was worth 0.65 SDR. In response to the global financial crisis, the IMF raised the amount of SDRs issued nearly tenfold, to 316 billion. Eventually, the IMF would like to see all international financial settlements conducted in SDRs.

Having summarized some basic balance of payments concepts and issues as they relate to both commodity trade and international flows of financial resources, we can now briefly review some trends in the balance of payments of developing nations and then focus our attention on a detailed analysis of debt problems.

Trends in the Balance of Payments

For most developing countries, the 1980s was an extraordinarily difficult period in their balance of payments accounts with the rest of the world. Prior to 1980, the conventional development strategy had developing countries operating with sizable current account deficits, because imports of capital and intermediate goods were required to provide the machinery and equipment for rapid industrialization. Export earnings paid for most, but not all, of these imports. The financing of these deficits was therefore made possible by large resource transfers in the capital account in the form of country-to-country (bilateral) foreign aid, direct private investment by multinational corporations, private loans by international banks to both developing-country governments and local businesses, and multilateral loans from the World Bank and other international development agencies. Capital-account surpluses, therefore, typically more than compensated for current account deficits so that international reserves were being accumulated.

However, during the 1980s, the developing world experienced a substantial deterioration in both current and capital-account balances. As Table 13.4 shows, the net financial transfers component of the capital account (which includes everything in Table 13.3 except private direct foreign investment) turned sharply negative beginning in 1984. The overall transition amounted to more than $68 billion, comparing the positive $33.2 billion capital account balance in 1978 with the negative $35.2 billion balance in 1988. Meanwhile, a brief period of large current account surpluses, which reflected entirely the Organization of the Petroleum Exporting Countries' (OPEC's) booming export revenues of 1979–1980, abruptly turned negative in 1981 and, as illustrated in Table 13.5, stayed negative until 2000, when they turned positive. One reason for persistent concern has been that the recent positive balances (outside of Africa) have been possible largely because of the wide and probably unsustainable U.S. trade deficit. Commodity exporters were also boosted in recent years by the booming demand from high-growth developing economies, especially China.

The reasons for the decline in current account balances in the 1980s and 1990s included (1) a dramatic fall in commodity prices, including oil; (2) global recessions in 1981–1982 and 1991–1993, which caused a general contraction in world trade; (3) increasing protectionism in the developed world against export from developing countries; and (4) some severely overvalued exchange rates in several key developing economies, such as Argentina. This reversed in the 2000s with large current account surpluses in many middle-income countries. In most cases, these surpluses shrank in the aftermath of the global financial crisis—at least temporarily.

TABLE 13.5 Developing Country Payments Balances on Current Account, 1980–2009 (billions of dollars)

