



## II

# Global Repercussions of the Crises in Emerging Markets and Other Conjunctural Issues

With two significant slowdowns in world economic growth having now occurred in this decade, global economic performance in the 1990s may clearly be viewed as disappointing. In fact, average annual world output growth in this decade is now estimated at only 3.1 percent, which is below the average growth rates in the 1980s (3.4 percent) and the 1970s (4.4 percent).

Among the major countries and regions, only the United States may be considered to have achieved a fully satisfactory economic performance in the 1990s, with a relatively shallow recession in 1990–91 having been followed by an unusually long economic expansion that has maintained strong momentum into the opening months of 1999. For Japan, in contrast, the 1990s stand out as a period of unsatisfactory performance especially by comparison with Japan's growth record earlier in the postwar period. Although the Japanese economy began the decade quite strongly, and after four years of sluggish growth showed signs of recovery in 1996, growth subsequently faltered, and the ensuing decline in economic activity (by 5¼ percent from early 1997 to the fourth quarter of 1998) is unprecedented among the major industrial countries in the postwar period. In the EU, economic performance in the 1990s has been mixed. Part of the decade was devoted to achieving economic convergence in preparation for EMU, but the achievements in reducing fiscal imbalances, inflation, and nominal interest rates contrast sharply with the generally poor growth performance and with persistently high unemployment in much of continental Europe. While growth in the United Kingdom was sufficiently robust to absorb slack after its 1990–92 recession, activity in most of the euro area has been quite weak, with unemployment rates in the double digits, since 1992. Although euro-area growth strengthened somewhat in 1998, it has recently shown signs of weakening anew as the external environment has deteriorated in the wake of the crises in emerging market economies.

In light of the recent crises and their repercussions, emerging market economies also have not lived up to the high—and perhaps excessively optimistic—expectations earlier in the decade. Many of these countries, and especially those in southeast and east Asia, experienced a significant acceleration in economic growth in the late 1980s and the first half of the 1990s, which helped to give rise to—and which was also fueled in

part by—a surge in private capital inflows and a substantial compression of yield spreads. For some countries, this compression of spreads was interrupted temporarily by the Mexican crisis, but it generally continued until the onset of the Thai crisis in mid-1997.

Although financial fragilities and policy shortcomings played important roles in the buildup to the recent emerging market crises, the unsatisfactory performance of Japan and most of western Europe since the early 1990s also contributed. Japan's and Europe's large and growing surpluses of domestic saving over domestic investment not only meant that they were able to finance the persistent balance of payments deficit of the United States, they also enabled global financial markets to channel large net capital flows into emerging markets. While these capital flows enabled many emerging market economies to expand strongly over this period, they also resulted in overheating pressures and large external imbalances. These imbalances made the economies concerned increasingly vulnerable to adverse external developments, including changes in cyclical conditions among the industrial countries and consequent fluctuations in global financial conditions and in the pattern of exchange rates among the major currencies. In addition, the emerging market countries became highly vulnerable to changes in perceptions of and aversion to risk.

The Mexican crisis of 1994–95 was the first in what has now become a long series of financial crises affecting emerging market economies in the 1990s. It demonstrated the potential for sharp changes in investor sentiment, which were triggered in this case by an unsustainable external imbalance, an overvalued exchange rate pegged to the U.S. dollar, a fragile financial system, and a tightening of financial conditions in the United States (long-term interest rates in the United States rose sharply in the first half of 1994 on fears of rising inflation and following a tightening move by the Federal Reserve). The Asian crisis, starting with Thailand, was triggered by some of the same problems (external imbalances, financial fragilities, and exchange rate overvaluation) in an environment of further exchange rate appreciation through links to the U.S. dollar, weakening export growth, and excessive short-term foreign borrowing. The more recent Russian and Brazilian crises both erupted owing to mixtures of concerns about domestic policy shortcomings and the sustainability of these countries' exchange rate pegs.

These crises have all served to underscore the challenges facing policymakers in maintaining the strong fundamentals that are an essential precondition for countries' successful integration into the global financial system. They have also highlighted the role of the global economic environment in contributing to the buildup of unsustainable imbalances, and the potential for changes in the external environment to contribute to financial disturbances. Of particular relevance in the current conjuncture are the broader lessons from these crises with respect to the potential for international financial contagion to spread through the system as financial volatility and currency market pressures are transmitted from an original crisis country to other emerging market countries. This process is analyzed in greater depth in Chapter III of this report.

This chapter focuses on some of the key economic repercussions from the recent emerging markets crises and the associated policy challenges that confront the authorities in individual countries. Many of these challenges are related to the ongoing adjustments to the global economic and financial imbalances that have characterized much of the decade and that may continue to shape world economic prospects during the period ahead.

The first section discusses the background to the Brazilian crisis and the potential economic consequences for Brazil and the rest of Latin America. This is followed by an assessment of Russia's situation and the scope for arresting and reversing the economic collapse that was triggered by last August's policy setbacks and financial crisis. The next section examines the prospects for financial flows to emerging market countries in the wake of the Brazilian and Russian crises and evaluates global trade and payments imbalances, with the conclusion that these imbalances do not appear sustainable. This is followed by an analysis of recent developments in global financial markets, where conditions generally seem to have improved since the turbulence that erupted in the wake of the Russian crisis; the Brazilian crisis seems to have been absorbed relatively quickly in financial markets without widespread turbulence, but financing conditions for many emerging market countries still remain unfavorable by recent historical standards.

The next section discusses the possible reasons for the relatively small impact of the emerging market crises on China, India, and most of Africa. This is followed by a review of the substantial adjustment challenges that confront many of the oil- and other commodity-exporting countries. The concluding section analyzes the sustainability of the large deficit that has built up in the U.S. private sector's saving-investment position, which has helped the U.S. and the world economy to absorb the emerging market crises without recession but which at the same time suggests that domestic demand growth in the United States will soon need to slow significantly in order to avoid a potential

"hard landing." The consequences of such a "hard landing" are illustrated in an alternative scenario.

In view of the difficulties facing the emerging market countries of Latin America and Russia, and the commodity exporters, and the fragile and highly uncertain prospects for recovery in Asia, significant downside risks still attach to the outlook for 1999, 2000, and beyond. If the U.S. economy were to slow significantly, which seems both likely and desirable at a relatively early stage, the EU may be the only region of the world with both the scope to offset the consequences of the adverse external environment for its domestic economy and the potential to help the rest of the world avert a further broadening and deepening of the current slowdown. In this context, the flexibility of European labor markets will have a substantial impact on the effectiveness and advisability of eventual policy actions. This important issue is examined in Chapter IV.

### **Brazil's Financial Crisis: Origins and Likely Economic Consequences**

The key issue still facing Brazil in the wake of the collapse of its exchange rate peg is the long-standing need to address public sector imbalances. The Real Plan was successful in reducing inflation between 1994 and 1998, but not in containing the fiscal deficit. The growing fiscal deficit, which is estimated to have reached 8 percent of GDP in 1998, also contributed to a widening of the external current account deficit, to 4½ percent of GDP last year. The combination of these two growing deficits and the structure of public debt, which makes the government's finances very sensitive to changes in short-term interest rates and the exchange rate,<sup>1</sup> made Brazil vulnerable to changes in investor sentiment. Ultimately, the two deficits also contributed to widespread sentiment in financial markets that the crawling peg was not sustainable in spite of the effort at fiscal adjustment.

Financial market pressures reached one peak in October 1997, in the wake of the Asian crisis. The government responded quickly and was able to stem the outflow of capital by tightening monetary policy and announcing a strong fiscal policy package, promising 2½ percent of GDP in tax increases and spending cuts. However, the fiscal efforts slipped, and financial markets soon became concerned again about the sustainability of the fiscal position. As a result, Brazil was hard hit by contagion from the Russian crisis in August 1998 when international investors again reassessed the risk of their exposure to emerging markets. Interest rate spreads jumped, and capital flows to

<sup>1</sup>The average maturity of Brazil's public debt is very short—less than eight months—with two-thirds of the debt indexed to the overnight interbank rate and one-fifth to the U.S. dollar.

emerging markets in general virtually dried up. To stem the huge capital outflows of \$12 billion and \$19 billion, respectively, in August and September, the Brazilian authorities increased official interest rates to nearly 43 percent and announced several fiscal measures. Although the pressure on the real eased, these measures did not offer sufficient relief, and the authorities started a dialogue with the IMF on an adjustment program that could receive financial support from the international community.

The subsequent IMF-led international rescue operation resulted in commitments of extensive balance of payment support, totaling \$41.5 billion, linked to a policy package aimed at producing large primary surpluses—on the order of 2½–3 percent of GDP—to halt the rise in the ratio of public debt to GDP by 2000. About two-thirds of the improvement in the government's finances was to come from revenue measures. Key elements in the program's fiscal policy package were an increase in the tax on financial transactions, an increase in the payroll taxes paid by civil servants to finance their pension plan, and stronger control by the central authorities over the states' finances. (See Box 1.1 of the December 1998 *Interim Assessment*, pp. 8–9.)

