CHAPTER 6

Opportunity and Challenge in the Global Economy



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What an extraordinary episode in the economic progress of man that age was which came to an end in August, 1914! ...life offered, at a low cost and with the least trouble, conveniences, comforts, and amenities beyond the compass of the richest and most powerful monarchs of other ages. The inhabitant of London could order by telephone, sipping his morning tea in bed, the various products of the whole earth...he could at the same moment and by the same means adventure his wealth in the natural resources and new enterprises of any quarter of the world.... But, most important of all, he regarded this state of affairs as normal, certain, and permanent, except in the direction of further improvement, and any deviation from it as aberrant, scandalous, and avoidable.

—*John Maynard Keynes,* The Economic Consequences of the Peace *(1919), writing about the pre-World War I economy*

For centuries, rising prosperity and rising integration of the global economy have gone hand in hand. The United States and much of the rest of the world have never before been as affluent as today. Nor has economic globalization—the worldwide integration of national economies through trade, capital flows, and operational linkages among firms—ever before been as broad or as deep. Keynes's words in the epigraph describe London at the beginning of the 20th century, yet they ring even truer for the United States and many other countries as we look to the 21st. This conjuncture of rising wealth and expanding international ties is no coincidence. The United States

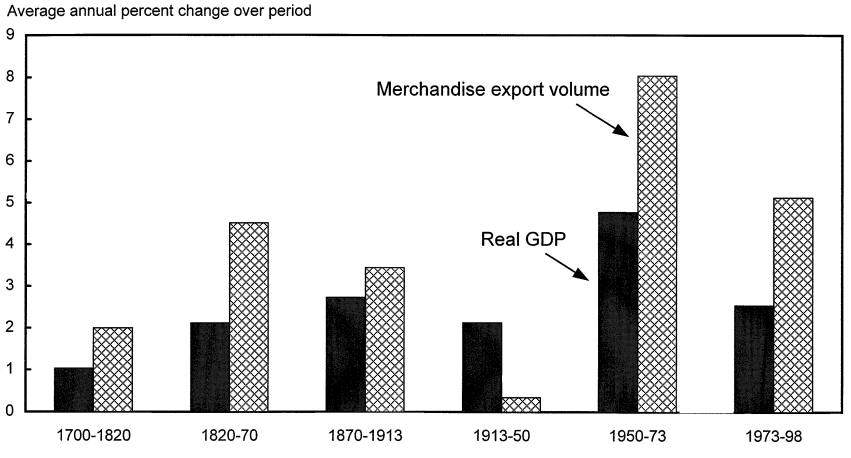
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has gained enormously from these linkages, which have helped drive the unprecedented prosperity of the economy. Indeed, future improvements in Americans' living standards depend in part on our continued willingness to embrace international economic integration.

As Chart 6-1 shows, the involvement of several of the world's richest countries in international trade has grown faster than their output for roughly three centuries. The one period when trade grew more slowly than output was from 1913 to 1950—a period that encompassed the Great Depression and two world wars. Fortunately, despite Keynes's characterization of the pre-World War I period as an "extraordinary episode," the rising globalization and economic buoyancy of that period proved not to be an aberration. Rather, it was the 1913-50 period that stood out as the extraordinary episode, one of uncharacteristically weak growth in both output and trade. During that period, and that period only, trade generally fell relative to gross domestic product (GDP). After 1950 the world economy resumed its globalizing trend. But it took time to make up the ground lost: in the United States and elsewhere, the level of trade relative to output has consistently exceeded early-20th-century levels only in the past few decades.

One reason why prosperity and economic globalization have risen together is that dramatic improvements in technology have contributed to both. As earlier chapters discuss, technological advances have raised living standards, enabling each worker to produce more and better goods and services.

Chart 6-1 **GDP and Export Growth Rates for Group of Seven Countries Since 1700**
Trade has usually grown faster than output over the past three centuries.



Note: Data beginning in 1870 are for the Group of Seven major industrialized economies: Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States. Data for 1700-1820 are for the United Kingdom only; export data begin in 1720. Data for 1820-70 exclude Canada, Germany, and Japan.
Sources: Organization for Economic Cooperation and Development and Angus Maddison, *Monitoring the World Economy 1820-1992,* 1995 and *Dynamic Forces in Capitalist Development,* 1991.

Meanwhile innovations in transportation, communications, and information technology have made international economic integration ever easier.

Quite apart from the impact of technology, openness to the world itself makes us more prosperous. The freedom of firms to choose from a wider range of inputs, and of consumers to choose from a wider range of products, improves efficiency, promotes innovation in technology and management, encourages the transfer of technology, and otherwise enhances productivity growth. All these benefits, in turn, lead to higher real incomes and wages. Through trade, countries can shift resources into those sectors best able to compete in international markets, and so reap the benefits of specialization and scale economies. Opening domestic markets to global capital can improve the efficiency of investment, which can promote economic growth. Through firms' direct investment in foreign affiliates, countries can adopt international best practices in production, including managerial, technical, and marketing know-how.

Given the momentum of the economic and technological forces behind globalization, its rise may seem inevitable. But policy can play a critical role in either helping or hindering its advance. The experience of the 20th century reinforces this lesson. International linkages in the United States and elsewhere were fairly well developed at the beginning of the century: as Keynes observed, rising prosperity and increasing economic integration had come to seem the natural state of affairs. Yet from 1914 until mid-century, war as well as mistakes of economic policy thwarted this normalcy. In the trade arena, governments actively promoted protectionism through high tariff and nontariff barriers, and so inadvertently contributed to the slowed pace of world growth and development.

For the past half century, in contrast, policy has worked actively to remove barriers and distortions that impede the market forces underpinning trade and investment. For example, the General Agreement on Tariffs and Trade (GATT) and, more recently, the World Trade Organization (WTO) have championed trade liberalization. Since the 1970s, most industrial countries have removed most of their controls on international capital movements, and many developing countries have greatly relaxed theirs as well. Given the very real benefits of open markets in both trade and finance, we should continue to embrace and encourage this trend toward liberalization.

Of course, economic globalization is not an end in itself, but rather a means to raise living standards. Like other sources of economic growth, including technological progress, economic integration involves natural tradeoffs. It provides real benefits by increasing the choices available to people and firms, but it also raises legitimate concerns. Increased trade re-sorts each country's resources, directing them toward their most productive uses, but some industries and their workers may find themselves facing

sharp competition from other countries. Broader global capital flows can increase efficiency and speed development, but when these flows reverse course, they can temporarily upset whole economies.

Sound policy plays an important role in ensuring that the benefits of international economic integration are shared as widely as possible, raising living standards within and across all countries that take part. Even in an increasingly global economy, each nation controls its own destiny. In large measure, active participation in international markets for goods, services, and capital strengthens the case for policies that make sense even without integration. Among these are policies that encourage a flexible and skilled work force, provide an adequate social safety net, reward innovation, and ensure that the financial system is sound and that financial markets are deep.

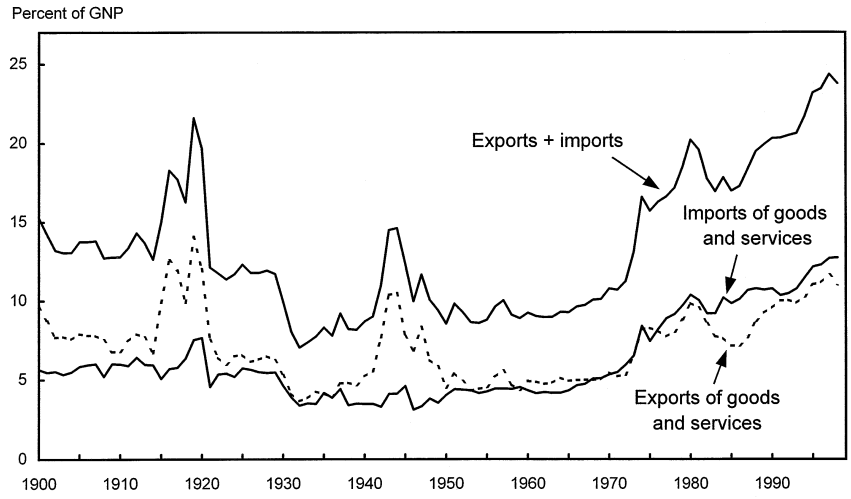
The Fall and Rise of the Global Economy

The U.S. economy today is more closely integrated with the rest of the world than at any time in history. Trade and, to a much lesser extent, investment links were well established a century ago, but both deteriorated during the interwar period. Over the past 50 years, however, international trade and investment have risen sharply. Today, global ties—through goods and services trade, through capital flows, and through integrated production relationships—are generally broader and deeper than ever before.

The Growing Importance of Trade

Historical statistics on U.S. trade reveal a striking pattern. A period of rising international economic integration began well before the 20th century but faltered between the two world wars. Although U.S. tariffs were relatively high during much of the 19th and early 20th centuries, the United States tended to participate actively in a generally flourishing world trade. Internationally, nontariff trade barriers were few. The interwar period that followed, however, was largely one of rising tariff and nontariff barriers—in the United States and elsewhere—and disintegration rather than integration. Since World War II, technological developments and the gradual international liberalization of trade and capital flows, described below, have once again put integration on the upswing. Chart 6-2 shows that, except briefly around the time of each world war, the ratio of trade (exports plus imports) to gross national product (GNP) did not return to turn-of-the-century levels until the 1970s. Recently, however, this ratio has approached 25 percent, its highest point in at least a century.

Chart 6-2 **U.S. Trade Relative to GNP Since 1900**
As a share of GNP, the sum of U.S. imports and exports has exceeded early-20th-century levels on a sustained basis only since the 1970s.



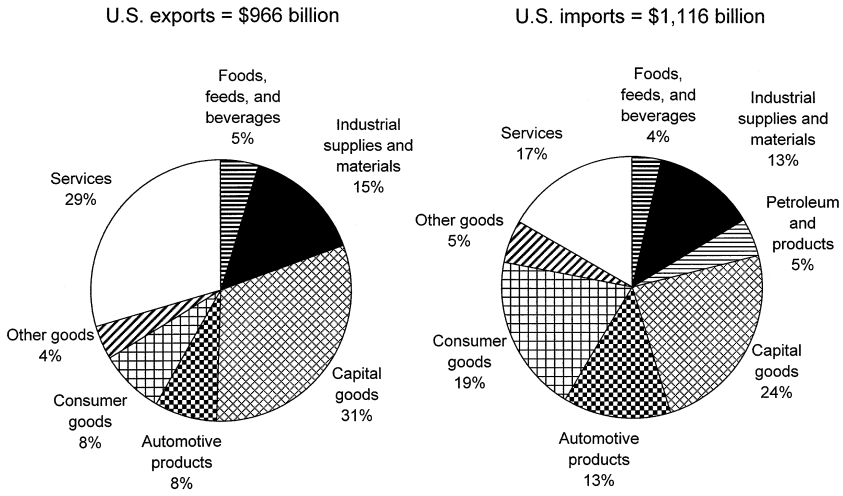
Sources: Department of Commerce (Bureau of Economic Analysis); Department of Commerce (Bureau of the Census); and Christina D. Romer, "The Prewar Business Cycle Reconsidered: New Estimates of Gross National Product, 1869-1908," *Journal of Political Economy*, 1989.