Country Group Name	1980	1981	1982	1983	1984	1985	1986	1987	1988
Emerging market and developing economies	29.621	−25.712	−52.604	−51.328	−31.097	−32.317	−65.062	−32.642	−44.718
Central and eastern Europe	−14.435	−12.426	−4.715	−7.55	−5.859	−7.517	−8.979	−6.857	−3.048
Developing Asia	−6.893	−11.544	−13.428	−17.145	−9.859	−20.244	−16.665	−5.786	−15.365
Latin America and the Caribbean	−27.677	−43.789	−42.287	−7.501	−1.266	−1.955	−17.089	−9.427	−9.322
Middle East and North Africa	79.021	60.438	24.563	−9.828	−8.55	−1.695	−16.793	−7.705	−8.788
Sub–Saharan Africa	0.519	−17.542	−16.363	−8.736	−4.442	−0.058	−4.943	−1.883	−6.821
	1989	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**
Emerging market and developing economies	−32.1	−18.325	−96.354	−82.433	−120.66	−80.472	−96.838	−68.491	−71.108
Central and eastern Europe	0.816	−4.623	−1.452	−1.577	−14.718	1.441	−10.067	−12.185	−16.167
Developing Asia	−18.814	−11.984	−4.028	−8.57	−28.215	−16.373	−37.330	−30.235	12.435
Latin America and the Caribbean	−4.977	−0.893	−17.374	−34.75	−45.88	−51.962	−38.003	−38.057	−66.134
Middle East and North Africa	−3.575	2.942	−66.776	−26.232	−22.305	−10.81	−3.055	15.760	15.895
Sub-Saharan Africa	−4.057	−2.387	−5.001	−6.53	−5.915	−6.068	−10.030	−4.833	−7.184
	1998	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Emerging market and developing economies	−102.725	−11.290	95.837	53.507	82.743	148.898	205.685	407.037	627.183
Central and eastern Europe	−15.681	−23.585	−28.852	−10.852	−18.660	−32.551	−55.253	−60.491	−88.543
Developing Asia	53.826	39.746	42.869	40.755	63.413	83.608	91.573	142.743	271.048
Latin America and the Caribbean	−89.946	−55.521	−48.566	−53.546	−15.823	8.319	20.538	32.789	46.586
Middle East and North Africa	−26.109	16.482	80.643	48.903	33.493	61.796	92.125	207.505	281.474
Sub-Saharan Africa	−15.751	−10.414	1.649	−5.261	−12.732	−11.506	−8.640	−1.653	27.657
	2007	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**		
Emerging market and developing economies	596.905	669.237	253.755	323.275	410.457	380.579	235.848		
Central and eastern Europe	−136.132	−158.981	−48.091	−82.560	−119.330	−79.357	84.844		
Developing Asia	394.913	429.367	276.764	238.819	97.572	108.721	138.461		
Latin America and the Caribbean	6.710	−39.041	−30.267	−62.792	−77.930	−104.474	140.639		
Middle East and North Africa	262.861	346.577	49.063	179.692	417.426	421.076	317.639		
Sub-Saharan Africa	9.346	−3.999	−27.582	−15.432	−17.349	−38.265	−51.996		

Note: Developing economies include what the IMF terms *emerging economies*.
Source of data: International Monetary Fund, *World Economic Outlook Database*, April 2010 and October 2013.

The capital account showed a dramatic turn in the 1980s as a combined result of rising developing-country debt service obligations, sharp declines in lending by international banks, and massive capital flight. During the 1980s, these factors turned what had previously been a positive annual resource flow of \$25 billion to \$35 billion from developed to less developed countries into a negative annual flow of \$25 billion to \$35 billion from the developing to the developed world. Behind these trends, however, was the debilitating dilemma of developing-country debt—a historically recurrent problem with important lessons for developing-country policy.

13.4 Accumulation of Debt and Emergence of the Debt Crisis in the 1980s

Background and Analysis

External debt Total private and public foreign debt owed by a country.

The accumulation of **external debt** is a common phenomenon of developing countries at the stage of economic development where the supply of domestic savings is low, current account payments deficits are high, and imports of capital are needed to augment domestic resources. Prior to the early 1970s, the external debt of developing countries was relatively small and primarily an official phenomenon, the majority of creditors being foreign governments and international financial institutions such as the IMF, the World Bank, and regional development banks. Most loans were on concessional (low-interest) terms and were extended for purposes of implementing development projects and expanding imports of capital goods. However, during the late 1970s and early 1980s, commercial banks began playing a large role in international lending by recycling surplus Organization of the Petroleum Exporting Countries (OPEC) "petrodollars" and issuing general-purpose loans to developing countries to provide balance of payments support and expansion of export sectors.

Although foreign borrowing can be highly beneficial, providing the resources necessary to promote economic growth and development, when poorly managed, can be very costly. In recent years, these costs have greatly outweighed the benefits for many developing nations. The main cost associated with the accumulation of a large external debt is debt service. Debt service is the payment of amortization (liquidation of the principal) and accumulated interest; it is a contractually fixed charge on domestic real income and savings. As the size of the debt grows or as interest rates rise, debt service charges increase. Debt service payments must be made with foreign exchange. In other words, debt service obligations can be met only through export earnings, curtailed imports, or further external borrowing. Under normal circumstances, most of a country's debt service obligations are met by its export earnings. However, should the composition of imports change or should interest rates rise significantly, causing a ballooning of debt service payments, or should export earnings diminish, debt-servicing difficulties are likely to arise.

