CHAPTER 4

THE WORLD ECONOMY

Like the U.S. economy, the world economy moved toward recovery in 2010 with positive economic growth reestablished in most regions and rebounding world trade. Emerging-market economies made substantial contributions to world growth, demonstrating their increasing importance to the world and U.S. economies. International policy coordination continued to play an important role: two leaders' summits of the Group of Twenty (G-20) were held in 2010, and significant agreements were reached on important global challenges such as ensuring a strong, sustainable, and balanced global recovery and setting core elements of a new financial regulatory framework, including bank capital and liquidity standards.

The world economy, however, must not only recover but also shift away from its pre-crisis pattern of growth that was too dependent on U.S. consumption. Global imbalances narrowed significantly during the crisis. Now, a fundamental challenge is to restore growth without restoring the old growth model and patterns of demand that led to those imbalances. Even without the economic crisis, however, the world economy would be undergoing substantial change. China has grown from the sixth- to the second-largest economy in just a decade, and the Group of Seven (G-7) advanced countries' share of the world economy continues to shrink as numerous emerging markets grow onto the world stage. These changes are generating shifts in world production and trade, but the growth of emerging markets need not portend a de-industrialization of advanced economies or a fall in the standard of living of Americans. The United States is home to many of the most innovative firms in the world, universities that attract more students than any other country, and the most productive workers of any major economy. In addition, output per capita is higher in the United States than in any of the other G-7 nations and much higher than in any emerging economy. These shifts do require, however, that the United States

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evolve to meet both new opportunities and new challenges. The same forces described in Chapter 3 on long-run growth—innovation, education, and infrastructure investment—coupled with a smart trade policy are crucial to the evolving role of the U.S. economy in the world.

The United States, both as part of the economic recovery and as part of its engagement with the global economy, must increase its exports over time. Substantial import growth in rapidly growing regions around the world helped drive U.S. exports at a fast pace in 2010, moving the United States closer to the Administration's goal of doubling exports by the end of 2014. Emerging-market economies are playing a growing part in U.S. trade relationships, and that role will only strengthen in the coming years. Robust enforcement of market access agreed to in previous trade accords, new trade agreements to guarantee access to these important emerging markets, and encouragement of balanced growth around the world will all help spur faster export growth. A range of additional policy initiatives—advocacy, export credit, and improvements in the U.S. transportation and supply chain infrastructure—can also contribute to export growth.

Status of the World Recovery

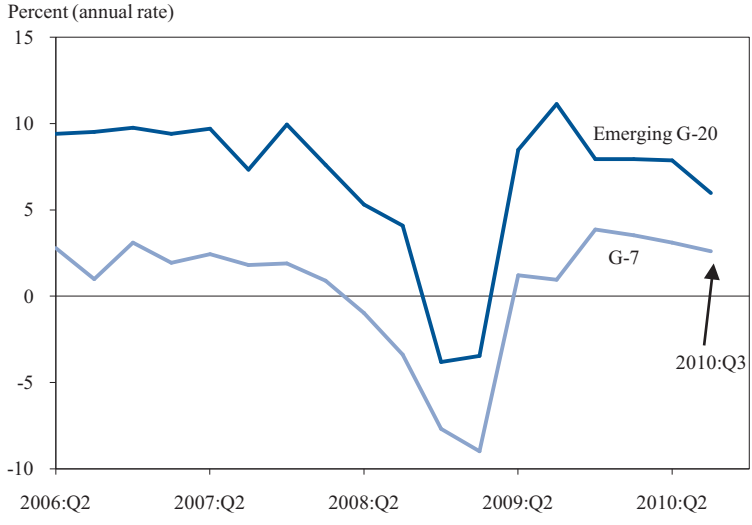
The world economy in 2008–09 faced its most wrenching economic crisis in a generation. The recovery from that crisis has been quite rapid in many regions, leading to a rebound in world economic growth and trade. Many challenges remain, however. Regions are growing at different paces, and many countries are facing some combination of slow growth, a need for fiscal consolidation, or complications from rising prices or increased capital inflows. Fortunately, institutions like the G-20, which were platforms for increased economic cooperation during the crisis, have been able to continue to play a positive role in the world economy.

Crisis Fading, But Challenges Remain

The world economy has experienced both a remarkable setback and rebound in the past three years. The global contraction in the second half of 2008 and first quarter of 2009 was sharp but relatively short-lived. By the second quarter of 2009, the world's growth rate (the weighted average of the growth rate of countries' real gross domestic product or GDP) was positive, and by the third quarter, the average growth rate had returned to its 2007 levels. The International Monetary Fund (IMF) projects that, for the four quarters of 2010, the world economy grew more than 4 percent and will continue at that pace in 2011 (IMF 2010).

Although average growth coming out of the crisis has been rapid, it has not been evenly distributed, as Figure 4-1 demonstrates. The financial market shocks of the recession were concentrated in the advanced economies, and those economies have rebounded more slowly. Most emerging-market economies rebounded quickly; some, in fact, never saw a contraction, just a slowdown in their rapid growth. In the first half of 2010, real GDP in the emerging-market countries of the G-20 grew 7.9 percent on average (at an annual rate), compared with 3.3 percent for the G-7 countries (growth slowed slightly in both groups in the third quarter).[1] The IMF projects that substantially faster emerging-market growth will persist, predicting growth of 7 percent in emerging and developing economies in 2010 and 2011, compared with roughly 2.5 percent in advanced economies.

Figure 4-1
Real GDP Growth



Sources: Country sources; CEA calculations.

It is not surprising to see advanced economies grow more slowly than emerging ones. Emerging markets tend to have faster population growth—and hence a growing labor supply—and can converge toward advanced economies through rapid productivity growth as they upgrade the education of their workforce and the technology they use. Still, a gap of roughly 4.5

[1] The G-20 is made up of 19 major economies plus the European Union. The G-7 includes the largest 7 advanced economies of that group (by size of economy, the United States, Japan, Germany, the United Kingdom, France, Italy, and Canada). The remaining members of the G-20 are Australia and South Korea along with major emerging-market nations: Argentina, Brazil, China, India, Indonesia, Mexico, Russia, Saudi Arabia, South Africa, and Turkey. Throughout this chapter, division of countries into emerging and advanced is based on IMF definitions.

percentage points in the growth rates of emerging and advanced economies is unusually large. Such a gap existed in the years immediately preceding the crisis, but between 1980 and 2007, the gap was much narrower: emerging and developing economies grew at an average of 4.4 percent, whereas the average for advanced economies was 2.8 percent.

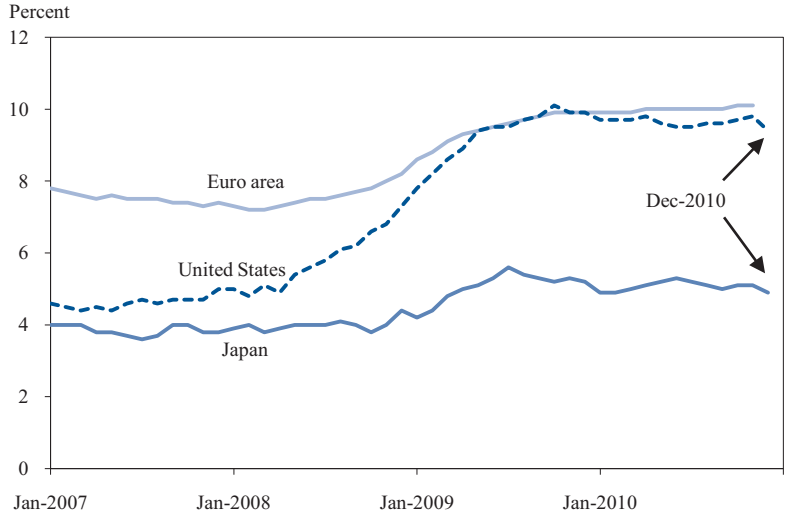
Several serious challenges to sustained global growth remain. The unemployment rate in many advanced nations is still unacceptably high. As Figure 4-2 shows, the unemployment rate in the euro area is still at its peak, and the U.S. rate is trending down only very slowly. At the same time, many advanced economies face substantial fiscal deficits. The U.S. Federal fiscal deficit in 2010 was 8.9 percent of GDP, the euro-area deficit was 6.3 percent, and Japan's was 7.7 percent. Over the next few years, those deficits will have to come down. They will likely fall significantly because of the business cycle (deficits tend to shrink as economies recover), but further fiscal consolidation will be needed over time. Maintaining sufficient growth to lower the unemployment rate while simultaneously implementing credible medium-term fiscal consolidation will be a challenge in many countries. Further, some euro-area countries have faced pressure from financial markets in the form of rising yields on their debt, forcing them to lean toward faster consolidation. Because the advanced economies are operating below capacity, their inflation rates have been low. Core rates were close to 1 percent in the United States and the euro area, and deflation continued in Japan. Thus far, central banks have maintained an accommodative monetary policy stance, with the Federal Reserve and Bank of Japan adding new quantitative easing measures in 2010, and the Bank of England and the European Central Bank keeping policy rates low.