But to look at U.S. trade only in the aggregate would miss much of the story of this country's integration into the global economy. Important changes have also occurred within sectors and individual industries. Exports of both goods and services have risen much faster than production, but each has followed its own distinct path.

Although typically small relative to aggregate production, U.S. exports of services—including travel and transportation; royalties and license fees; telecommunications services; education; and a variety of financial and business, professional, and technical services—have grown dramatically, providing further evidence of the increasing importance of global linkages. (The United States exports transportation services when, for example, a European tourist flies a U.S. airline to New York, and imports transportation services when an American tourist flies a British carrier to London.) U.S. service providers have almost tripled the export share of their output over the past five decades. In 1950 only about 2 percent of U.S.-produced services were exported; in 1998 that share was about 6 percent.

Indeed, growth in exports of services has outpaced growth in exports of goods. Not coincidentally, services have become a more important part of the domestic economy over the same period. As a result, services now account for about 29 percent of U.S. exports (Chart 6-3), up from only 17 percent in 1950 and about 2 percent in 1900.

Chart 6-3 **U.S. Trade by Sector in 1998**
Capital goods make up the largest single share of both U.S. exports and U.S. imports. Services are the second largest component of exports and the third largest of imports.



Note: Data are on a national income and product accounts basis.
Source: Department of Commerce (Bureau of Economic Analysis).

Although goods production—capturing production in manufacturing, mining, and agriculture—has come to account for a smaller share of the economy, it, too, has become more deeply integrated into the global economy. The share of domestic goods production destined for export markets has grown from around 9 percent in 1929 to 21 percent in 1998. However, the shares for some specific industries and products are much larger. Many high-technology U.S. manufacturing industries, such as electronics, export 25 percent or more of their total shipments.

Imports, too, foster integration into the global economy. In fact, the United States often imports and exports within the same categories of products. Capital goods, for example, are the leading category of both U.S. imports and U.S. exports (Chart 6-3). This two-way trade can also be seen within specific industries, such as the computer industry. Some of this two-way, intraindustry trade reflects the globalization of production arrangements. Anecdotal evidence and recent studies document how production processes have been increasingly divided up and reallocated, either domestically or globally. That is, discrete elements of these processes, such as research and development, design, assembly, and packaging, are performed by firms in the United States and elsewhere, based on countries' relative strengths in completing different tasks. Part of the growth in trade may also reflect rising vertical specialization, in which goods are imported, further processed, and reexported.

Data from the U.S. computer industry (computer systems, hardware, and peripherals) illustrate the extent of both intraindustry trade and vertical specialization. According to one recent report, in 1998 an estimated 43 percent of domestic producers' total shipments was exported, and an estimated 58 percent of final and intermediate domestic consumption was imported. The same report notes that more than 60 percent by value of the hardware in a typical U.S. personal computer system comes from Asia.

Intraindustry trade may also reflect an interaction of consumers' desire for variety with economies of scale in production. The automobile industry provides some commonly cited examples. We observe firms in the United States and the European Union producing and exporting different kinds of luxury and sport vehicles for niche markets. Because the average cost of production falls as more cars are produced, firms try to reach as many customers as possible. This gives them an incentive to seek out markets abroad. And when many producers in different countries adopt the same strategy, the result is greater satisfaction of consumers' demand for product selection. Economists note that consumer tastes for variety help explain trade flows among countries with similar resource and technology bases.

U.S. firms' trading partners are located around the world, but they tend to be concentrated in industrial countries and in our closest neighbors. Canada is the top-ranking trade partner of the United States, accounting in 1998 for about 21 percent of U.S. merchandise exports and imports combined. Measured on the same basis, the European Union is a very close second, followed by Japan and then Mexico. In the aggregate, developing countries (excluding the few that are members of the Organization for Economic Cooperation and Development) account for about 31 percent of U.S. trade, although the 48 countries designated by the United Nations as least developed account for a very small share—less than 1 percent.

The Rise of International Capital Flows

Cross-border capital flows have likewise grown to unprecedented levels in the United States and around the world, reflecting reduced barriers to capital, an increased desire on the part of investors to diversify their portfolios internationally, and a plethora of new financial instruments and technologies. Cross-border transactions in bonds and equities have exploded in recent decades, reaching 223 percent of GDP in the United States in 1998, compared with only 9 percent of GDP in 1980. One survey reports that average daily turnover on world foreign exchange markets was about $1.5 trillion in April 1998, although not all such turnover necessarily crosses borders. This turnover has risen from $0.6 trillion in April 1989.

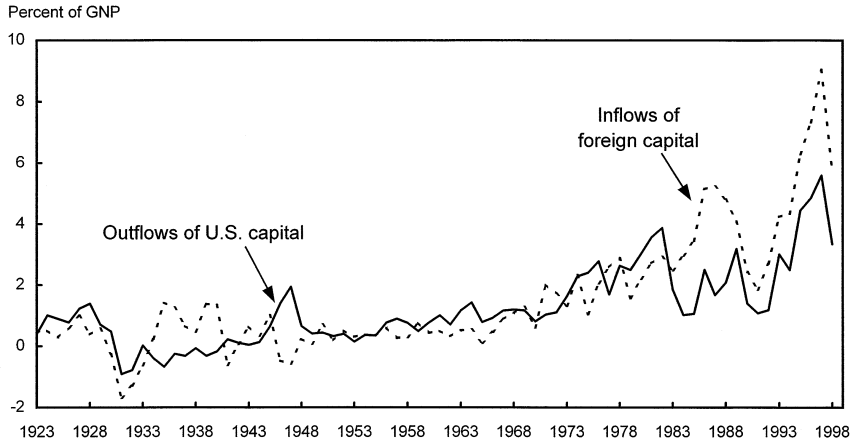
These cross-border figures include substantial trading and retrading of the same securities, and hence to some extent overstate the degree to which own-

ership claims cross borders. For example, a U.S. mutual fund might turn over its entire portfolio of foreign securities more than once during the course of a year. Official balance of payments data provide an alternative measure of gross flows that comes closer to measuring the true change in cross-border ownership claims. Chart 6-4 shows these data on inflows of capital sent into the United States by foreigners, and outflows of capital sent from the United States by U.S. residents. U.S. outflows abroad have been rising; foreign inflows into the United States have been rising even faster. These flows typically amounted to 1 percent or less of GNP through the 1960s. By contrast, flows have been much larger recently: from 1995 through 1998, for example, inflows averaged 7 percent of GNP.

Net capital flows (the difference between inflows and outflows in Chart 6-4), measured relative to GNP, have also reached much higher levels in recent decades. Indeed, the United States is by far the largest recipient of net capital inflows in the world, amounting to more than $200 billion in 1998.

The large net capital inflows of the past two decades have led to a profound change in the net international indebtedness position of the United States. The United States was a net debtor until the late 1910s and then a net creditor until the late 1980s. At the end of 1998, foreign-owned assets in the United States exceeded U.S.-owned assets abroad by about $1.2 trillion (valued at current cost), an amount equal to 14 percent of U.S. GNP. A century ago, the net international investment position of the United States was similar, with

Chart 6-4 **Capital Flows Into and Out of the United States Relative to GNP**
Capital flows into and out of the United States have soared since the 1960s. Since the 1980s, inflows from abroad have consistently exceeded outflows.



Note: Outflows of U.S. capital are the net increase in U.S.-owned assets abroad. Inflows of foreign capital are the net increase in foreign-owned assets in the United States.
Sources: Department of Commerce (Bureau of Economic Analysis); Department of Commerce (Bureau of the Census); and Christina D. Romer, "The Prewar Business Cycle Reconsidered: New Estimates of Gross National Product, 1869-1908," *Journal of Political Economy*, 1989.

net indebtedness of about 18 percent of GNP. However, the gross investment positions were much smaller then. In 1897, for example, U.S. assets abroad amounted to only 5 percent of U.S. GNP, compared with 56 percent in 1998.

Economists sometimes distinguish among various broad categories of capital flows. The main ones are foreign direct investment (FDI), portfolio investment (such as stocks and bonds), and bank lending. These types of capital flows differ greatly in their volatility—a matter of concern for emerging market economies, as discussed below. Anecdotal evidence and recent studies suggest that bank lending and portfolio flows may be the most volatile. FDI, in contrast, may be less fickle, because these flows arise, in part, from the internationalization of production processes (Box 6-1). FDI occurs, for example, when an investor sets up an enterprise in a foreign country or obtains a large enough share (U.S. statistics, and those of some other countries, set the threshold at 10 percent) in an existing foreign enterprise to influence managerial decisions. Global FDI outflows accounted for about a quarter of total international capital outflows between 1990 and 1996. They grew from an annual average of $181 billion between 1986 and 1991 to $649 billion in 1998.

Box 6-1. Multinational Corporations and Globalization

Globalization is played out in many arenas and by many actors, an important one of which is the multinational company (MNC). MNCs undertake FDI when they establish overseas operations through foreign affiliates. They also engage extensively in international trade. Worldwide, some 60,000 parent operations of MNCs and their 500,000 foreign affiliates account for roughly 25 percent of global output, one-third of it in host countries. In industrial countries, services accounted for 53 percent of all FDI inflows in 1997, and manufacturing for 35 percent. In developing countries, manufacturing accounted for about 50 percent of FDI inflows in 1997, and services for 41 percent.

U.S.-based MNCs account for a large share of U.S. production, trade, and employment. They produce about 19 percent of U.S. GDP through their parent operations (all these figures refer to nonbank MNCs only). In 1997 the trade associated with U.S. MNCs accounted for about 63 percent of U.S. goods exports and 40 percent of U.S. goods imports. Over 40 percent of these transactions involved trade between U.S. parent operations and their foreign affiliates. The parent operations of U.S. MNCs employed about 20 million workers in the United States in 1997, roughly the same number as in 1977.

Although foreign affiliates of U.S. MNCs trade with their parent operations, among others, data show that most of their sales are local,

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Box 6-1.—*continued*
occurring within the host country. In 1997, 63 percent of worldwide sales of goods and 82 percent of worldwide sales of services by foreign affiliates of U.S. MNCs were local, reflecting in part the importance of proximity in the delivery of some products. In terms of the gross product of U.S. MNCs' majority-owned foreign affiliates, the United Kingdom is the most important destination for U.S. MNCs, followed by Canada and Germany. The foreign affiliates of U.S. MNCs employed about 8 million workers in 1997, up from 7.2 million in 1977.