Basic transfer Net foreign-exchange inflow or outflow related to a country's international borrowing; the quantitative difference between the net capital inflow (gross inflow minus amortization on past debt) and interest payments on existing accumulated debt.

First, it is necessary to understand a fundamental concept, known as the **basic transfer**.[4] The basic transfer of a country is defined as the net foreign-exchange inflow or outflow related to its international borrowing. It is measured as the difference between the net capital inflow and interest payments on the existing accumulated debt. The net capital inflow is simply the difference between the gross inflow and the amortization on past debt. The basic transfer is an important concept because it represents the amount of foreign exchange that a particular developing country is gaining or losing each year from international capital flows. As you will soon discover, the basic transfer turned very negative for developing nations during the 1980s, causing a loss of foreign exchange and a net outflow of capital.

The basic-transfer equation can be expressed as follows. Let the net capital inflow, F_N, be expressed as the rate of increase of total external debt, and let D represent the total accumulated foreign debt. If d is the percentage rate of increase in that total debt, then

$$F_N = dD \tag{13.1}$$

Because interest must be paid each year on the accumulated debt, let us let r equal the average rate of interest so that rD measures total annual interest payments. The basic transfer (BT) then is simply the net capital inflow minus interest payments, or

$$BT = dD - rD = (d - r)D \tag{13.2}$$

BT will be positive if $d > r$, and the country will be gaining foreign exchange. However, if $r > d$, the basic transfer turns negative, and the nation loses foreign exchange. Any analysis of the evolution of, and prospects for, debt crises requires an examination of the various factors that cause d and r to rise and fall.

In the early stages of debt accumulation, when a developing country has a relatively small total debt, D, the rate of increase, d, is likely to be high. Also, because most first-stage debt accumulation comes from official (as opposed to private) sources in the form of bilateral foreign aid and World Bank lending, most of the debt is incurred on concessional terms—that is, at below-market interest rates with lengthy repayment periods. Consequently, r is quite low and in any event less than d. As long as this accumulating debt is being used for productive development projects with rates of return in excess of r, the additional foreign exchange and rising foreign debt represented by the positive basic transfers pose no problems for recipient nations. In fact, as noted in earlier chapters, this process of debt accumulation for productive investments in both rural and urban areas represents an essential ingredient in any viable strategy of long-term development.

A serious problem can arise, however, when (1) the accumulated debt becomes very large so that its rate of increase, d, naturally begins to decline as amortization rises relative to rates of new gross inflows; (2) the sources of foreign capital switch from long-term "official flows" on fixed, concessional terms to short-term, variable-rate private bank loans at market rates that cause r to rise; (3) the country begins to experience severe balance of payments problems as commodity prices plummet and the terms of trade rapidly deteriorate; (4) a global recession or some other external shock, such as a jump in oil prices, a steep rise in U.S. interest rates on which variable-rate private loans are based, or a sudden change in the value of the dollar, in which most debts are denominated, takes place; (5) a loss in confidence in the ability of a developing country to repay resulting from points 2, 3, and 4 occurs, causing private international banks to cut off their flow of new lending; and (6) a substantial flight of capital is precipitated by local residents who, for political or economic reasons (e.g., expectations of currency devaluation), send great sums of money out of the country to be invested in developed-country financial securities, real estate, and bank accounts. All six factors can combine to lower d and raise r in the basic-transfer equation, with the net result that the overall basic transfer becomes highly negative and capital flows from the underdeveloped to the developed world (as shown in Table 13.5). The debt crisis then becomes a self-reinforcing phenomenon, and heavily indebted developing countries are forced into a downward spiral of negative basic transfers, dwindling foreign reserves, and stalled development prospects. The story of the debt crisis of the 1980s is largely told by the simple analysis of the factors affecting the basic-transfer mechanism of Equation 13.2. Against this analytical background, we can now look at the specific details of the 1980s debt crisis and the policy responses in the 1980s and early 1990s, and, in the case of many African and some other low-income economies, into the late 1990s and 2000s.

