

## CHAPTER 3

# Growth and Evolution of International Capital Markets

IN THE SUMMER OF 1944, representatives of the Allied Powers convened at Bretton Woods for an ambitious purpose: to plan a financial system for the postwar world. In the 44 years since that meeting in New Hampshire, world trade and capital flows have changed course dramatically. A revolution in currency exchange markets occurred. By the end of the 1970s, vast changes in national economic conditions and policies had almost sundered international economic relations. In the 1980s the current Administration took stock. The policy changes it proposed not only revitalized the U.S. economy, but also brought the Nation renewed respect in the international arena.

The United States has played a central role in the evolution of international capital markets throughout the postwar period. Immediately following the war, loans, aid, and direct investment flowed from the United States to assist the ravaged economies of Europe and Asia. At the same time, the United States assumed a leading role in the system of pegged but adjustable exchange rates designed at Bretton Woods. By providing this leadership and by fostering a stable worldwide market system and encouraging the opening of markets in goods and assets, the United States reinvigorated the world economy.

The reward for these efforts has been enhanced opportunities for the United States. World output and trade have flourished. The successful recovery of the war-torn economies and the entry of many newly industrializing and developing nations into the international arena have meant a revision in the role of the U.S. economy in the world. Yet the United States remains a world leader, and U.S. policies of free markets, low tax rates, low inflation, and reduced government regulation have resulted in a robust, productive economy that stands as an example for the rest of the world.

The road to the 1980s has been replete with lessons about international trade, capital, and currency markets. Beginning in the 1960s divergences in sovereign policies affecting domestic inflation and output growth eventually led to results inconsistent with the exchange-rate regime initiated at Bretton Woods—a system of pegged

but adjustable exchange rates. In the early 1970s the flaws in the Bretton Woods system proved insurmountable and the industrial world adopted a regime of floating exchange rates in its stead. Subsequent large swings in the value of the dollar have led to renewed debate regarding international monetary arrangements. The value lost by the dollar in the 1970s was more than made up, and then lost again, during the 1980s. Swings in the international cost competitive-ness of U.S. manufacturers mirrored those of the dollar's real value in the 1980s. Yet the flexible exchange-rate regime has weathered without crisis three recessions in the United States, sizable oil shocks and even war between two major oil-producing nations, rapid increases and decreases in inflation, and most recently a significant shift in the international pattern of trade balances. Although flexible exchange rates exhibit substantial short-run variability, they provide efficient and timely signals to markets and governments when actions and policies go awry.

During the 1970s the traditional trade and current account surpluses of the United States, correlatives of net U.S. lending to the rest of the world, gave way to intermittent external deficits. Since 1982 the external deficits have become persistent and amplified. Trade and current account deficits represent important channels through which an economy can acquire the resources needed to take advantage of profitable investment opportunities. They can also reflect current consumption out of previous saving. Trade deficits can arise when an economy's households and firms react to distorted incentives to consume today by borrowing from abroad at the expense of future generations. Whether the trade deficits of the 1980s signal promise or trouble for the current and future well-being of the United States is an important and difficult question.

Between 1918 and the mid-1970s, and particularly in the period following World War II, the United States built up large international asset holdings as the counterpart to its annual current account surpluses. By the 1980s that pattern of international capital flows had changed. The gradual acquisition of U.S. assets by foreigners at a faster rate than the United States has acquired similar assets abroad has resulted in a reversal in the U.S. net foreign asset position as officially measured. According to official estimates, since 1985 the total value of foreign holdings of assets in the United States in the form of direct investments, common stock, and bonds of all kinds has exceeded the total value of holdings by U.S. citizens of similar assets abroad. This imbalance is often described as the net debtor position of the United States, even though many of these assets involve equity claims rather than debt. Although difficulties of measurement cast some doubt on the accuracy of official estimates, there is little doubt

that the net international asset position of the United States has decreased in the 1980s.

The consequences of the United States becoming a net debtor have been hotly debated. Unlike the troubles of many indebted developing nations, the ability of U.S. citizens and the U.S. Government to maintain their contractual obligations is not a concern. The United States continues to have the largest aggregate wealth in the world, and its creation of new wealth remains strong. Nevertheless, some have argued that its current financial position increases the temptation for U.S. policymakers to induce an inflation, reducing the real value to foreigners of their dollar-denominated claims. Others argue that it erodes U.S. leadership in the world economy. Neither development is a necessary consequence of a net debtor position. By adhering consistently to this Administration's policies of noninflationary growth, the United States can continue as a world leader, and the dollar can remain a reliable and widely held currency.

During the 1980s many developing countries have experienced grave difficulties in managing their external debts. The problems of debtor nations have frequently been compounded by high-tax, inflationary, and confiscatory policies that have handicapped their domestic economies, reduced trade and investment, and led to capital flight. In addition, these policies have created insufficient incentives for debtors and creditors to reach voluntary, market-oriented agreements. Private and official creditors as well as international agencies have increasingly devoted resources to renegotiating the terms of existing debt and providing debt relief appropriate to the individual borrower. By maintaining incentives conducive to voluntary, country-specific negotiations between creditors and debtors and continuing to support domestic economic reform, the United States can encourage the design of innovative approaches that resolve the problem.

The issues of the international economy involve policy choices and the need to develop a framework to produce growth in world living standards for the coming years. Stable and growing economies require smoothly functioning financial markets. It is to that issue that this chapter turns first.

### THE BEHAVIOR OF EXCHANGE RATES

Since the inception of floating exchange rates in the early 1970s, the nominal values of many currencies have swung widely. As indicated by the U.S. Federal Reserve Board staff index, between the beginning of 1970 and the end of 1979 the dollar declined 29 percent in value against a trade-weighted basket of the currencies of 10 major industrial countries. The deutsche mark rose 78 percent on a trade-

weighted basis during this period, while the currencies of many other nations also moved substantially relative to those of their trading partners. In the third quarter of 1980 the dollar turned around, rising 83 percent in value until the first quarter of 1985. Since then it has again declined, returning approximately to its 1981 level.

These dramatic changes have been the subject of much discussion and investigation. Major issues include the causes of the swings, their implications for the U.S. competitive position in world markets, their effects on trade balances, and the question of whether the regime of flexible exchange rates has well served the increasingly complex system of international trade in goods and assets.

#### THE PURCHASING POWER OF THE DOLLAR

A rise in the nominal value of the dollar does not necessarily mean that the dollar can buy more foreign goods. For example, if the dollar's rise is accompanied by a foreign inflation of equal magnitude, each dollar buys more of the foreign currency but no more of the foreign goods than before. Alternatively, if the dollar's appreciation is matched by a decline in the U.S. price level while the foreign price level remains unchanged, the rise in the value of the dollar signals an increased power of the dollar to purchase foreign goods, but not relative to the increased power of the dollar to purchase U.S. goods.

A broad measure of the dollar's relative purchasing power abroad can be derived from dividing the number of foreign goods that a dollar can buy by the number of U.S. goods that a dollar can buy, or equivalently by dividing the product of the U.S. price level times the foreign exchange value of the dollar by the foreign price level. A rise in that measure, called the real or inflation-adjusted exchange rate, would signal that a dollar could purchase more foreign goods relative to domestic goods than before. Alternatively, it would imply either that foreign inflation had not proceeded as quickly as the dollar's value rose, or that the pace of U.S. inflation exceeded the appreciation of the dollar. In either case, the real value of the dollar would rise—that is, the dollar's purchasing power abroad relative to its purchasing power in the United States would increase. Real exchange rates can change for a variety of reasons, including country-specific changes in productivity, thrift, taxation, and the efficient use of resources.

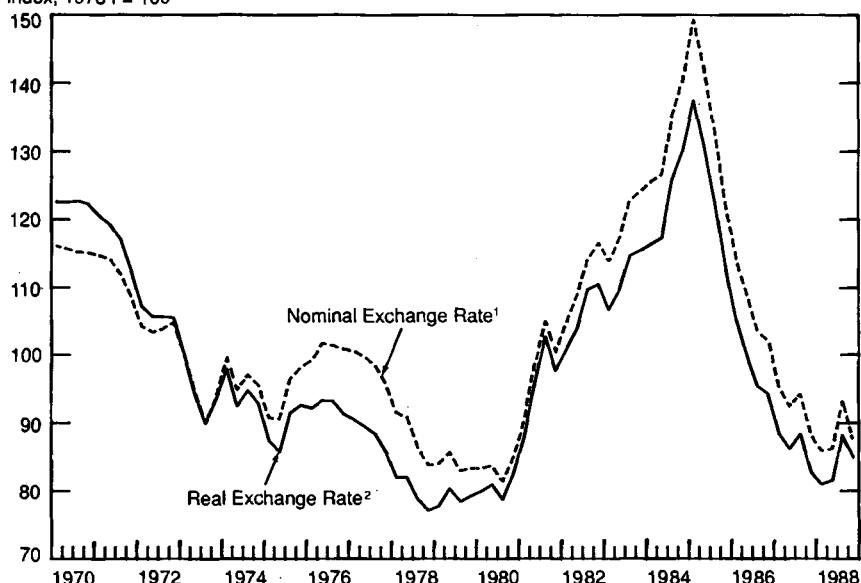
Chart 3-1 shows indexes of the nominal and real exchange rates of the U.S. dollar in terms of trade-weighted baskets of foreign currencies and consumer price indexes of 10 major industrial countries. The real value of the dollar has closely paralleled its nominal value, suggesting that, at least in the short run, the forces giving rise to exchange-rate movements are not matched by offsetting changes in in-

flation, either here or abroad. For example, the dollar's 20 percent decline from the second quarter of 1976 until the third quarter of 1980 was accompanied by a 16 percent decline in its real value, or purchasing power.

Chart 3-1

Nominal and Real Exchange Rates

Index, 1973 I = 100



<sup>1</sup>Multilateral trade-weighted value of the dollar against the currencies of the other G-10 countries plus Switzerland.

<sup>2</sup>Product of the nominal exchange rate times the U.S. consumer price index divided by trade-weighted consumer prices of the other G-10 countries plus Switzerland.

Source: Board of Governors of the Federal Reserve System.

Although exchange-rate movements have not tended to be perfectly offset by changes in domestic or foreign price levels during the recent floating rate experience, exchange rates do respond to the relative price changes of the countries in question. There is no reason for bilateral exchange rates to reflect exactly all price level movements. The broad pattern of relative inflation across countries tends, however, to influence the long-run behavior of exchange rates.

Chart 3-2 shows indexes of relative price levels and nominal bilateral exchange rates for three major U.S. trading partners: Japan, West Germany, and the United Kingdom. In each case, relative price levels are measured by an index of the ratio of the implicit deflator of foreign gross domestic product (GDP) or gross national product (GNP) to the U.S. price level. The exchange rates and price ratios for

each individual country are indexed to equal each other in 1973, the starting point of the flexible exchange-rate regime. Although the units on the vertical axis are arbitrary, upward (downward) movements of the price ratios reflect rapid (slow) foreign inflations relative to that of the United States. Upward movements of the exchange rate reflect increases in the nominal value of the dollar, and vice versa.