Just as U.S. MNCs have reached across national borders, so foreign-based MNCs have entered the United States. U.S. affiliates of foreign companies account for about 6 percent of U.S. private-industry gross product. In terms of the gross product of foreign MNCs' U.S. affiliates, the United Kingdom is again the leader, followed by Japan and Germany. In 1997, U.S. affiliates of foreign companies accounted for about 20 percent of U.S. goods exports and about 30 percent of U.S. goods imports. Also in 1997, U.S. affiliates of foreign companies employed about 5 million workers in the United States, up from only 1.2 million in 1977.

Transactions involving U.S. entities, as either investors or recipients, account for a large share of global FDI flows. U.S. FDI outflows amounted to $133 billion in 1998, up from an annual average of $26 billion between 1986 and 1991. Meanwhile, U.S. FDI inflows rose from an annual average of $49 billion between 1986 and 1991 to $193 billion in 1998. Globally, most FDI goes to industrialized countries, but developing countries' share of global FDI inflows is also substantial, totaling about 28 percent in 1998, although this marked a decline from 37 percent in 1997.

The Forces Behind Globalization

The forces driving globalization include technology and policy. Technological improvements—in transportation, communications, information technology, and elsewhere—have reduced the costs of doing business internationally, thus lowering significant barriers to trade and investment. These improvements have also increased the range of possible commercial transactions, particularly in financial markets, and have created venues for new kinds of transactions, such as electronic commerce.

Policy has also played an active role in reducing barriers to trade and investment. For example, over the past 50 years, policy measures have sought to reduce tariff and nontariff trade barriers. More recently, and especially since the 1970s, many countries have decided to remove restrictions on

capital flows. Coupled with other domestic policies designed to promote competition among firms, these kinds of market liberalization in trade and investment have helped reduce costs to consumers and promote technological innovation.

The Role of Technology

Although our nearest neighbors remain among our most important trading partners—Canada and Mexico together account for about one-third of our total trade—improvements in technology have reduced the costs of doing business overseas and made distant markets more accessible.

The cost of moving goods has fallen over time. Studies document substantial reductions in shipping costs in the pre-World War I period, and some indicators suggest that costs have continued to decline since then. This decline appears to reflect several factors, including direct declines in some shipping rates as well as a shift in the mix of traded goods and modes of shipping. One study reports that average ocean freight and port charges on U.S. trade fell from $95 per short ton in 1920 (measured in 1990 dollars) to $27 in 1960, but then leveled off. Another recent study looks at relatively disaggregated data since the 1950s and finds little evidence of declines in real ocean shipping rates. But that study does find that air shipment rates have fallen sharply: worldwide, the cost of airfreight, measured as average revenue per ton-kilometer, dropped by 78 percent between 1955 and 1996. In addition, the share of world trade in high-value-to-weight products such as pharmaceuticals has risen. Reflecting the falling cost of airfreight as well as the shifting composition of trade, air shipments in 1998 accounted for 28 percent of the value of U.S. international trade—up from 7 percent in 1965 and a negligible share in 1950.

At the same time, the cost of land-based shipping may also have fallen. Because of the importance of Canada and Mexico as trading partners, about 34 percent of the value of U.S. trade was shipped by land in 1998—up from about 28 percent in 1965—and even many goods that travel by ocean-going vessel must be transported to or from the port. Domestic deregulation in the U.S. transportation industry has contributed to efficiency gains in land transport, and the development of the Interstate Highway System since World War II also appears to have reduced transport costs. In addition, technological developments such as containerization have facilitated intermodal transportation and improved the quality of transport services. Containerization allows a standard-sized container to be hauled by truck or rail and then, if continuing overseas, loaded by crane directly onto a ship. This technology has reduced both handling requirements and transit time for deliveries.

Improved communications and information technologies have also facilitated international commerce. In 1930, for example, a 3-minute phone

call from New York to London cost $293 in 1998 dollars. By 1998, one widely subscribed discount plan charged only 36 cents for a clearer, more reliable 3-minute call. This decline in communications costs, coupled with the availability of new technologies, has probably been particularly important in facilitating services trade. Although market proximity is still an important factor for many services, firms' ability to provide customer support by telephone or e-mail at relatively low cost, or to transmit products electronically via the Internet, has reduced its importance in some industries. A report from the U.S. General Accounting Office notes that technological innovations linked to computers and satellites have influenced how intermodal freight shipments are handled. Such innovations include bar coding for verification and tracking, electronic transmission of business data and documents, and in-vehicle navigation systems that help shippers find the most direct or least congested routes.

Improvements in information and communications technology have also underpinned rapid technological change in the financial sector. Recent years have seen an explosion in the range of financial instruments, which has contributed to the massive gross flows of financial capital discussed earlier. For example, advances in computing technology enable traders to implement complex analytical models (such as models for pricing options), and this in turn allows financial firms to meet demand for new financial instruments. Under flexible exchange rate regimes, one source of demand for such instruments is the desire of market participants to remove or insure against the exchange rate risks they face in trading goods, services, or assets. Swaps, options, and futures permit them to do so.

In addition, rising financial wealth in many countries has created demand for instruments that facilitate international portfolio diversification, even as financial innovation has made it easier to supply these instruments. For example, international mutual funds—some highly specialized by sector or region—are more easily available today than ever before, reflecting both the rise in demand and the ease of supply.

Information and communications technologies have also made it easier to source inputs globally. For example, Chapter 3 discussed the case of a firm that specializes in finding suppliers for large custom procurement orders. After finding qualified suppliers, who may be located anywhere in the world, the firm coordinates online bids for the order. The process helps overcome the informational barriers to finding reliable, low-cost suppliers.

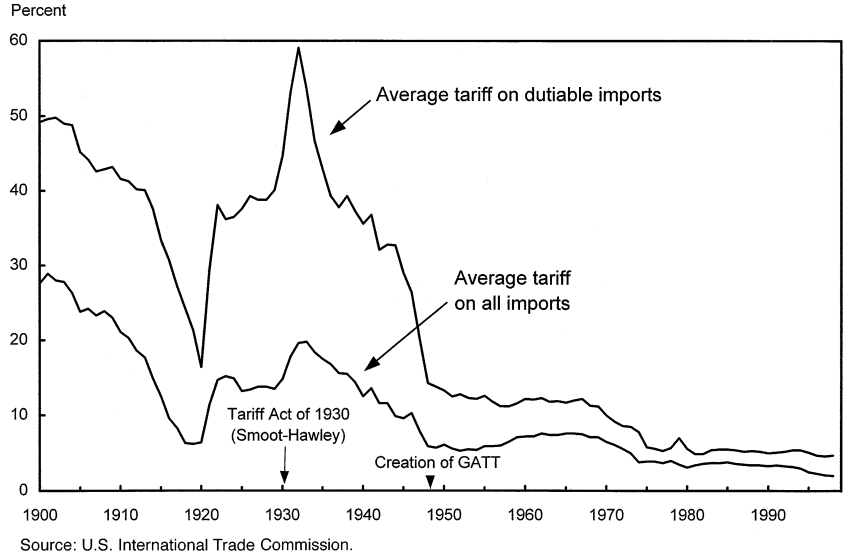
The Role of Policy

Given the economic and technological forces behind globalization, its rise may seem inevitable. Yet governments have taken on a critically important role in opening markets and removing distortions, thereby allowing market

forces to play themselves out. In the interwar period, in contrast, policy actively promoted protectionism through high tariff and nontariff barriers. Indeed, rising protectionism in a number of countries—including the United States, through the Tariff Act of 1930 (Smoot-Hawley)—made the Great Depression more severe. Despite efforts by the United States to begin reducing tariffs at home and abroad in 1934, through the Reciprocal Trade Agreements Act, world tariffs remained high on average. Since mid-century, however, policy in the United States and elsewhere has worked actively to reduce trade barriers that limit or distort the choices available to consumers and firms. Since the 1970s especially, governments have been reducing barriers to capital flows as well. As discussed later, policy can also help in dealing with the inevitable tensions and disruptions of economic integration.

The United States has played a leading role in liberalizing trade internationally, both by reducing its own tariffs and by encouraging others, through a variety of market-opening initiatives, to follow suit. The multilateral trading system, consisting of the GATT at first, and more recently the WTO, is at the core of these efforts. Before the creation of the GATT in 1948, trade barriers—in the United States and elsewhere—were more susceptible to a range of economic and political factors. Tariff rates, measured as the ratio of duties to import values, rose noticeably in the United States during the interwar period, partly because of new legislation. But some of the increase shown in Chart 6-5 reflects the effect of declining import prices in the early 1930s: many tariffs were "specific," in that they were imposed as a nominal

Chart 6-5 **Average U.S. Tariff Rates Since 1900**
Tariff rates rose sharply in the interwar period but have remained consistently low since the creation of the GATT.



Source: U.S. International Trade Commission.

dollar amount per imported quantity, so that when prices fell, effective tariff rates rose. A recent study shows that the Tariff Act of 1930 raised the tariff rate on U.S. imports by roughly 20 percent, on average, independent of the effects of price declines.

Following the creation of the GATT, and through successive rounds of multilateral negotiations, world trade markets have become more open and integrated, contributing to the strong economic growth of the second half of the 20th century. Success in reducing nontariff barriers was uneven throughout this period, but tariffs generally declined. For example, import tariffs on industrial products in industrial countries have dropped 90 percent over the last 50 years, from an average of about 40 percent to roughly 4 percent. Other market-opening initiatives have also contributed to trade, such as the U.S. "open skies" policy for international civil aviation, which has helped improve U.S. air carriers' access to passenger and cargo markets around the world. As Chart 6-1 showed, growth of trade has consistently outpaced growth of income since 1950.

Policy developments have also contributed to the growth of international capital flows. Most governments kept at least some controls on capital movements from World War II into the 1970s. Today, by contrast, restrictions on capital flows have generally been removed in the industrial countries, and they have been substantially relaxed in many developing economies as well. Pervasive controls on cross-border capital flows were part of the international monetary and financial regime adopted at Bretton Woods in 1944. These controls were partly a response to the severe instability of the international monetary system during the Great Depression. The industrialized countries generally began relaxing these controls in the 1950s, and the late 1970s saw much more widespread liberalization. Technological developments in a sense contributed to liberalization by making capital controls increasingly difficult to enforce. And a rising volume of trade conducted under flexible exchange rates spurred interest in financial transactions to hedge exposure to currency and commercial risk.