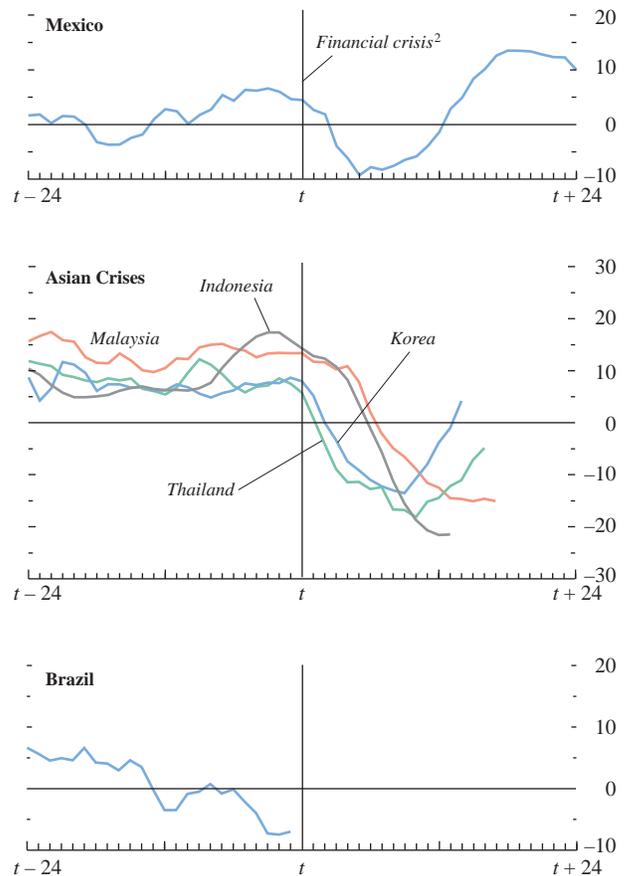
Following the announcement of the international rescue package in November 1998, the financial pressures initially abated, but they increased again in December when it became clear that the authorities were encountering strong resistance in Congress to needed social security reforms. Market concerns were immediately reflected in increased capital outflows, and spreads on Brazil's external debt rose to about 1,000 basis points. At the beginning of January, when the state of Minas Gerais announced that it sought to renegotiate the payment terms of its debt with the federal government (then totaling \$15 billion), market confidence in the success of Brazil's fiscal stabilization plan waned further, and there was a renewed surge in the interest rate spread. And when a number of other Brazilian states joined the request of Minas Gerais, the net outflow of capital intensified to reach \$1.2 billion on January 12. This led the authorities, first, to widen the real's exchange rate band on January 13 and, when this did not stop the financial outflows, to allow the currency to float two days later. The floating of the real and subsequent increases in official interest rates stemmed the capital outflows, and the currency broadly stabilized at about R\$2, where it remained until the revised adjustment program was adopted in March and the currency appreciated to R\$1.7–R\$1.8. (See the section below on foreign exchange and financial markets for more details.)

A key question for Brazil is whether the economy will recover quickly from the current crisis, as was the case in Mexico and now seems possible in Korea and Thailand, or whether the contraction will be more severe and longer lasting (Figure 2.1). To address this

**Figure 2.1. Selected Crisis Countries: Industrial Output Recovery Paths<sup>1</sup>**

(Percent change from a year earlier)

The experiences of Mexico, Korea, and Thailand suggest that relatively rapid recovery is also possible in Brazil.



Source: WEFA, Inc.

<sup>1</sup>Industrial production, three month moving average.

<sup>2</sup>The "financial crisis" line for each country corresponds to the date of the respective change in exchange rate regime (Mexico: January 1995; Thailand: July 1997; Malaysia and Indonesia: August 1997; Korea: November 1997; and Brazil: January 1999).

question, it is useful to consider four factors that bear on the adjustment process: the domestic imbalances that contributed to precrisis current account deficits in these countries; the external environment at the time of the crisis; public and private sector internal and external debt; and fragilities in the financial sector.

In all of the countries considered here, large current account deficits—ranging from around 4 percent of GDP in Brazil to almost 8 percent of GDP in Thailand—had emerged in the period leading up to the crisis. These imbalances were initially financed by private capital inflows, but as the appetite for investments in these countries at prevailing interest and exchange rates waned, pressures emerged in financial markets. Central banks first intervened to support inflexible exchange rate regimes and then allowed their respective currencies to float.

Underlying these similar external imbalances, however, were different patterns of domestic saving and investment. In the Asian crisis countries, high levels of investment, some of which ultimately proved unprofitable at market interest rates, underlay the external deficits despite saving rates that were exceptionally high by international standards (see Statistical Appendix Table 44). In Mexico, the external deficit in 1994 can also be traced to domestic demand that was not met by local production, but in this case, buoyant private consumption (and associated low private saving) was a key contributing factor. Public accounts were in surplus or close to balance in Mexico and most of the Asian crisis countries before the crises erupted. In Brazil, in contrast, the growing fiscal imbalance appears to be at the root of the external current account deficit.

These differences may have implications for the timing and shape of recovery. Although in principle fiscal imbalances can be addressed quickly—making possible short adjustment periods and shallow recessions when the problem is well recognized and there is political consensus on how it can be addressed—in practice there are often implementation delays. Failure to address underlying fiscal problems promptly can lead to losses of confidence, and restoring confidence subsequently can be costly, as high interest rates may have to be maintained for longer periods.

Imbalances originating in the private sector, in contrast, are not under the direct control of the authorities but they may nevertheless respond quickly to policy and to market signals such as changes in interest rates and exchange rates. This was the case in Mexico when high interest rates and the depreciation of the peso contributed to a sharp retrenchment in domestic demand, a rapid reduction in the current account deficit, and, with appropriate accompanying policies, a progressive restoration of confidence. A similarly rapid adjustment process has been taking place in the Asian crisis countries, although (as discussed below) these countries face additional hurdles, especially in the financial sector, that have prolonged the recessions.

The external environment at the time of the crisis also matters. An important factor underlying the quick recovery in Mexico was strong external demand in the United States: exports from Mexico to the United States represent about 25 percent of Mexican GDP (and 85 percent of its total exports), and import demand from the United States was growing rapidly in 1995.<sup>2</sup> In contrast, the depth of the recessions in Asia, and the failure of many forecasters, including the IMF, to anticipate the severity of the output declines, in part reflected a contraction in intraregional trade, including trade with Japan. For Brazil, the baseline forecast incorporates some slowing of intraregional trade, but this should be less important because the economy is more closed than those in Asia.

Debt positions can also affect the recovery path. The task of fiscal adjustment for Brazil is made more difficult because of its large public debt, two-thirds of which is indexed to the overnight interbank rate (Selic). The increase in this rate from 30 percent to about 40 percent following the change in currency regime is estimated to have added about 1¼ percent of GDP to the budget deficit through March, not taking into account the effects of higher inflation associated with the currency depreciation. In addition, the depreciation of the real increases the stock of external and dollar-indexed domestic debt in domestic currency terms. If the real remains in a trading range of R\$1.7 to R\$1.8 against the U.S. dollar, the public debt would increase by 6 percent to 7 percent of GDP relative to prefloat levels, which would add significantly to budget outlays. Successful stabilization, however, is expected to result in declines in real interest rates and a partial reversal of the initial exchange rate depreciation (as has already occurred), which will ease the debt-service burden on both domestic and dollar-denominated debt. Mexico faced a debt burden of about the same magnitude, but fiscal adjustment was less critical because Mexico's public accounts were initially near balance. The Asian crisis countries, in contrast, had little public debt, which has made it possible to allow the automatic fiscal stabilizers to operate and in most cases to provide some support to demand. For these countries, however, the high levels and short maturity of private external debt have been bigger problems.

Financial sector conditions, finally, will affect the depth of the recession and speed of recovery. In Mexico, fragilities quickly emerged in the banking sector, but the authorities stepped in to prevent deposit runs and to clean up balance sheets.<sup>3</sup> While some ques-

<sup>2</sup>Global interest rates rose in the months before the crisis in Mexico and subsequently declined. Brazil has benefited from relatively easy monetary conditions in the major advanced economies.

<sup>3</sup>See Miguel Mancera, "Problems of Bank Soundness: Mexico's Recent Experience," in Charles Enoch and John H. Green, eds., *Banking Soundness and Monetary Policy: Issues and Experiences in the Global Economy* (Washington: IMF, 1997), pp. 228–41.

tions and difficulties are still to be resolved, this prompt action helped to prevent a shutdown of domestic lending and the payments system. Developments in the Asian crisis countries have been more difficult in this regard because problems in the banking sectors were more deep-rooted. Inflexible exchange rate regimes in these countries had given banks, other financial institutions, and in some cases private firms an incentive to borrow at low interest rates in foreign currencies without hedging their currency exposures. This practice, along with such distortions as directed lending, had led to investment in projects with low rates of return and balance sheets exposed to currency risk. In these circumstances, the path to recovery has entailed more than a corrective contraction of demand and a rebalancing of the private saving-investment balance. Banking sectors have had to be restructured, as have many insolvent private corporations—a process that is time-consuming because it involves many private agents. In Brazil, these tasks are less likely to delay recovery because the banking sector and supporting institutions have undergone considerable reform over the past few years. Moreover, in Brazil the role of the banking sector is less important than in the Asian crisis economies, because of the much lower level of financial intermediation that is the legacy of Brazil's high-inflation experience.

Brazil may not recover from its crisis as quickly as Mexico, because of a less favorable external environment, but the recovery may be faster than in some countries in Asia, since the Brazilian crisis is less rooted in the structure of the economy. Nevertheless, there remain downside risks to the projections that may result in a slower recovery. The pace of recovery will depend crucially on the speed at which the government addresses the fiscal deficit, and related to this, on inflation expectations and the speed with which confidence is restored so that interest rates can be brought down (Box 2.1). The assessment of these risks is still subject to substantial uncertainty, as reflected in differences among forecasts of output growth in 1999. IMF staff currently projects a contraction of about 3¼ percent, whereas some private forecasters consider larger output declines to be more likely.