The chart shows that, although exchange rates are more volatile than relative price levels, exchange rates tend in the longer run to fluctuate roughly around the ratio of the price levels. Shifts toward relatively rapid inflation in the United States raise U.S. prices relative to prices abroad and tend to be accompanied by a declining dollar. Slowdowns in U.S. inflation rates relative to those abroad tend to be met with dollar appreciation, as are periods of relatively rapid inflation abroad.

There is no reason to expect bilateral purchasing power parity—that is, to expect exchange rates and the ratios of the price levels of the paired countries to move together at all times. As can be seen in the chart, the relationship is far from exact. In the short run, ratios of price levels may not determine the exchange rate. This lack of concordance may be partly because a substantial share of goods and services is not internationally traded. In addition, it may be partly because exchange rates, as the relative prices of two assets, reflect the market's expectations about future relative inflations more rapidly than current price levels of goods and services respond to these pressures. The pronounced short-run deviations from purchasing power parity between the United States and its trading partners correspond to changes in the real exchange rate, which reflect a variety of influences.

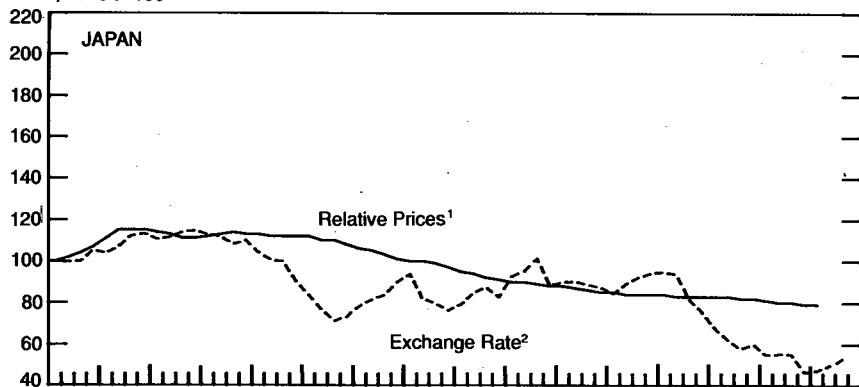
Changes in the real value of the dollar have no single cause. Changes in relative productivity, in relative thrift, efficiency, and risk make domestic assets more or less valuable. Changes in tax rates also alter the after-tax returns on assets. Market participants compare the expected, risk-adjusted after-tax real returns available all over the world. If expected risk-adjusted real returns rise abroad relative to the expected returns at home, demand for foreign assets increases until the expected real returns reach equality. The shifting of demand from one country's assets to another's entails shifts in the demands for the domestic and foreign currencies used to purchase the assets. The exchange rate adjusts to these changes in demand as in any other open market.

Any government policies that influence the price level, growth rates, or interest rates will affect exchange rates. Incentive-based fiscal policy, which affects a country's standard of living or alters the incentive to invest, will be reflected in exchange-rate movements.

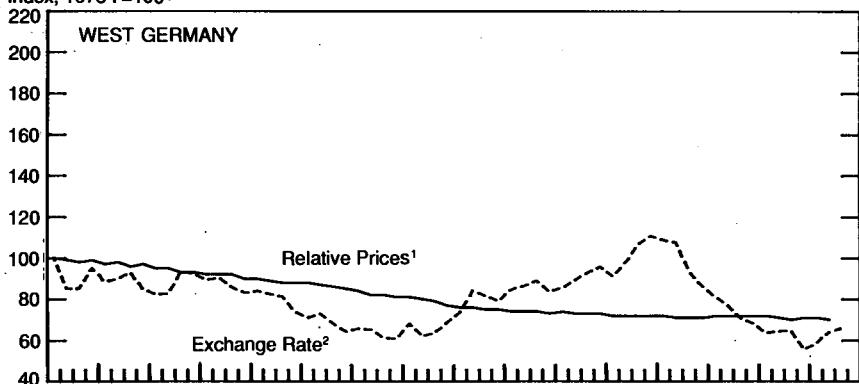
Chart 3-2

## Exchange Rates and Relative Prices

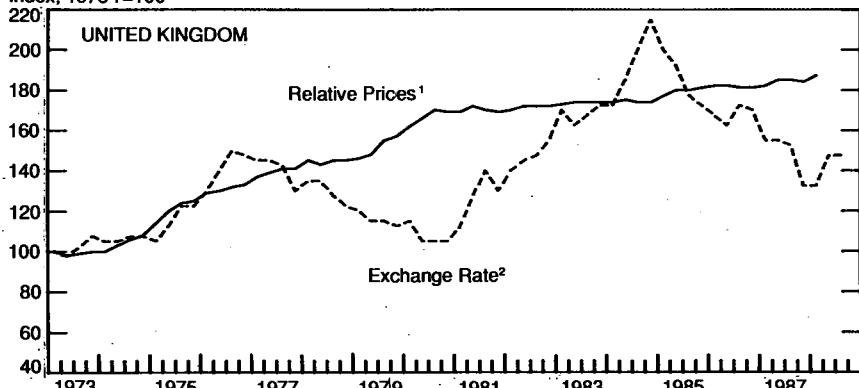
Index, 1973 I=100



Index, 1973 I=100.



Index, 1973 I=100



<sup>1</sup>Ratio of GNP/implicit price deflator for Japan and West Germany (GDP implicit price deflator for United Kingdom) to U.S. GNP implicit price deflator.

<sup>2</sup>Foreign exchange value of the dollar.

Sources: Department of Commerce, International Monetary Fund, and Council of Economic Advisers.

Moreover, changes in government purchases relative to GNP may also induce relative price and real exchange-rate adjustments.

Influences that can lead to a decline in the value of the dollar include a rise in the rate of growth of the U.S. money supply relative to U.S. output, or a fall in the rate of growth of the foreign money supply relative to foreign output. Differences in these rates of change result in eventual declines in the rate of foreign inflation relative to that in the United States. The expectation of that fall in relative foreign inflation can trigger immediate movement of the exchange rate, as market participants attempt to shift from dollar-valued to foreign-valued assets. The decline in relative foreign interest rates, reflecting the market's reassessment of the relatively lower foreign inflation, reinforces the relative desirability of holding foreign currency by reducing the interest earned abroad that is forgone by holding money.

Although substantial evidence confirms the persistence of deviations from purchasing power parity, the tendency of bilateral exchange rates to return to the relative price ratios over long periods may indicate the presence of long-run market forces to return to approximate purchasing power parity. Because many of the goods and services whose prices are averaged in the consumer price indexes are not directly traded internationally (for example, many personal services and housing), some of the delay may reflect the time it takes for travelers and immigrants to shift their demands to the countries with lower relative prices. Given the length of time that is apparently involved, an alternative explanation is that by giving rise to shifting demand, large deviations from purchasing power parity pressure governments to revise their economic policies in the direction of long-run parity between the price levels. These policies include monetary and fiscal policies, as well as changes in incentive-based measures such as tax rates.

Under a system of floating exchange rates, U.S. policies alone are not the only determinants of the value of the dollar. The experiences and policies of other nations—the rates of growth of their real output, money supplies, tax rates, and interest rates—affect the value of the dollar as much as U.S. policies do. The United States can help to keep the foreign exchange value of the dollar stable by controlling its own inflation, but this approach will work only to the extent that U.S. trading partners pursue similar policies. Four historical examples of these principles are worth examining, and can offer the opportunity for some insight about the floating exchange-rate system and exchange-rate stability.

## PEGGED AND FLEXIBLE EXCHANGE RATES: RECENT HISTORICAL EXPERIENCES

The broad features of the experience of the past 20 years tell much about exchange rates. This period breaks up logically into two separate subperiods. The first, beginning in the middle 1960s and ending in 1973, covers the demise of the Bretton Woods regime of pegged but adjustable exchange rates. The second covers the flexible exchange-rate regime, focusing on the wide swings in the value of the dollar.

### *The Foundering of the Bretton Woods System*

Toward the end of the 1960s, pressures built that led ultimately to the breakdown of the Bretton Woods regime of pegged but adjustable exchange rates. In 1967, money growth picked up sharply relative to output. As discussed in Chapter 1, the increase reflected the combined pressures of U.S. Government expenditure for the Great Society and the Vietnam war and the operating rules of Federal Reserve policy—particularly interest rate targeting. The result was U.S. inflation. In addition, under the structure of the pegged exchange-rate regime, the excess money flowed abroad, raising foreign money stocks and price levels.

Both because of the rules of the Bretton Woods Agreement and the reputation the United States had acquired in steadfastly maintaining those rules during the postwar period, foreign countries continued to treat the U.S. dollar as a reserve currency at the historical par value of \$35 per troy ounce of gold. Moreover, many countries were reluctant to see the Bretton Woods system change. Foreign central banks accepted the extra dollars at par value even though the fractional gold reserves behind each dollar had declined.

In response to the ensuing U.S. balance of payments deficits, the United States intensified its capital controls. Differing real growth rates throughout the world in the early postwar period had already contributed to pressure on the dollar. As early as 1963, the United States had imposed the interest equalization tax on securities and long-term bank loans sold in U.S. markets by developed countries (except Canada). In 1965 additional controls were imposed on capital flows from banks and financial institutions, and in 1968, the United States made mandatory controls on direct investment abroad that had previously been voluntary. These measures distorted investment incentives and did not address the source of the problem.

In 1968 the U.S. balance of payments deficit worsened and by 1969 U.S. official reserve holdings were substantially reduced. As citizens of foreign countries turned in their dollars to their own cen-

tral banks, the foreign countries further increased their own money supplies, increasing inflation overseas. International pressure on the United States to change its monetary policy built up. The threat to tender the dollars against the insufficient supply of U.S. gold made the pressure credible. On August 15, 1971, President Nixon suspended the right of foreign central banks to convert the dollar into gold. The system established at Bretton Woods ended.

In an effort to stem the continued domestic inflation and capital outflows without addressing the rapid growth in money relative to output that was their fundamental cause, President Nixon simultaneously imposed wage and price controls and a 10 percent import surcharge when he suspended gold convertibility. These stopgap measures decreased market efficiency by distorting relative prices, and further contributed to the difficulty of economic adjustment. New exchange-rate parities were set at levels that were determined by the Smithsonian Agreement in December 1971. The plunge in the dollar's value halted, but that arrangement lasted little more than a year. By then it had become abundantly clear that the U.S. balance of payments deficits were attributable to U.S. economic policies that were fundamentally inconsistent with the fixed exchange-rate system and the maintenance of low inflation. In March 1973 the monetary authorities of the major industrial nations decided to let their currencies float freely against the dollar, either individually or in currency groups such as the European "snake." Between March and September 1973, the dollar fell by 5 percent on a trade-weighted basis, reflecting in part the accumulated pressures from 6 years of excessive growth of money relative to output.

The Bretton Woods system went far in the postwar years in the direction of its goals of both price and exchange-rate stability. In the course of time, however, it achieved neither aim. The system relied on the conduct of U.S. monetary policy, but provided insufficient incentive to carry out policies consistent with the maintenance of the goals of the regime. When the United States failed to conduct its monetary policy in a manner consistent with price stability, while several key currency countries were reluctant to accept inflation rates commensurate with continued exchange-rate stability, the system was unable to withstand the pressures that built up. Given the conduct of U.S. monetary policy, the inherent design of the system forced foreigners to choose between price and exchange-rate stability. They chose to let exchange rates be determined in international markets.