In contrast, rising inflation is a concern in emerging-market countries where growth has been faster. The 12-month change in consumer prices in China breached 5 percent (above the 3 percent target for 2010, and China is now reported to have raised its target to 4 percent for 2011); wholesale price inflation in India rose above 10 percent during the spring and summer of 2010; and inflation rates began to creep up in 2010 in many other emerging-market countries. Many central banks have raised policy rates or taken other action to calm inflation. The contrast between fast growth with rising interest rates in the emerging world and slower growth with lower interest rates in advanced economies has put pressure on capital flows and exchange rates. After depreciating during the crisis, the currencies of emerging-market nations of the G-20 appreciated 5 percent on average over the first 10 months of 2010 on a real trade-weighted basis, and capital flows into these countries increased as well.[2] Thus far, emerging nations have responded

[2] Net portfolio investment flows into emerging-market G-20 countries turned negative at the peak of the crisis but rebounded in 2009 and 2010.

with a varying mix of currency appreciation, currency intervention, and capital controls. Total foreign exchange holdings by emerging and developing countries rose by roughly $500 billion in the first three quarters of 2010 (more than double the amount in the first three quarters of 2009 after adjusting for valuation changes), reflecting increased currency intervention aimed at slowing or preventing appreciation.

Figure 4-2
Unemployment Rate



Sources: Country sources; CEA calculations.

While overall world growth has rebounded, another crucial challenge to the world economy is to make up for the output lost during the recession. By the end of June 2010, the world economy had recovered to the level of output before the recession, but world GDP remains considerably below the output trend it was on before the crisis struck. Research suggests that financial recessions are long and deep, and whether the output lost is completely recovered is an important issue.[3] For the world economy to return to its previous output trend, several years of above-average growth will be necessary.

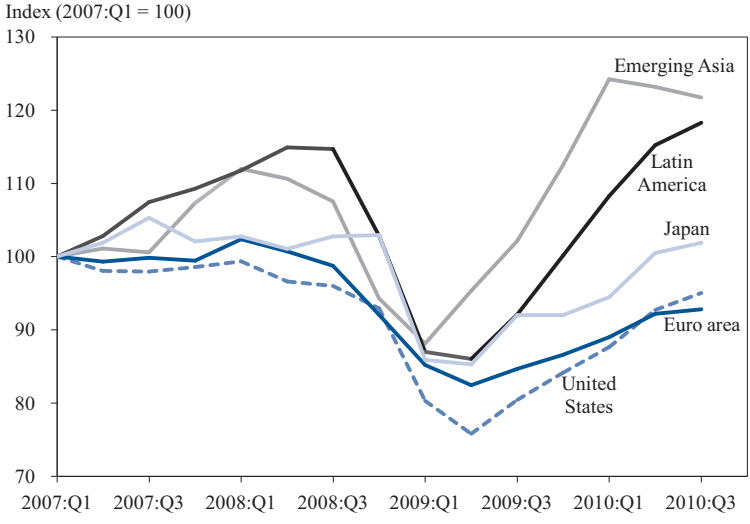
[3] Reinhart and Rogoff (2009) demonstrate that financial recessions are longer and deeper than other kinds of recessions, but the authors do not comment on whether the output loss is permanent. IMF (2009) argues that, on average, countries do face a medium-term output loss and thus never recover to the pre-crisis trend level, but that study (which looked at earlier recessions) found wide variation in outcomes, with the top quarter of countries more than 5 percent above their pre-crisis output trend seven years after a banking crisis. In addition, a variety of methodological choices may bias the IMF results toward finding a permanent loss. Other work finds that most countries recover all output lost in a financial recession over the medium term (see, for example, Cecchetti, Kohler, and Upper 2009).

The Rebound in World Trade

A particular difficulty during the recession was the collapse in world trade. Even countries with little connection to the financial aspects of the recession were nonetheless affected as demand for imports plummeted and financing conditions for export credit tightened (Baldwin 2009). Trade fell even faster than GDP: the unprecedented collapse of world trade during the last quarter of 2008 and the first quarter of 2009 saw an almost simultaneous, precipitous decline of exports and imports across all major regions of the world.

Trade has recovered more quickly than GDP has: exports and imports picked up during the second and third quarters of 2009 and continued the V-shaped recovery in 2010, advancing significantly ahead of expectations. In October 2009, the IMF expected real world trade (adjusted for prices) to grow just 2.5 percent in 2010. Only months later, the Organisation for Economic Co-operation and Development projected a 6 percent increase. In April 2010, the IMF forecast a 7 percent increase, and in the fall of 2010, both institutions expected over 11 percent growth for the year.

Figure 4-3
Import Volume Indexes

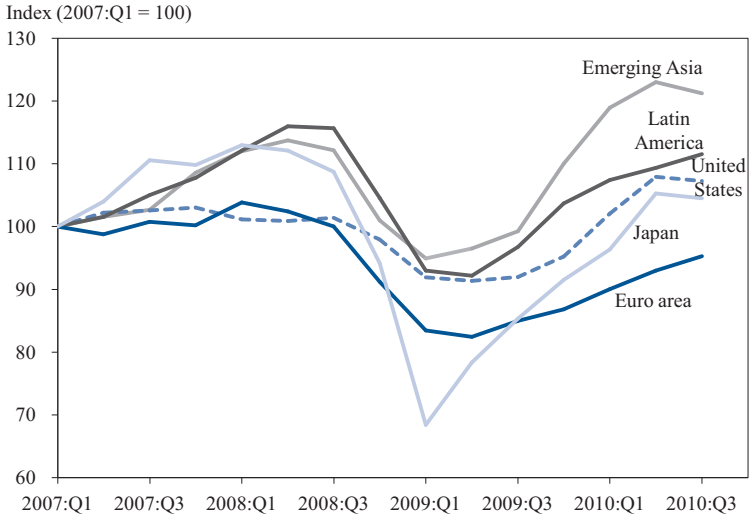


Sources: CPB World Trade Monitor; CEA calculations.

Important regional differences mark both the contraction in trade during the recession and the expansion of imports and exports during the recovery. Figure 4-3 shows the import volume (adjusted for prices) and Figure 4-4 the export volume of various regions relative to their levels in the first quarter of 2007. Asia's emerging economies experienced a sharp decline

of imports and exports, but they were among the quickest to recover and were the first in 2010 to reach their pre-crisis levels. Japan, whose exports plunged nearly 40 percent from peak to trough in the crisis, also rebounded in 2010, closing the year with exports less than 10 percent below the pre-crisis peak. Japan's imports fell by only half as much as its exports, and they too were recovering but had not attained their pre-crisis levels by the end of 2010.

Figure 4-4
Export Volume Indexes



Sources: CPB World Trade Monitor; CEA calculations.

The export decline in the United States was similar to that in the euro-area countries, but U.S. exports have recovered more quickly. U.S. imports initially declined more sharply than those in the euro area, but they also have rebounded substantially. Among all of the major regions of the world, the euro area has had the slowest resumption in import growth.

Finally, despite the substantial progress in the V-shaped trade recovery, as of the third quarter of 2010, none of these economies had yet achieved the level of trade that had been projected to take place had pre-crisis trends continued in the absence of the 2008–09 trade collapse.

Global Policy Coordination

During the crisis, world leaders established the G-20 as the premier international body for international economic coordination. The G-20, whose members account for nearly 90 percent of world GDP, continued to

play a pivotal role in 2010, holding two leaders' summits as well as finance ministers' and deputies' meetings, along with continual staff work.

At the leaders' summit in Pittsburgh in 2009, under U.S. leadership, the G-20 committed to work toward strong, balanced, sustainable global growth. In Toronto in June 2010, leaders made commitments to boost demand where needed and to strengthen public finances and financial systems. In Seoul in November 2010, they agreed to undertake macroeconomic policies to ensure ongoing recovery and sustainable growth, including making exchange rates more market-determined and adopting other policies to temper global imbalances.

