute and more than five years of official proceedings, the WTO ruled that the EU governments had provided \$18 billion in illegal subsidies to Airbus and ordered them removed by the end of the year. U.S. Trade Representative Ron Kirk hailed the ruling, saying, "The WTO Appellate Body has confirmed without a doubt that Airbus received massive subsidies for more than 40 years and that these subsidies have greatly harmed the United States, including causing Boeing to lose sales and market share in key markets throughout the world." If the European Union fails to comply with the WTO directive, the United States can seek the right to impose countermeasures.

In its ongoing dialogue with China, the Obama Administration secured a strong commitment from Chinese President Hu Jintao that China would stop discriminating against U.S. technologies and intellectual property in its government procurement plans. The Administration is monitoring developments closely to ensure that market realities conform to central government directives. The United States has filed a WTO case against China, challenging the troubling imposition by China of antidumping and countervailing duties against imports of U.S. chicken "broiler products." The Administration scored another major victory in January 2012 when the WTO's Appellate Body upheld a WTO panel ruling condemning Chinese export quotas and duties on certain key industrial raw materials as a violation of China's WTO commitments. These actions add to a series of cases in which the Federal Government has taken action at the WTO to protect U.S. economic interests jeopardized by Chinese policy in areas such as steel products, electronic payment services, and wind power equipment.

In November 2011, the United States gained China's confirmation through bilateral negotiations that it would not require foreign electric vehicle manufacturers to transfer technology to Chinese enterprises or to establish Chinese brands as a condition for investing and selling in China. One year earlier, the United States successfully persuaded China to adopt transparent and non-discriminatory technology standards for its emerging smart grid market and to remain technologically neutral with regard to the development of third-generation and future technologies for its telecommunications market.

Several of America's trading partners, including China, have effectively imposed bans on U.S. meat product exports. These bans have no scientific basis, and the Administration has been trying to bring these bans to an end as soon as possible. In 2011, agreements were reached to resume exports to Chile and Egypt. Fifty-seven countries have removed their avian influenza bans on imports of poultry products from the United States since 2008. Most of the countries that imposed bans on the import of U.S. swine, pork, and pork products in the wake of international concern over the H1N1 virus have removed those bans.

With strong support from the United States, Russia concluded negotiations to join the WTO in December 2011. In supporting Russia's WTO accession, the Obama Administration has laid the basis for a more effective, rules-based approach to managing U.S. trade relations with the largest economy not yet inside the WTO system. The Administration will be working with Congress to end application of the "Jackson-Vanik" amendment to Russia so that the United States can enjoy all of the benefits of Russia's membership in the WTO and U.S. companies and workers can compete on a level playing field with those of other WTO Members in exporting products and services to Russia.7

To further enhance the Federal Government's ability to protect the Nation's commercial interests, the President is creating and seeking funding for a new Trade Enforcement Unit, which will significantly enhance the Administration's capabilities to aggressively challenge unfair trade practices under international and domestic trade rules. The President is also proposing to improve trade inspection capabilities of the Customs and Border Patrol and the Food and Drug Administration, to increase the likelihood of stopping counterfeit, pirated, or unsafe goods before they enter the U.S. market. Certain countries, including China, aggressively use subsidized capital to promote their exports, and appear to offer such export financing on better terms than allowed under current international best practices. In response, the Administration will actively employ its existing authorities so that the Ex-Im Bank can provide U.S. firms competing for domestic or third-country sales with matching financial support to counter foreign noncompetitive official financing that fails to observe international best practices.

The IMF estimates that sub-Saharan Africa will grow by 5.5 percent in 2012, faster than advanced, emerging, and developing economies as a whole. Between 2000 and 2010, five of the 10 fastest-growing economies in the world were in sub-Saharan Africa, and trade between Africa and the

⁷ The Jackson-Vanik amendment is a provision in the 1974 Trade Act that denies most favored nation status to certain countries that restrict emigration. It was introduced during the Cold War, partly as a response to efforts by the Soviet Union to restrict emigration.

rest of the world increased more than 200 percent. Central to the United States' economic policy for Africa is the African Growth and Opportunity Act (AGOA), which provides duty-free access to a broad range of exports from 37 eligible sub-Saharan African countries. To help African countries make the most of AGOA's trade benefits, the United States funds technical assistance work at Regional Trade Hubs. The United States also fosters investment by negotiating Bilateral Investment Treaties (BITs) with African countries. In 2009, the United States launched BIT negotiations with Mauritius, and, in 2011, the U.S. Senate ratified the U.S.-Rwanda BIT.