Moreover, recent decades have brought renewed recognition worldwide that financial markets, like markets for goods and services, generally allocate resources effectively. This recognition has given impetus to considerable financial liberalization in developing economies over the past decade. Financial liberalization has often accompanied other favorable economic policies, such as macroeconomic stabilization, privatization, trade liberalization, and deregulation. Such structural reforms in a significant number of capital-scarce developing countries have provided significant investment opportunities, with high expected rates of return, and this has attracted a surge of foreign capital. However, this surge does raise some concerns, as discussed later, and it puts a premium on adopting appropriate domestic macroeconomic policies and strengthening domestic financial systems.

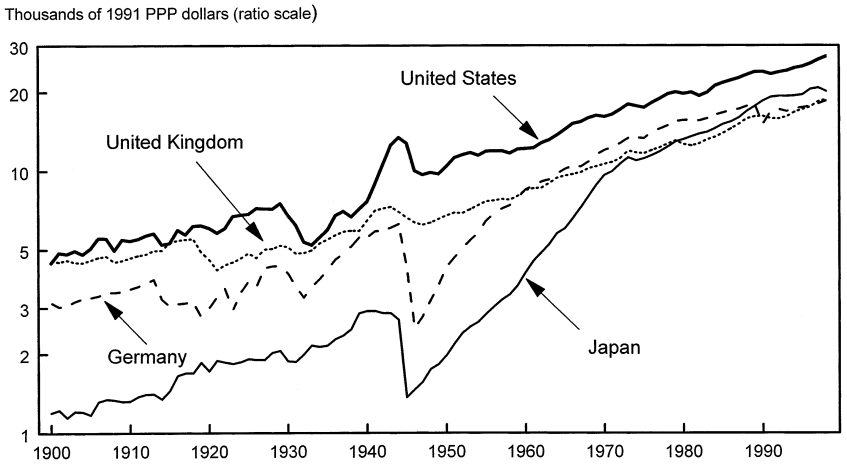
The Benefits of a Global Economy

The United States approaches globalization from a position of considerable strength. In per capita terms, the United States has been the world's richest major economy since overtaking the United Kingdom early in the 20th century, and by most measures it remains so today.

Chart 6-6 shows estimates of GDP per capita since 1900. The chart is plotted on a ratio scale, so that a steeper slope implies a faster growth rate. As the figure illustrates, the dominant macroeconomic fact for both the United States and other major economies for more than a century has been that output per person has grown. But this growth has been far from steady. The 1913-50 period, when global economic relations deteriorated and integration receded amid active protectionism and instability in the international monetary system, recorded the most volatile output growth rates in all four countries shown in the chart. The post-World War II period of rising globalization, in contrast, has been a time of rapidly rising prosperity.

Throughout much of the postwar period, Germany and Japan grew more quickly than the United States, somewhat closing the gap in GDP per capita. But this convergence slowed after the early 1970s and had largely ceased by the end of the 1980s. In 1998, GDP per capita remained considerably higher in the United States than in the other economies in Chart 6-6. Overall, the record shows that the U.S. economy has thrived in the global mar-

Chart 6-6 **GDP per Capita in the United States and Selected Major Economies**
The gap in income per capita between the United States and other major economies has narrowed in the postwar era, but the United States retains a clear lead.



Note: Data for 1960 to 1998 are from the OECD. Estimates from 1900 to 1959 are extrapolated backward using growth rates from Maddison's data. Data for Germany are for western Germany through 1990, and for all of Germany beginning in 1991. PPP stands for purchasing power parity.
Sources: Organization for Economic Cooperation and Development, and Angus Maddison, *Monitoring the World Economy 1820-1992,* 1995.

ketplace. The discussion of the benefits of globalization that follows suggests that this conjuncture of globalization and prosperity is no mere coincidence.

International economic integration raises living standards by improving resource allocation, promoting innovation, encouraging technology transfer, and otherwise enhancing productivity growth. Through trade, countries can shift resources into their most internationally competitive sectors and reap the benefits of specialization and scale economies. Their consumers also enjoy less expensive and more varied products. Opening domestic markets to global capital can help countries invest more efficiently. FDI can lead to improved management, better technology and training, and higher wages in local communities.

However, the same processes that bring about economic growth, including those that work through trade and investment, can force costly adjustments for some firms and their workers. An array of U.S. domestic policies, such as those to assist job search and training, address these issues, as do some elements of international agreements that the United States has entered into. Both are discussed later.

Globalization and Living Standards

Trade economists have long recognized the benefits of specialization in production and of access to markets. When a country produces and exports those goods and services that it can produce relatively inexpensively, and imports those that are relatively inexpensive to produce abroad, trade improves standards of living on both sides of the transaction. For example, the United States can produce financial services at lower cost, relative to other products that it might produce, than most developing countries can. Costa Rica, by comparison, can produce coffee at lower cost, relative to other products, than can most industrialized countries. In this example, the United States would likely benefit from producing and exporting financial services and importing coffee. The reverse is true of Costa Rica. Through freer trade and specialization, a country's resources can be directed more efficiently to those uses in which they generate the most economic value, thereby raising income.

Access to larger markets can also reduce costs and increase the returns to innovation. Producing such goods as automobiles and airplanes requires building large plants and installing complex and costly equipment. By adding exports to their domestic sales, manufacturers can lower their unit costs by extending production runs and spreading overhead costs more broadly. Moreover, the ability to spread fixed research and development costs may allow globally competitive firms to be more innovative than those confined to selling in domestic markets.

Domestic production can expand when firms export, drawing workers into jobs in the economy's most productive and internationally competitive sectors. Recent studies find a substantial wage premium—on the order of 15 percent—in U.S. jobs supported by goods exports. Moreover, opening up to trade means giving consumers and firms greater freedom of choice about what inputs to purchase and what goods to consume. For consumers, the availability of less expensive and more varied products increases the real purchasing power of domestic wages. Some of the benefits of market opening are quantifiable. For example, a study of the costs of protection in the United States found that tariffs and quantitative import restrictions in place in 1990 cost American consumers about $70 billion. Since 1990, these costs to U.S. consumers have fallen, as trade barriers have been reduced on some products. At the same time, import competition creates incentives for U.S. businesses to price their products more competitively.

Access to international capital markets can also improve living standards. International capital mobility allows portfolio diversification and improved risk sharing. It allows investments to take place where they offer the highest returns, thereby improving global resource allocation. And it allows a country to smooth its consumption by consuming today more than it produces today, paying for the difference by borrowing abroad. Therefore, global investment, like trade, yields benefits to both sides of the transaction. Capital goes to those who are best able to make productive use of it, and the suppliers of that capital receive a higher return for a given level of risk than they could get elsewhere. These benefits may be particularly pronounced in the case of FDI. Too large a volume of short-term capital flows, by contrast, may in some cases make an economy more vulnerable to crisis, as discussed later.

Trade and investment activities can be mutually reinforcing. For example, FDI by U.S. companies can help pave the way for U.S. exports. It may create demand for U.S.-produced inputs, possibly from the parent operations. It may also offer U.S. companies a foothold in foreign markets from which they can further expand sales. In many cases, investment in distribution and other essential services increases a supplier's ability to export into a market. Trade between firms and their foreign affiliates, so-called intrafirm trade, can be an efficient means of doing business overseas, particularly when firms need substantial information about suppliers, clients, or markets abroad in order to operate effectively. Over a third of U.S. merchandise exports and about two-fifths of U.S. merchandise imports are estimated to be intrafirm; worldwide, intrafirm trade's estimated share is about a third. Trade may also expand capital flows. For example, the growth of trade has created a need for more trade-related financing and, as noted previously, for tools to hedge risk.

Globalization and Growth

Although causality may be hard to establish, simple measures of the correlation between the openness of an economy and its growth suggest a mutually supportive relationship. For example, ample evidence demonstrates that countries that actively participate in international trade tend to have higher incomes than those that do not. They also experience more rapid growth and productivity improvements. Studies also suggest that countries that have adopted outward-oriented economic policies since the early 1970s experienced significantly higher annual growth of GDP per capita over the next two decades than countries that remained inward-oriented.

Exposure to foreign competition gives domestic firms an incentive to raise their productivity—and these gains recur. Once competition is introduced, it leads to a cycle of productivity improvements and quality enhancements that continue to benefit the economy indefinitely. Studies of the United States and Japan find a positive relationship between import growth and productivity growth. Furthermore, evidence suggests that openness can induce higher average productivity through access to a greater range of intermediate inputs and, within a given industry, through faster growth of those firms that achieve the highest productivity.

Increased trade and FDI can also boost productivity growth by improving the flow of knowledge and the transfer of technology. Traded manufactures, like all manufactures, embody knowledge and technology and, in the case of information and communications technology for example, may boost countries' ability to innovate. Besides providing funding, direct investors can bring international best practices, including managerial, technical, and marketing know-how, to the recipient, which can then spill over into the rest of the economy. In turn, the direct investors may also benefit from the expertise of the recipient firms. The flow of knowledge and transfer of technology also occur through local research and development (R&D). Expenditure on R&D performed by foreign affiliates in the United States accounted for about 12 percent of the R&D performed by all U.S. businesses in 1997. The ratio of R&D expenditure to gross product for these affiliates was 5 percent, twice the ratio for all U.S. businesses.

For developing countries, evidence suggests that FDI, along with high-technology trade, can play an important role in their catch-up to the industrial countries. When industrial-country investors build, contribute to, or acquire production facilities in a developing country, the recipient country gains not just from expanded production and improved job opportunities, but also from access to more advanced technologies. Recent studies show that, in developing countries with a sufficient stock of skilled labor, FDI from industrial countries can contribute more to growth than does the country's own domestic R&D.

In short, increased globalization benefits the United States and other economies. Globalization yields gains from trade, through specialization and through realization of scale economies in production. And by allowing capital to flow across borders, it lowers the cost of financing investment in the recipient country, increases the return to saving, and allows for portfolio diversification in the country providing the funds. Both trade and investment contribute to the flow of knowledge and transfer of technology.

The Challenges of Globalization

The United States has long sought to extend the benefits of trade and investment as widely as possible, both within and among countries, but significant challenges remain. The United States is committed to expanding trade and investment opportunities around the world. It is also committed to putting a human face on the global economy, in part through greater consideration of labor and environmental concerns and more openness in WTO proceedings. For all the evidence that trade raises living standards, some U.S. industries and their workers may face difficulties adjusting to more open markets. Economists attribute only a small share of worker dislocation (roughly 10 percent or less) to trade, but crafting sound domestic policy to help ease the transition for those affected poses another important challenge. The emerging market financial crises of 1997-99 highlight yet another challenge: the risk that sudden reversals in capital flows can in some cases be destabilizing. Finally, the growing U.S. trade deficit raises the challenge of ensuring not only that the United States remains an attractive location for investment, but also that Americans are saving enough for the future.