The Bretton Woods system was one of pegged but adjustable exchange rates. From its inception it was subject to currency revaluations and devaluations. In the 1960s the system came to be regarded as crisis prone, reflecting the increasing frequency and magnitude

of exchange-rate changes as countries adopted and persisted in uncoordinated economic policies. Changes in the rate of growth of one country's money supply relative to its output, unmatched by corresponding changes abroad, caused excess capital to flow out of the country that incurred relatively rapid monetary growth. When these changes were not reversed, they resulted either in a balance of payments crisis, with a decline in the international reserves held by the authorities of the country inducing the relatively rapid monetary growth, or in a currency devaluation to staunch that decline.

### *The Flexible Exchange-Rate Regime*

Under a completely flexible exchange-rate regime, changes in the international reserve holdings of central banks are obviated, because a currency's value adjusts to the forces of supply and demand in international markets. The chief distinction between flexible and fixed exchange-rate systems lies in the institutional tradeoff between exchange-rate movements and international reserve movements. What matters most is not the system, but the stock of money relative to domestic output. The money stock changes as a result of monetary policy, and output may change as a result of such real factors as changes in productivity or demographic changes affecting thrift or labor force participation. These are the main determinants of the expected course of the exchange rate and the long-term movements of the price level.

Under a flexible exchange-rate system the monetary authorities may intervene to prevent the currency from declining in value. In order to succeed, they must necessarily stabilize the rate of money growth relative to the growth of output. If intervention reduces central bank holdings of both international reserves and money in order to change market anticipations about the thrust of monetary policy, a central bank can change the exchange rate. The essential element is a credible change in the growth of money relative to output. In contrast, sterilized exchange-market intervention, which changes the mix of international reserves and domestic assets held by central banks without changing the stocks of money relative to output at home and abroad, has no lasting effect on exchange rates. This process changes the distribution of assets in government and private portfolios. The main effect is to change who bears the risk of fluctuations in foreign or domestic asset prices.

Three changes in the value of the dollar characterized the experience of flexible exchange rates: the decline in the dollar's value during the middle to late 1970s, its appreciation until March 1985, and its subsequent depreciation. The dollar depreciation in the second half of the 1970s reflected the continuation of the rapid U.S. monetary growth relative to output begun in the late 1960s, com-

pounded by increasing reliance on policies that attempted to fine-tune the economy. The stop-go pattern of policy became more pronounced in early 1973, when the rate of growth of M2 fell sharply. The oil price rise later that year was met with direct controls on the domestic price of oil. These actions ultimately produced a slowing of the rate of price increase and a halt to the dollar's decline, but they exacerbated the economy's difficulty in adjusting to the reduction in income implied by the change in international oil prices. The ensuing recession of 1974-75 led to increasing efforts to boost employment and output by expanding monetary growth and reducing taxes. As monetary growth in the United States accelerated in an effort to lean against the recessionary tide, U.S. inflation soared. At the same time, several major U.S. trading partners, most notably West Germany and Japan, allowed domestic oil prices to adjust to world levels and consciously restrained their money supplies to focus on the longer run. The value of the dollar plummeted, dropping 16 percent between the first quarters of 1976 and 1980, the period of the highest postwar U.S. inflation.

During this period the Carter Administration had proposed a policy known as the "locomotive theory." Foreign governments were expected to adopt monetary and fiscal policies consistent with the expansionary policies of the United States in an effort to increase aggregate demand. Many foreign countries, fearing inflation, were reluctant to stimulate their economies in this manner. The episode ended with continued domestic inflation and a decline in the value of the dollar without achieving the desired outcome.

When in 1980 Ronald Reagan cast his pre-election support to the new regime of monetary control, the expectation of pronounced reduction in inflation resulted in a turnaround in the value of the dollar. The new U.S. tax incentives introduced in the Economic Recovery Tax Act of 1981 (ERTA) encouraged domestic investment and capital accumulation and raised expected after-tax real rates of return. Productivity increases in the United States resulted in an appreciation of the real value of the dollar, as the dollar's purchasing power increased relative to that of the currencies of many U.S. trading partners. Capital inflows to the United States responded with renewed vigor to the higher anticipated U.S. real after-tax rates of return. These higher expected real rates of return were reflected in real and market interest rates. The shifting of assets toward the United States reinforced the rise in the nominal exchange rate begun in 1980.

The resulting unprecedented rise in the dollar's value, as can be seen in Charts 3-1 and 3-2, continued until the first quarter of 1985; that is, throughout approximately the same period that the U.S. eco-

nomic recovery, revised growth incentives, monetary restraint, and reduced inflation led similar advances abroad. During this period, the dollar rose in value against all major U.S. industrial trading partners, including the United Kingdom, whose economic recovery began earlier but whose reduction in inflation was unable to match this Nation's, and West Germany, which continued to exercise its traditional monetary restraint but whose economic growth rate was usually below that of the United States.

In late 1984 U.S. monetary policy eased markedly. At the same time, widespread anti-inflation policies abroad accelerated. In March 1985 the dollar began to decline. In the 7 months between the dollar's peak and the Plaza Agreement of September 1985, which announced the intentions of the G-5 countries (France, Japan, the United Kingdom, the United States, and West Germany) to engage in coordinated economic policies and to regard some further dollar decline as appropriate, the trade-weighted value of the dollar declined 12 percent. The U.S. monetary expansion continued through the end of 1986, contributing to the continued decline in the dollar's value.

Changes in tax rates at home and abroad reinforced the decline in the dollar's value. Foreign marginal tax rates were lowered as other nations began to emulate the successful U.S. policies of the early 1980s. At the same time, the Tax Reform Act of 1986 reduced the relative incentive of U.S. citizens to invest in the United States by raising the effective tax rate on capital investments. As discussed in Chapter 2, it also provided more uniform treatment of alternative types of investment purchases. The elimination of the deductibility of nonmortgage interest on personal income tax returns encouraged some shifting of private spending away from consumer durables and toward business investment. Notwithstanding these mitigating forces, the real value of the dollar fell until early 1988.

Compared with the Bretton Woods system of pegged but adjustable exchange rates, the system of flexible exchange rates has functioned smoothly. The upheavals of the 1970s and 1980s, including two large oil price shocks, sharp changes in the relative prices of other commodities, and rapid relative movements in the patterns of international monetary and output growths of the period, were registered in wide swings in exchange rates. Crises in international reserves and speculative attacks in anticipation of dollar devaluations were nevertheless avoided. The market's depreciation of the dollar during the 1970s was a symptom of the rapid domestic inflation. As discussed in Chapter 1, it was also a symptom of the market's uncertainty about the future stance of U.S. monetary policy, given the stop-go reactions of the Federal Reserve to the events of the period. During the 1980s the market's assessment of real factors, such as

changes in relative output growth, productivity, and marginal tax rates, have played a dominant part in determining exchange rates.

A frequent comment is that real exchange rates have been more variable in the fluctuating exchange-rate period than under the Bretton Woods regime. Some observers interpret the increased variability as evidence that the international economy has become less stable. This conclusion is unwarranted. Changes in real exchange rates are the means by which the economy adjusts to changes affecting demand and output. Increased variability of real exchange rates is entirely consistent with greater economic stability and reduced fluctuations in output, employment, and the price level. Studies of variability in output and prices under fixed and flexible exchange rates suggest that despite the oil shocks, inflation, and then disinflation of the 1970s and 1980s, leading countries have reduced variability of prices and output in the flexible exchange-rate era.

#### THE DOLLAR AND COMPETITIVENESS

Wide swings in the value of the dollar in excess of U.S. and foreign inflation differentials have had pronounced effects on the cost competitiveness of American manufacturers. Dollar depreciation during the late 1970s raised the dollar price of imports relative to other domestic prices and temporarily shielded many trade-sensitive industries from foreign competition. The 10 percent real depreciation of the dollar between the first quarter of 1977 and the second quarter of 1980 allowed some manufacturing industries to remain temporarily profitable despite substantial increases in real wages and relatively slow productivity growth. This temporary insulation from foreign competition that dollar depreciation provided left many trade-sensitive industries unprepared to deal with heightened competition in the 1980s.

The unprecedented surge in the dollar's value during the first half of this decade resulted in a marked loss in the international cost competitiveness of U.S. industries. This loss occurred because foreign exporters to the United States could—and did—charge a lower dollar price to cover the same level of home currency costs when the dollar appreciated. Between the second quarter of 1980 and the first quarter of 1985, a period when the inflation-adjusted dollar price of a trade-weighted basket of currencies of 10 major industrial countries fell by some 37 percent, the price of nonpetroleum imports relative to U.S. producer prices declined by 18 percent. Although the aggregate data appear to suggest that foreign producers took advantage of the surge in the dollar to boost both sales and profits, more can be learned by examining the dollar prices of individual categories of imported goods.

Table 3-1 shows price indexes for several categories of U.S. non-petroleum imports divided by the producer price index for finished goods. The indexes are relative to a base of 100 in the second quarter of 1980. Between the second quarter of 1980 and the first quarter of 1985, the dollar price of industrial supplies and materials imports, relative to producer prices for finished goods, declined by 28 percent, while the relative prices of capital goods (excluding autos) and consumer durables imports declined by 26 and 19 percent, respectively. By contrast, the relative price of consumer nondurables imports fell by only 10 percent, while the relative price of auto imports rose by 11 percent. This divergence in relative import prices reflects several factors, including the weakness in world commodity prices during this period, technological advance in the production of capital goods, and, as discussed in Chapter 4, the imposition of nontariff barriers in the U.S. auto and textile industries. Apart from the impact of nontariff barriers on the dollar prices of autos and textiles, however, it would appear that much of the real appreciation of the dollar during the first half of this decade was in fact passed through to the dollar prices of imports.

TABLE 3-1.—*The Dollar and Import Prices Since 1980*  
[1980 II = 100]

Item	1985 I	1988 III
Dollar price of foreign exchange <sup>1</sup> .....	63	84
Nonpetroleum import prices <sup>2</sup> .....	82	97
Industrial supplies and materials .....	72	83
Capital goods except automobiles .....	74	92
Consumer durables .....	81	99
Consumer nondurables .....	90	109
Automobiles .....	111	133

<sup>1</sup> Dollar price of the trade-weighted currencies of the foreign G-10 countries plus Switzerland adjusted for changes in consumer prices in the foreign countries and the United States.

<sup>2</sup> Ratio of the GNP fixed-weighted price index to the producer price index for finished goods.

Sources: Department of Commerce, Department of Labor, International Monetary Fund, and Council of Economic Advisers.

Because of the passthrough of the dollar's real appreciation to dollar import prices, U.S. manufacturers lost sales to their foreign competitors. This loss happened despite the fact that unit labor costs were rising more slowly in the United States than abroad, the result of exceptional productivity gains and modest wage increases in U.S. manufacturing. Specifically, unit labor costs in U.S. manufacturing rose only 9 percent during the first half of this decade (and have actually fallen since 1982) while, in national currency terms, average unit costs in the nine largest foreign industrial countries rose nearly 18 percent. When measured in dollars, however, unit labor costs in

these nine other industrial economies fell just over 13 percent. Instead of experiencing a solid 9 (18-9) percent improvement in international cost competitiveness between 1980 and 1985, the surge in the value of the dollar brought about a 22 (-13-9) percent decline in relative cost competitiveness of U.S. manufacturers, measured at current exchange rates. This decline was in line with the relative price declines of capital goods and consumer durables.