The G-20 also followed up on significant commitments to reform the international financial system and its institutions. Through the Basel Committee on Banking Supervision, nations around the globe negotiated a new framework for banking supervision that is intended to improve the ability of the global financial system to absorb shocks and reduce the risk of spillover from the financial sector to the real economy. The framework involves raising capital standards, broadening the coverage of supervision, introducing global liquidity standards, and promoting the buildup of capital buffers in good times.

G-20 nations also followed through on their commitment to change the governance structure of the two major international financial institutions: the IMF and the World Bank. The governance structure of these two organizations was heavily weighted toward advanced countries, and each is now being changed to incorporate more leadership from major emerging-market countries, including changes to quota shares and board seats.

Finally, policy coordination has continued as various financial difficulties have appeared throughout the year. The focus of much of the concern during 2010 has been on sovereign debt in Europe. First, central banks, including the Federal Reserve, coordinated to ensure sufficient liquidity across markets. More importantly, in May, European leaders worked with the IMF to create a European Financial Stabilization mechanism with up to $1 trillion committed to stabilizing the debt markets for various euro-area nations. The funds were first used in Greece to provide a necessary backstop as that country tried to rebalance a precarious fiscal situation. Toward the end of the year, the mechanism was used to backstop Ireland as it struggled with the costs of its banking system.

The Evolution of the World Economy

The world economy has begun a transformation. Rapidly growing emerging-market countries and some advanced countries with high savings will need to provide more demand to the world economy, and countries that are borrowing too much will need to save more. Changes are already taking place in the composition of U.S. exports as services play a larger role, but there will likely be continuity as well, as the United States maintains its exports of products that rely on sound legal institutions, an innovative economy, and the high skills and productivity of U.S. workers. More of those products, though, are likely to be headed toward rapidly growing emerging markets, a change that will be essential if the U.S. economy is to meet the Administration's goal of doubling exports in five years.

Global Imbalances

As the G-20 actions show, world leaders have recognized that more balanced growth is essential to the world economy. The United States had a large current account deficit before the crisis, and the Administration has been clear that the United States must find a more balanced growth model, one that involves more exports and investment. The trade balance, or net exports, represents the bulk of the current account (net income on overseas assets and unilateral transfers such as foreign aid and remittances make up the rest). At the same time, the current account represents the net lending of a country to the rest of the world because if a country exports less than it imports, it must either borrow or sell foreign assets to pay for that consumption from abroad.

The issue of global imbalances is a problem not just for the United States but for all nations. A single country's saving behavior can affect saving and investment around the globe. A large deficit, for example, can take up too much world savings and crowd out borrowing in other countries. Conversely, a current account surplus means a country is not contributing as much to world demand as it is to world supply and may be lowering world interest rates and encouraging deficits in other countries. Surpluses become particularly contentious when global output is below potential output. Thus, the macroeconomic behavior and outcomes of different countries are linked.[4] Before the crisis, when the United States was too reliant on consumption, other countries around the world were also too reliant on U.S. consumption and exports to the United States.

[4] Current account deficits or surpluses are not always a bad thing. Where many productive opportunities exist, a country may borrow to invest more than its savings allow and may therefore want a deficit; alternatively, a country may temporarily have an excess of savings. However, large persistent surpluses or deficits can be a sign of more structural imbalances in an economy.

The United States accounts for roughly one-quarter of the world economy, and consumption has historically accounted for roughly two-thirds of the U.S. economy. Thus, one might normally expect 16–17 percent of world aggregate demand growth to come from U.S. consumers. But emerging and developing economies often grow faster than more mature economies. Thus, a larger portion of world growth would be expected to come from emerging economies than their share of the world economy would warrant.

From 1996 to 2006, though, U.S. consumption played an outsized role in the world economy, with roughly 22–23 percent of the growth in the world economy coming from growth in U.S. consumption. This level was simply not sustainable. During this period, U.S. consumption rose to 70 percent of the U.S. economy, personal saving fell to very low levels, and U.S. business equipment and software investment growth lagged behind GDP growth. At the same time, the fiscal position of the U.S. Federal Government moved from substantial surpluses at the end of the 1990s to substantial deficits in the mid-2000s. These deficits also contributed to lower national saving. Such macroeconomic behavior had important implications for the world economy. The rapid growth in consumption and decline in saving (both personal and government) meant that the United States increasingly borrowed from the world and had a growing current account deficit.

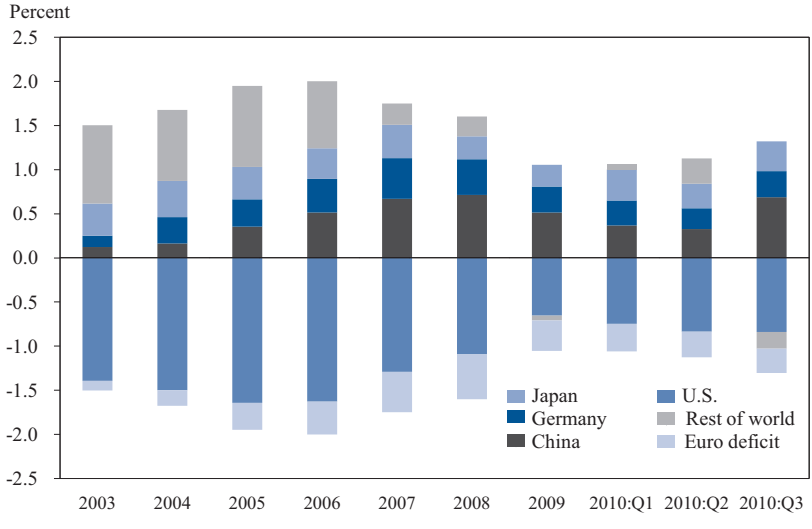
At the same time that consumption was outpacing income in the United States, many other countries had export growth well in excess of GDP growth. Falling transport prices and the rise of globally integrated production supply chains mean that the production of a single good may generate far more recorded exports and imports than the value of the final good itself. To illustrate, consider a smartphone whose various parts may be traded across many borders at different stages of production before final assembly and sale of the phone. Each time a component crosses a border to move to the next stage of processing, it counts as an import for one country and an export for another. As a result, the total value of exports and imports for various countries from that one phone will likely exceed the total final value of the phone, leading to faster export growth than GDP growth when one more phone is made. From 1998 to 2008, exports grew faster than GDP in nearly every major economy. Of the largest 20 exporters, though, the United States had the lowest rate of export growth—96 percent, compared with an average of 243 percent among the other top 20 exporters. Even among other advanced countries, the average was 143 percent. The United States still exports more goods and services than any other country in the world, but over the past decade, it relied too much on domestic consumption to drive

growth and not enough on the rest of the world. As a result its export growth lagged and its lead shrunk significantly.

Some countries, such as India and Brazil, opened up to the world economy and saw both their exports and imports rise substantially over the decade before the crisis. Their exports as a share of GDP increased, but they were not dependent on external demand for growth because they were both selling to and buying from the world. Yet other countries experienced the mirror image of the U.S. model of the 2000s. Rather than imports and consumption rising faster than incomes, exports and savings increased so that both exports and the trade surplus continued to grow as a share of their economies. These surplus countries thus effectively funded the borrowing of deficit countries and provided less demand support to the world economy. From 2000 to 2008, China's current account rose from a surplus of 2 percent of GDP to 10 percent, while Germany's moved from a deficit to a 7 percent surplus. While Germany's surplus rose, other countries in the euro area (France, Greece, Italy, Portugal, and Spain) experienced rising deficits.

Figure 4-5 shows that as the decade of the 2000s wore on, the global imbalances worsened. The U.S. deficit and the Chinese and German surpluses grew not just as a share of their own GDP but as a share of world GDP as well. By 2007, the U.S. deficit was shrinking as a share of both U.S. and world GDP, but China's surplus continued to rise as a share of world GDP, and the euro-area deficit countries' combined current account deficit was expanding as well.

Figure 4-5
Current Account Deficits or Surpluses as a Share of World GDP



Notes: "Euro deficit" represents France, Greece, Ireland, Portugal and Spain. "Rest of world" represents all other countries not shown here plus the statistical discrepancy.
Sources: Country sources; CEA calculations.