Spreading the Benefits of Trade

The United States has sought to open markets, extend the rule of law, and encourage economic growth internationally through bilateral, regional, and multilateral trade agreements. The multilateral trading system, consisting originally of the GATT and more recently the WTO, is at the core of these efforts. Although its achievements have been considerable, this system remains a work in progress. The recent difficulty in establishing a mandate for a new round of WTO negotiations, and the public protest accompanying the WTO Ministerial in Seattle, give a sense of the challenges that lie ahead.

Many countries continue to maintain high trade barriers, especially in agriculture and services, but institutional concerns, such as those relating to the WTO's accessibility and transparency and to its relationships with international labor and environmental organizations, have come increasingly to

the fore. Much work also remains to be done to ensure that developing countries—particularly the least developed—enjoy improved market access and obtain the technical assistance they need to realize the benefits that international trade can afford. At the same time, the United States must also address legitimate concerns about the adjustment of domestic industries and workers. On balance, trade does raise living standards, but there are those within an economy who may suffer losses when more-open markets shift resources from one use to another.

Opening Markets More Fully

The United States gains when it lowers its trade barriers, but it gains most when other nations also lower theirs. Indeed, as one of the world's most open economies, the United States has a particular interest in promoting liberalization abroad. The Uruguay Round, which lasted from 1986 to 1994, brought agriculture and textiles and clothing more fully into the GATT and took the first steps toward liberalizing trade in those sectors. It also brought service trade into the multilateral system by creating the General Agreement on Trade in Services. A series of post-Uruguay Round negotiations have yielded additional market access commitments in financial services, basic telecommunications services, and information technology, opening up new opportunities in areas where the United States is believed to be highly competitive. Yet room for improvement remains, as many countries continue to maintain significant tariff and nontariff barriers.

Agriculture provides a stark example. Bound tariff rates (maximum rates to which countries commit themselves in trade negotiations) on agricultural products average about 50 percent around the world, compared with less than 10 percent in the United States. Moreover, even after the European Union and Japan fully implement their Uruguay Round commitments, they will be free to provide as much as $78 billion and $35 billion, respectively, in trade-distorting domestic support to their farmers each year. By comparison, the United States will be limited to about $19 billion. Partly because of these policies, average prices for food and related goods are 34 percent higher in the European Union and 134 percent higher in Japan than in the United States.

To help meet the challenges of market opening, the United States is seeking additional market access in agriculture, services, and certain industrial products in the WTO. Notwithstanding the difficulty in establishing a negotiating mandate during the Seattle Ministerial, the WTO's built-in agenda calls for further negotiations on agriculture and services to have begun by January 2000. In agriculture the United States has proposed eliminating export subsidies and reducing tariffs and trade-distorting domestic supports. In services the United States has sought commitments for more openness in

key sectors such as finance, telecommunications, and construction. In other areas—chemicals, energy products, environmental products, fish, forest products, jewelry, medical and scientific equipment, and toys—the United States has sought accelerated tariff liberalization.

Rapid technological change poses additional challenges, sometimes raising questions about the nature of trade and product development. The United States has sought to promote the development and use of new technologies, such as electronic commerce and biotechnology, in ways that help spread the benefits of trade. With the strong support of the Congress, this Administration has sought an extension of the moratorium on tariffs on electronic commerce in the WTO. The United States is also seeking to ensure that trade in agricultural biotechnology products is based on transparent, predictable, and timely processes.

Strengthening Rules and Institutions

Credibility and predictability are essential components of the trading system. For firms to undertake the investments necessary to serve foreign markets, they need to believe that new barriers will not be raised and that old ones will not reassert themselves. To rely on foreign suppliers, buyers need to believe likewise that market access will not be disrupted. Traders need assurance that commitments will be binding and that markets will remain open even if circumstances change. And the rules of the trading game should ensure that governments play fair—that they neither seek advantage for favored interests by subsidizing their producers, nor pass regulations that unnecessarily distort international trade, nor otherwise circumvent international commitments. In setting these rules and encouraging compliance with them, the WTO has tried to strike an appropriate balance between the needs of the trading system and those of sovereign nations. Its agreements do not preclude the United States or other countries from establishing, maintaining, and effectively enforcing their own laws, nor do they prevent the United States from setting and achieving its environmental, labor, health, and safety standards at the levels it considers appropriate.

The WTO operates not by decree but by consensus among its members. Through consensus, the WTO has done much to achieve both credibility and fairness. Its rules allow nations to take antidumping measures, countervailing duty measures, and action against import surges, provided they follow certain procedures. The United States has used its own WTO-consistent trade laws to combat unfair foreign practices and to provide safeguards for domestic producers. The WTO also provides an improved framework for resolving disputes within the multilateral system. This framework has proved extremely useful to the United States, which as a complaining party has so far prevailed in 22 out of 24 cases, having favorably settled 10 without litigation

and having won 12 in litigation. And the WTO provides new rules for protecting intellectual property rights. For the United States and many other countries, such rights convey substantial value. In 1998, for example, U.S. exports of royalties and license fees amounted to about $37 billion.

By and large, countries participating in the GATT and later the WTO have adhered to their commitments. The trend toward market liberalization since World War II, and the maintenance of commitments not to raise barriers even in the face of international financial crises, stand in sharp contrast to the trade policy experience of the interwar period. The multilateral trading system has played a critical role in maintaining and expanding economic ties, helping make the last half century one of historically unprecedented economic growth for the United States and many of its trading partners.

Nevertheless, the rules of the WTO and the ways in which they are administered can be improved. The dispute settlement process, although much strengthened, is opaque and sometimes slow. During the Seattle Ministerial, the United States led the call for greater public access and participation. The United States has sought to open the WTO's dispute settlement procedures to the public and to allow nongovernmental organizations to file amicus briefs. The drawn-out pace of settlement proceedings has also caused dissatisfaction. Ordinarily, a case should not take more than a year (15 months if it is appealed), but in practice the dispute settlement process can continue to drag on even after the WTO has adopted a ruling. For example, in the case involving the EU banana import regime, the WTO found for the United States in about 18 months from the point of initial consultation, but by the time the United States was finally authorized to suspend trading concessions, nearly 3 years had passed.

Promoting Growth Internationally

The United States has long advocated the use of the multilateral trading system to promote economic growth internationally, often with considerable success, but not all countries are well positioned to reap the benefits that trade can afford. Steps can be taken to help ensure that developing countries, including the least developed, obtain the market access and technical assistance they need to benefit more fully.

Developing countries have increasingly come to appreciate the value of the multilateral trading system. The system not only provides them opportunities to trade on the basis of their comparative strengths but also reinforces market-oriented development strategies where they have been adopted. Originally dominated by the industrial countries, the system has witnessed growing participation as other nations have sought inclusion. Today the WTO counts 135 members, with over 30 nations, including China, seeking accession (Box 6-2). This allure of the trading system supports the conviction that

international trade is not a zero-sum game: both the United States and its trading partners reap the benefits.

Developing countries have come to account for an increasingly large share of world trade, but some have moved ahead more rapidly than others. Developing countries' total trade (exports plus imports) rose at an annual rate of 9.9 percent between 1989 and 1997, exceeding the 7.6 percent growth rate

Box 6-2. China's WTO Accession: Opening Foreign Markets, Extending the Rule of Law, and Encouraging Growth and Development

In November 1999 the United States and China concluded a bilateral agreement on China's WTO accession. This agreement, which represents a crucial step in China's accession to the multilateral organization, addresses many of the barriers to trade and investment in China that now impede the flow of goods, services, and capital. Upon implementation, the agreement would benefit both U.S. and other firms outside of China, by improving access to China's market. China would benefit as well from wider availability of high-quality foreign products and from the introduction of best-practice skills by U.S. firms in areas such as finance and insurance. The agreement would help address distortions in China's economy that have contributed to slowing output growth there and have reduced the prospects for future growth.

Under the terms of the agreement, China's WTO accession would continue the remarkable process of economic reform that began there two decades ago. China's economy has become increasingly market-oriented and increasingly open to trade and foreign investment. Between 1978 and 1999, China's official statistics indicate that the country's income per capita rose at a rate of more than 8 percent per year, which, according to the World Bank, has helped raise some 200 million people out of absolute poverty. (Some have argued that statistical shortcomings lead to an overstatement of this long-run growth rate, but even skeptics acknowledge that the results have been impressive.) Trade has grown even faster than output, with the sum of exports and imports rising from $21 billion in 1978 to $324 billion in 1998. Over this period more than $250 billion in FDI entered China.

Despite this substantial progress, China has continued to maintain significant barriers to foreign trade and investment. These barriers include high tariffs on many agricultural and industrial products and other, less quantifiable restrictions. For example, some products may be imported only by approved foreign trading companies, and foreign investment is sometimes restricted outside of particular sectors. In many sectors these barriers have shielded inefficient state-owned

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Box 6-2.—*continued*

enterprises—the core of the former centrally planned economy—from competition, reducing prospects for China's continued strong growth.

The bilateral agreement directly addresses many of these concerns, especially as they relate to trade. China has agreed to significant reductions in tariffs on imports of agricultural and industrial products: for example, tariffs on U.S. industrial products would decline from a simple average of 24.6 percent to 9.4 percent, calculated from a 1997 baseline. The bilateral agreement would also address many nontariff barriers. In agriculture, China would establish large and increasing tariff-rate quotas on bulk agricultural commodities, limit some state trading activities, and eliminate export subsidies. (A tariff-rate quota is one in which imports are allowed above the quota but a higher tariff applies than within the quota.) China would phase in full trading and distribution rights for most of its industrial sectors. The agreement also covers a wide range of trade in services, including banking, insurance, telecommunications, distribution, professional activities, and other business services. The agreement also contains a special safeguard rule, to protect against surges in China's exports to the United States, and it specifies a non-market economy methodology to address dumping.

As a result of these changes, U.S. firms would gain from better access to a fast-growing market of almost 1.3 billion people, and from greater certainty about China's economic policies in the future. WTO accession would commit China to a path of further economic liberalization, which could help lock in its transformation from a centrally planned to a market-based economy and encourage faster growth. This commitment can also help strengthen the rule of law in China, providing more certainty for U.S. firms seeking to do business there.

Although the bilateral agreement represents a crucial step toward China's WTO accession, several important ones remain. For example, China must still complete bilateral agreements with a number of other WTO members, as well as multilateral negotiations on its accession protocol. After that, China must complete its own domestic procedures for accession.

of trade worldwide. Over this period their share of world trade rose from 29.1 percent to 34.7 percent. Among developing countries, the trade of those that are WTO members grew slightly faster, at an annual rate of 10.5 percent. The 48 least developed countries have, as a group, done less well. For these countries, many of which are also WTO members, trade grew at an annual rate of only 6.1 percent through 1996.