The real depreciation of the dollar that has occurred since March 1985 has, in conjunction with continued rapid productivity growth and modest wage increases, restored the international cost competitiveness of many U.S. manufacturers. In particular, relative unit labor costs measured in dollar terms are now lower than they were in 1980. Although dollar import prices responded with a longer-than-expected lag to the real depreciation of the dollar—actually continuing to fall on average until the fourth quarter of 1986—manufacturing output and exports rose in 1987 and 1988 as higher prices for foreign goods shifted domestic and foreign demand toward U.S. goods.

As can be seen in the table, between the first quarter of 1985 and the third quarter of 1988 the inflation-adjusted dollar price of foreign exchange has risen 33 percent—that is, to 84 percent of its base in the second quarter of 1980. The dollar price of imported capital goods relative to the producer price index for finished goods rose 24 percent, reaching a level last recorded in the first quarter of 1981. Similarly, the relative dollar price of imported consumer durables (excluding autos) has jumped 22 percent, and is now about the same as in 1980. Reflecting the weaker dollar and, perhaps, the voluntary export restraints on Japanese cars and the quotas on textile imports, the relative dollar prices of imported automobiles and consumer nondurables have soared, and are now respectively 33 and 9 percent higher than in 1980. By contrast, the relative dollar price of industrial supplies and materials has risen 15 percent since the first quarter of 1985, reflecting the modest but incomplete recovery in commodity prices that has occurred in recent years. In short, the relative dollar prices of nonpetroleum imports have risen substantially in response to the real depreciation of the dollar and, excepting industrial supplies and materials, are currently near or above their levels in the second quarter of 1980.

To summarize, the real appreciation of the dollar, and not sagging productivity growth or other commonly alleged causes, was the primary source of the deterioration of the international cost competitiveness of U.S. manufacturers during the first half of this decade. Moreover, cost competitiveness has been restored for many industries in line with the dollar's depreciation. The jump in dollar import

prices discussed above has had a modest, one-time effect on the price level; but, contrary to the predictions of some commentators, dollar depreciation has not set off another round of accelerating inflation. This effect is not surprising because, in the context of appropriate monetary policy, real exchange-rate changes represent relative price changes that can ultimately change the price level, but not the economy's long-run inflation rate.

These observations do not imply that the United States can, or should, rely solely on exchange-rate movements to improve further its competitive position. Real exchange-rate depreciation can increase competitiveness in the intermediate run by making imports more expensive, but at the cost of slower domestic real income growth than would otherwise result. In contrast, policies to promote more rapid productivity growth should be actively pursued. Faster productivity growth will boost both international competitiveness and real standards of living.

#### **INTERNATIONAL POLICY COORDINATION UNDER FLEXIBLE EXCHANGE RATES**

Economic theory and the recent exchange-rate history both suggest that monetary and fiscal policies, through their effects on inflation, inflationary expectations, and real output, are important influences on nominal exchange rates. To achieve a stable value of the dollar requires not only predictable and restrained monetary policy along with sustainable real growth in the United States, but also similar economic conditions abroad. To the extent that wide swings in the value of the dollar are appropriate market responses to changes in these underlying international economic conditions, exchange rates can serve as signals of improved prospects or deepening problems in these underlying factors. Under a fixed exchange-rate regime, data on international reserve flows have to serve this same role. Although exchange rates are not perfect signals, they are generally more informative indicators than quantities, such as reserve flows.

Disturbed by the recent large exchange-rate swings, officials from many countries and other observers have expressed their desire for greater exchange-rate stability. They have sought to find ways to increase the coordination of sovereign policies in order to help stabilize exchange rates. As shown in many studies, however, including those commissioned by the Versailles Economic Summit in 1982, direct sterilized exchange-market intervention has proved to be of limited value in reducing exchange-rate variability.

Some groups of countries have tried an adjustable peg—notably the European Monetary System (EMS), which ties several currencies together but allows some variability within pre-arranged bands. This

system requires either a common monetary policy to keep inflation similar or strict capital controls to limit precipitate intercountry asset flows. Otherwise countries must accept periodic adjustment in their exchange rates. Smaller countries tend to fix their exchange rates to those of larger developed nations. As is evidenced by repeated realignments within the EMS and repeated devaluations of the currencies of some developing nations, an adjustable peg system contains all of the inherent drawbacks of modern fixed exchange-rate regimes. The inability to enforce compatible sovereign monetary and fiscal policies is a key deficiency of these systems.

A promising approach for increasing the stability of exchange rates focuses on the coordination of domestic policies toward inflation and economic growth. Under this approach, the leading industrial countries adopt mutually compatible economic policies to achieve sustained growth with low inflation. Direct exchange-rate coordination is not required to achieve these principal benefits.

If fully enacted, plans for a single internal market in the European Community by 1992 could contribute to increased stability of exchange rates within Europe by encouraging international competition, which will help to keep domestic policies in line across countries. Some European leaders have suggested that the 1992 reforms be followed by reforms leading toward the use of a single European currency. If widely used in place of existing monies, a common currency would require a unification of monetary policies. A common currency is not necessary, however, to achieve the benefits of the sweeping reductions of economic barriers proposed for Europe in 1992.

No country acting alone can achieve both price and exchange-rate stability. Larger countries that achieve domestic price stability provide a public good: smaller countries can then fix their exchange rates to those of the larger countries and achieve greater price and exchange-rate stability. For the larger countries, disturbances to exchange rates caused by differences in actual or anticipated inflation can also be reduced, and exchange-rate stability can increase. A policy of this kind does not require elaborate control procedures. The benefits can be achieved if each of the major countries adjusts its money growth rate to be consistent with sustained growth at stable prices in its domestic economy.

This arrangement provides the opportunity for countries to choose increased price and exchange-rate stability. Bretton Woods produced this result to a degree and for a time, and the prosperity of the period showed that benefit is to be had. Nevertheless, the inability of the Bretton Woods system to weather the strains of changing sovereign goals suggests that an overarching system of pegged but adjust-

able exchange rates will not serve the world as a whole as well as the current system of free choice in forming exchange-rate arrangements.

Productive policy cooperation among countries includes not only consistent monetary and fiscal policies, but also vigilant reduction of market rigidities and barriers to trade in both goods and financial assets. Recent discussions among developed countries with regard to the plans for Europe in 1992 and at the Organization for Economic Cooperation and Development (OECD) indicate increasing regard for reducing the institutional, policy-supported, and structural rigidities that slow or even prevent market adjustments to a rapidly changing world. Postwar institutions such as the General Agreement on Tariffs and Trade (GATT) and the International Monetary Fund (IMF) have also devoted themselves to reducing such market imperfections. In the case of GATT, direct reductions in tariffs as well as in import and export quotas have expanded trading opportunities throughout the world and have increased the communication among trading nations. The IMF, whose original role as defined at Bretton Woods was to finance temporary payments imbalances under the regime of fixed exchange rates, has taken a strong stance in favor of market and trade liberalizations for countries to which it has extended loans. Progress on these fronts has been made, though much more remains to be achieved.

### EXPORTS, IMPORTS, AND TRADE BALANCES

During the 1980s the United States experienced trade deficits relative to output of a persistence and magnitude that have not been seen since the past century. The increasing external deficits of the 1980s were not associated with rapid inflation, as were the trade deficits of the late 1970s; nor did they weaken the economy or portend the dire economic consequences that some feared. On the contrary, the trade deficits of the 1980s reflected the relative strength of the U.S. expansion. Both real exports and real imports of goods and services have risen on average since the last quarter of 1982. The excess of imports over exports during that period provided U.S. citizens with additional consumption and investment goods to satisfy the demand generated by relatively rapid U.S. real growth. Until early 1985 that effect was reinforced by the strong dollar, which lowered the relative price of these imports.

External trade deficits necessarily imply inflows of capital. Whether the ultimate consequences of these inflows benefit the United States depends on how the resources are used and on whether there is a bias toward consumption in the United States. Such a bias could arise as a result of distortions inherent in the tax system, in regulation, or

in government spending. Government spending and transfers shift toward consumption some resources that the private sector might otherwise invest. Government spending financed by borrowing absorbs private savings unless the private sector acts to offset the savings reduction. An understanding of the causes and consequences of the trade deficits of the 1980s begins with their definitions.

#### MEASURES AND MEANINGS OF EXTERNAL BALANCES

Trade and current account balances convey information about exports and imports, net international borrowing, and net international flows of capital. In order to disentangle this information, it is helpful to examine the meanings of the external balances on which the United States collects data.

When the United States imports more goods than it exports, it experiences a merchandise trade deficit. Because the balance on merchandise trade is restricted to trade in physical goods, it is too narrow a measure of the many things traded internationally to be a reliable signal about U.S. trade. Adding U.S. exports and imports of services (including investment income) produces net exports of goods and services. Because the United States tended in the past to export more services than it imported, the recent deficit on net exports tended to be somewhat smaller than that of merchandise trade. The net service balance has declined recently, so that the difference between the merchandise trade and net export balances is smaller than in the past.

The balance on net exports as measured in the national income and product accounts (NIPA) is conceptually similar to but slightly narrower than the balance on goods and services as measured in the international transactions of the Bureau of Economic Analysis (BEA). The balance on net exports excludes interest payments and receipts on government liabilities; but these investment earnings are included in BEA's balance on goods and services. (The NIPA and BEA balances also differ in the way they account for certain other items such as gold, capital gains and losses, and data revisions.) A still broader measure of the external trade balance is BEA's current account, which is derived by adding net international remittances, pensions, and other unilateral transfers to the balance on goods and services. Because the United States tends to transfer more abroad than foreigners transfer to the United States, the current account deficit exceeds the deficit on net exports. The balance on the current account is the most inclusive and reliable measure of the value of the net flow of U.S. sales to foreigners.

By measuring the balance between exports and imports of goods and services in constant 1982 dollars, it is possible to determine real

net exports. This measure is the one most closely associated with real GNP, which reflects real living standards. Because differences between net exports in current and constant dollars reflect changes in the relative price of imports and exports, however, only the relative movements of the balance on real net exports are meaningful. For example, in 1972 the difference between exports and imports in current dollars was positive, implying a surplus on real net exports—that is, net exports in 1972 dollars. Between 1972 and 1982 the price of exports went up by a factor of 2.4, while the price of imports more than tripled, owing primarily to the two oil price shocks in the 1970s. Reevaluating 1972 exports and imports in 1982 dollars increases the value of imports by enough more than the value of exports to make 1972 a year of a deficit in real net exports. Conversely, revaluing 1982 net exports in 1972 dollars raises it to an even larger surplus. Given a base year whose prices are chosen to remain constant, measurement can be made of relative increases and decreases of the balance on real net exports, but not of whether it is in deficit or surplus.