The Brazilian crisis will have adverse effects on the rest of Latin America, where growth had already slowed in the latter part of 1998, through reduced Brazilian demand and activity, the competitiveness effects of the real's depreciation, and tighter external financing constraints (Table 2.1). Regional trade links among the Latin American countries are, in general, less important than in east Asia, including Japan, and this should reduce the potential for the large negative trade-based spillover effects observed in that region (Table 2.2). Among the Latin American economies, Argentina, Paraguay, and Uruguay—Brazil's partners in the trading bloc MERCOSUR—have the highest trade exposures to Brazil and are likely to be most af-

ected. For Chile, Colombia, Ecuador, and Venezuela, direct trade links with Brazil are less important, but falling commodity prices have adversely affected the external and fiscal balances—and the growth prospects—of all four countries. Financial sector problems and budgetary imbalances have further increased the vulnerabilities of Colombia and Venezuela, and have led to severe financial pressures in Ecuador. The Mexican economy is even less affected by the Brazilian crisis because of the relative unimportance of its economic links with Brazil. With respect to financial spillovers, the Brazilian crisis has had only limited and short-lived direct effects on interest rates, equity prices, and exchange rates in the other Latin American countries. The crisis, however, appears to have been a significant setback to the normalization of financing conditions facing emerging market economies, thereby confronting these countries with the prospect of continued low levels of private capital inflows.

## Whither Russia?

In the wake of the August 1998 financial crisis, Russia's economic performance has deteriorated sharply. Over the last five months of 1998, consumer prices rose by more than 75 percent, and the ruble depreciated by more than 70 percent against the U.S. dollar. Reflecting the severe financial pressure during the run-up to the crisis and the worsening of the overall economic situation in the postcrisis period, in 1998 as a whole real GDP fell by about 5 percent, and real investment declined by close to 10 percent, with foreign direct investment down to a trickle of \$1.2 billion from \$6.2 billion in 1997. The budgetary outlook has also worsened: revenues raised by the federal government fell to below 10 percent of GDP in 1998, while the federal government deficit amounted to 6 percent of GDP (Table 2.3).

The August 1998 financial crisis was rooted in persistent fiscal imbalances and structural weaknesses in the enterprise and banking sectors. Although the government's stabilization programs from 1995 managed to bring inflation down quickly, limited progress was made in dealing with underlying fiscal and structural problems, with program after program being poorly implemented in these two areas in part because of the opposition of strong vested interests. Rapidly falling costs of borrowing in both the domestic treasury bill market and international financial markets, a reflection of strong foreign appetite for Russian securities, further weakened the government's incentive to address the underlying problems. By the time, toward the end of 1997, that steps to correct the fiscal imbalances were finally being implemented in earnest, the reversal in foreign investor sentiment following the Asian crisis and a rapid increase in interest rates had put

**Table 2.1. Selected Latin American Economies: Macroeconomic Indicators***(Percent change from four quarters earlier unless otherwise noted)*

	1997				1998			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Argentina</b>								
Real GDP	8.0	8.3	9.9	8.2	7.2	7.4	3.2	-0.5
Inflation	0.7	0.7	0.6	—	0.6	1.2	1.1	0.7
Trade balance (billions of U.S. dollars) <sup>1</sup>	-0.7	-0.3	-1.2	-1.8	-1.6	-0.5	-1.7	-1.6
Import value <sup>2</sup>	29.7	30.9	24.1	26.9	15.5	8.2	2.7	-12.3
Export value <sup>2</sup>	20.2	8.7	7.5	5.1	2.0	5.4	-3.1	-11.4
Export volume	16.5	14.7	13.7	10.0	11.9	15.9	9.4	-0.7
<b>Brazil</b>								
Real GDP	3.8	4.8	2.7	2.0	1.1	1.6	-0.1	-1.9
Inflation	9.2	8.4	6.7	7.4	6.1	4.4	3.3	1.9
Trade balance (billions of U.S. dollars) <sup>1</sup>	-2.5	-1.3	-2.0	-2.6	-1.5	-0.5	-1.8	-2.6
Import value <sup>2,3</sup>	22.2	23.5	19.0	0.3	2.2	-5.5	-9.7	-10.1
Export value <sup>2,3</sup>	3.6	12.0	15.0	11.9	11.7	-0.5	-9.5	-12.3
Export volume	-5.9	3.9	5.6	4.3	24.1	9.8	6.0	3.3
<b>Chile</b>								
Real GDP	5.1	6.4	8.9	9.9	8.0	5.9	2.9	-2.8
Inflation	6.8	5.3	6.0	6.0	5.3	5.4	4.8	4.7
Trade balance (billions of U.S. dollars) <sup>1,3</sup>	0.6	0.2	-0.7	-1.3	-0.6	-0.5	-1.1	-0.3
Import value <sup>2,3</sup>	5.3	7.3	12.6	15.3	15.3	7.2	-5.1	-28.5
Export value <sup>2,3</sup>	14.3	2.1	13.7	11.9	-13.0	-8.6	-0.1	-0.1
Export volume	3.3	4.1	8.2	14.7	5.3	12.5	5.8	...
<b>Mexico</b>								
Real GDP	4.6	8.4	7.5	6.6	7.5	4.4	5.0	2.6
Inflation	24.5	20.3	18.8	15.7	15.3	15.3	15.9	18.6
Trade balance (billions of U.S. dollars) <sup>1</sup>	8.4	1.6	-2.9	-7.4	-1.9	-2.5	-8.9	-18.1
Import value <sup>2</sup>	17.1	24.4	23.4	22.3	22.0	12.4	7.0	11.9
Export value <sup>2</sup>	14.3	14.6	14.6	11.8	11.2	8.9	2.3	4.4
Export volume	12.3	15.5	16.1	15.9	18.7	14.7	8.1	12.6
<b>Venezuela</b>								
Real GDP	1.7	8.9	9.2	5.8	10.6	2.0	-4.5	-8.1
Inflation	83.1	52.5	39.7	38.1	37.3	39.4	36.2	31.2
Trade balance (billions of U.S. dollars) <sup>1</sup>	3.3	2.6	2.1	2.6	0.9	0.6	0.8	1.0
Import value <sup>2</sup>	22.5	11.0	51.6	42.7	46.5	14.7	-9.1	-5.5
Export value <sup>2</sup>	17.5	4.9	1.2	-10.0	-21.5	-25.3	-29.0	-30.0

Sources: Country authorities; IMF staff estimates (for GDP); and IMF, *International Financial Statistics (IFS)* (for inflation, trade balance, import value, export value, and export volume, except where noted).

<sup>1</sup>On a national accounts basis.

<sup>2</sup>In U.S. dollars, on national accounts basis.

<sup>3</sup>Trade in goods only.

Russia's public debt on an explosive path, confronting the authorities with the prospect of an ever-increasing adjustment burden. The fiscal position was further weakened by the decline in oil and other commodity prices, which reduced tax revenues and the prospective receipts from privatizations in the energy sector. With oil and gas export revenues down by around 20 percent or \$3.5 billion in the first seven months of 1998 (compared with the same period a year earlier), the external current account balance was also negatively affected and swung into deficit during this period.

Russia's experience in the period preceding the August 1998 crisis underscored the mutually reinforcing character of its fiscal and structural problems. Fiscal policy failed to provide proper incentives for

the restructuring of the corporate sector, as implicit and explicit subsidies, widespread de facto tax exemptions, and tolerance of tax arrears and payments-in-kind helped to sustain soft budget constraints. Social safety net arrangements, generally provided by the employer, discouraged labor mobility, while distortionary tax structures and arbitrary tax administration hampered the development of new small and medium-sized private companies. Moreover, the willingness of the federal and local governments to run up expenditure arrears, together with the tolerance of tax arrears and the practice of offsetting such arrears with expenditure arrears, sharply reduced incentives for taxpayer compliance and contributed to the spread of a culture of nonpayment and barter, which made tax collection even more difficult. The inadequate structural reform

**Table 2.2. Selected Latin American and Asian Countries: Regional Trade Links in 1997***(Exports to partner countries as percent of exporter's GDP)*

Exporters	Importing Partners								
	Argentina	Brazil	Chile	Colombia	Mexico	Paraguay	Uruguay	Venezuela	World
<b>Latin America</b>									
Argentina	—	2.4	0.5	0.1	0.1	0.2	0.2	0.1	7.8
Brazil	0.9	—	0.1	0.1	0.1	0.2	0.1	0.1	6.7
Chile	1.0	1.2	—	0.3	0.5	0.1	0.1	0.2	22.2
Colombia	0.1	0.1	0.2	—	0.1	—	—	0.9	12.3
Mexico	0.1	0.2	0.2	0.1	—	—	—	0.2	27.4
Paraguay	2.0	6.1	0.5	—	0.1	—	0.3	0.2	15.8
Uruguay	1.8	4.7	0.3	0.1	0.2	0.3	—	0.1	13.5
Venezuela	0.1	1.2	0.3	1.6	0.5	—	0.1	—	28.7
	China	Indonesia	Malaysia	Philippines	Thailand	Korea	Japan	World	
<b>Asia</b>									
China	—	0.2	0.2	0.1	0.2	1.0	3.5	20.3	
Indonesia	1.1	—	0.7	0.4	0.4	1.6	5.8	24.8	
Malaysia	1.9	1.3	—	1.2	2.9	2.6	10.1	80.4	
Philippines	0.4	0.1	1.0	—	0.6	0.8	5.5	35.6	
Thailand	1.1	0.9	1.6	0.5	—	0.7	5.7	37.4	
Korea	3.1	0.8	1.0	0.6	0.5	—	3.3	30.7	
Japan	0.5	0.2	0.3	0.2	0.3	0.6	—	10.0	

Source: IMF, Direction of Trade Statistics database.

effort, in turn, burdened the budget with additional expenditures and hindered an economic recovery that would have expanded the tax base.