The crisis brought about a sharp change in these imbalances.[5] The U.S. current account deficit shrank from 5 percent of its GDP to less than 3 percent in 2009. At the same time, China's surplus fell from 9.6 percent of its GDP in 2008 to 5.9 percent in 2009. Still, as is clear from the figure, imbalances remain and have begun once again to widen, albeit slowly. The U.S. current account deficit is still less than 4 percent of U.S. GDP and, given that the United States is growing somewhat slower than the world as a whole, this deficit is shrinking further as a share of world GDP. The surpluses in both Germany and China remain above 5 percent, however. Furthermore, when a fast-growing country such as China has a constant surplus as a share of its GDP, that implies the surplus is growing as a share of the world's GDP. Also, while U.S. borrowing in the early 2000s was larger than the surpluses in Germany, Japan, and China combined, over time the current account surpluses in these countries grew, and by the third quarter of 2010, their combined total was considerably larger than the U.S. current account deficit. As noted, the G-20 continues to work on how to reorient countries' policies so they are more mutually consistent and growth is more balanced and sustainable.

Box 4-1: What Do We Owe the Rest of the World?

Because the current account represents net borrowing in a year, it indicates the net capital flows (such as securities purchases, bank deposits, and direct investment) into a country. Along with adjustments for changes in exchange rates and asset prices, the current account measures the change in a country's net foreign wealth (all of the assets its investors own abroad minus all the claims on its economy by foreign investors). Net borrowing by U.S. residents over the past decade has left a negative net international investment position of roughly 20 percent of U.S. GDP. Relative to other countries, this negative position is still fairly small as a share of GDP.[a]

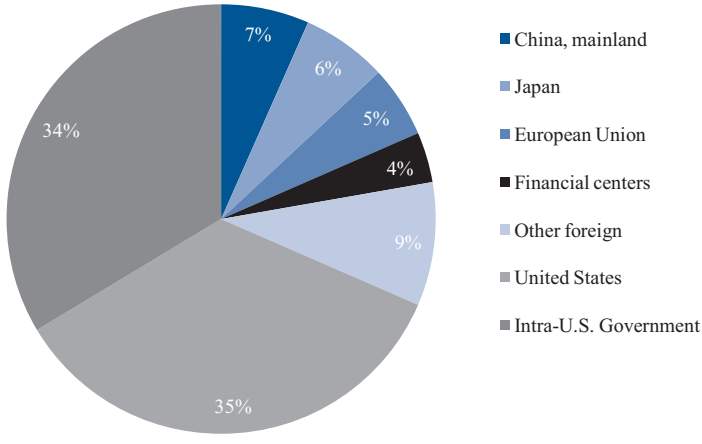
Box 4-1, continued on next page

[5] U.S. personal consumption increased to more than 23 percent of the world economy in 2001 and 2002, measured in current dollars, but over time, that share began to shrink. A depreciating real exchange rate and rapid growth in emerging markets meant that by 2007, U.S. consumption as a share of the world economy had declined to 18 percent. Despite growing by 6 percent in 2007, U.S. imports as a share of the world economy fell that year. The simple fact that emerging markets often grow faster suggested that U.S. consumers and U.S. imports could not continue to absorb such a large share of the world economy. The crisis abruptly and sharply changed the relationships, but they were already shifting well before the crisis erupted.

Box 4-1, continued

In addition, foreign investors own only about 11 percent of the overall financial assets in the U.S. economy. This fact is sometimes obscured by foreign investors' preference for U.S. Treasury bills. Because so much of U.S. net foreign debt is concentrated in one asset class, the United States is often viewed as a massive debtor to the world. Foreign investors own roughly one-third of U.S. Treasury securities (roughly one-half if Treasury securities held by government trust funds—such as the Social Security Trust Fund—are excluded) (see box figure). China is the largest foreign holder of U.S Treasuries, but China's investors own just 7 percent of the total—one-fifth as much as U.S. bondholders (some foreign holdings may be misclassified if, for example, China buys Treasuries through a London investment bank that buys them from the United States).

Major Holders of U.S. Treasury Securities



Notes: Financial centers include Caribbean banking centers, Hong Kong, Luxembourg, Singapore, and Switzerland.
Sources: Treasury International Capital data, October 2010; Department of the Treasury, Monthly Statement of the Public Debt of the United States.

[a] The U.S. net international investment position has not become as negative as one might have expected based on the amount of borrowing over the 2000s. In addition to borrowing in any given year, the values of U.S. foreign assets and liabilities change in response to changes in market conditions. Over the past decade, the United States has had, on net, positive "valuation effects" (Lane and Milesi-Ferretti 2009). Strong asset performance in the United States and changes in currency may have led to a decline in the net international investment position in 2010.

Determinants of Exports

The United States is well positioned to spur growth through exports, even if the precise composition of the goods and services America will sell to the world in the future is not known today. The pattern of trade between one economy and another, quite different, economy is determined in part by the forces of comparative advantage, that is, what it is that differentiates the two economies. Comparative advantage can lie in differences in labor productivity, the relative availability of a country's natural and physical resources, the educational priorities that help to determine the skill sets of its people, and even the institutions that can create different conditions across national markets. For example, the United States exports high-tech machinery to other countries that may not have the high-skill labor or advanced technology required to make those goods. Also, high judicial quality and good contract enforcement give the United States an advantage in the production of goods and services that require businesses to invest to tailor products to particular consumer needs. Thus, the United States has a comparative advantage in highly complex products that are difficult to commoditize. Such products may require teamwork in the design and production process and substantial financial investment in research and development (R&D) and hence commitment to the protection of intellectual property.

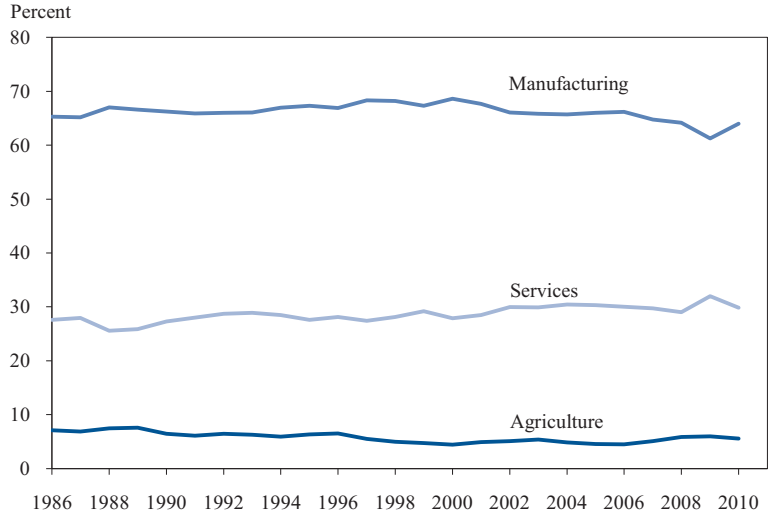
But comparative advantage does not explain the determinants of and benefits to the back-and-forth trade of similar products (intraindustry trade), especially that taking place between similar economies. A modern-day example is trade in smartphones. Beginning in the late 1990s, a Canadian firm was a first entrant to the wireless communications market, and U.S. business consumers flocked to import a mobile device that could send and receive e-mail messages. Soon thereafter, U.S. firms innovated and engineered different varieties of these mobile products with additional features that increasingly appealed to individual consumers as well. Consumers in other countries (including Canada) imported substantial quantities of these U.S.-designed smartphones. The ability to trade internationally let these firms produce for multiple markets and take advantage of scale economies, and it encouraged their entrepreneurship and innovation by providing a larger potential market. But manufacturers are not the only ones that gain; consumers in the United States and Canada also benefit through access to foreign-designed varieties of the product in addition to those that are conceived and produced domestically.

Product quality is also important to understanding the determinants of intraindustry exports. Generally speaking, richer countries tend to specialize in higher-quality goods within the same product type, while developing and emerging economies tend to focus on goods further down the

quality ladder. For example, Italy may import low-cost T-shirts from China, but it is a leader in exporting high-quality, high-fashion shirts to the world. Those products that have wide variation in quality allow advanced-country firms to differentiate their goods and services away from imported varieties from low-wage countries.

Manufacturing Exports. While the United States is still the largest combined exporter of goods and services, America has slid from being the world's leading exporter of goods at the beginning of the century to the third position, behind China and Germany. Nevertheless, the United States continues to export over $1 trillion of goods annually, more than three-quarters of which are manufactured, and these exports support more than one-fourth of the manufacturing jobs in the United States. As Figure 4-6 indicates, manufacturing and agriculture goods combine to make up more than two-thirds of total U.S. exports.