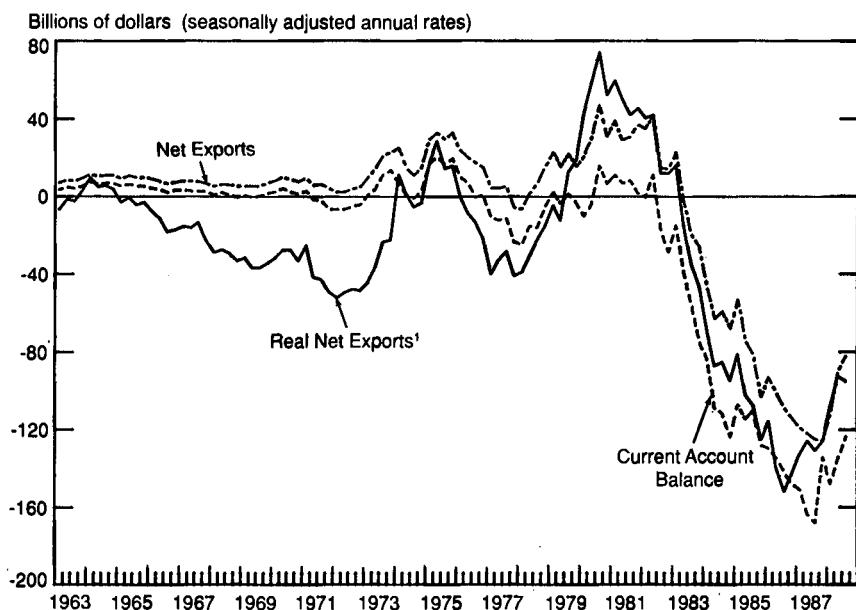
Chart 3-3 depicts the nominal current account as well as net exports in current and constant 1982 dollars since 1963. All three measures of the external balance exhibit broadly similar patterns. Until the second quarter of 1983 all three measures stayed within the ranges exhibited in the previous postwar history. Beginning in 1983, however, all three accounts deteriorated substantially. The deficit on real net exports reached its peak at \$151.8 billion in the third quarter of 1986. Since then it has declined from 4.1 percent of real GNP to 2.3 percent. The deficit on net exports in current dollars reached its peak in the last quarter of 1987, and has since turned around. Since 1983 the deficit on net exports has averaged 1.8 percent of GNP, greater than any deficit experience in this century, but about the same as the average ratio of the post-Civil War deficit on goods and services to output in the years 1869-75.

A deficit in net exports implies several things. First, it implies that total spending by residents of the United States—government and private investment and consumption—is greater than the value of GNP or domestic income. When domestic purchases exceed domestic production, the country imports the excess and runs a deficit on goods and services. Alternatively, it implies that national saving is less than national investment. This result is a direct consequence of national income accounting relationships. Apart from some relatively minor items, the excess of national investment over national savings equals the excess of domestic demand over GNP, and thus the deficit on net exports.

Finally, a deficit in net exports implies that, on net, foreigners are accumulating claims on or reducing liabilities to the United States,

Chart 3-3

## Net Exports and the Current Account Balance



<sup>1</sup> In 1982 dollars.

Source: Department of Commerce.

either in the form of direct investment or acquisition of financial assets (including those of the government). A current account deficit must equal in magnitude the capital account surplus, because in order to purchase current goods and services in excess of those sold, assets must be sold in excess of those purchased. Except for a statistical discrepancy, the current account deficit equals this net capital inflow, which in turn is conceptually similar to net foreign saving.

Under a strictly flexible exchange-rate regime, the exchange rate adjusts until the net payments offered by market participants balance exactly, so that capital account transactions exactly offset those of the current account. If the monetary authorities engage in capital account transactions, as they might under fixed exchange rates or a managed float, a current account deficit must equal in magnitude the surplus on the total capital account, including the value of any net official sales of international reserves.

## THE CURRENT ACCOUNT BALANCE: RECENT HISTORICAL EXPERIENCES

Many factors can lead to net international borrowing, and thus to deficits in the current account. In some cases a current account deficit signals an inherent problem in economic policies or in underlying economic conditions. In other cases a current account deficit reflects a healthy, growing economy where citizens are borrowing in order to invest and consume in anticipation of a robust future. Three recent experiences of current account deficits are instructive on these differences: the first occurred between early 1971 and the end of 1972, the second between mid-1976 and mid-1980, and the last in the period since the third quarter of 1982.

The first of these incidents had its seeds in the late 1960s, as the U.S. dollar creation in excess of amounts consistent with the maintenance of the Bretton Woods Agreement led to dollar outflows that exceeded the amount of dollars willingly held by foreigners and domestic residents. The current account of the United States declined accordingly, leading to the balance of payments deficits and the accumulation of the excess supply of dollars by foreign central banks noted in the previous section. Current account deficits persisted until early 1973, when the dollar was finally allowed to float freely. As can be seen in Chart 3-1, the value of the dollar fell almost without exception throughout the period both in real and nominal terms, while both the balance on real net exports and the current account first declined and then, beginning in 1972, began to increase. When the underlying source of a dollar depreciation is excessive money creation, the current account and the value of the dollar tend to deteriorate together.

The circumstances characterizing the latter 1970s appear to be similar. The rapid U.S. monetary expansion intended to combat the high unemployment resulting from the recession of 1974-75 led simultaneously to higher inflation, a depreciating dollar, and a declining current account. By the middle of 1975 real imports began to soar, and by the end of the next year the current account became negative. The deficits on the current account and real net exports began to shrink in 1978. The inflation-fighting stance adopted by the U.S. monetary authorities in late 1979 helped to halt the deteriorating dollar and the rapid capital outflows of the period. Real exports picked up and real imports slowed. By mid-1980 the current account was in surplus and real net exports were rising briskly. In 1982, however, the current account again fell into deficit, followed shortly by a decline in real net exports.

Unlike the earlier experiences with current account deficits, both of which were associated with excessive money growth relative to output, the experience of the 1980s has been one of incentive-based

fiscal policy and an inflation-fighting stance. The recent decline in the current account actually began in 1980, when the prospect of reduced inflation under the new regime of monetary restraint raised real after-tax rates of return in the United States relative to those abroad. As foreigners began to increase their willingness to hold U.S. assets, the U.S. current account fell. This trend was reinforced by the effects of the Economic Recovery Tax Act of 1981, which reduced corporate taxes, further increasing after-tax real returns in the United States relative to abroad. The dramatic U.S. expansion beginning in 1982 came at a time when many U.S. trading partners were still in the throes of slow growth or recession. The growth of total public and private U.S. demand for consumption and investment goods, based on the strength of the expansion, outstripped the growth of current U.S. output. This increase in relative U.S. demand resulted in growing current account deficits accompanied by voluntary private capital inflows. The rising real value of the dollar amounted to a relative price effect that further reinforced the income effect behind the increased relative demand.

In the past few years, foreign nations have begun to acknowledge and emulate the success of U.S. policies, with the result that, since mid-1987, the external balances have begun to turn around. Foreign tax reductions and monetary restraint have reduced foreign inflations and been accompanied by increases in foreign GNP growth that have in turn increased relative foreign demand. The prospect of reduced trade and structural barriers associated with the 1992 plan for a single European market and the extension of the European Community to include Spain and Portugal have resulted in sharp increases in investment in Europe. Again, the decline of the dollar, which partly reflected these improved foreign conditions, has helped reinforce the improvement in the U.S. current account.

A frequently made claim is that recent U.S. current account deficits are financing a U.S. spending spree that will end in the painful curtailment of future consumption in order to service the debt. This result is possible but not inevitable. The outcome depends on how the resources are used. Borrowed resources enable the United States to increase investment, raising productivity and future output, thus providing the resources to service the debt out of higher future incomes. On the other hand, relatively low U.S. savings and investment rates suggest that much of the inflow of foreign capital is instead being diverted to current consumption. As Chapter 1 showed, however, measured U.S. investment rates are understated relative to those of the rest of the world because education, research and development, and consumer durables, on which U.S. expenditure is relatively high, are excluded from the usual measures of investment. The

encouragement of U.S. investment through tax laws that raise expected after-tax rates of return and make uniform the tax rates on alternative kinds of capital has been a goal and an achievement of this Administration. Raising corporate or marginal income tax rates will discourage further investment and reduce future output, making the servicing of the foreign debt more difficult.

During the 1980s the large U.S. external deficits occurred along with large U.S. Government budget deficits. While the concurrence of these deficits has often been noted, a precise statistical relationship between the two is not expected on theoretical grounds and has not been found. In principle, if the government simply taxes less while borrowing more in order to finance a given amount of government expenditure, the private sector may simultaneously save the difference in anticipation of the higher future taxes necessary to repay the debt, including interest, that the government has incurred. Net borrowing by the United States under these circumstances would not increase if the only factor were a government budget deficit. In practice, government expenditure was not held fixed during the early 1980s; and various distorting tax laws may have discouraged sufficient private saving to offset the effects of the government borrowing. Higher economic growth and the reduced government spending consistent with the Gramm-Rudman-Hollings deficit reduction plan will contribute to higher U.S. saving, and hence to further reductions in the current account deficit, without a tax increase.

### THE CHANGING U.S. NET ASSET POSITION

The negative current accounts of the 1980s have meant annual increases in the net claims foreigners held on the United States. Even though total U.S. holdings of foreign assets have continued to increase on average during the 1980s, foreign ownership of U.S. assets has increased at an even faster pace. As a consequence, the postwar role of the United States as net lender to and investor in the rest of the world diminished during the 1980s. According to official estimates, since 1985 the United States has acquired a position of net indebtedness toward the rest of the world, a position last assumed by the United States in World War I. At the end of 1987, total U.S. assets abroad were recorded at \$1.17 trillion, \$368 billion less than recorded foreign assets in the United States. Although these official estimates may substantially underestimate the true U.S. net asset position, the trend implies a change in the traditional role of the United States as a net lender.

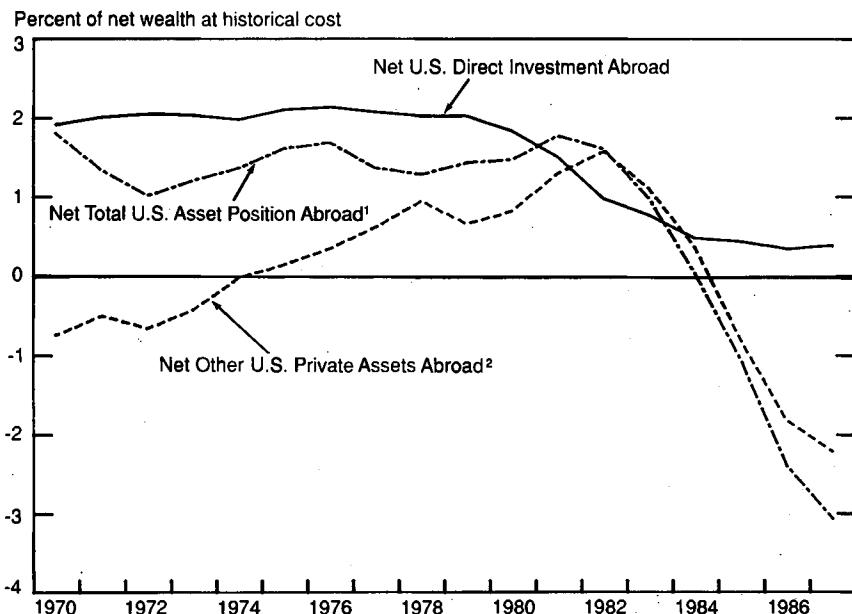
Although measured U.S. net external indebtedness in 1987 represented the largest net nominal amount owed by any single country, it

amounted to only 8.1 percent of GNP. This amount is small compared with U.S. net indebtedness-to-GNP ratios in the latter half of the 19th century. Following the Civil War and again following the period of heavy investment in railroads during the 1880s and 1890s, this ratio reached a full quarter of average annual GNP. Based on estimates produced by the IMF, Canada's net external debt (excluding gold holdings) was 34 percent or more of Canadian GDP throughout the 1980s. In 1987 the service on the gross U.S. debt abroad amounted to less than 2 percent of GNP and was less than U.S. earnings on assets abroad. Even a further increase in net U.S. debt need not be a problem for the United States. By continuing to increase U.S. output, the productive use of resources will keep the U.S. net debt and its servicing from growing too fast relative to GNP. Nevertheless, questions about the causes and consequences of the debt merit examination. It is helpful to begin with definitions and facts.