By mid-August, with investor confidence in a state of collapse, international reserves dwindling, and interest rates soaring, the authorities became unable to defend the ruble exchange rate peg or to refinance maturing public debt. The consequences of the crisis and of the ensuing de facto devaluation, payment moratorium on private sector external obligations, and unilateral restructuring of the government's domestic currency debt have been severely negative. The exchange rate depreciated sharply and inflation picked up; the output decline accelerated; domestic financial markets and banks were paralyzed; and access to international financial markets was lost. From the time of its introduction there was a significant risk that the July 1998 anticrisis program would fail if the program's revenue and expenditure measures did not receive full parliamentary approval and if interest rates were not brought down by a return of investor confidence (see the October 1998 *World Economic Outlook*, Chapter II). The authorities' course of action in response to the materialization of this risk—the unilateral debt restructuring in particular—aggravated the consequences of the program's breakdown.

In the wake of the August 1998 events, the ruble depreciated by around 70 percent against the U.S. dollar in a couple of weeks, and monthly consumer price inflation accelerated to almost 40 percent in September from virtual price stability in the first half of the year. The exchange rate rebounded, and monthly inflation moderated to 4½ percent in October as the operation of the foreign exchange market was restricted admin-

istratively, liquidity creation by the central bank slowed, and deposits remained frozen in the banking system. This stabilization was only temporary, however, and the underlying foreign exchange market and inflationary pressures reemerged from November on, in tandem with the resumption of substantial central bank support to the budget and to ailing banks. The ruble depreciation and surge in inflation in late 1998 in turn sharply reduced the real value of consumer savings and incomes and ended the rise in domestic demand that had contributed to the modest resumption of output growth in 1997. (Further exchange rate and inflation developments are discussed below.)

The devaluation of the ruble and unilateral restructuring of sovereign domestic debt also had major implications for Russia's financial markets and banking sector. Trading in the treasury bill market was suspended (operations on a very limited scale resumed in early 1999), while the equity market lost most of its value, and turnover declined sharply. Banks, most of which were in structurally weak financial positions already before the crisis, suffered extensive losses on their portfolios of government securities and large net foreign currency liabilities. The freezing of the treasury bill market, moreover, caused severe liquidity problems and contributed to widespread difficulties in the payment system. According to a first assessment by the central bank in October 1998, banks accounting for about one-third of total banking assets and deposits had no prospect of recovery, while substantial public financial support was needed to help overcome liquidity and solvency problems in other banks, including some large banks to be salvaged for systemic reasons. Financial intermediation, including prospects for fu-

**Table 2.3. Russian Federation: Recent Macroeconomic Developments and 1999 Baseline Scenario**

	1997	1998	1999
	Actual	Preliminary	Baseline Scenario
<i>Annual percentage change</i>			
<b>Production and prices</b>			
Real GDP	0.8	-4.8	-7.0
Consumer prices			
Annual average	14.7	27.8	101.5
12-month, year-end	11.0	84.5	50.0
GDP deflator	16.6	11.3	80.0
<i>Percent of GDP</i>			
<b>Public sector</b>			
Federal government			
Fiscal balance <sup>1</sup>	-7.0	-6.0	...
Revenue <sup>1</sup>	12.0	9.9	...
Expenditure <sup>1</sup>	19.0	15.9	...
<i>Billions of U.S. dollars unless otherwise indicated</i>			
<b>External sector</b>			
Total exports, f.o.b.	88.7	73.3	74.0
Total imports, f.o.b.	74.8	60.6	47.5
External current account			
balance	-0.8	-1.4	14.0
Foreign direct investment	6.2	1.2	0.8
Government external			
debt service	12.9	17.6	...
In percent of exports <sup>2</sup>	12.7	20.5	...
Stock of external			
government debt	123.5	149.0	...
In percent of GDP	27.7	45.3	...
<b>Memorandum</b>			
GDP in billions of rubles	2,586.0	2,740.0	...
Exchange rate, rubles			
per U.S. dollar	5.8	9.7	...
GDP in billions of			
U.S. dollars	446.0	329.0	...

Sources: Russian authorities; and IMF staff estimates and projections.

<sup>1</sup>Including noncash revenue and expenditure for 1997-98.

<sup>2</sup>Exports of goods and nonfactor services.

ture borrowing, has suffered with the large-scale collapse of the banking sector, the reduced activity of the securities markets, and the drying up of activity in the interbank market. The low level of financial intermediation in Russia prior to the crisis has, however, limited somewhat the negative repercussions of the crisis on economic activity.

The payment moratorium on private sector obligations, and domestic debt restructuring, alienated investors, and subsequent negotiations have not yet normalized relations with international creditors. Foreign commercial banks saw their repayment claims (including those related to dollar forward contracts) on Russian banks falling due from mid-August to mid-November 1998 suspended by the moratorium. When it became clear that most Russian banks would be unable to settle these claims following the moratorium's

expiration, a range of bilateral negotiations was initiated, which are mostly continuing. Foreign investors, together with domestic banks, also suffered heavy losses from the treasury bill restructuring. In response to the extremely unfavorable reaction by foreign investors, in September 1998 Russia opened negotiations with an international investor committee to revise the August restructuring terms, but, in the absence of a full agreement, the authorities unilaterally introduced new payment terms in February 1999.

These developments confront the Russian authorities with the need both to step up efforts to come to grips with the unresolved fiscal and structural issues that are at the root of the crisis and to address the negative consequences of the crisis itself. However, since August, the fiscal policy stance has been loosened, and implementation of many of the revenue measures, including those aimed at improving tax compliance, and expenditure cuts introduced in the July 1998 anticrisis plan, have stalled. Weakening tax discipline, together with payment problems in the banking system, contributed to a sharp decline in federal government cash revenue in the second half of 1998, with the shortfall being financed primarily by central bank credit and a further buildup of budgetary arrears. There have also been important setbacks in the structural reform effort, with some regression in important areas. For instance, oil companies have been obligated to supply nonpaying domestic refineries, bankruptcy procedures have de facto been suspended, tariffs for energy and other utilities have been administratively frozen or reduced, and price controls have been imposed at the regional and municipal levels.

The authorities have also failed to address fully monetary and financial market issues. Significant central bank credits extended to the federal budget and the banking sector in late 1998 intensified the foreign exchange market and inflationary pressures unleashed by the August devaluation. Monetary policy was tightened, however, in January-February 1999 as the central bank did not extend credit to the government and this contributed to a stabilization of the exchange rate and a slowdown in inflation during this period. The implementation of a bank restructuring program announced in October 1998 has been slow, with no firm action yet taken against major insolvent banks, and the risk of a large-scale and ad hoc bailout of ailing banks remains. Initiatives to normalize relations with foreign creditors affected by the August 1998 measures have met with little success, and the government's announcement at the end of 1998 that it would be unable to meet its 1999 payment obligations on Soviet-era debt to London Club (private) and Paris Club (official) creditors has further reduced the scope for restoring access to international financial markets.

Russia faces the prospect of protracted high inflation and prolonged recession unless determined and coherent efforts are made to address the country's un-

### Box 2.1. Exchange Rate Crashes and Inflation: Lessons for Brazil

A critical policy challenge in the aftermath of a currency devaluation is to ensure that the upward price pressures that arise do not lead to a sustained rise in inflation, which would create further downward pressures on the currency. This concern is of particular importance in the case of the recent Brazilian devaluation because of Brazil's inflation and exchange rate history. Prices in Brazil rose at a compound annual rate of over 700 percent in the ten years prior to the introduction of the Real Plan in 1994, and the currency depreciated by similar amounts relative to the U.S. dollar. The major achievement of the Real Plan, which linked the Brazilian currency to the U.S. dollar, was to reduce inflation from over 2000 percent in 1994 to 3½ percent in 1998. Following the abandonment of the crawling peg and subsequent float of the real in mid-January 1999, the Brazilian authorities now face the need to reestablish a credible and coherent monetary policy without the exchange rate anchor. This box discusses the lessons from other countries that have faced currency crises in recent years, including two industrial countries—Italy and the United Kingdom after the ERM crisis in 1992—and two emerging market countries—Mexico after the crisis in 1994–95 and Korea after its crisis in 1997.<sup>1</sup>

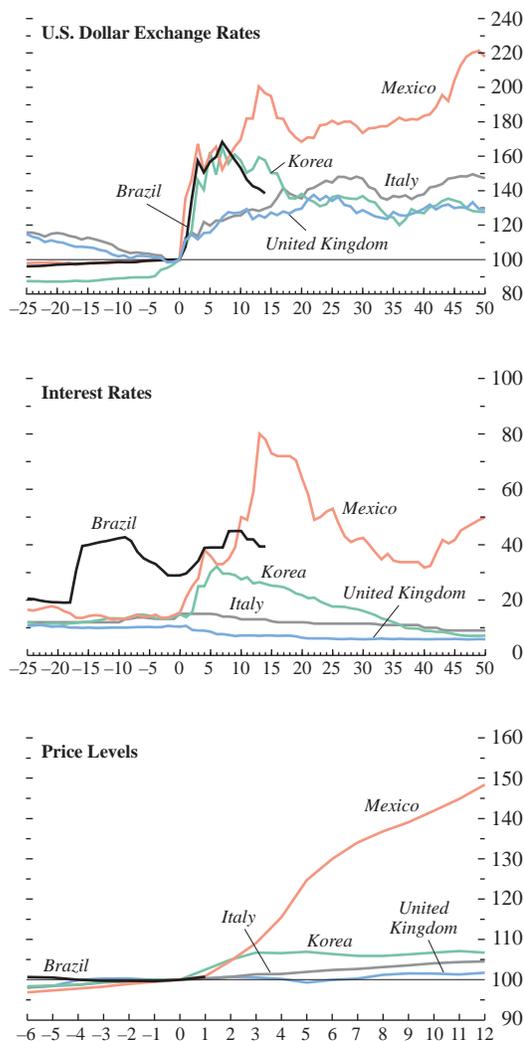
In Mexico, Korea, and Brazil, the initial devaluation was much larger than in the two industrial countries. Within five weeks of the respective crises, the Mexican peso, the Korean won, and the Brazilian real depreciated over 50 percent relative to the dollar, while the Italian lira and pound sterling fell less than 20 percent (*see first figure*). However, the won recovered significantly from its initial overshoot, and the pound stabilized after depreciating slightly further over a few more weeks, while the peso and, to a much lesser extent, the lira continued to depreciate. These different experiences reflect various factors, including the state of the domestic economy; the credibility of the immediate policy response, partly in light of expectations formed from historical experience; and progress toward the resolution of the underlying causes of the crises—macroeconomic imbalances, structural weaknesses, and financial fragilities, such as large external debt-servicing requirements relative to foreign reserves.<sup>2</sup>