Figure 4-6
U.S. Exports by Sector



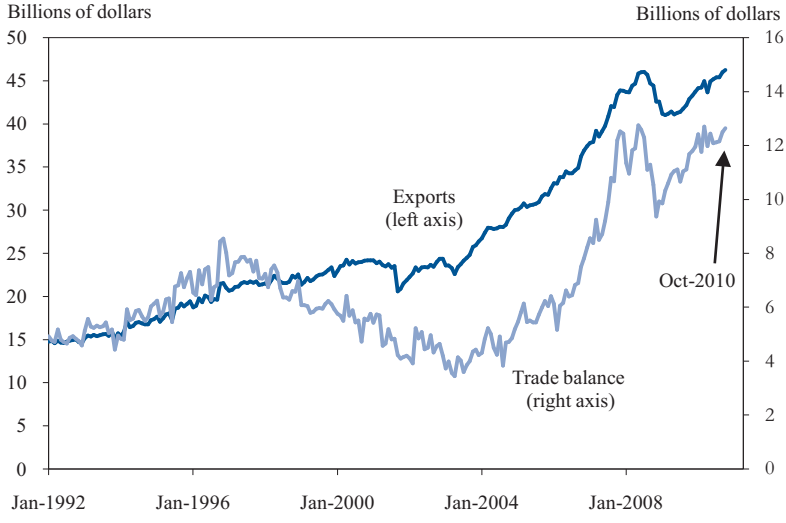
Note: 2010 data are through October.
Sources: Bureau of Economic Analysis / Census Bureau, U.S. International Trade in Goods and Services.

Experience from other high-income countries shows that a shift in the world share of exported goods does not mean a shift entirely out of manufacturing and into a service-only economy. Germany, the second-place goods exporter, maintains a substantial share of manufacturing in its economy and exports many of these products (including to emerging markets). Manufacturing is also a larger share of the economy in Japan than it is in the United States. Like the United States, these countries have a

floating currency and highly paid, high-skilled workers. The rise of emerging markets—with lower wages but also lower productivity—has not forced these high-income countries out of manufacturing. Richer countries do tend to produce and consume more services than do emerging-market countries. Nevertheless, manufacturing, especially of complex products, continues to play a substantial role in advanced economies, including the U.S. economy.

Services Exports. Services are of increasing importance to high-income economies. Some services are nontraded, such as restaurant meals, live entertainment, and cleaning services. But services such as consulting, finance, architecture, accounting, law, and tourism are traded. With improvements in communications technology as well as infrastructure, many services are becoming increasingly tradable. As noted, nearly one-third of total U.S. exports annually are in services. Figure 4-7 shows the rapid growth of U.S. services exports as well as the growing surplus in U.S. services trade.

Figure 4-7
U.S. Trade in Services



Source: Census Bureau, U.S. International Trade in Goods and Services.

Some of the largest and fastest-growing U.S. services exports are in business, professional, and technical services. Other important categories are insurance, finance, and education services. Analogous to the case of goods exports, U.S. service exports are in sectors where U.S. firms and employees offer world-class, high-quality performance and thus give the United States a strong comparative advantage.

Changing Composition of Goods and Services Exports. Economic forces have traditionally allowed the United States to produce and export many of the goods and services in which it had a comparative advantage at that point in time. There is no reason to think that those forces will cease to operate going forward.

As the next section documents in more detail, the growth in U.S. exports is coming from new demand, much of it from emerging economies. Some emerging markets are quickly urbanizing and shifting away from subsistence agriculture, thus increasing foreign demand for U.S.-grown farm exports such as soybeans, corn, and wheat. These emerging economies are developing a sizable middle class, newly able to afford the higher-quality goods and services that they may not have been able to buy in the past. And the expansion of home-grown businesses in emerging economies creates new demand for R&D-intensive, highly complex products, such as aircraft, turbojets, oil and gas field machinery, electronic integrated circuits, and medical instruments. These products frequently sit at the top of the U.S. export list, and U.S. exports of these products will likely sit at the top of the quality ladder.

The details may be impossible to forecast accurately, but past experience suggests that the U.S. export industry is likely to be built on high-quality goods and services that tap into entrepreneurial talents and that reflect the United States' commitment to reward an innovative workforce. Many of the policies and programs described in Chapter 3 as essential to long-run innovation and growth are also critical to the successful evolution of the United States as it adjusts to changes in the world economy.

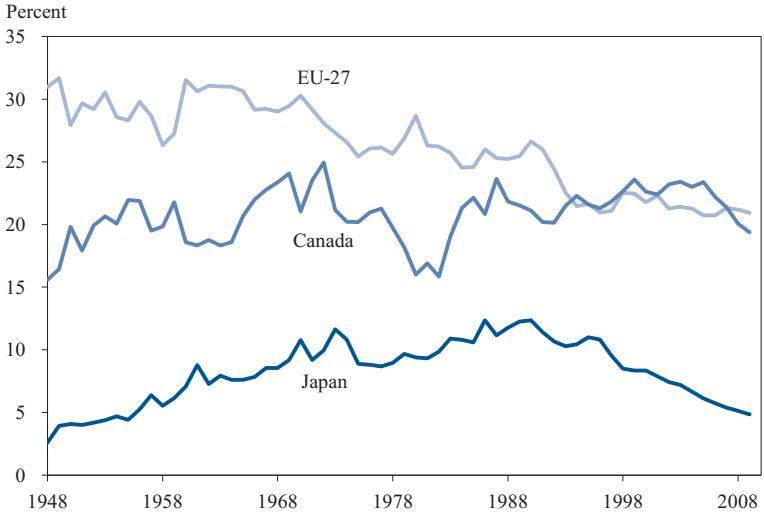
Evolving U.S. Trade Patterns

Even before the global economic crisis and recession of 2007–09, the United States had been in the midst of a longer-term reorientation of its international trade patterns. Understanding the relative shift in these trade patterns is as important as coming to terms with the shifting trends in the underlying goods and services that the United States produces and exports. While historical trading partners such as Canada, Japan, and the European Union continue to be a strong component of overall U.S. trade, the new and most dynamic sources of U.S. trading relationships are coming from other places in the world.

Increasing Trade with Emerging Economies. The share of total U.S. exports sent to mature trading partners has been declining for decades. The share of total U.S. goods exports consumed by the 27 countries of the European Union (EU) dropped from nearly one-third (31 percent) in 1948 to one-fifth (21 percent) in 2009, even though these economies have

grown increasingly wealthy. The share of total U.S. goods exports to historically important high-income economies like Japan and Canada has also shown signs of decline (Figure 4-8). But the European Union, Canada, and Japan are not buying less from the United States than they did in the past. Rather, U.S. exporters are now shipping an increasing amount of goods to other, faster-growing economies, in addition to maintaining their historical trading relations (Figure 4-9).

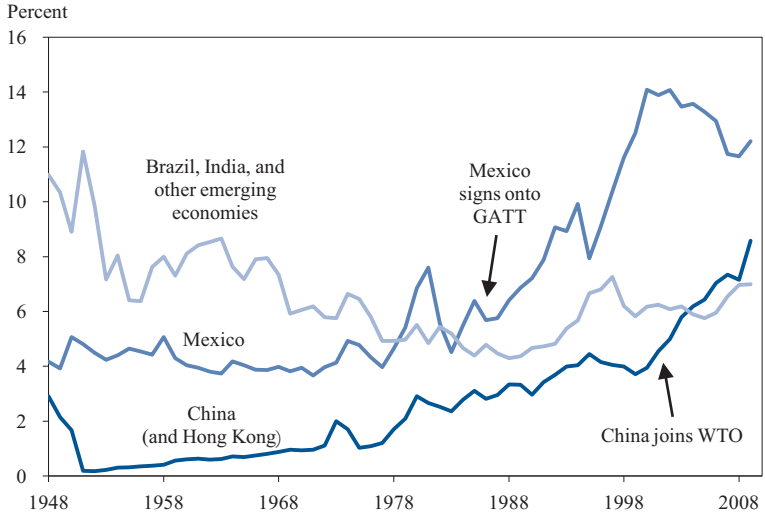
Figure 4-8
Share of U.S. Goods Exports to Mature Foreign Economies



Sources: IMF Direction of Trade Statistics; CEA calculations.