At the end of 1970 total U.S. assets abroad stood at \$165 billion, 54.7 percent higher than foreign asset holdings here. Total assets include direct investment, other private assets (such as bonds, Treasury bills, bank deposits, and stock), and official assets such as international reserves. These assets had largely been accumulated during the postwar period, as the United States contributed heavily to the rebuilding of Europe and Japan through loans and direct investment. On average, U.S. assets abroad grew somewhat more slowly than foreign assets in the United States during the 1970s. From the end of 1979 to the end of 1987, however, the average annual rate of growth of foreign assets in the United States increased from the 16.2 percent per year of the 1970s to 17.7 percent per year, while the average annual rate of growth of U.S. assets abroad fell from 13.3 to 10.9 percent.

Chart 3-4 shows the total U.S. net asset position abroad and two of its components as a percentage of U.S. wealth net of depreciation. U.S. net wealth consists of the value of government and private tangible assets (including land, structures, inventories, and consumer durables), and net U.S. claims on foreigners (including both net financial assets and net direct investment abroad). Because the net U.S. asset position abroad is available only on a primarily historical-cost basis—that is, excluding changes in asset values attributable to capital gains or losses for many of the assets—net wealth is also computed on an historical-cost basis. The total net U.S. asset position abroad was 1.8 percent of net wealth in 1970. Although U.S. holdings of foreign assets continued to increase on average even relative to U.S. net wealth, the percentage of net wealth represented by foreign asset holdings rose more rapidly. Consequently, by the end of 1987 net foreign assets in the United States amounted to some 3.1 percent of U.S. wealth.

Chart 3-4 U.S. Net Asset Position Abroad as Percent of Net Wealth



<sup>1</sup>Direct investment, other private assets, and official assets.

<sup>2</sup>Nondirect investment.

Sources: Department of Commerce and Board of Governors of the Federal Reserve System.

Several factors caused the reversal of the net asset position of the United States. By the mid-1950s Europe and Japan had recuperated from the war's devastation, reducing the net outflow of capital from the United States. The incentives to use U.S. dollars to finance the purchase of foreign assets created by the arrangements of Bretton Woods were removed with its breakdown in the early 1970s. Increased U.S. private and official lending to developing nations partly offset the contraction in the net U.S. capital outflow to other industrial countries. By the early 1980s, however, debt repayment problems on the part of those developing nations reduced their ability to borrow.

At about the same time U.S. tax laws in the early 1980s made the country a relatively desirable and safe investment for its trading partners, simultaneously attracting private foreign capital into the United States and reducing the relative desirability to Americans of foreign assets. Additionally, beginning in 1982 the robustness of the eco-

nomic expansion in the United States led to an increased U.S. demand for goods and durables for consumption and investment purposes. The result of these forces was that the capital account deficits in the 1960s gave way to capital account surpluses in the 1980s, with a concomitant annual decline in the net lending position of the United States.

As can be seen in Chart 3-4, U.S. direct investment abroad continues to exceed foreign direct investment in the United States. In the early 1980s, however, U.S. direct investment abroad declined slightly, while foreign direct investment in the United States continued to increase rapidly, resulting in a decline in the U.S. net investment abroad to 0.4 percent of national net wealth in 1987. The net capital inflow was responding to the rise in the relative U.S. after-tax real rate of return experienced in the early 1980s.

The most variable component of the U.S. net asset position has been that of other private assets, which include financial instruments but exclude direct investment. During the 1980s private foreign acquisition of U.S. financial assets, particularly U.S. Treasury bills, has outpaced even the fairly rapid increase in private American holdings of foreign nondirect investment. A slowdown in private U.S. asset acquisition abroad between 1982 and 1984 further contributed to the decline in the net position. These private asset flows again reflect the increase in expected U.S. after-tax rates of return, as well as the relatively low risk associated with U.S. Treasury assets, including the reduced risk of U.S. inflation during the 1980s.

The figures presented in Chart 3-4 and above substantially underestimate the U.S. asset position relative to the foreign position. Because direct investment is valued at historical cost, the increased market value of older assets is not taken into account. American assets abroad are of a relatively older average vintage than foreign assets here, resulting in an estimate that undervalues the net U.S. asset position. Moreover, the current definition of the U.S. asset position counts official holdings of gold as claims on foreigners, but values the gold at the official price of \$42.22 per troy ounce. Revaluing official gold holdings of the United States in 1987 at \$400 per troy ounce reduces the apparent net debtor position of the United States by one-fourth. On the other hand, allowance for the reduced market value of U.S. holdings of the debts of troubled developing countries such as Brazil, Mexico, and Argentina tends to increase the U.S. net debtor position. In addition, if the bulk of the errors and omissions item in the U.S. capital account is assumed to reflect unrecorded capital inflows, then U.S. liabilities to foreigners are also understated. One recent estimate correcting for some of these measure-

ment deficiencies suggested that the United States continued to be a net creditor in 1987 by about \$50 billion.

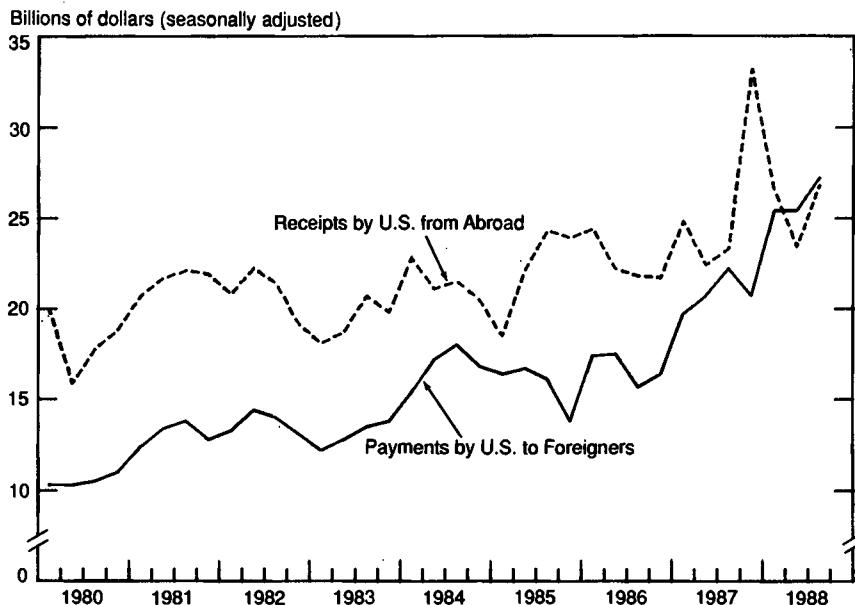
An alternative indicator of the U.S. asset position abroad can be inferred from international earnings flows. Although quarterly earnings are not strictly related to the market value of the investments, and are affected by tax laws governing assessments on distributions, earnings may still provide a gauge of the market's valuation of the U.S. net asset position abroad. Chart 3-5 shows seasonally adjusted quarterly public and private earnings by the United States on foreign assets and by foreigners on assets in the United States during the 1980s. These series exhibit a good deal of quarter-to-quarter variation despite seasonal adjustment, reflecting changes in short-term interest rates, the exchange rates at which foreign earnings are repatriated into the United States, and taxes. Although the gap has been closing for several years, quarterly U.S. receipts exceeded U.S. payments on assets until the second quarter of 1988. In 1987, U.S. receipts of income on assets abroad exceeded U.S. payments of income on foreign assets in the United States by \$20.4 billion. By this measure the net asset position of the United States remained positive at least through the end of 1987. Such an inference does not take account of the differences in interest rates. American assets abroad tend to earn higher rates of return than foreign assets in the United States. This difference may reflect the greater relative riskiness of foreign assets, or it may reflect the higher realized returns that come with long-established capital investments. On the other hand, it may be an artifact attributable solely to comparing earnings with the artificially low historical-cost value of the assets.

Regardless of whether the net U.S. asset position is still positive, the trend has certainly been for it to decline. The year 1982 marks a quickening in the pace at which foreign net lending to the United States, relative to wealth, increased. Since that year foreign non-official lending and direct investment to the United States have increased by 151 percent, while U.S. private lending and direct investment abroad increased by 44 percent. The largest percentage increases in foreign holdings of U.S. assets during the period were in Treasury securities and corporate and other bonds. During this period, after-tax real returns in the United States had increased relative to those abroad, attracting the large private capital inflow.

Foreign holdings of U.S. Government securities have increased substantially during the 1980s. Interest payments made to foreigners by the U.S. Government are currently 2.6 percent of government expenditures, and amount to 18.7 percent of net U.S. Government interest payments. The inflow of foreign funds for which these interest payments serve as compensation is beneficial in several ways. It helps

Chart 3-5

## Asset Earnings Flows



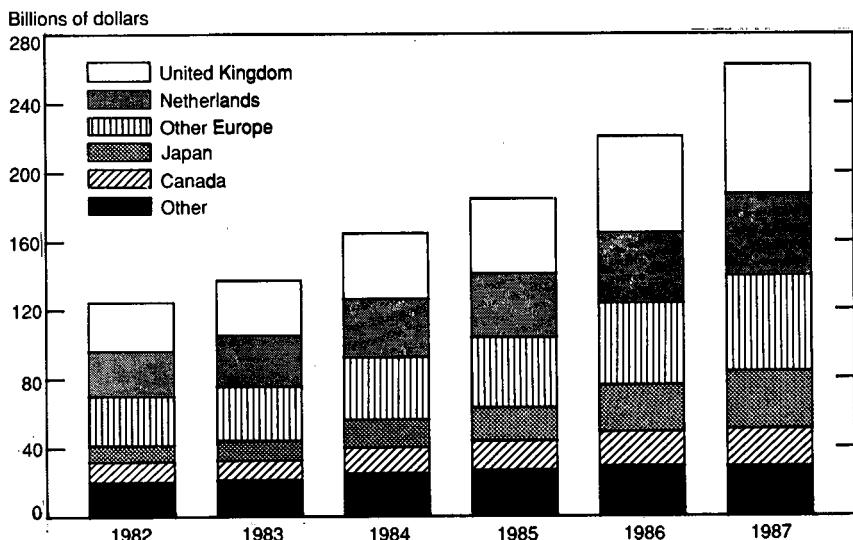
Source: Department of Commerce.

to keep U.S. interest rates close to world levels. It frees up the capital of U.S. citizens for other purposes. To the extent that the capital has been invested productively rather than consumed, the increase in expected future income attributable to that investment can be expected to compensate for the interest payments due to the foreigners who helped finance it.