In part because the growth of activity and demand pressures in the United Kingdom and Italy were already weak prior to the ERM crisis, prices in these two countries showed little pass-through from the devaluations; in fact, 12-month inflation rates declined during the following year. Official interest rates in the United Kingdom were reduced when the ERM constraint was abandoned,

<sup>1</sup>This box mainly focuses on lessons that can be learned about containing inflation in the aftermath of a currency devaluation. For a more extensive discussion of the role of monetary policy in the aftermath of a currency crisis, including the advantages and disadvantages of using monetary tightening to stabilize the exchange rate, see Box 2.3, "The Role of Monetary Policy in Responding to Currency Crises," in the October 1998 *World Economic Outlook*, pp. 40–43.

<sup>2</sup>See Chapters II and III, and references therein, for a more extensive analysis of these crises.

#### Exchange Rates, Interest Rates, and Prices<sup>1</sup>



<sup>1</sup>Exchange and interest rates are in weeks around the crisis, and price levels are in months around the crisis. Week or month zero is, respectively, the week or month prior to the devaluation. For the United Kingdom and Italy, the crisis occurs in September 1992; for Mexico in December 1994, for Korea in December 1997; and for Brazil in January 1999. Exchange rates and price levels are indexed to 100, respectively, for week zero and month zero. Interest rates are in percent.

contributing to a rebound in economic activity (*see second figure*). This easing of monetary policy was possible because the U.K. authorities correctly perceived that the  
(Box continues on next page.)

**Box 2.1 (concluded)**

attack on sterling had been the result of market sentiment that maintaining the ERM peg was incompatible with the cyclical requirements of the economy. In Italy, interest rates needed to be maintained at higher levels as the lira continued to depreciate in the context of relatively stronger demand conditions, a backward-looking wage indexation system, and much wider fiscal imbalances. Partly as a result of the need to maintain a tighter monetary policy, growth slowed further in the year after the crisis before rebounding. The exchange market crisis, however, provided a catalyst for a sizable fiscal package and some structural reforms, including on the pension system, as well as a tripartite agreement between government, business, and labor to switch the wage indexation system to one based on targeted inflation. These policy and structural changes boosted the credibility of the subsequent exchange rate and monetary policy regime.

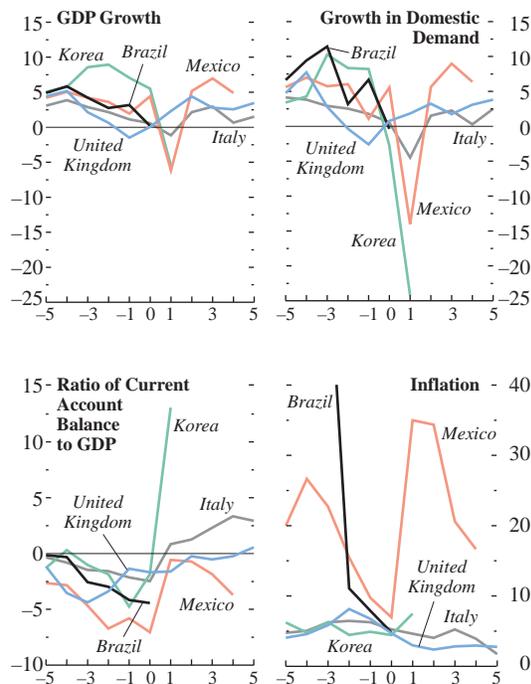
In Korea and Mexico, exchange rate stabilization was much more difficult given the loss of credibility for these countries' policies in the wake of the financial crises, the size of the initial currency depreciations, and the immediate external financing requirements. Consequently, the output losses were greater because financial conditions needed to remain relatively tight for longer periods of time. To stabilize the exchange rate, official interest rates were raised substantially in both countries—albeit with some hesitation that probably exacerbated currency pressures—and other measures were required as well, including large financing packages and a voluntary debt roll-over. In Korea, after a period of adjustment lasting about three months, inflation declined significantly as the stabilization effort took hold, and a sharp reversal in the external current account position helped to reverse a large part of the initial depreciation. In addition, the traditionally low pass-through from exchange rate depreciations to inflation in Korea may have played a role by dampening inflation expectations. With the depreciation having been contained, interest rates soon began to fall. In Mexico, however, inflation rose to much higher levels—annualized monthly inflation rates peaked at over 150 percent—and remained much higher than before the crisis because a combination of factors, including a premature attempt to lower interest rates, set off a further round of currency depreciation, giving rise eventually to a need for higher rates.

To assess which of these contrasting experiences is most relevant for Brazil, some of the long-run characteristics of these economies also should be taken into account because they may influence expectations and the credibility of policies following exchange rate devaluations. One striking difference among these economies is in their long-term inflation experiences (*see table*). In the United Kingdom, Italy, and Korea, inflation averaged under 10 percent annually between 1970 and 1998, while in Mexico inflation averaged over 30 percent and, in Brazil, over 180 percent. Over 1970–98, cross-country differences in inflation tended to be largely reflected in exchange rate changes.<sup>3</sup>

<sup>3</sup>In this analysis, the reference country is the United States. U.S. inflation averaged 5.3 percent during 1970–98.

**Selected Macroeconomic Indicators<sup>1</sup>**

(Percent)



<sup>1</sup>In years around the crisis. Year zero is 1992 for the United Kingdom and Italy, 1994 for Mexico, 1997 for Korea, and 1998 for Brazil.

Given historical experience, it would not be surprising if in Brazil expectations of inflation in the aftermath of the recent devaluation tended to be higher than in the other countries, making the establishment of a credible monetary framework to replace the exchange rate anchor even more important. This is all the more necessary because of the sophisticated mechanisms developed to cope with years of hyperinflation prior to the Real Plan, particularly the indexation of wages and other prices. If widespread indexation were to reemerge—wage indexation is not now permitted—inflation inertia would develop again, and the subsequent disinflation would be even more difficult and costly.

Other long-run characteristics are less markedly different. Ratios of imports to GDP are higher in the United Kingdom, Italy, Korea, and Mexico than in Brazil, which should help to limit the spillover from currency depreciation to domestic inflation in Brazil if policies are credible. External current account deficits have been larger on average in Mexico and Brazil than in the other three

### Selected Macroeconomic Characteristics

(Percent average for 1970–98 unless otherwise indicated)

	United Kingdom	Italy	Korea	Mexico	Brazil
Inflation	8.0	9.6	9.6	33.0	180.1
Exchange rate depreciation <sup>1</sup>	1.3	3.7	5.5	26.6	164.8
Import share of GDP	26.5	20.4	33.1	16.5	8.6
GDP growth	2.3	2.6	7.6	4.1	4.4
Current account balance to GDP	-0.5	-0.1	-1.1	-2.9	-2.4
Fiscal balance to GDP <sup>2</sup>	-2.8	-9.2	-0.5	-5.9	-4.2

<sup>1</sup>Relative to the U.S. dollar.

<sup>2</sup>For Italy, the average is computed for 1977–98 and for Brazil, for 1980–98 because of data availability. The fiscal balance is the consolidated general government balance as defined in the *World Economic Outlook* database.

economies, while fiscal deficits have also been larger on average, except for Italy.

The large depreciation of the real since mid-January suggests a significant direct impact on the price level in Brazil, as in Mexico and to a lesser degree in Korea. Whether the exchange rate stabilizes, as in Korea, or depreciates further, as in Mexico, depends on the soundness and credibility of macroeconomic policies, including their ability to contain inflation spillovers, as well as on whether interest rates are at sufficient levels to maintain the confidence of investors. The initial jump in the overall price level is roughly estimated to be just over 5 percent (given the 60 percent initial rise in the price of foreign exchange and the 9 percent ratio of imports to GDP).<sup>4</sup> This implies that annualized monthly inflation could easily rise to the middle double digits in the near term, even with only moderate spillover to prices of domestically produced goods and services. If Brazilians were to extrapolate this initial jump in inflation into expectations of a sustained rise in inflation and a continued depreciation of the real, an inflation spiral could ensue. This underscores the crucial importance of the early establishment by the Brazilian authorities of a credible monetary policy to contain inflation expectations.