As these data suggest, not all WTO members are well equipped to use the trading system effectively. Some of the least developed members lack the necessary domestic institutions and infrastructure to reap the full benefits of trade. For them, capacity building and technical assistance, coupled with additional market opening, could help spread those benefits. Through the WTO, the international community can make more progress in liberalization in certain priority areas, such as agriculture and services. But developing countries, including the least developed, can also take their own actions. In addition to participating in multilateral initiatives, they can benefit from increased unilateral liberalization, as free trade promotes the movement of labor and capital into their most productive uses, strengthens competitive forces, facilitates innovation, and raises living standards.

The United States has proposed measures for the WTO to provide developing countries with technical assistance in implementing trade policy. The United States will also work to give the least developed countries greater access to global markets, as it is already doing through the U.S. Generalized System of Preferences (GSP) program. The U.S. GSP program began in 1976, when the United States joined 19 other industrialized countries in granting tariff preferences to developing countries, to help promote economic growth through expanded international trade. Currently, over 4,400 products and product categories are eligible under the program for duty-free entry from designated beneficiaries—over 140 developing countries and territories in total—and another 1,783 products are eligible for duty-free entry from least developed beneficiaries only. The value of U.S. GSP duty-free imports in 1998 was $16.3 billion. However, lapses in authorization of the program, which have occurred several times over the past 5 years, have tended to detract from its efficacy, by creating uncertainty for investors and importers.

Addressing Concerns About Adjustment

As markets become more open, some domestic industries will expand while others may contract. Although globalization provides benefits overall, the adjustments that businesses and workers in shrinking industries may undergo can be costly and painful. Although, as noted above, economic studies typically find that trade is a small factor in U.S. job displacement, some workers may face short-term unemployment, and others may even face permanent wage reductions if they are unable to find comparable jobs in expanding sectors.

Trade, like other sources of economic growth, therefore presents challenges at home. But the fact that trade produces additional income means that, in principle, resources are available to help those who are hurt—either to adapt by becoming more productive and competitive at what they were already doing, or to switch activities. One way to help in the transition is to develop

programs that directly address the problems of dislocation. Another is to encourage trade while limiting the pace at which change occurs, as the United States has done by phasing in provisions of the WTO agreements and applying safeguard measures. Such gradualism may be desirable under certain circumstances, but trying to prevent liberalization altogether would be counterproductive. Permanent protection inevitably costs more, in terms of benefits forgone, than it saves. The key lies in maintaining an economy that is sufficiently flexible and vibrant to meet the challenges of reaping those benefits.

To address problems of worker dislocation, regardless of cause, the Administration has developed new programs to assist in job search and training. These programs add to the assistance already available to displaced workers through the Federal Trade Adjustment Assistance program. The Workforce Investment Act of 1998 retains a funding stream for dislocated workers and promotes customer access to services and information, as well as customer choice, through a One-Stop delivery system and through Individual Training Accounts. The Administration is also acting to ensure that Lifetime Learning tax credits and scholarships are available to assist workers in preparing for new jobs. Federal job and talent banks are meanwhile providing mechanisms for helping millions of U.S. workers find new jobs. For example, on a single day in January 2000, America's Job Bank listed over 1.5 million jobs.

The WTO agreements and U.S. trade laws also provide a cushion during periods of adjustment. For example, key features of the Agreement on Agriculture and the Agreement on Textiles and Clothing phase in gradually over periods of 6 to 10 years. Moreover, the WTO agreements allow countries to use certain forms of safeguards to protect themselves temporarily against import surges that seriously injure or threaten to seriously injure a domestic industry. The United States has invoked its own safeguard provisions three times since the creation of the WTO, in cases involving corn brooms, wheat gluten, and lamb meat.

Addressing Concerns About Core Labor Standards and the Environment

During the Seattle Ministerial, some participants and observers raised important questions about the relationships between trade and labor and between trade and the environment. The Administration is committed to ensuring that the benefits of trade are shared broadly and do not come at the expense of core labor standards or the environment. Economic evidence, presented below, suggests that trade can support labor and environmental objectives rather than obstruct them.

Over time, the United States has developed strategies to address international labor and environmental considerations through a variety of means.

For example, preferential U.S. trade programs contain criteria for workers' rights: legislation for the U.S. GSP program states that the President shall not designate any country a beneficiary developing country if "such country has not taken or is not taking steps to afford internationally recognized worker rights to workers in the country. . . ." The North American Free Trade Agreement contains side agreements on labor and the environment. At the same time, the United States has sought to promote core labor standards and environmental goals through multilateral institutions such as the International Labor Organization and the United Nations Environment Program. During negotiations in Seattle, the United States proposed to strengthen the WTO's links to these and other relevant international organizations. The United States is also seeking to create a working group on trade and labor in the WTO, to better understand the linkages between them. And just before the Seattle Ministerial, the President issued an executive order for the United States to conduct environmental reviews of certain kinds of trade agreements.

Economic evidence suggests that trade can support both labor and environmental objectives, in part through its positive effect on economic growth. For example, analysis using wage, employment, and income data to study the relationship between economic development and working conditions in Hong Kong, the Republic of Korea, Singapore, and Taiwan has found that these conditions generally improved as the economies developed. Studies of the relationship between pollution and income per capita are also revealing: in several cross-country analyses of emissions patterns of air and water pollutants, emissions seem to increase with income at low incomes and fall with income at high incomes. As countries become wealthier, they may eventually become cleaner, perhaps because of increased demand for environmental protection. Recognizing that trade and environmental objectives can be mutually supportive in even more direct ways, the United States is seeking to eliminate fishery subsidies that contribute to overfishing and to eliminate tariffs on environmental goods.

Nevertheless, international trade occurs in the context of domestic policy. Although sovereign nations bear responsibility for adopting sound domestic policies, the international community can contribute its expertise. In this regard, the United States has proposed measures in the WTO to provide technical assistance on implementing trade policy and on strengthening institutions in developing countries responsible for trade, labor, environmental, and other policies that influence the gains to living standards from trade.

Managing Capital Flows and the Macroeconomy

Globalization raises other challenges as well: flows of goods, services, and capital can be the source of macroeconomic shocks. To take an extreme example, the crisis in emerging markets that began in Thailand in 1997

demonstrated the potential adverse consequences of volatile capital flows. The crisis also highlighted the need for developing countries to strengthen their domestic financial systems and adopt appropriate macroeconomic policies, including consistent monetary and exchange rate policies, to cope with this volatility. Such policies allow countries to capture more fully the benefits of an increasingly global financial system and to minimize their vulnerability to crises. Of course, for some very poor countries the challenge is not that capital flows are too volatile, but that they are insufficient. Recent policy initiatives, discussed below, aim to distribute the benefits of global capital flows more broadly.

International Financial Crises and the New Financial Architecture

A particular concern is the potential role of sudden swings in capital flows in precipitating a financial crisis—a phenomenon marked by extreme financial market volatility and macroeconomic instability. An economic crisis can, of course, occur in a country that is closed to trade and capital flows, but adding an international dimension to the crisis can in some cases make the situation even worse. We have seen how international capital flows provide important benefits in allocating resources efficiently and promoting growth. But sometimes capital—especially short-term capital, such as overnight bank loans—can flow out of a country very quickly. For example, capital might leave a developing country in response to new information about the country or to a change in industrial-country interest rates. But whatever drives them, rapid outflows can force a sudden and costly adjustment in financial markets and the real economy.

A series of crises in emerging market economies in the 1990s have brought these issues to the fore. In Mexico in 1994 and 1995, policy shortcomings, weakness in Mexico's balance sheet, and financial market volatility combined to create a sharp liquidity crunch and a steep fall in output. The crisis that began in Thailand in 1997 seems to fit the same pattern. That crisis quickly spread to other Asian developing economies in 1997 before it began to ease in mid-1998; it then, however, revived and spread to Russia, Brazil, and several other Latin American countries in 1998 and early 1999.

Many emerging markets had exchange rate regimes that, to a greater or lesser extent, involved pegging the value of the domestic currency to the dollar while retaining latitude to adjust the pegged rate or even float the currency. For these economies the initial manifestation of the crisis was a sharp fall in reserves, which forced abandonment of the pegged rate; the currency's value then fell precipitously. Stock markets also dropped sharply. Severe declines in output soon followed. For example, annual output growth had averaged about 7 percent from 1990 to 1996 in the five "front-line" Asian crisis economies (Indonesia, Korea, Malaysia, the Philippines, and Thailand).

By contrast, in 1998 output fell on average by 7 percent in these economies. Large swings in capital flows required corresponding adjustments in the current account balances of these five economies, which shifted from combined deficits of $54 billion in 1996 and $25 billion in 1997 to a combined surplus of $69 billion in 1998.

Last year's *Economic Report of the President* discussed the recent emerging markets crisis at length. The crisis and the virulent contagion that ensued did not have a single, simple cause. Nevertheless, in some Asian countries, structural weaknesses, particularly in financial intermediation, appear to have been a key source of vulnerability. Weak financial systems intermediate resources poorly, so capital is not allocated efficiently. The combination of lax financial supervision and regulation, a tradition of lending to politically favored borrowers, and poor corporate governance, led in turn to considerable lending to low-productivity projects. In some cases, domestic and international capital liberalization may have exacerbated the problems caused by these distortions, by allowing banks and firms to borrow more money at lower rates in international markets than was advisable.

Insufficiently prudent management of the national balance sheet compounded these weaknesses. Too many countries involved in recent crises were seeking short-term capital from abroad. In Thailand, for example, the Bangkok International Banking Facility enabled Thai banks and firms to borrow heavily abroad in foreign currency at very short maturities, and the government decided to mortgage its foreign exchange reserves in forward markets. Fixed but adjustable exchange rates in some countries gave the illusion of currency stability, and low levels of usable reserves created vulnerability to a sudden turn in confidence that ultimately became self-perpetuating. As the psychology of the market shifted, the opportunity to fix the underlying problems that triggered the crisis without up-ending the economy drained away.

These weaknesses interacted with an inadequate focus on risk on the part of banks and investors in industrial countries, which had contributed to the rapid inflows of capital in the first place. This combination of structural weaknesses, policy biases that favored risky forms of finance, and an insufficient regard for risk led ultimately to an abrupt collapse in confidence that spread outward from Asia in 1997, as investors realized the extent of their exposure. Once confidence was lost, the problems in the affected countries were compounded by rapid and self-fulfilling outflows of capital.

How can countries and the international financial system retain the benefits of capital flows discussed earlier while making crises both less likely and less virulent? The debate over the new international financial architecture, as it has come to be known, seeks to address this question. The Mexican crisis of 1994-95 sparked the search for policies that could prevent large swings in

capital flows, but the emerging markets crisis of 1997-99 gave it particular urgency. The United States has taken the lead in these efforts.