Although the majority of the increase in net foreign claims on the United States has been in financial assets, foreign direct investment in the United States has also increased in the 1980s. Chart 3-6 breaks down the foreign direct investment position in the United States since 1982 by nationality. Direct investment by the United Kingdom represents the largest component of foreign ownership in the United States, averaging 25 percent of total foreign direct investment since 1982. The Netherlands, at 20 percent, is the next largest single investor. Other European direct investment averaged 22 percent. Japanese direct investment constituted 11 percent, growing from 8 percent in 1982 to 13 percent in 1987. Canadian and other direct investment make up the remainder.

Free international trade in assets, including direct investment, benefits both buyers and sellers. At the same time, there is some concern about the impact of foreign direct investment on national security. The Exxon-Florio provision of the Omnibus Trade and Competitive-ness Act of 1988 empowers the President to investigate and block foreign direct investment for reasons of national security. This provi-sion is a step toward meeting those concerns, while allowing the United States to maintain an open investment policy.

Chart 3-6  
Foreign Direct Investment Position in the United States



Source: Department of Commerce.

As a net debtor to the rest of the world, the United States has cer-tain obligations. In order to service the debt in the future, the Nation must make appropriate use of the resources today. By continuing to use the loan proceeds to engage in productive investment, the United States can service the future debt without reducing consump-tion growth.

Because the debt of the United States is denominated in U.S. dol-lars, inflation in the United States would have the short-run effect of reducing the real value to foreigners of their long-term debt instru-ments. Such an inflation would reduce the role of the dollar as a principal world currency if foreigners became hesitant to denominate debt and goods contracts in dollars. Since 1982, when the current in-crease in net lending to the United States started, U.S. inflation has

remained under control. Nevertheless, some increase in the international roles of other currencies has occurred.

Table 3-2 compares the roles of various currencies in the denomination of international bond issues. Although the role of the U.S. dollar as an international currency is no longer the formal one assigned to it at Bretton Woods, widespread use of the dollar has continued under flexible exchange rates. Since 1983, however, the share of the U.S. dollar in the denomination of internationally traded financial assets has decreased by 44.3 percent, while the shares of the Japanese yen and other currencies have increased substantially. Some of those increases parallel the greater share of lending by nations whose increased growth and financial liberalizations have enabled their participation in world credit markets to soar. As nations such as Japan have opened their capital markets, in part at the urging of the current Administration, their currencies have come to play a larger role in the denomination of international loans and goods payments. Some of the increase may be a response to international market concerns about the U.S. response to the temptation to incur an inflation, thus reducing the real value of the debt service on outstanding debt. The United States welcomes the increased participation of other nations in the world's credit markets. Open international credit markets benefit the citizens of all countries. At the same time, the United States continues to offer credible assurances of its ability and intention fully to repay its real debt through monetary restraint and domestic investment incentives. By reducing inflation until price stability is restored, and continuing its policies of promoting domestic growth, the United States will ensure the continued use of the dollar throughout the world as a means of payment, a unit of account, and a store of value.

TABLE 3-2.—*Currency Denomination of International Bond Issues, 1983-88*  
 [Percent distribution]

Year	United States	Japan	West Germany	Other
1983	78.3	0.5	8.1	13.2
1984	80.0	1.5	5.3	13.3
1985	70.9	4.8	7.0	17.2
1986	62.9	9.9	9.1	18.1
1987	41.3	16.1	10.7	31.9
1988: First 3 quarters	43.6	9.0	12.9	34.6

Note.—Data are shares of total new issues of international debt. Shares may not sum to 100 percent due to rounding.  
 Source: Organization for Economic Cooperation and Development.

## THE DEBT OF DEVELOPING NATIONS

Compared with the manageable debts of developed nations, the external debts of developing nations reached unprecedented levels during the late 1970s and early 1980s. Between 1980 and 1982 the average external debt of developing countries reporting their loans to the World Bank grew from 28 percent to 36 percent of GDP. Although the pace of new lending has diminished since 1982, stagnating real GDP and investment in many of those countries further increased average external debt to 48 percent of GDP by 1986.

Although no generally accepted economic criteria exist for the maximum sustainable level of debt a country can bear, the experience with developing nations during the late 1970s and early 1980s has been alarming to their creditors. Only the regions of South and East Asia (including the Pacific) continue to have external debt-to-GDP ratios within the range experienced recently by developed countries. The ratios for the African nations south of the Sahara soared to an average of 70 percent in 1986. The average debt of the Latin American and Caribbean countries has hovered around 60 percent of GDP since 1983, with some individual countries reaching levels higher than 100 percent. Each increase in debt requires a permanent increase in the net exports of the indebted country in order to service that higher debt. Nevertheless, during the 1980s the exports of many of these countries as well as their investment have slowed, although the exports of some highly indebted countries have improved since 1986.

Beginning with Mexico in 1982, many indebted developing nations have interrupted servicing portions of their debt, in some cases unilaterally declaring moratoriums on both principal and interest payments. Official lenders such as the members of the Paris Club and various consortia of commercial banks have increasingly devoted resources to renegotiating and rescheduling existing private and official bilateral debts. International institutions such as the IMF and the World Bank have played a leading role in assisting these renegotiations. Almost one-third of the estimated \$1.2 trillion worth of total debt owed by developing countries in 1987 was subject to renegotiation between January 1980 and September 1987. Fifty nations, representing one-half of the developing countries reporting their loans to the World Bank, were involved in these renegotiations. Proposals for debt relief continue to be presented, despite negotiated reductions in debt servicing, new loans and investments, and somewhat improved economic conditions in many of these countries.

The causes of these debt problems, the implications for the United States and other lenders, and the solutions vary by debtor country.

Nevertheless, some common features and lessons can be observed, beginning with the meaning of the debt figures, then the causes, and finally the proposed solutions.

The debt totals of developing nations are not directly comparable with the net international asset positions of developed countries. The debt totals of developing nations exclude net foreign direct investment, which in some developing countries has been substantial. On the other hand, the debt figures also do not include the assets of the developing countries held abroad. In many cases, capital and exchange controls imposed by these countries limit the ability of their citizens to buy foreign assets, suggesting that the net external liability position is well approximated by gross external debt. However, capital controls do not prevent and may encourage capital flight. Although by definition flight capital is not an available asset of the country (for example, its earnings cannot be reached for tax purposes by the country of origin), it does have the potential for repatriation should economic conditions at home improve, because citizens of the country control it. Recent estimates of the flight capital of seven highly indebted countries suggest that it may represent one-third of their total external debt, and may be substantially higher for some individual countries. Nevertheless, even though the external debt figures for developing countries are not perfectly comparable with the net external debt statistics available for developed nations, they are likely to be broadly suggestive of their current position.

The debt of developing nations can be broken into short-term, long-term unguaranteed, and long-term guaranteed debt. Based on IMF estimates, long-term debt guaranteed by the debtor countries accounted for 75 percent of total developing-country debt in 1987. Private creditors held about one-half of that debt. International agencies and governments held the remainder of the long-term publicly guaranteed debt. International agencies customarily retain seniority over private creditors in the servicing of debt. The resources that contributing countries provide to international agencies have been increased as the agencies increased their responsibilities in addressing the debt problems. The United States recently supported a \$74.8 billion general capital increase for the World Bank to enable it to support reforms and strengthen its role.

Although many highly indebted countries continue to be good credit risks, maintaining scheduled principal and interest payments and occasionally even prepaying, the 1980s have witnessed a large number of reschedulings. Many debtor nations have also fallen into arrears on commercial bank loans. Renegotiations have often been preceded by brief moratoriums on the payment of principal and, in the past few years, interest on the debts of some countries.

Although the causes for these troubling events vary by country, some themes stand out. First, the low or negative real interest rates of the 1970s increased borrowing, while the high real interest rates of the early 1980s suddenly raised the cost of servicing the outstanding debt. Some of the effect of the rise in cost was mitigated by the portion of the debt that had been negotiated at the lower fixed rates of the earlier period, notably World Bank loans. However, most of the loans were at premiums over the floating London Interbank Offered Rate (LIBOR), the benchmark on many short-term interbank loans. While the average interest rate on new commitments of official loans went from 5.2 percent in 1975 to 7.5 percent in 1982, the average market interest rate on new private commitments went from 8.6 percent in 1975 to 12.3 percent. Because much of the debt was denominated in U.S. dollars, unexpectedly high levels of real debt service resulted from the high real interest rates and strong dollar that accompanied the reduction in U.S. inflation during the early 1980s and the higher expected after-tax real rates of return brought on by the Economic Recovery Tax Act of 1981.

Second, the effects of the higher real interest rates of the early 1980s were exacerbated by the collapse of the prices of many commodities such as copper and oil, on which particular developing countries had relied for export revenue. In some cases recoveries in these prices have contributed to improvements in the solvency of these countries—notably, copper prices for Chile. In other cases, such as oil, prices have fallen even further. As long as some countries depend heavily on a small number of commodities for their exports, such high variance in earnings must be anticipated.

A third common cause of debt problems has been the use to which the loan proceeds were put in some countries. In some cases, poor investment projects simply failed to pay off. Some of these projects such as the building of minor roads had low expected payoffs at the time the investment was undertaken. Others were initially promising projects that ultimately never yielded the expected return. In many countries consumption rather than investment was the destination of the funds. This outcome in itself need not signal trouble, especially for a nation with promising prospects. When investment is insufficient to cover the loan repayments, however, consumption eats into wealth. The tendency of troubled debtors to reduce investment more than consumption as a response to maintaining repayment schedules has been an additional complication of the 1980s. This response compounds the problem, making future repayments increasingly difficult. In some cases, too, outright fraud and corruption may have waylaid funds meant for productive purposes.

Finally, a fourth cause of the debt problem was the further deterioration of economic conditions within these countries. Barriers to trade and to financial transactions, price controls and fixed exchange rates coupled with high domestic inflation rates, high marginal tax rates, and the nationalization of private industry handicapped these countries as they entered the difficult passage of the 1980s. In many instances, these distorting disincentives were increased rather than reduced as a response to the economic downturns. Capital flight often resulted. The very capital needed by these countries to invest in more promising industries, rebuild, and repay the debts moved quickly out of the countries as the governments—through inept policies and threatened confiscation—reduced the incentives to keep wealth at home. Policies that entice this capital to be repatriated can help the countries achieve domestic economic recovery as well as return to timely debt servicing.