The weakness of activity in the economy prior to the devaluation and Brazil's relatively low import share will both support a credible effort to resist a buildup of inflationary pressures.<sup>5</sup> In early February 1999, the authori-

ties announced their intention to introduce an inflation-targeting framework as the nominal anchor for monetary policy, with a goal of annualized monthly inflation in the middle single digits by the end of the year. While an inflation-targeting framework is being put in place, the central bank is committed to keeping the growth of net domestic assets within rates consistent with the target path of inflation and the projected paths of real GDP and the overall balance of payments. To make this new framework credible, strong fiscal support will be required, while high nominal interest rates are likely to be unavoidable for a period, particularly because of the need to ensure the refinancing of public sector debt; otherwise, the result would be injections of liquidity that would fuel an inflation spiral. Initially, in the weeks following the floating of the real, nominal interest rates seem not to have been high enough, in view of the cancellation or reduction of some government debt auctions. Subsequently, however, after the announcement of the inflation-targeting framework and some further increases in short-term interest rates, these refinancing difficulties eased.

Although relatively high nominal interest rates seem unavoidable in the near term, real interest rates will have increased by less because of the rise in inflation expectations—even though these are hard to measure precisely. Moreover, relatively tight monetary conditions need not be prolonged if the credibility of the new monetary policy framework is rapidly established and strong fiscal adjustment is implemented. If the private sector is persuaded that the increase in the price level is a onetime adjustment, then nominal interest rates should soon begin to fall, as they have in other countries, as the exchange rate stabilizes. Even though higher nominal interest rates will increase debt-servicing costs, these should be sustainable since the increase will be less in real terms and is a transitional problem. Dealing with such a transitional increase in debt-servicing costs will also be much less difficult over the long run than tackling an inflation spiral with its substantial adverse effects on resource allocation, growth, and the income distribution.

<sup>4</sup>This direct impact on the price level of the depreciation of the real could be somewhat smaller if imported goods are priced in local currency or if domestic goods are substituted for foreign goods. The former does not seem very likely, given Brazil's inflation and exchange rate history.

<sup>5</sup>The pass-through from an exchange rate depreciation to inflation depends in part on the level of economic activity and inflation prior to the devaluation. For example, Eduardo Borensztein and Jose De Gregario, "Devaluation and Inflation After Currency Crises," IMF Working Paper (forthcoming, 1999), find that the main determinants of inflationary pass-through from devaluations are the position of output relative to trend, the extent of the initial overvaluation of the exchange rate, and the initial rate of inflation. In Brazil, as in the United Kingdom and, to some extent, Italy, the economy had already slowed down prior to the devaluation. Similarly, tight financial

conditions in the year leading up to the crisis had caused inflation in Brazil to turn negative in the latter part of 1998.

derlying fiscal and structural problems and the additional challenges arising from the August 1998 crisis. Russia can draw encouragement from the experience of other countries: it is not unique in experiencing a reversal in macroeconomic stabilization achievements as a consequence of lags in structural reform. Bulgaria, for instance, went through a deep economic and financial crisis in 1996 and early 1997, including hyperinflation and massive capital flight, following a collapse of its unreformed banking system. The crisis set the stage for a change in policies and the implementation of a new strategy that included a very disciplined fiscal stance, and an acceleration of structural reforms quickly brought inflation back into the single digits and led to a resumption of growth. There are significant differences between the conditions in Bulgaria in early 1997 and those in Russia in early 1999, but the Bulgarian example shows that from a dire starting position inflation can be reduced and growth restored. A scenario that could achieve these objectives in Russia would include the following elements.

Inflation in Russia can return to the moderate range (in the low double digits) by next year if a strong fiscal adjustment program is implemented that limits the need for central bank credit to the budget and the further accumulation of budget arrears. An adjustment program that boosts revenue and cuts noninterest expenditure as a share of GDP, in combination with an agreement on debt rescheduling, could contain the overall financing requirement in 1999. At the same time, such a program would open the way for international financial support, covering part of this financing requirement and reducing the need for residual monetary financing. The improvement in confidence associated with the adoption of such a program would help growth to resume. For growth to be restored on a sustainable basis, in addition, a reinvigorated structural reform effort will be needed. The key principles and measures needed in Russia's structural reform agenda have been spelled out in past programs, including the July 1998 anticrisis program. The emphasis should therefore be on areas where implementation has been unsatisfactory. In addition, the reform setbacks and banking sector problems that have emerged in the wake of the August 1998 crisis need to be addressed. To promote growth it will be particularly critical to (1) tackle the economy-wide nonpayment problem through the establishment of hard budget constraints, beginning with the government and the energy sector; (2) reduce the claims of ailing large enterprises on scarce resources by encouraging industrial restructuring, including through the exit of nonviable enterprises; (3) foster the development of small and medium-sized private enterprises and stimulate—among other measures by a revitalized privatization process—foreign participation and investment in the economy; and (4) strengthen the legal system, including property rights.

The agenda of structural reforms that Russia still needs to implement is formidable, particularly given the regression that has occurred since August 1998. A very high priority is to address the culture of nonpayment. While no quick or easy solution to this deep-rooted and economy-wide problem can be expected, measures to correct revenue and payment arrears in the government sector itself, including through the elimination of tax offsets, could have a strong demonstration effect. Without early progress in this and other structural reforms, Russia seems unlikely to see sustained economic recovery in the near term, since maintaining obsolete production facilities will further drain resources, and financing for new investment will be lacking.

### **Financial Flows in the Wake of the Brazilian Crisis and the Sustainability of External Imbalances**

Before the Brazilian crisis, international fundraising by emerging market economies had fallen to low levels in the wake of the Asian and Russian crises. Thus in the fourth quarter of 1998 gross private financial flows to emerging market economies (excluding interbank flows) fell to a level equivalent to about one-third of the peak reached in the second quarter of 1997 (Table 2.4). Market access in the fourth quarter of 1998 was mainly confined to borrowers from central and eastern Europe and Latin America that continued to enjoy high credit ratings, with also some borrowing by highly rated economies in east Asia. The overall decline in inflows notwithstanding, market activity recovered modestly from the near total shutdown experienced in the immediate aftermath of the Russian crisis.

The Brazilian crisis has not thus far generated strong or systemic financial market spillovers comparable to those observed in the wake of the Russian crisis, but it has further clouded the prospects for an early pickup in financial flows. Emerging market bond spreads rose sharply immediately following the Brazilian crisis; although they have since fallen back somewhat, they remain on average roughly double the levels prior to the Russian crisis and well above levels consistent with a recovery in private capital flows (see Figure 1.3). Preliminary figures on gross flows for the first quarter of 1999 indicate low volumes in January, but some pickup in February–March, as Latin American borrowers in particular returned to the international bond market. On a net basis, private capital flows to the emerging market economies are expected to reach somewhat less than \$70 billion in 1999—about one-third of the peak reached in 1996 and around \$20 billion less than projected in the December 1998 *Interim Assessment*. There is a substantial risk that financing could fail to re-

**Table 2.4. Gross Private Financing to Emerging Market Economies***(Billions of U.S. dollars)*

	1996	1997	1998	1998				1999			
				Q1	Q2	Q3	Q4	Q1	Jan.	Feb.	Mar.
<b>Total</b>	<b>218.4</b>	<b>286.1</b>	<b>148.8</b>	<b>39.5</b>	<b>50.9</b>	<b>30.5</b>	<b>27.9</b>	<b>28.6</b>	<b>6.1</b>	<b>11.3</b>	<b>11.1</b>
Asia	118.5	127.5	34.1	7.1	14.1	5.5	7.5	10.0	3.4	4.1	2.5
Europe	21.3	37.5	36.1	7.5	12.7	9.9	6.1	3.1	1.2	1.3	0.7
Middle East and Africa	15.5	30.8	14.0	3.3	2.4	4.9	3.5	3.3	1.0	1.7	0.5
Western Hemisphere	63.1	90.3	64.6	21.7	21.8	10.2	10.9	12.1	0.5	4.2	7.4
<b>Bond issues</b>	<b>101.9</b>	<b>128.1</b>	<b>77.7</b>	<b>25.3</b>	<b>28.0</b>	<b>14.1</b>	<b>10.3</b>	<b>21.0</b>	<b>4.3</b>	<b>8.0</b>	<b>8.8</b>
Asia	43.1	45.5	11.5	2.7	6.7	0.3	1.8	5.9	3.0	1.8	1.1
Western Hemisphere	47.2	54.4	38.3	14.8	13.3	5.1	5.2	11.0	0.2	4.2	6.6
Other regions	11.6	28.2	27.9	7.8	8.1	8.7	3.3	4.1	1.0	2.0	1.1
<b>Other fixed income</b>	<b>9.4</b>	<b>10.0</b>	<b>0.5</b>	<b>0.1</b>	<b>0.4</b>	—	—	—	—	—	—
Asia	9.4	9.8	0.5	0.1	0.4	—	—	—	—	—	—
Western Hemisphere	—	—	—	—	—	—	—	—	—	—	—
Other regions	—	0.2	—	—	—	—	—	—	—	—	—
<b>Loan commitments</b>	<b>90.7</b>	<b>123.2</b>	<b>60.7</b>	<b>11.0</b>	<b>18.7</b>	<b>16.2</b>	<b>14.9</b>	<b>5.4</b>	<b>1.4</b>	<b>2.4</b>	<b>1.6</b>
Asia	56.2	58.9	17.7	2.5	5.0	5.2	4.9	2.9	0.1	2.1	0.7
Western Hemisphere	12.3	30.9	26.1	6.9	8.5	5.0	5.7	0.9	0.1	—	0.9
Other regions	22.2	33.4	16.9	1.5	5.2	6.0	4.3	1.6	1.2	0.4	0.1
<b>Equity issues</b>	<b>16.4</b>	<b>24.8</b>	<b>9.9</b>	<b>3.1</b>	<b>3.7</b>	<b>0.2</b>	<b>2.8</b>	<b>2.2</b>	<b>0.5</b>	<b>0.9</b>	<b>0.8</b>
Asia	9.8	13.2	4.4	1.7	1.9	—	0.7	1.2	0.3	0.2	0.7
Western Hemisphere	3.7	5.1	0.2	—	0.1	0.1	—	0.2	0.2	—	—
Other regions	3.0	6.5	5.3	1.4	1.7	0.2	2.0	0.7	—	0.6	0.1

Source: Capital Data Loanware and Bondware.

cover in 2000 to the level assumed in the projection (Table 2.5).