The quest for a more stable global financial system is important for industrial economies as well as for emerging market economies. After all, the emerging markets crises had effects on both the real and the financial sector in the United States and in Europe and Japan. Together with continued weakness (indeed, outright recession) in Japan in 1997 and 1998, the crises reduced income growth abroad, which in turn cut U.S. exports. Some sectors of the economy—agriculture and manufacturing in particular—clearly suffered from the loss of export markets and from increased import competition. At the same time, weakness in the currencies of the crisis-stricken countries implied an appreciation of the dollar in both real and nominal terms, which made foreign products more competitive both abroad and in the United States. The crises overseas have at times also had significant repercussions on U.S. financial markets. In the period following Russia's default on its sovereign debt in August 1998, U.S. asset prices declined and considerable financial market stress followed.

At certain junctures, the weak external environment and the possibility of further financial market turmoil posed a clear risk to the continuing strong performance of the U.S. economy. The downside risks for the United States did not materialize, however, in part because of the policy response of U.S. authorities in the fall of 1998 and the financial packages assembled by the International Monetary Fund. Most Asian emerging market economies resumed growth in 1999. However, for much of this period the world economy was essentially flying on one engine: the robust performance of the U.S. economy. Indeed, during this period, the openness of the U.S. market helped cushion the adverse effects of the crisis on output and employment abroad. Thus events abroad create important policy challenges at home. For this reason, promoting the new international financial architecture is in America's own self-interest.

A consensus is emerging on the broad outlines of this new architecture (Box 6-3). A central lesson of the crises of the 1990s is that countries largely shape their own destinies. Hence, building a sound global financial system requires that individual countries work to ensure that their financial systems and macroeconomic policies are sound, consistent, and transparent. Improving transparency, for example, requires improved accounting standards and timely reporting of data. These steps can minimize the information problems that contribute to swings in capital flows. In addition, the recent crises demonstrate the critical importance of the choice of exchange rate regime in reducing a country's vulnerability to crisis. Whatever regime is adopted should be credible and supported by consistent macroeconomic policies and robust financial systems.

Box 6-3. The New International Financial Architecture

The international community, under U.S. leadership, has proposed a set of reforms to strengthen the international financial system. On the general principle that a market-based system provides the best prospects for a sound global economy, these reforms seek to improve crisis prevention and the international community's response to crisis in ways that allow markets to operate effectively.

Last year's *Economic Report of the President* described the background behind the major reform proposals and outlined their chief features. Since then, work has continued within the Group of Seven (G-7) large industrial countries and with key emerging market countries to explore ways to improve and implement these reforms. The United States has continued to play a leading role in these efforts. At its June 1999 summit in Cologne, Germany, the G-7 released a report on financial architecture. The report emphasized reforms in six areas:

- Strengthening and reforming the international financial institutions—the International Monetary Fund (IMF) and the World Bank—and arrangements for international cooperation
- Enhancing the transparency of financial institutions and markets and promoting best practices, to enable market participants to make informed judgments about risk and provide greater incentives for policymakers to implement sound policies
- Strengthening financial regulation in industrialized countries, so that creditors will act with greater discipline and assess more prudently the risks associated with their lending
- Strengthening macroeconomic policies and financial systems in emerging markets, to allow borrowers in emerging markets to benefit fully from integration into the international financial system
- Improving crisis prevention and management and involving the private sector, to ensure that all participants will expect to bear the consequences of the risks they take, and to reduce the risk of financial market contagion
- Promoting social policies to protect the poor and most vulnerable.

The Administration has pushed forward with this effort in several ways. It has made the terms of exceptional financing support more market-based through the creation of the IMF's Supplementary Reserve Facility and, most recently, its Contingent Credit Line (CCL). It has also helped countries develop stronger national financial systems, including through the incentives embodied in the terms of the CCL.

continued on next page...

Box 6-3.—*continued*

In addition, to promote dialogue on key economic and financial issues, a new informal mechanism known as the G-20 (a group of key industrial and emerging market economies that account for more than 80 percent of world GDP) met for the first time in December 1999. This group will be focusing on how countries can further reduce their vulnerability to modern capital account crises.

Improvements in national policies are necessary to strengthen the international financial system, but not sufficient. Policies and incentives must also be appropriate at an international level, as discussed in Box 6-3. These reforms seek to reduce the incidence and severity of future crises by providing suitable incentives for the effective working of a market-oriented system.

When reversals of capital flows do occur, an important task is to keep the damage to a minimum. Several actions can help in this regard. First, it appears clear that countries should avoid policy biases that encourage excessive reliance on short-term, foreign currency-denominated debt, since it is those flows that can flee most quickly. Second, ensuring that the financial system is sound can enable a country to cope with capital and exchange rate movements without excessive damage to financial intermediation.

Debt Relief for Developing Countries

An important goal of the proposed reforms of the international financial system is to ensure that countries realize the substantial benefits of open markets in trade and investment. However, some of the world's poorest nations are not benefiting from globalization. Many developing countries have unsustainable debts and policies that are not conducive to economic growth and development. Recognizing the need to integrate these countries into the global economy, the United States has actively pursued several multilateral and bilateral initiatives to reduce their debt burden.

Most recently, the United States helped forge an international consensus among the G-7, the International Monetary Fund, the World Bank, and other creditors to provide broader, faster, and deeper debt relief to many of the world's poorest, most heavily indebted nations. Together with previous debt relief commitments, the June 1999 Cologne Debt Initiative, which expanded on the Heavily Indebted Poor Countries (HIPC) Initiative of 1996, may reduce these countries' combined nominal debt by as much as $90 billion, in return for genuine reforms aimed at reducing poverty and encouraging long-run economic growth. The combined external debts of the 33 HIPCs most likely to benefit from the Cologne Debt Initiative were estimated at $127 billion in 1998, or nearly 120 percent of their combined GNP.

The key objective of the initiative is to strengthen the links among poverty reduction, debt relief, and sound economic policy so as to foster development. Countries seeking eligibility for debt relief must meet several requirements. They must undertake macroeconomic reforms, such as inflation stabilization. They must place increased emphasis on channeling the benefits of debt relief to poverty reduction, especially in the areas of health care and education. They must make efforts to improve governance, especially in establishing participatory processes with civil society and ensuring transparency. In consultation with the International Monetary Fund and the World Bank, eligible countries will design poverty reduction strategies that allow them to use the savings from debt relief to fight poverty effectively.

Openness has increased opportunity and prosperity in both industrialized and developing countries. In order to benefit, however, countries must have policies in place that are conducive to economic growth, and they should not be held back by unsustainable debts. As the Cologne Debt Initiative encourages growth and stability in return for debt reduction, it will benefit creditors and debtors alike by creating new opportunities for trade, investment, and the development of human capital.

The Trade and Current Account Deficits

Throughout the second half of the 1990s, the U.S. trade and current account deficits rose steadily. In the third quarter of 1999, the current account deficit (a comprehensive measure that comprises not only the trade deficit in goods and services but also net income and transfers) reached a record relative to GDP—even as the U.S. unemployment rate stood at its lowest level in 30 years. It is worth recalling that the benefits of openness, including higher real incomes, are realized no matter what the size of the external deficit. By themselves, external trade and current account deficits are neither inherently good nor inherently bad. What matter are the reasons for the deficits. The main reason for the deficits today appears to be the strength of the U.S. economic expansion relative to the slow or negative growth in many other countries.

By definition, a trade deficit occurs when a country's domestic spending exceeds its domestic production. The shortfall is then made up by importing more goods than are exported. When the United States runs a trade deficit, foreigners buy less than a dollar's worth of U.S. goods for every dollar they earn from their export sales to us. The natural question to ask is, What do foreigners do with the dollars left over after they buy those U.S. goods? In practice, they typically invest those excess dollars in U.S. assets. The desire of foreigners to purchase attractive U.S. assets—in essence, to lend us the money needed to finance a trade deficit—makes the deficit possible. In other words, there is necessarily a link between the international flow of goods and

services and the international flow of financial resources. In fact, one can as readily argue that the desire of foreigners to acquire attractive U.S. assets is responsible for the U.S. trade deficit as the reverse.

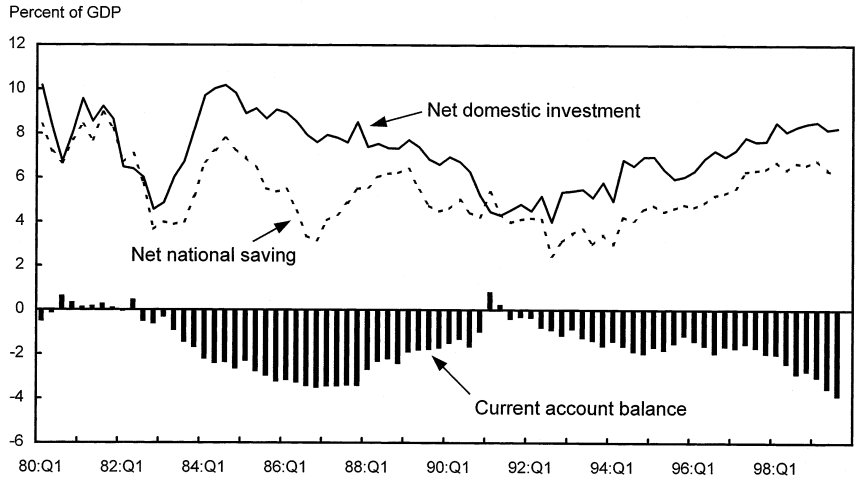
This link between the flow of goods and services and the flow of financial resources highlights another way of looking at the trade and current account deficits. From a national accounting perspective, a country's current account balance equals the difference between national saving and domestic investment (plus a statistical discrepancy and after minor adjustments). When the demand for domestic investment in the United States exceeds the pool of national saving, borrowing from foreigners—a rise in national indebtedness—makes up the difference. Conversely, when saving exceeds investment, the surplus is invested abroad.

Is it good or bad for a country to get into debt? The answer obviously depends on what the country does with the money. What matters for future incomes and living standards is whether the deficit is being used to finance more consumption or more investment.

In this respect, the deficit in the 1990s differs radically from that in the 1980s. The United States experienced large current account deficits in the mid-1980s (Chart 6-7), when net domestic investment fell as a share of GDP, and net national saving fell even faster. By contrast, in the current expansion the deficit has been associated with rising shares of GDP devoted to both investment and saving. The deficit's growth indicates that the rise in national saving, due to reduction of the Federal budget deficit, has not kept pace with the increase in investment. It signals rising investment rather than falling saving.