U.S. trade with China exemplifies this story. As late as 2000, the year before China joined the World Trade Organization (WTO) and substantially opened its market to imports, only 2 percent of all U.S. goods exports went to China. By 2009, after a decade of rapid growth, China had become the fourth-largest destination market for U.S. goods exports after the European Union, Canada, and Mexico. Mexico is another prime example. Mexico's import tariffs in 1982 averaged 16 percent with a maximum rate of 100 percent (de la Torre and González 2005). Mexico signed onto the General Agreement on Tariffs and Trade (GATT) in 1986, and by 1992 it had cut those tariffs under the GATT to an average of 11 percent with a maximum rate of only 20 percent. In recent years, the share of total U.S. goods exports to Mexico has remained steady at 12 percent, nearly double its level in the early 1980s before Mexico liberalized its economy, signed onto the GATT, and negotiated the North American Free Trade Agreement (NAFTA).

Figure 4-9
Share of U.S. Goods Exports to Major Emerging Economies



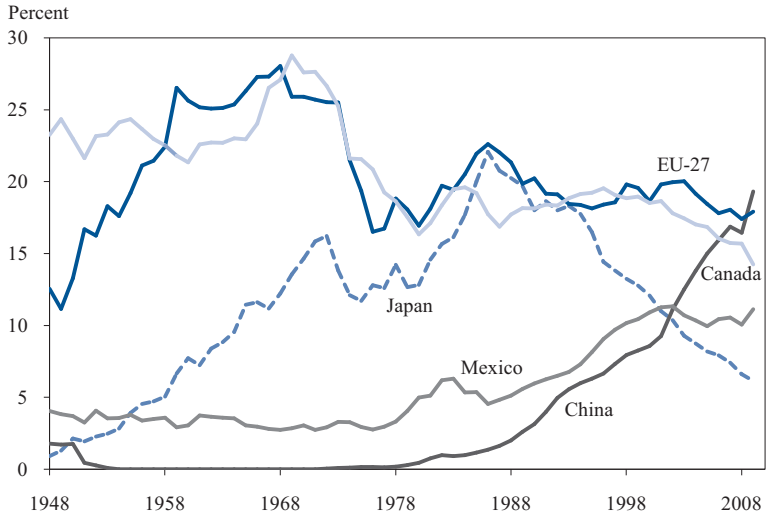
Sources: IMF Direction of Trade Statistics; CEA calculations.

U.S. exports to several other emerging economies still have room to grow. The share of total U.S. goods exports going to Brazil, India, and a number of other emerging economies (see Figure 4-9) has increased slightly from its mid-1980s low point, hitting a recent peak in the mid-1990s when some of these economies went through an initial phase of trade liberalization. U.S. export growth to these economies has since leveled off. Whether future U.S. export growth to these other emerging economies replicates the experience of earlier U.S. export expansions into China and Mexico—and even to Japan through the 1980s (see Figure 4-8)—depends partly on the extent to which these other emerging economies commit to liberalizing their import markets. A key item on the Administration's trade agenda is therefore continued work to open these markets through the Doha Round of WTO negotiations.

U.S. import patterns are also experiencing a reorientation. At the end of the 1940s, Japan and the European Union countries were still devastated by World War II and far from being the mature economies they are now. After these economies rebuilt, however, they quickly became large sources for U.S. imports. The European economies peaked at supplying nearly 30 percent of U.S. goods imports in the late 1960s; Japan peaked at roughly 20 percent of U.S. imports in the mid-1980s. Imports from Canada peaked at nearly 30 percent around 1970. U.S. imports from Canada, the European Union, and Japan continue to grow, but the share of U.S. imports from

these countries has declined as imports from fast-growing export markets, including China and Mexico, have increased (Figure 4-10).

Figure 4-10
Share of U.S. Goods Imports by Foreign Source



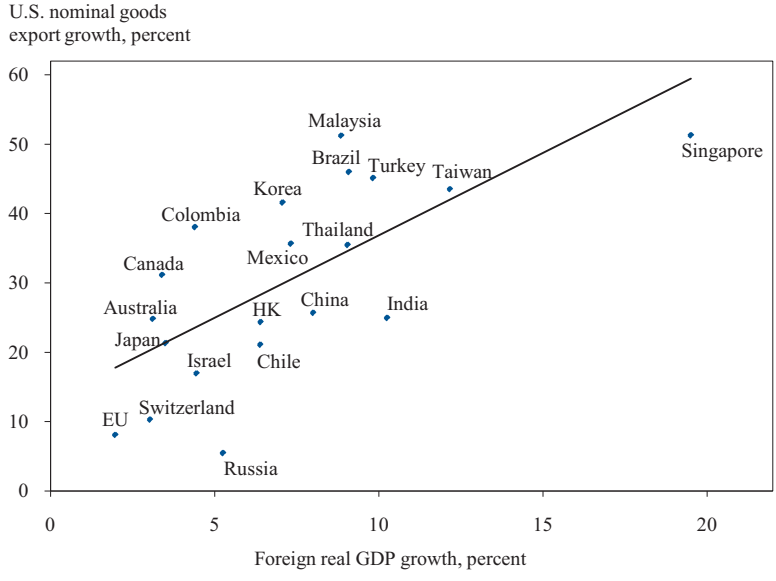
Sources: IMF Direction of Trade Statistics; CEA calculations.

Doubling U.S. Exports. In his January 2010 State of the Union address, the President established 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 $1.57 trillion to an annual level of $3.14 trillion by the end of 2014. To meet that goal, U.S. exports need to grow an average of 15 percent a year. So far, exports are on track to meet or exceed that pace. Through the first three quarters of 2010, U.S. exports of goods and services increased by 17 percent relative to the same period in 2009. Doubling exports over five years will increase the number of jobs supported by exports, and importantly, these are, on average, higher-paying jobs.

Goods exports have been rising faster than total exports, increasing 22 percent through the first three quarters of 2010. But that total masks significant variation in exports to different regions. U.S. goods exports to the Pacific Rim (East Asia and Oceania) increased by 32 percent, to Latin America by 29 percent, to Canada and Mexico by 26 percent, but to Europe by only 9 percent. This slow export growth to Europe means that even though it is a key export partner, the European market contributed very little to export growth in 2010. Some of this variation is attributable to the longer term, pre-crisis trends in which U.S. exports to many emerging economies were already increasing.

The extent to which a region drives U.S. export growth is not simply a function of the growth rate of U.S. exports to the region. The size of the trading relationship matters. Even though exports to our NAFTA partners grew more slowly than those to the Pacific Rim, exports to Canada and Mexico contributed more to total export growth because they represented roughly a third of all U.S. exports. Still, increasing demand from emerging markets is essential to the growth of U.S. exports. Emerging markets accounted for 43 percent of U.S. goods exports during the first nine months of 2010, but they generated half of the export growth during that period and might have generated even more than half had not excellent U.S. export performance to Canada and Korea helped keep up export growth to advanced regions. Faster growth of exports to emerging economies means their share of U.S. exports will rise over time.

Figure 4-11
U.S. Export Growth vs. Foreign GDP Growth, 2009:Q2 – 2010:Q2

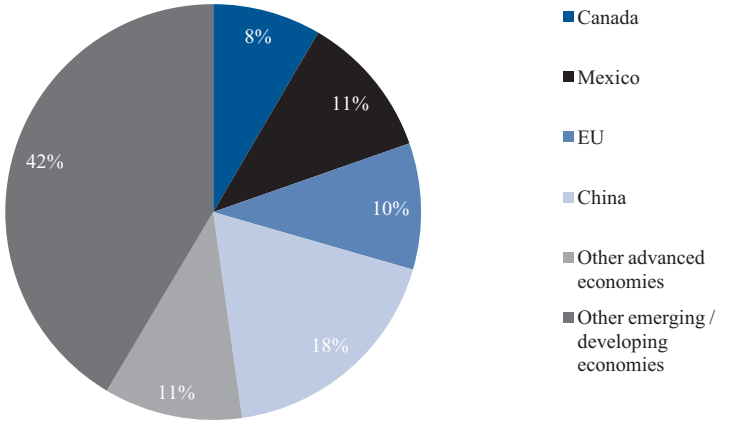


Sources: IMF Monthly Direction of Trade Statistics; country sources; CEA calculations.

A crucial determinant of U.S. export growth to a region is the pace at which that market is growing, that is, the speed and depth of trading partners' domestic economic recoveries. Figure 4-11 illustrates this fact by showing the strong positive relationship between growth in foreign real GDP and nominal growth in U.S. goods exports between the second quarter of 2009 and the second quarter of 2010. The relationship suggests that each percentage point of economic growth in a country is correlated with

more than 2 percentage points of additional U.S. bilateral export growth. Eliminating Singapore, the sole outlier, leads to a relationship of roughly three to one.[6] Thus, growth abroad is good for the United States—the global economy is not a zero-sum game.