Reduced access to international financial markets is the main factor underlying the projected improvement of around \$30 billion in the combined current account position of the Western Hemisphere developing countries in 1999, with Brazil accounting for around two-thirds of the total (Figure 2.2). This improvement is considerably smaller than the swing of almost \$120 billion in the current account balances of the Asian crisis economies between 1996 and 1998. The improvement in current account balances among the Asian economies was absorbed mainly by the United States, other advanced economies outside the euro area, and developing countries outside Asia, in particular the fuel exporters. This deterioration in the balances of the fuel exporters is projected to be partly reversed in 1999, as adjustment takes place, with negative implications for domestic activity and imports. For the transition economies, the projected swing toward surplus in 1999 is more than accounted for by Russia, where, reflecting financing constraints, a \$14 billion surplus is expected to be recorded this year after a near \$1 billion surplus in 1998. In most other transition economies, current account deficits are projected to widen, partly reflecting declines in exports to Russia and also western Europe. The combined current account surplus of the east Asian crisis countries is projected to fall by around \$15 billion; during 1998 the

decline in imports leveled off, while the dollar value of exports was broadly stable (Figure 2.3).

In part reflecting the absorption of the finance-constrained improvements in current account balances in Russia and the developing countries of the Western Hemisphere, the current account position of the advanced economies as a group is projected to swing into a \$40 billion deficit in 1999 from a \$14 billion surplus in 1998, a deterioration that is larger by half than that projected in the December 1998 *Interim Assessment*. Both the projected turnaround and the revision are accounted for almost entirely by the United States, whose projected deficit in 1999 has been revised up to almost \$310 billion or 3½ percent of GDP, mainly owing to the upward revision to domestic economic growth (Table 2.6). The combined current account surplus of the euro-area countries is projected to be broadly stable at 1½ percent of GDP. The general appreciation of the yen since August 1998 is expected to contribute to a modest decline in Japan's current account surplus in 2000.

The global current account projections for 1999 show that the United States is expected to absorb most of the counterpart to the improvement in Latin America's current account position, having already absorbed most of the counterpart to the swing into surplus of the Asian crisis countries in 1997–98. This widening of the U.S. current account deficit raises the question of sustainability and suggests an alternative

**Table 2.5. Emerging Market Economies: Net Capital Flows<sup>1</sup>***(Billions of U.S. dollars)*

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Total</b>										
Net private capital flows <sup>2</sup>	123.8	119.3	181.9	152.6	193.3	212.1	149.1	64.3	66.7	145.4
Net direct investment	31.3	35.5	56.8	82.7	97.0	115.9	142.7	131.0	116.7	123.3
Net portfolio investment	36.9	51.1	113.6	105.6	41.2	80.8	66.8	36.7	8.0	44.2
Other net investment	55.6	32.7	11.5	-35.8	55.0	15.4	-60.4	-103.4	-58.0	-22.1
Net official flows	36.5	22.3	20.1	1.8	26.1	-0.8	24.4	41.7	8.0	2.9
Change in reserves <sup>3</sup>	-61.5	-51.9	-75.9	-66.7	-120.2	-109.1	-61.2	-34.7	-22.6	-75.1
<i>Memorandum</i>										
Current account <sup>4</sup>	-85.1	-75.6	-116.0	-72.0	-91.0	-91.8	-87.1	-59.2	-39.4	-58.7
<b>Africa</b>										
Net private capital flows <sup>2</sup>	8.9	6.9	8.7	4.8	6.8	7.6	16.3	10.3	11.9	16.8
Net direct investment	2.0	1.7	1.9	3.4	4.2	5.5	7.6	6.8	8.0	8.3
Net portfolio investment	-1.5	-0.6	1.0	0.8	1.5	-0.2	2.9	3.5	1.0	2.1
Other net investment	8.4	5.8	5.8	0.7	1.2	2.3	5.8	—	2.9	6.4
Net official flows	7.8	10.5	7.8	14.0	10.8	3.7	-4.5	1.5	0.2	1.1
Change in reserves <sup>3</sup>	-2.5	0.8	0.8	-4.7	-1.7	-7.4	-12.3	2.9	-1.0	-4.6
<i>Memorandum</i>										
Current account <sup>4</sup>	-7.4	-10.4	-11.0	-11.8	-16.4	-5.7	-6.1	-18.1	-19.7	-17.4
<b>Asia<sup>5</sup></b>										
<b>Crisis countries<sup>6</sup></b>										
Net private capital flows <sup>2</sup>	26.8	26.6	31.9	33.2	62.5	62.4	-19.7	-45.3	-25.7	-11.1
Net direct investment	6.1	6.3	6.7	6.5	8.7	9.5	12.1	4.9	8.6	8.3
Net portfolio investment	3.4	5.3	16.5	8.3	17.0	20.0	12.6	-6.5	-3.3	5.9
Other net investment	17.3	15.0	8.7	18.4	36.9	32.9	-44.5	-43.6	-30.9	-25.4
Net official flows	4.4	2.0	0.6	0.3	0.7	4.8	25.0	22.7	0.3	0.6
Change in reserves <sup>3</sup>	-8.3	-18.1	-20.6	-6.1	-18.3	-13.6	37.7	-39.1	-25.1	-20.2
<i>Memorandum</i>										
Current account <sup>4</sup>	-25.2	-16.1	-13.5	-23.2	-40.5	-53.4	-27.0	66.6	50.9	31.3
<b>Other Asian emerging markets</b>										
Net private capital flows <sup>2</sup>	7.2	-8.7	25.5	33.2	32.6	38.1	22.8	-9.6	-6.7	14.0
Net direct investment	8.3	8.5	26.3	38.7	41.1	45.6	50.5	45.1	32.2	37.8
Net portfolio investment	-2.0	2.6	4.5	1.1	-6.1	-7.5	-11.8	-8.8	-13.3	-8.3
Other net investment	0.9	-19.7	-5.4	-6.6	-2.4	0.1	-15.8	-45.9	-25.6	-15.5
Net official flows	6.5	8.3	7.9	5.1	3.8	5.3	3.3	5.9	4.1	6.0
Change in reserves <sup>3</sup>	-31.4	-7.6	-17.2	-47.7	-26.2	-42.5	-46.3	-9.7	1.5	-12.6
<i>Memorandum</i>										
Current account <sup>4</sup>	23.7	14.0	-8.5	17.1	9.4	17.0	37.5	30.5	22.4	14.9

adjustment scenario in which the deterioration in the U.S. current account balance is reversed to a greater extent than in the medium-term baseline (see the final section of this chapter). This alternative scenario indicates how the tension in the baseline projections shown by the widening of the current account discrepancy in 1999 and 2000 (see Statistical Appendix Table 27) might be resolved—by smaller U.S. current account deficits than projected in the baseline. Alternatively, the increase in the discrepancy may indicate that the surpluses of Japan and the euro-area countries will rise beyond the levels projected in the baseline, perhaps owing to weaker domestic economic activity, or that lower private capital flows than assumed in the baseline will force larger improvements in the current account positions of emerging market economies. In this respect, some major commodity exporters and transition countries that are forecast to accumulate

sizable deficits, as well as some Latin American countries that remain dependent on private capital flows, seem particularly vulnerable.

The significant current account imbalances in 1998 and prospectively in 1999–2000 raise the question of sustainability more broadly than for the United States alone. To address this issue, it is useful to distinguish between transitory influences on payments balances—such as relative cyclical divergences among economies—and underlying balances.

*Underlying current account balances* may be defined as the balances that would prevail if all countries were operating at potential output, and after the lagged effects of all past exchange rate changes have worked through. They are the balances that would prevail in the medium to long run at current exchange rates and with zero output gaps. Estimates of underlying balances and the associated adjustments of actual bal-