In agriculture and other sectors, the U.S. Agency for International Development uses public-private partnerships to build new markets and has been recognized by the Organisation for Economic Co-operation and Development as the best among its peers with respect to private-sector engagement. The Millennium Challenge Corporation (MCC) is partnering with American and local businesses. From helping the Port of Cotonou in Benin cut its average customs-clearance time in half to facilitating an American company's efforts to provide much-needed power to Tanzania's national grid, the MCC is investing in infrastructure to expand trade, commerce, and development across the African continent. Other agencies-including OPIC and the Ex-Im Bank-have significantly increased their investment in Africa. These activities are consistent with the goals of President Obama's Presidential Policy Directive on Global Development signed in September 2010 that establishes a new model for U.S. development efforts.

Tax Reform to Promote American Competitiveness. Administration's proposed reform of the U.S. corporate income tax seeks to enhance American competitiveness, promote investment in the United States, and support continued robust growth of American exports. As part of a comprehensive tax reform plan, the President has proposed a reduction in the U.S. corporate income tax rate, with additional incentives available for firms that manufacture, conduct research and development, or invest in the capability to produce clean energy products within the borders of the United States. At the same time, the President addresses longstanding features of the American corporate tax system that encourage some companies to move jobs and production overseas.

Increasing Market Access for Services. As noted, the United States has a strong comparative advantage in services. The global market for services trade, however, remains far more closed than the global market for manufactured goods. The long history of extensive trade in goods, the relatively simple nature of many barriers (tariffs and quotas) to such trade, and the cumulative result of six decades of multilateral, bilateral, and regional trade liberalization efforts have resulted in a global economy in which formal barriers to trade in manufactured goods are reasonably low, especially in the advanced industrial countries.

The barriers to trade in services are more complex and harder to quantify. Hufbauer, Schott, and Wong (2010) review a number of methodologies for quantifying the barriers to trade in services and present new estimates at the country level of the tariff equivalents of these barriers. Their findings suggest that the aggregate level of discrimination against services imports in important emerging markets such as China, India, and Indonesia is equivalent to a tariff on these imports of more than 60 percent. The size of these barriers may not be surprising—extensive international trade in services is a recent phenomenon, and diplomatic efforts to open services markets are just beginning—but these barriers deprive American firms of critical export opportunities to rapidly emerging markets in an area where their international comparative advantage is the strongest.

America's productive exporters of services cannot solve this problem on their own. The President is committed to negotiating effectively and aggressively for increased liberalization of services trade. The Administration has already made progress in bilateral and regional trade agreements, but the largest emerging-market economies have not yet been fully engaged in these initiatives. The primary multilateral means for seeking greater services market access has been through negotiations pursuant to the General Agreement on Trade in Services (GATS) and, to a lesser degree, the WTO Agreement on Government Procurement. While taking existing GATS disciplines and market access commitments into account, the United States is also pursuing additional pathways to services liberalization, including a new, multiparty agreement open to any country ready to take on high standards and address new issues such as trade in the digital economy. Other advanced countries and progressive developing countries are likely to share the U.S. interest in pushing for greater liberalization of services trade and may be willing partners in this effort.

Recent scholarship demonstrates that services liberalization is in the interest of countries that are importing services as well as those that are exporting services. Better access to world-class services raises productivity and living standards in emerging-market economies. Interesting evidence on this point comes from a randomized experiment in India (Bloom et al. 2011). Researchers based at Stanford University and the World Bank randomly selected a set of Indian textile factories to receive a complimentary five-month program of consulting services from a leading international firm. Upon arriving in these factories, the researchers and consultants found that productivity was hampered by poor management practices. Over the next five months, the consultants worked with the firms to implement standard management practices proven to have enhanced productivity, output, and profitability in the West. When the project ended, the "treated" factories had cut defects roughly in half, substantially reduced inventories, and increased output, while the control factories saw little change. The authors calculate that these performance improvements increased profits by about \$350,000 a year. These are sufficiently large increases that the firms would have made enough money from the consulting projects to be able to pay the consultants commercial rates for their engagement in the projects.

Given the magnitude of the improvement, why had the firms not adopted these practices earlier? The researchers' results suggest that informational barriers were the primary factor explaining the lack of adoption. What is true for India is likely to be true throughout the developing world. By reducing barriers to trade in services, developing countries can help their own firms move toward the productivity frontier achieved in the West.

Conclusion

Over the course of 2011, the pace of growth in the global economy slowed, posing challenges for the U.S. recovery. Nevertheless, U.S. exports have climbed to record high levels, the current account deficit narrowed to 2.9 percent of GDP in the third quarter, and the economy has begun to rebalance its sources of growth, laying the foundation for sustained future expansion. The greatest threats to continued progress in these domains lie bevond America's borders. Provided Europe's debt crisis can be resolved, America's export growth and progress toward rebalancing are likely to continue at a brisk pace. Other developments in the global economy, notably the continued expansion of international trade in services and the interest of major trading partners in new U.S. trade initiatives, provide a foundation of new opportunities on which the U.S. economy can build in the years to come.