Figure 4-12
Projected Share of U.S. Nominal Export Growth, 2009–14



Sources: IMF, World Economic Outlook, October 2010; Bureau of Economic Analysis / Census Bureau, U.S. International Trade in Goods and Services; CEA calculations.

U.S. export growth also benefits from changes in relative prices caused by faster inflation in growing emerging markets because faster inflation abroad means U.S. goods are cheaper on world markets relative to goods from these countries. These price and growth relationships suggest that if the United States is to double exports, an overwhelming portion of that new export growth will come from faster-growing emerging and developing economies. Figure 4-12 shows the share of projected growth of U.S. nominal exports by region using IMF forecasts for GDP and price growth in different regions. Trade with America's traditional partners will remain important. For example, trade with the European Union is likely still to be roughly 20 percent of U.S. exports by 2014, and growth in exports to EU countries will be roughly 10 percent of U.S. export growth over the five-year period. But more than 70 percent of U.S. export growth is projected to come from Mexico, China, and other emerging and developing countries. Growth in

[6] These findings are consistent with standard results on aggregate relationships across countries, which suggest that growth of real exports increases roughly 2 percent for every 1 percent of world real GDP growth; see Chinn (2005) and IMF (2007). In addition, one would expect U.S. export prices to rise in fast-growing markets, so the result that nominal growth of U.S. goods exports rose at a faster pace than the anticipated real growth is also to be expected.

these countries and active engagement in trade with them will be essential to meeting the Administration's goal of doubling U.S. exports in five years.

Trade Policy

Recent economic research has focused on U.S. firm productivity and the fixed cost of exporting as fundamental determinants of which U.S. businesses are able to enter new markets and export successfully (Bernard et al. 2007). Some costs to firms of market entry are well known—for example, learning about customer-specific attributes and tailoring products accordingly, establishing new distribution networks to reach a market, and targeting advertising to attract those new customers. Nevertheless, U.S. businesses that seek to enter a new foreign market sometimes have to overcome additional costs, such as foreign import tariffs. Another such cost is nontariff barriers, including foreign requirements that the exporting firm undertake a costly modification of its export product to fit local standards, even in the absence of any recognized technical, safety, or customer benefit for doing so.

Appropriately tailored government policy can reduce some of the costs that firms must incur to export to new foreign markets. In particular, the President's National Export Initiative includes several policy instruments aimed at reducing these costs. These instruments include negotiating the reduction of foreign tariffs and removal of nontariff barriers to trade, enforcing existing market access agreements, and increasing advocacy and access to credit for U.S. exporters.

Negotiating to Open New Markets

Any import tariff in a foreign market is an additional cost to market entry that U.S. firms must factor into their export decisions. Despite the trade liberalization of the past few decades, U.S. exporters still encounter substantial unevenness in the tariff treatment they receive.

For example, U.S. exporters enjoy low tariffs and open markets in U.S. NAFTA partners Mexico and Canada. Equally important are the relatively open markets of several high-income economies with which the United States has partnered for more than 60 years under the WTO and the GATT before it. As Table 4-1 shows, the European Union and Japan offer U.S. exporters most-favored-nation (MFN) tariff rates that are on average only moderately higher than the average rate the United States applies toward their exports. The applied import tariffs of these high-income economies are also quite close to their "bound" rates—that is, the upward limits that their applied tariffs cannot legally exceed without compensation to their trading partners. The third column of the table provides an alternative

and more sophisticated measure of import "restrictiveness," the overall trade restrictiveness index (OTRI), that takes into account not only import tariffs but also some nontariff measures and the potential responsiveness of imports and exports (elasticities) to changes in trade barriers (Kee, Nicita, and Olarreaga 2009); it does not take into account trade distortions caused by undervalued exchange rates. The United States is also quite open based on this index, but Japan's OTRI is nearly twice as large, indicating that its nontariff measures are an important constraint to the ability of trading partners to export to its market.

Table 4-1
Import Tariffs, Nontariff Measures, and Trade Restrictiveness, 2008

	Import regime			Conditions facing exporters
Economy	Applied MFN Tariff (simple average, %)	Bound MFN Tariff (simple average, %)	Overall Trade Restrictiveness Index (OTRI)	Foreign Trade Restrictiveness Index (MA-OTRI)
United States	3.5	3.5	6.3	10.3
European Union	5.6	5.5	6.4	9.1
Japan	5.4	5.4	11.3	7.9
Korea	12.2	17.0	--	9.8
Colombia	12.5	42.9	19.9	8.1
Panama	7.2	23.5	--	12.6
China	9.6	10.0	9.8	9.2
Brazil	13.6	31.4	20.3	12.3
India	13.0	49.0	18.0	8.5
Russia	10.8	--	19.0	4.0

Notes: Russia's tariffs are not bound because it is not a WTO member. Dashes indicate data are not available. The most recently available year's data are reported where OTRI and MA-OTRI for 2008 are not available.
Sources: Tariff data from WTO (2009); OTRI and MA-OTRI from World Bank, World Trade Indicators.

There are substantial differences between the openness of these particular high-income economies and other important U.S. trading partners, however. First, consider Korea, a country with which the United States recently concluded negotiations on a trade agreement, as well as Colombia and Panama, countries with which the United States is seeking free trade agreements. Relatively high tariffs in these countries (see Table 4-1) are likely to remain in place until trade agreements negotiated with them are ratified and implemented. Completion of these agreements has the potential to lower and secure these import tariffs for U.S. exporters at rates much closer to zero and also to remove many other burdensome nontariff measures (Box 4-2). However, these gains will be realized only if the agreements address these burdensome measures in a sustainable way, which is

why the Administration is committed to supporting only agreements that secure serious concessions and that overall are in the interest of U.S. workers and the U.S. economy.

Box 4-2: The Korea-United States Free Trade Agreement

In December 2010, the Administration announced the successful resolution of the outstanding issues with the Korea-United States free trade agreement (KORUS). The agreement is the most economically significant free trade pact that the United States has negotiated and signed in nearly 20 years. A study by the U.S. International Trade Commission estimated that the agreement could boost U.S. annual goods exports to Korea, including agriculture products and autos, by as much as $11 billion. The agreement also includes Korean commitments expected to result in considerable expansion of U.S. services exports.

Table 4-1 highlights why agreements like KORUS are especially critical for the competitiveness of U.S. exporters. In its absence, U.S. exporting firms face an average Korean import tariff of 12.2 percent; under the agreement, this rate will eventually reach zero and will help U.S. exports compete in Korea against Korean firms. Without KORUS, U.S. exporters would also be at a competitive disadvantage with other foreign competitors that also export to Korea. The European Union has signed a similar trade agreement with Korea, scheduled to be implemented in July 2011, that would give its exports a leg up. Indeed, in little more than 10 years, the United States has already fallen from being the number one exporter to Korea to being the fourth-largest supplier, trailing China, Japan, and the European Union. Implementation of KORUS and the lowering of Korea's tariffs toward U.S. exporters are expected to help stem further erosion.

The KORUS may also result in changes to the composition and source of U.S. imports. Korea's exporters already face a relatively low average U.S. tariff of 3.5 percent even without the agreement. KORUS would eventually lower that rate to the level enjoyed by the United States' other free trade partners, including Canada and Mexico.

Second, the major emerging economies also tend to have more restrictive import regimes than the high-income economies. Economic growth in China, India, and Brazil has surged in part because these nations lowered their import tariffs significantly from their levels of 20 years ago. U.S. firms have responded to those reductions by increasing exports to these new

markets over the past 15 years, providing these economies with key goods and services that contribute to their growth. Nevertheless, Table 4-1 indicates that the import tariffs that remain in these economies are still relatively high.

Just as U.S. trade shows a reorientation toward emerging economies, U.S. trade liberalization negotiations have turned toward these same emerging economies, especially through forums such as the WTO's Doha Round of multilateral negotiations. Dubbed the Doha Development Agenda, the negotiations are focused in part on the power of trade liberalization to enhance the development prospects of low-income countries. The Administration is pushing for an ambitious set of trade liberalization commitments under the Doha Round not only to enhance opportunities for U.S. exporters of manufactured goods, services, and agricultural products, but also to increase opportunities for development-enhancing trade among developing countries. Emerging economies such as China, India, and Brazil will have a particular responsibility to further reduce and bind their import tariffs to produce such an outcome.