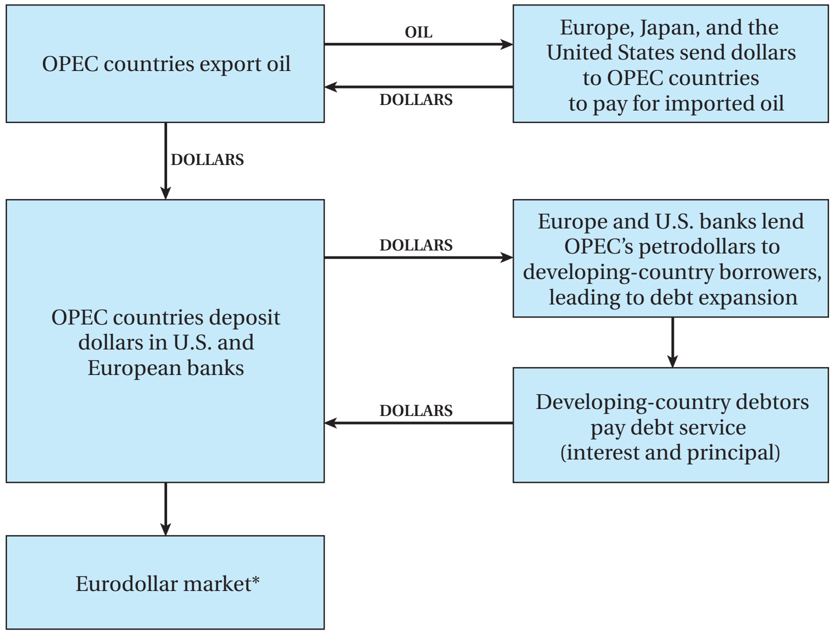
Origins of the 1980s Debt Crisis

The seeds of the 1980s debt crisis were sown in the 1974–1979 period, when there was a virtual explosion in international lending, precipitated by the first major OPEC oil price increase. By 1974, developing countries had begun playing a larger role in the world economy, having averaged growth rates of 6.6% in 1967–1973. Mexico, Brazil, Venezuela, and Argentina in Latin America, among other nations, had begun importing heavily, especially capital goods, oil, and food. Following outward-looking development strategies, they expanded their exports aggressively. In the face of high oil prices and a worldwide recession, in which the growth rates of the industrialized countries fell from an average of 5.2% in 1967–1974 to an average of 2.7% for the rest of the 1970s, many developing countries sought to sustain their high growth rates through increased borrowing. Although lending from official sources, particularly nonconcessional lending, increased significantly, it was insufficient to meet growth needs. Furthermore, countries with an excess of imports over lagging exports were reluctant to approach official sources, such as the IMF, that might subject them to painful policy adjustments. So the middle-income and newly industrializing developing countries turned to commercial banks and other private lenders, which began issuing general-purpose loans to provide balance of payments support. Commercial banks, holding the bulk of the OPEC surplus (which had jumped from $7 billion in 1973 to $68 billion in 1974 and ultimately peaked in this period at $115 billion in 1980) and facing a low demand for capital from the slower-growing industrialized countries, aggressively competed in lending to developing countries on comparatively permissive and favorable terms. Figure 13.1 portrays the mechanism by which OPEC petrodollars were recycled, starting with Middle Eastern oil export earnings being deposited in U.S. and European banks, which then lent these dollar balances to developing-world public- and private-sector borrowers. Over $350 billion was recycled from OPEC countries between 1976 and 1982.

As a result of all these factors, the total external debt of developing countries more than doubled from $180 billion in 1975 to $406 billion in 1979, increasing over 20% annually. More significant, an increasing portion of the debt was now on nonconcessional terms, involving shorter maturities and market rates of interest, often variable rates. In 1971, about 40% of the total external debt was on nonconcessional terms. This increased to 68% by 1975, and by 1979, over 77% of the debt was on harder terms. Although the increase in nonconcessional lending by official institutions was partly responsible for this rising proportion, the more than tripling of lending by private capital markets played the major role. Together, the large increase in the size of debt and the larger proportion scheduled on harder terms were responsible for the tripling of debt service payments, which rose from $25 billion in 1975 to $75 billion in 1979.