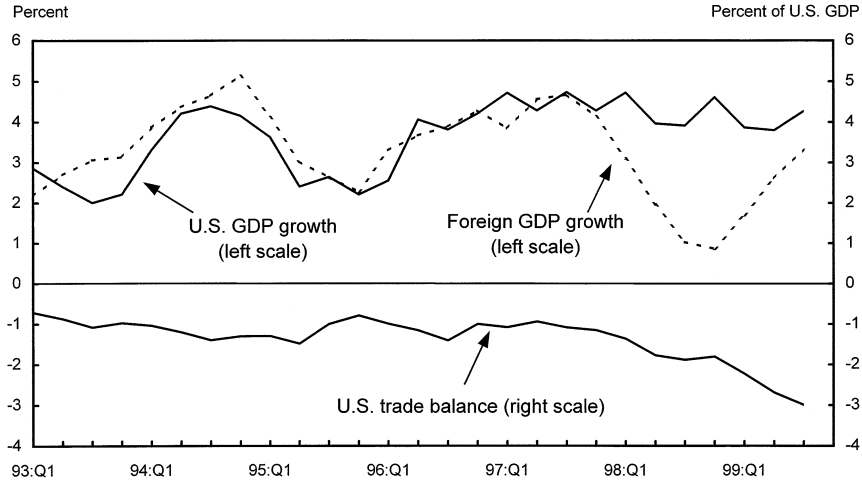
That a falling trade balance can coincide with a robust economy is no surprise; indeed, both economic theory and empirical observation lead one to expect such a pattern. A strong economy raises demand for imports and is generally associated with high demand for investment. As Chart 6-8 shows, GDP growth in the United States' trading partners as a group fell sharply in 1998, reflecting weaker growth in Europe, recession in Japan, and outright crisis in emerging markets. By contrast, U.S. growth remained robust. Since the end of 1997, the U.S. trade deficit has risen from about 1 percent of GDP (its average throughout the mid-1990s) to about 3 percent. The dramatic difference between U.S. and foreign growth appears to be the primary cause of the increase in the deficit, as demand grew more rapidly for all products, including imports, in the United States than elsewhere. From the perspective of capital flows, expected returns on investment have been relatively attractive in the United States. As a result, the United States has absorbed substantial net inflows of capital. Whether viewed as a phenomenon in the international flow of goods and services or as a phenomenon in the international flow of financial resources, the result of these recent devel-

Chart 6-7 **Saving, Investment, and the Current Account Balance**
The current account deficit grew in the mid-1980s as saving fell faster than investment. But in the 1990s both saving and investment rose as a share of GDP.



Note: The current account balance equals net national saving minus net domestic investment plus statistical discrepancy plus other adjustments.
Source: Department of Commerce (Bureau of Economic Analysis).

Chart 6-8 **U.S. and Foreign GDP Growth and U.S. Net Exports**
The sharp slowdown in many of the United States' trading partners in 1998 and continued weakness in 1999 contributed to a growing U.S. trade deficit.



Note: GDP growth is the percent change from four quarters earlier. Foreign GDP is an index of GDP in 35 U.S. trading partners, weighted by shares in U.S. nonagricultural exports. The trade balance is the balance in goods and services and is on a national income and product accounts basis.
Sources: Department of Commerce (Bureau of Economic Analysis), and various country sources.

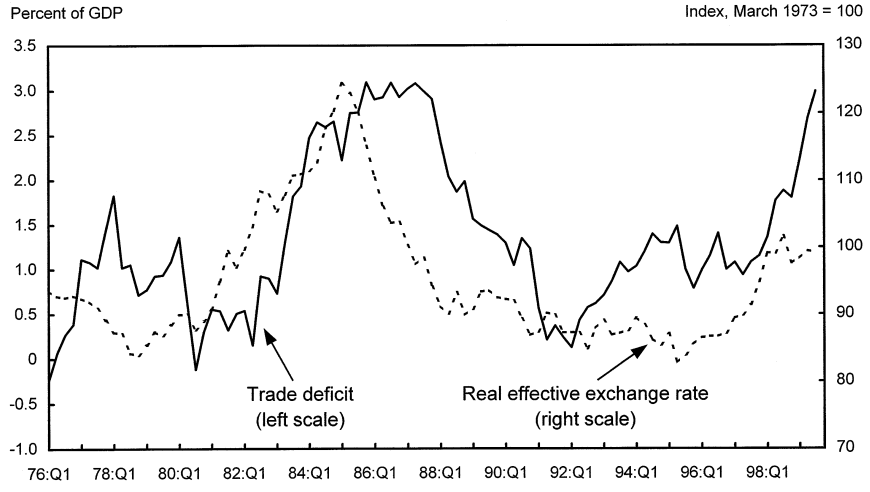
opments was that the U.S. trade and current account balances swung much more sharply into deficit.

Exchange rate movements, reflecting in part the desirability of U.S. assets, have also contributed to the rising trade deficit by affecting the relative price of imports and exports. Chart 6-9 shows that, over the past several decades, the trade deficit has tended to rise when the dollar has strengthened. Between 1995 and 1998 the dollar appreciated, although by less than in the 1980s.

In addition to these factors, some of the recent increase in the trade and current account deficits (and in the corresponding capital inflows) may reflect other, more persistent factors. A possible explanation for such a "structural" current account deficit, as well as for some of its recent increase, is faster U.S. productivity growth, as discussed in Chapter 2. If productivity growth has risen more in the United States than in other countries, this fact tends to make the United States a particularly attractive place for investment, since the expected returns to capital then rise. Capital may then flow into the United States to finance this higher investment. To the extent this story applies to the United States today, it again emphasizes the relative strength of the U.S. economy.

Clearly, then, large trade and current account deficits can easily coincide with a strong and robust economy, as they do today. Hence, a trade deficit does not by itself have implications for the overall level of employment. Nevertheless, some sectors of the U.S. economy, such as manufacturing, may be harmed by increased competition from foreign imports and from reduced

Chart 6-9 **Real Effective Exchange Rate of the Dollar and the Trade Deficit**
Increases in the trade deficit typically follow an appreciation of the dollar, and the late 1990s were no exception.



Note: The real effective exchange rate is the Federal Reserve's price-adjusted broad index of the foreign exchange value of the dollar. A rise in this index indicates an appreciation of the dollar.
Sources: Department of Commerce (Bureau of Economic Analysis), and Board of Governors of the Federal Reserve System.

demand for exports. It would be a mistake, however, to simply equate a manufacturing trade deficit with job loss in that sector. The inflows of capital into the United States that finance the trade deficit have allowed the economy to operate at higher levels of domestic investment than it could have otherwise. Higher investment, in turn, helps boost demand for manufacturing output.

Nevertheless, since the onset of the Asian financial crisis, manufacturing employment does appear to have been adversely affected by the reduced demand for U.S. exports. Between the first quarter of 1993 and the fourth quarter of 1997, U.S. manufacturing firms added about 700,000 workers to their payrolls. However, between the fourth quarter of 1997 and the fourth quarter of 1999, manufacturing employment fell by about 440,000 workers. The economy has remained at a high level of employment throughout this period—and has added more than 20 million new jobs since January 1993—which suggests that many of these displaced workers have found jobs elsewhere in the economy. As discussed earlier in this chapter, policy may also be able to help ease the adjustments resulting from trade.

In sum, although some adjustments have been necessary, today's trade and current account deficits reflect the relative strength of the U.S. economy. These deficits are essentially a macroeconomic phenomenon, reflecting a higher rate of domestic investment than of national saving. They have allowed U.S. firms to continue to invest at high rates even in a high-employment economy.

A vast array of factors affect the level of the deficit, by influencing the decisions of private individuals and firms, so it is very difficult to be precise about the "appropriate" level of the deficit. Nevertheless, for any given level of the current account deficit, one must keep several principles in mind.

First, the better are the United States' terms of trade—that is, the higher the prices we receive for our exports, and the lower the prices we pay for our imports—the higher Americans' incomes will be. Working to open large foreign markets can stimulate exports and improve the terms of trade. By contrast, closing markets in the United States through protectionist measures is counterproductive and should play no part in the policy response to the current account deficit. Measures such as higher tariffs and quotas do discourage imports by making them more expensive, but they also make our economy less efficient and reduce national income. Besides making Americans poorer, such protectionist measures would not necessarily have much effect on the current account balance, because they are unlikely to have much effect on either saving or investment.

Second, for any given level of the current account deficit, the United States is better off if it remains open and attractive to foreign investment, provided these capital flows are channeled into productive uses. Chapter 3 discussed the role of policy in nurturing innovation, which in turn leads to productive investment opportunities for the private sector. In addition, it is important to

continue prudential regulation of the financial system, to help it remain sound and keep pace with new technology and deregulation. The strong U.S. financial system is well positioned to channel capital inflows into profitable uses, and it is important to maintain that strength.

Although, again, the appropriate level of the current account deficit is difficult to assess, at least two principles are relevant should it prove necessary to reduce the deficit. First, the United States has an interest in policies that stimulate foreign growth, since it is better to reduce the current account deficit through faster growth abroad than through slower growth at home. A recession at home would obviously be a highly undesirable means of reducing the deficit. The cyclical component of the deficit, caused by declines in global demand in recent years, should reverse itself as the world economy recovers. For the future, the new international financial architecture, discussed earlier, should help maintain stronger and more stable foreign growth.

Second, any reductions in the deficit are better achieved through increased national saving than through reduced domestic investment. If there are attractive investment opportunities in the United States, we are better off borrowing from abroad to finance these opportunities than forgoing them. On the other hand, incomes in this country would be even higher in the future if these investments were financed through higher national saving. The United States needs policies that make saving more attractive. Indeed, the Administration has proposed substantial tax cuts to promote saving, especially among low- and moderate-income families who currently save relatively little. The United States also needs to maintain prudent fiscal policies. Here again, the Administration's proposals, which would lead to large and growing budget surpluses in the decade to come, are highly desirable.

A growth strategy for the United States based on continued prudent fiscal policy would also extend macroeconomic assistance to the problems faced by the manufacturing sector. By increasing national saving, such a policy would allow interest rates to remain lower than they would otherwise be. Lower interest rates would lead to higher domestic investment, which, in turn, would boost demand for equipment and construction. For any given level of investment, increased saving would also result in higher net exports, which would again raise employment in these sectors.

Conclusion

Over the long term, increasing the standard of living in the United States requires that Americans embrace change. We should not retreat from the constant succession of new opportunities that arise in an ever-changing world economy. The United States has long welcomed the opportunities that

integrating with the world economy provides. Growing international integration has benefited Americans profoundly, contributing to our increasing prosperity. It is clearly in our interest to forge ahead, both promoting and guiding the process of international economic integration.

Yet at the same time we must confront the very real challenges that arise from economic globalization. We must find ways to share its benefits as widely as possible, both at home and abroad. International policy on trade and capital flows plays an important role in ensuring that we capture the benefits of international economic integration.

Ultimately, however, our prosperity in the global economy depends primarily on our policies at home. The right policies for this task include those that encourage a flexible and skilled work force, that build an economic system in which innovation is rewarded, and that ensure that the U.S. financial system is sound and deep.