The need for partners to commit to additional trade liberalization is confirmed by evidence from the last column of Table 4-1, which reports a separate World Bank index (the market access-overall trade restrictiveness index, or MA-OTRI) of the average trade restrictiveness facing a country's exporters from all of its foreign markets combined. The index is based on tariff levels and some nontariff measures that trading partners impose (again, not including an undervalued exchange rate), and the importance of those measures is weighted by the composition of the exporting country's exports in addition to the exporter's and its trading partners' responsiveness (elasticities) to trade. Lower numbers reflect fewer trade barriers confronting the country's exporters. By this measure, the average U.S. exporter faces trade restrictions surpassed only by those facing exporters from Panama and Brazil. One reason for this high index number for the United States (and a main driver of it for Brazil and Panama) is that it is a major agricultural exporter and agricultural trade barriers around the world remain high: they need to be negotiated and reduced. Nevertheless, U.S. exporters face trade barriers that are higher than they are for Japan, the European Union, and other important competitors in global export markets. The Administration is therefore committed to negotiating better terms for U.S. exporters to help level the playing field. In addition to completion of free trade agreements with Korea, as well as Colombia and Panama, and a successful conclusion of the Doha Round, the Administration is placing increased emphasis on persuading Asian economies to reduce trade barriers and open themselves to U.S. exporters through the Trans-Pacific Partnership.

Encouraging Exports by Enforcing Existing Agreements

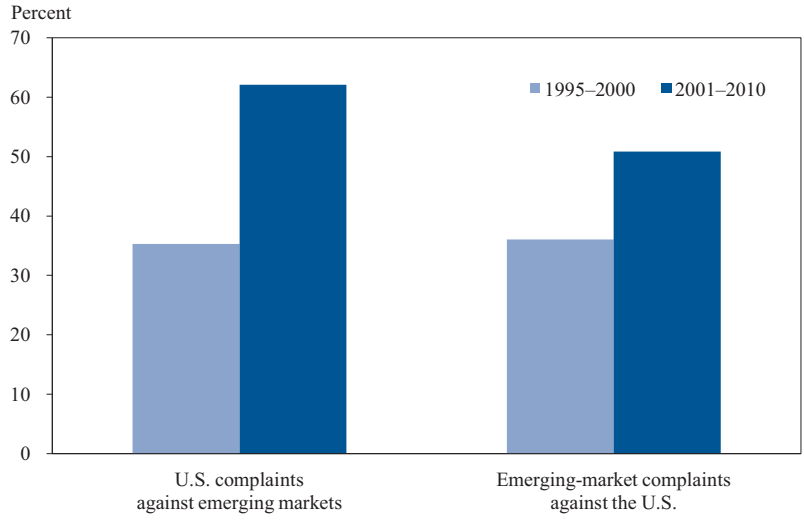
The Administration works to increase U.S. exports through regular engagement in bilateral and regional trade policy forums in a way that encourages trading partners to live up to their international commitments and obligations. These trade dialogues facilitate policy reforms, yield additional foreign market access, and level the playing field for American workers and companies. For example, in December 2010, the Administration worked with China through the Joint Commission on Commerce and Trade to improve China's intellectual property rights protection, better ensure nondiscriminatory treatment of foreign suppliers and products, and provide fair treatment for new technologies. Similar successes are occurring through other dialogues, notably in other emerging economies throughout Asia, Africa, and Latin America.

Nevertheless, enforcement of existing trade agreements sometimes means that the U.S. Government resorts to dispute settlement provisions to resolve trade frictions, whether under a free trade agreement or more commonly under the WTO's multilateral auspices. The total number of disputes the United States has filed at the WTO has declined over time, dropping from 68 initiated between 1995 and 2000 to only 29 initiated between 2001 and 2010. As trading partners increasingly commit to open their markets to U.S. exporters, enforcement becomes increasingly important to ensure that trading partners live up to their agreements. Enforcement is a fundamental role for the Federal Government; under WTO rules, exporting firms themselves cannot challenge another country's trade actions. As such, U.S. Trade Representative Ronald Kirk has frequently stated the Administration's commitment to step up enforcement on behalf of U.S. exporting interests.[7]

A growing share of the complaints the United States has filed with the WTO is now being filed against emerging economies. As Figure 4-13 shows, nearly two-thirds of all disputes the United States brought between 2001 and 2010 were against emerging economies, up from roughly one-third between 1995 and 2000. This increase is not surprising given the importance the United States places on maintaining current and future trade with these emerging economies. During the 2008–09 crisis, for example, the number of import restrictions imposed on U.S. exporters by emerging markets increased substantially relative to those imposed by high-income trading partners (Bown 2010). Historically, many U.S. disputes allege that some element of a newly imposed import restriction that is obstructing U.S. exports is inconsistent with WTO rules.

[7] See, for example, his speech at Georgetown University on April 23, 2009.

Figure 4-13
U.S. Trade Disputes at the WTO



Notes: Percentages are for the number of disputes initiated during the period. Disputes are broken down into bilateral (respondent/complainant) pairs.
Sources: WTO (2010); CEA calculations.

At the same time, as Figure 4-13 indicates, the share of disputes filed against the United States by foreign exporters in emerging economies attempting to protect their access to the U.S. import market has also grown. Because an increasing share of U.S. imports derives from emerging markets, these economies are now the most frequent challengers to U.S. trade policy.

Two additional points regarding the U.S. Government role in WTO disputes are worth highlighting. First, use of the WTO dispute resolution mechanism represents attempts to resolve differences between trading partners through rulings based on the application of agreed international trade rules. During 1995–2000, when more U.S. exports were destined for high-income economies, most U.S. disputes filed at the WTO were lodged against these economies, even though they were and continue to be strategic allies. The process was designed to prevent trade issues from escalating in a manner that would increase barriers to international trade.

Second, despite the growing importance of enforcement to keep foreign markets open to U.S. export interests, the U.S. Government's enforcement role has become ever more complex. The production process of many goods is increasingly fragmented into supply chains that cross international borders. As a result, domestic stakeholders often have varied interests with respect to the issues that may arise in a particular dispute.

When the U.S. exporter facing a new foreign trade barrier is also a multinational firm with significant affiliate activity in that foreign market, that firm may be hesitant to publicly support U.S. Government actions to have the trade impediment removed. The company could face many forms of reprisal from the foreign government in ways that the U.S. Government is legally unable to help fight and that may cost the company more than it loses under the trade restriction. The complexities facing U.S. enforcement of the rights of U.S. exporters and the interests of the U.S. workforce are likely to continue to escalate as technology improves, transport costs continue to fall, and production processes continue to be integrated among operations in various nations.

Advocacy to Encourage Exporters, Credit, and Trade Facilitation

Part of the fixed cost of exporting can be learning about a market or making the necessary investments in building relationships. In many cases, the Federal Government may already have that information and can thus lower the cost of exporting by sharing it. As such, several WTO-consistent policies may help boost the visibility of U.S. exports, especially those produced by small- and medium-size firms, and lower the hurdle that each firm faces in entering new markets.

One approach, contained in the President's National Export Initiative, is for the U.S. Government to improve advocacy abroad. For example, trade fairs can showcase export-ready enterprises that may be too small or too young to be a part of the larger industry associations that often organize promotions. Advocacy could also involve better support from consular offices abroad, such as providing exporters with contacts and buyer-seller information.

The government can facilitate trade by offering trade credit to match the terms available to firms in other countries. Investments in the U.S. transportation and supply chain infrastructure are critical to enabling U.S. exporters to move their goods to ports quickly and inexpensively. The Administration is also committed to negotiating agreements on trade facilitation abroad so that U.S. exports can be shipped to foreign customers more efficiently. At an even more basic level, the Government, through the Small Business Administration, the Export-Import Bank, or the International Trade Administration, can work with U.S. firms (especially small businesses) to help them navigate the process of exporting.

In the end, the decision whether to export to a given country is a private market decision made every day by thousands of U.S. firms. Nevertheless, the National Export Initiative sets out an ambitious agenda by which the Federal Government can play a more constructive role for U.S. businesses and their workforce.

Conclusion

As the United States orients its economy toward more exports and more investment, growth in exports will be determined by U.S. interactions with a complex and changing world economy. Trade relationships of today look little like those of 50 years ago, when different countries led the world economy and played leading roles in U.S. trade. Recognizing those changes and engaging constructively with the world as it is today can be a significant source of growth for the U.S. economy for decades to come.