Despite the sizable increases in debt-servicing obligations, the ability of most developing countries to meet their debt service payments during the

FIGURE 13.1 The Mechanics of Petrodollar Recycling



*Eurodollars are dollar deposits in any bank outside of the United States, not necessarily in Europe only. Rather than send their surplus dollars to the United States, non-U.S. banks began in the 1970s to accept direct dollar deposits, pay interest on them, and lend them directly to developing-country borrowers.

Source: From *The ABC's of International Finance*, Second Edition, by John Charles Pool et al. Copyright © 1991 by Lexington Books. Reprinted with permission.

late 1970s remained largely unimpaired. This was primarily a function of the international economic climate during that period. A combination of declining real oil prices as a result of inflation, low or negative real interest rates, and increased export earnings narrowed current account deficits toward the end of the decade and enabled developing countries to sustain relatively high growth rates, averaging 5.2% during 1973–1979, through massive borrowing.

In sum, the surge in international lending following the first oil shock was largely during the period 1974–1979. In a congenial economic atmosphere, it permitted developing countries to maintain relatively high rates of growth with little debt-servicing difficulty. It also facilitated the recycling of a huge surplus from oil exporters to oil importers through the lending activities of private international banks, and it helped dampen the recession in industrialized countries by providing for increased export demand on the part of developing countries.

Unfortunately, this success was short-lived, and in fact, the surge in international lending that occurred in 1974–1979 had laid the groundwork for all the problems that were to come. The second oil shock, which occurred in 1979, brought about a complete reversal of the economic conditions conducive to the success of international lending in the previous period. Now developing countries faced an abrupt increase in oil prices that added to oil import bills and affected industrial goods imports. There was also a huge increase in interest rates caused by the industrialized countries' economic stabilization policies and a decrease in export earnings for developing countries, resulting from a combination of slowed growth in the more developed nations and a precipitous decline of over 20% in primary commodity export prices. Moreover, developing countries inherited from the previous period a huge debt and debt service obligation, which was made even more onerous by burgeoning interest rates and more precarious as a result of the bunching of short-term maturities.

Finally, during the entire period of debt accumulation, one of the most significant and persistent trends was the tremendous increase in private capital flight. It is estimated that between 1976 and 1985, about $200 billion fled the heavily indebted countries.[5] This was the equivalent of 50% of the total borrowings by developing countries over the same period. Fully 62% of Argentina's and 71% of Mexico's debt growth are estimated to have resulted from capital flight. In fact, some researchers have argued that the 1985 level of Mexican debt would have been $12 billion (rather than the actual $96 billion) were it not for the huge private *capital flight*.[6]

Facing this critical situation, developing countries had two policy options. They could either curtail imports and impose restrictive fiscal and monetary measures, thus impeding growth and development objectives, or they could finance their widening current account deficits through more external borrowing. Unable, and sometimes unwilling, to adopt the first option as a means of solving the balance of payments crisis, many countries were forced in the 1980s to rely on the second option, borrowing even more heavily. As a result, massive debt service obligations accumulated so that countries like Nigeria, Argentina, Ecuador, and Peru were experiencing negative economic growth in the 1980s and consequently faced severe difficulties in paying even the interest on their debts out of export earnings. They could no longer borrow funds in the world's private capital markets. In fact, not only did private lending dry up, but also by 1984, the developing countries were paying back $10.2 billion more to the commercial banks than they were receiving in new loans (see Table 13.4).

In the 1990s, the economic situations of developing countries varied greatly: Many experienced positive net transfers, but others remained in crisis. The statistical picture became more complicated after the mid-1990s, with middle-income developing countries increasingly relying on foreign direct investment. Some countries in crisis probably experienced negative net financial transfers.

13.5 Attempts at Alleviation: Macroeconomic Instability, Classic IMF Stabilization Policies, and Their Critics

The IMF Stabilization Program

One course of action that was increasingly but often reluctantly used by countries facing serious **macroeconomic instability** (high inflation and severe government budget and foreign-payments deficits) along with growing

Macroeconomic instability Situation in which a country has high inflation accompanied by rising budget and trade deficits and a rapidly expanding money supply.