Despite the difficulties, some countries have achieved a degree of success in coping with their problems. South Korea, Mexico, and Chile have all improved their debt standings. For Chile, the improvement accompanied sweeping deregulation of domestic markets and a consistent inflation-fighting stance, leading to rapid and sustainable economic growth and renewed domestic investment. Based on its successful performance, Chile's creditors unanimously agreed to a partial waiver of the prohibition against buying back its outstanding debt, permitting it to use copper earnings in excess of a threshold value to repurchase and thus extinguish some of its debt. On the other hand, countries that tried to raise tax revenue via inflation have generally fared among the worst, creating the greatest amounts of capital flight, incurring repeated currency devaluations, and in extreme cases, inducing their own recessions in attempts to cure their monetary excesses.

Progress in the form of increased gross domestic product and increased export earnings has been initiated on average in the 15 major debtor countries targeted by the Baker Initiative of 1985, of which Chile is one example. The Baker plan strengthened and extended many of the existing proposals for dealing with the debt problems of the developing nations. It emphasized four essential and mutually reinforcing elements: first, the importance of achieving sustained economic growth; second, the need for market-oriented reforms in order to achieve such growth; third, new debt and equity financing as well as the return of flight capital to help support such reforms; and fourth, a case-by-case approach to address the individual needs of each country.

A key feature of the plan was to highlight the need for reform within the debtor countries, particularly reform in areas that will con-

tribute to renewed investment and output growth so that the net exports of these countries can be sufficient to service their debt obligations. Trade and financial market liberalization, privatization, deregulation, increased reliance on market prices including exchange rates, and fiscal balance can help these countries recuperate and return as reliable participants in world credit markets. For countries at the lowest levels of income that undertake appropriate economic reforms, initiatives have been put into place to provide substantially increased concessional financing.

The Baker plan continued the emphasis on the need for voluntary negotiations that leave room for individual responses to the wide variety of problems arising in a particular developing country. There can be no grand solution, because each country has its own constraints and opportunities. Each creditor, and each borrowing nation, must be free to negotiate acceptable terms. This approach encourages a variety of debt conversion techniques and innovative responses to the evolving debt climate.

While the long-run solution to the debt problem must be directed at regenerating investment opportunity within these countries, short-run solutions must include either reschedulings or other types of negotiated adjustment. Reschedulings basically extend the maturity of the debt. The advantage is that the annual principal and interest payments are reduced, helping a country through a temporary downturn without having to reduce domestic spending further. The cost is that the debt increases and additional interest must be paid in the future on the portion of the principal that is rolled over. Nevertheless, for many countries this step has been useful.

Some types of negotiated adjustment reduce the creditor's exposure without affecting the obligations of the borrower. The lending banks are currently able to sell their debt in a secondary market. Doing so imposes severe costs on the bank. Typically, the discount in the secondary market is substantial. Following the sale, the bank must adjust its balance sheet to take account of any previously unrecorded difference between market and book value. Another alternative is swapping the debt for equity equal in value to some measure of the market value. Debt-equity swaps can sometimes benefit all parties. Because the debtor nation stands to gain by reducing its interest payments, the value of the equity offered often exceeds the secondary market price. Part of the debt and the need to service it is wiped out for the debtor country, although it is replaced by dividend payments to be made.

Under a debt-equity swap, capital is left in the debtor country and a working relationship remains between the investor and the nation. Direct foreign investment contributes to improved foreign expertise

and increases competition and market efficiency. Some risks are entailed for the creditors. For example, the creditor must now learn about business conditions and laws in these foreign countries, a risk that is fairly substantial and is outside the usual province of banking expertise. In order to entice banks and other lenders into such swaps, a country must offer assurances minimizing the risks of nationalization, of denial of the right to repatriate the dividends, or of imposing exchange controls. Perhaps as a consequence of these risks, most of the debt-equity swaps have been in the secondary markets involving private investors rather than banks' involvement for their own portfolios. In some cases, country risks associated with direct investments qualify for U.S. Government guarantees under the Overseas Private Investment Corporation or the investments can be insured by the private sector. Correct assessment of these risks for the purpose of providing insurance is difficult but essential if the risks are to be allocated in an appropriate and unsubsidized manner.

Many countries face internal opposition to debt-equity swaps based partly on nationalistic fears about foreign control of capital, and subject the swaps to severe restrictions. There is also concern that the capital inflow at the time of the exchange will raise money growth and inflation, although this problem can be prevented by appropriate central bank action. Despite these objections, countries have found debt-equity swaps helpful. Debt-equity swaps have accounted for \$10 billion to \$12 billion in debt reduction, or almost one-half of the total debt reduction accomplished since 1982, and have been carried out successfully in Bolivia, Brazil, Chile, Mexico, the Philippines, and other countries.

In some cases debt reduction has been accomplished through debt buybacks where either the private or public sector repurchases the outstanding debt at a discount. This method has been successful in Brazil, Bolivia, Chile, and Mexico. A promising innovation is the opportunity to swap debt for bonds, an approach tried recently in Mexico. Perhaps because the bonds were not sufficiently more appealing in marketability, interest security, or price to the banks than the debt, only a small fraction of the outstanding debt was exchanged. Nevertheless, experimentation with swaps and buybacks holds the promise of finding arrangements attractive to both borrowers and lenders.

Grand schemes that attempt to encompass all of the individual debtor-country problems with a single proposed solution should be rejected. Circumstances differ across countries. Furthermore, proposals offering to transfer part of the debt to taxpayer-supported facilities may discourage countries from making the painful adjustments required to bring greater efficiency to their economies.

A fine line separates providing the proper environment for successfully resolving the debt problems and offering assistance that may ultimately compound the problem. Attention must be paid to the incentives and disincentives that any particular plan creates. The offer of official guarantees or an official program offering non-country-specific relief creates free rider and moral hazard problems, if some countries are tempted to declare insolvency in order to qualify for the aid. Confronted with an official program to provide relief, a borrowing country has an incentive to act in ways that reduce the market value of its debt in order to qualify for aid.

As long as the choice of whether and how to renegotiate the debt remains privately and individually determined, the market's traditional threat to limit further lending to recalcitrant debtors reduces these disincentives. Many banks have now recognized that the market value of the debt is less than its face value. Commercial banks are increasingly moving to reduce their developing-country exposure through a variety of techniques, including decisions to swap debt for equity, debtor bonds, or other local claims at market or negotiated prices. There have been several proposals to increase the incentives for debtors and creditors to negotiate such voluntary transactions. There is a danger, however, that many of these proposals would involve either additional official financing or a shift in risk from the private to the public sector. To avoid this result, debtors and creditors should be encouraged to pursue voluntary, market-based solutions to debt problems. To support these efforts, debtor countries must establish stable economic conditions compatible with the return of flight capital and sustainable growth. By privatizing state industries and liberalizing restrictions on domestic markets and international trade, as envisioned in the Baker Initiative, these countries can create an economic environment that is conducive to long-term growth and solvency.

International financial institutions may risk increasing their exposure in order to sustain full service of outstanding debt. Such increases of exposure could pose fundamental problems for the long-term viability of these institutions. It is important, therefore, to review the role of the IMF and World Bank in the debt strategy and their relationship to commercial bank financing packages.

International agencies and lending governments have played a constructive role in preventing the debt problem from degenerating into a crisis. They have offered a route for continued debt renegotiation and have encouraged economic reform. They have often sought to ensure adequate financing that, combined with commercial bank and Paris Club reschedulings, would meet debtors' financing needs, while leaving specific elements of financing packages and any debt-reduc-

tion techniques to be negotiated between the debtor nations and commercial banks. International agencies should continue to encourage reforms that increase market incentives and reduce government subsidies and deficits.

The chief aim of the United States and international agencies, should be to continue maximizing debtor nations' prospects for lasting economic reforms and sustainable growth. This objective is advanced by conditionality which ties new lending to programs that foster productive investment, growth, and market freedom. Under current policy, there is room for debtors and creditors to reach market-oriented agreements to reduce the value of the outstanding debt. If these negotiations proceed more actively, international agencies could continue the policy of making new loans conditional on reforms, leaving negotiations between debtors and private creditors to determine changes in the value of outstanding debt and the associated debt service. More resources could then be available to encourage domestic reform and increase the share of borrowing from international organizations used for productive investment; this change would heighten debtors' incentives to achieve economic reforms. Voluntary agreements leading to debt reduction would, if successful, lower the amount of debt service that the debtor economies would be required to support.

The demise of the Bretton Woods system and the rapid liberalization and accessibility of international financial markets have altered the roles of the IMF and the World Bank in a more general sense. The original function of the IMF was to maintain a system of fixed exchange rates by providing short-term loans of international reserves to ease temporary payments imbalances. This function was diminished as the major industrial countries adopted flexible exchange rates and were able to meet their financing needs from private markets. Similarly, the World Bank's original commission to provide credit to developing countries for investment in projects such as infrastructure was aided by the increased access these countries obtained to financing from private markets. Over time, both private and government credit expanded, and by the early 1980s many countries were deeply in debt. What began as an effort to increase insufficient market lending ended in a crisis exactly the opposite in character. Many countries borrowed to such an extent that they now face difficulty servicing their extensive debts.

At the urging of the United States and others, the IMF and the World Bank have undertaken increased responsibility to assist debtor countries in dealing with their debt problems. The IMF and the World Bank have increased their financing activities in support of economic reform efforts by developing countries that are having dif-

ficulty repaying their extensive debts. They are also playing a more active role in debt renegotiations between developing nations and their private and official creditors. This change in mission, however, has blurred the traditional distinction between the two institutions and has raised fundamental issues regarding their purposes and operations in today's world economy. These issues require careful consideration. The roles of official international organizations in a world of flexible exchange rates and integrated and efficient capital markets should be appropriately reevaluated and redefined.

## CONCLUSION

The postwar period witnessed an unprecedented transformation of world financial markets. In the early 1970s the regime of pegged but adjustable exchange rates devised in 1944 at Bretton Woods proved unable to withstand the diversity of independent sovereign policies that had evolved. The regime gave way to the system of flexible exchange rates now in use. That system proved able to accommodate differing domestic monetary and fiscal policies during the 1970s, significant shifts in international capital flows, and increased international coordination of inflation-fighting, incentive-based policies during the 1980s.

A multinational system of fluctuating exchange rates was a new experience for the world. Wide swings in the value of the dollar during the 1970s and 1980s reflected underlying changes in worldwide domestic policies and events, including changes in relative inflation, marginal tax rates, expected real after-tax rates of return, and productivity. Moreover, the advent of the system of flexible exchange rates accompanied rapid growth in the volume of financial assets and the development and liberalization of financial markets in many parts of the world. New instruments and new procedures developed. It is not surprising that some time passed before central banks and governments learned to operate effectively to control inflation.

The current system of flexible exchange rates permits countries to achieve desired rates of inflation. In the 1980s many countries have embarked on policies to lower inflation, and they have succeeded much better than in the past. Countries acting alone must choose between price and exchange-rate stability. By choosing compatible policies, countries can achieve the goals of price stability and sustainable output growth and can thereby reach the additional goal of increased exchange-rate stability.

By focusing on long-term growth, price stability, and open trade, the United States has been able to achieve the longest peacetime expansion in its history. The United States has simultaneously encouraged the rest of the developed and developing world in its renewed regard for the incentive-based, free-market policies that have enabled the United States to achieve this goal. The continuation of these policies can lead to the economic prosperity that is the common goal not only of the United States but of all nations of the world.