Table 2.5 (concluded)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Middle East and Europe<sup>7</sup></b>										
Net private capital flows <sup>2</sup>	68.6	35.1	33.7	15.4	10.1	6.8	16.7	26.5	25.6	20.5
Net direct investment	1.2	0.9	3.9	3.8	3.7	2.4	3.3	2.9	4.5	5.9
Net portfolio investment	22.3	13.5	21.8	13.6	9.4	4.1	4.3	8.8	8.0	10.4
Other net investment	45.1	20.7	8.0	-2.0	-3.0	0.4	9.1	14.7	13.1	4.2
Net official flows	3.9	-1.3	2.3	-1.3	-1.4	-0.7	-1.0	-2.2	-2.1	-3.2
Change in reserves <sup>3</sup>	-3.3	1.2	-4.8	-3.6	-12.7	-16.2	-20.4	-5.3	-4.9	-5.8
<i>Memorandum</i>										
Current account <sup>4</sup>	-64.2	-26.7	-31.1	-7.2	-5.2	5.4	2.9	-22.7	-19.1	-15.1
<b>Western Hemisphere</b>										
Net private capital flows <sup>2</sup>	24.1	55.9	62.6	47.5	38.3	82.0	87.3	69.0	38.3	82.5
Net direct investment	11.3	13.9	12.0	24.9	26.1	39.3	50.7	54.0	45.6	43.7
Net portfolio investment	14.7	30.3	61.1	60.8	1.7	40.0	39.7	33.0	2.1	23.2
Other net investment	-2.0	11.7	-10.6	-38.2	10.6	2.7	-3.1	-18.1	-9.4	15.7
Net official flows	2.7	-1.7	0.6	-4.1	20.6	-13.7	-7.8	1.6	2.6	-3.2
Change in reserves <sup>3</sup>	-17.4	-22.6	-21.3	4.2	-25.5	-28.3	-14.6	17.7	20.5	-18.0
<i>Memorandum</i>										
Current account <sup>4</sup>	-16.9	-34.5	-45.7	-50.9	-35.9	-38.9	-65.1	-89.9	-60.7	-61.7
<b>Countries in transition</b>										
Net private capital flows <sup>2</sup>	-11.7	3.5	19.6	18.5	42.9	15.1	25.7	13.6	23.3	22.6
Net direct investment	2.4	4.2	6.0	5.4	13.4	13.5	18.5	17.4	17.8	19.2
Net portfolio investment	—	0.1	8.8	21.0	17.8	24.4	19.0	6.7	13.6	10.9
Other net investment	-14.1	-0.7	4.8	-8.0	11.7	-22.8	-11.9	-10.6	-8.1	-7.6
Net official flows	11.1	4.5	0.9	-12.2	-8.5	-0.2	9.3	12.2	2.9	1.6
Change in reserves <sup>3</sup>	1.3	-5.6	-12.8	-8.7	-35.8	-1.0	-5.3	-1.2	-13.5	-13.9
<i>Memorandum</i>										
Current account <sup>4</sup>	4.8	-1.7	-6.3	3.9	-2.4	-16.2	-29.3	-25.6	-13.2	-10.7

<sup>1</sup>Net capital flows comprise net direct investment, net portfolio investment, and other long- and short-term net investment flows, including official and private borrowing. Emerging markets include developing countries, countries in transition, Korea, Singapore, Taiwan Province of China, and Israel. No data for Hong Kong SAR are available.

<sup>2</sup>Because of data limitations, "other net investment" may include some official flows.

<sup>3</sup>A minus sign indicates an increase.

<sup>4</sup>The difference between the current account and the sum of net private capital flows, net official flows, and change in reserves is the capital account and errors and omissions.

<sup>5</sup>Includes Korea, Singapore, and Taiwan Province of China. No data for Hong Kong SAR are available.

<sup>6</sup>Indonesia, Korea, Malaysia, the Philippines, and Thailand.

<sup>7</sup>Includes Israel.

ances, along with projected balances for 2004, are shown in Table 2.7.<sup>4</sup> For the United States, for example, elimination of the current, positive domestic output gap—involving a reduction of activity relative to potential—would improve the current account balance by an estimated 0.3 percent of GDP. Closing output gaps outside the United States, which are on average negative, would also improve the U.S. balance, by an estimated 0.4 percent of GDP. (Because of the particular uncertainty surrounding estimates of output gaps in the Asian crisis countries, it is assumed for them not that output gaps close but that current account bal-

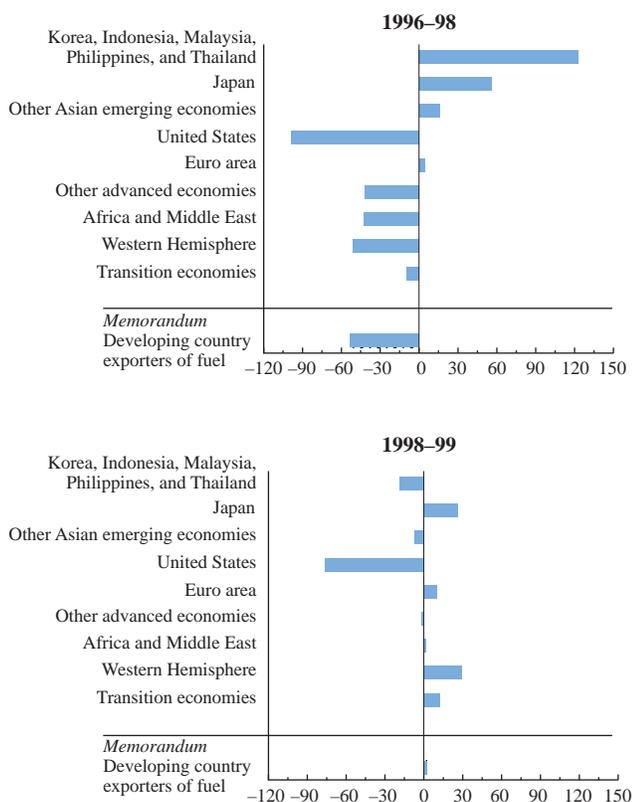
ances move to their underlying levels, which are assumed to be given by the projection for the five-year horizon (2004) shown in the table. The corresponding adjustments to the current account balances for the Asian-5 countries are assumed to be allocated among the United States and other trading partners on the basis of trade shares.) More than offsetting these positive adjustments, however, is a negative adjustment of 1.3 percent of GDP, which is the estimated outcome of the working through of the remaining impact of the dollar's general appreciation in recent years.<sup>5</sup> The implication, on net, of these three adjustments together is that the underlying current account deficit of the United States is about 3.3 percent of GDP, which is 0.6 percent of GDP larger than the actual deficit in 1998

<sup>4</sup>For details of these calculations, see Tamim Bayoumi and Hamid Faruqee, "A Calibrated Model of the Underlying Current Account," in Peter Isard and Hamid Faruqee, eds., *Exchange Rate Assessment: Extensions of the Macroeconomic Balance Approach*, Occasional Paper 167 (Washington: IMF, 1998), pp. 32–34. The elasticities for Australia and New Zealand have been adjusted to reflect the large commodity share of exports in these countries.

<sup>5</sup>The calculations assumed that real exchange rates are unchanged from the base period used for this *World Economic Outlook*. No attempt is made to capture possible cyclical exchange rate effects.

**Figure 2.2. Changes in Current Account Balances**  
(Billions of U.S. dollars)

The east Asian crisis and declines in commodity prices led to substantial shifts in trade balances in 1996–98. The crisis in Brazil will contribute to adjustments in 1999.



**Table 2.6. Selected Economies:  
Current Account Positions**

(Percent of GDP)

	1997	1998	1999	2000
<b>Advanced economies</b>				
United States	-1.9	-2.7	-3.5	-3.3
Japan	2.2	3.2	3.6	3.4
Germany	-0.2	-0.4	-0.1	—
France	2.8	2.7	2.8	3.0
Italy	3.0	2.3	2.3	2.3
United Kingdom	0.6	-0.8	-1.2	-1.4
Canada	-1.5	-2.1	-1.6	-1.1
Australia	-3.1	-5.0	-5.4	-5.0
Austria	-2.2	-2.0	-1.5	-1.3
Belgium-Luxembourg	5.6	5.3	5.3	5.4
Denmark	0.5	-1.4	-0.8	-0.2
Finland	5.5	5.1	5.2	4.9
Greece	-2.6	-2.6	-2.5	-2.6
Hong Kong SAR <sup>1</sup>	-3.2	0.6	1.2	1.2
Ireland	2.8	1.9	1.9	1.8
Israel	-3.3	-3.0	-2.6	-2.2
Korea	-1.8	13.1	7.1	4.1
Netherlands	6.1	5.6	5.4	5.8
New Zealand	-7.1	-6.0	-6.7	-5.8
Norway	5.2	-0.8	1.4	2.9
Portugal	-2.2	-4.1	-3.7	-3.7
Singapore	15.8	20.9	18.0	17.7
Spain	0.5	-0.2	-0.8	-0.8
Sweden	2.9	2.1	1.9	1.7
Switzerland	8.9	9.1	9.3	9.4
Taiwan Province of China	2.7	1.3	2.0	2.0
Memorandum: Euro area	1.7	1.4	1.5	1.6
<b>Developing countries</b>				
Algeria	7.2	-2.0	-3.6	-0.6
Argentina	-3.7	-4.4	-4.3	-4.3
Brazil	-4.1	-4.5	-3.0	-2.6
Cameroon	-1.3	-2.5	-4.4	-4.4
Chile	-5.3	-6.3	-5.0	-4.9
China	3.3	2.4	1.7	1.1
Côte d'Ivoire	-4.5	-4.9	-2.9	-2.5
Egypt	0.2	-3.0	-3.9	-3.8
India	-1.4	-1.7	-1.9	-2.2
Indonesia	-3.0	3.4	2.7	1.5
Malaysia	-5.1	15.7	9.6	5.0
Mexico	-1.9	-3.7	-2.0	-2.2
Nigeria	4.8	-8.4	-11.5	-5.8
Pakistan	-5.8	-2.9	-2.8	-2.6
Philippines	-5.2	2.0	2.5	1.5
Saudi Arabia	0.2	-10.4	-8.2	-6.9
South Africa	-1.5	-2.1	-1.4	-1.6
Thailand	-1.9	12.2	8.8	5.5
Turkey	-1.4	1.4	1.0	0.1
Uganda	-0.9	-2.1	-3.6	-2.6
<b>Countries in transition</b>				
Czech Republic	-6.1	-1.8	-2.0	-1.7
Estonia	-13.0	-8.9	-7.1	-7.9
Hungary	-2.2	-4.1	-4.9	-4.7
Latvia	-4.8	-8.4	-7.3	-6.0
Lithuania	-10.2	-12.1	-12.8	-11.8
Poland <sup>2</sup>	-3.1	-4.5	-5.6	-4.3
Russia	-1.3	0.3	8.4	8.2
Slovak Republic	-10.6	-10.3	-4.5	-3.4
Ukraine	-2.7	-1.5	-2.5	-2.2

<sup>1</sup>Data include only goods and nonfactor services.

<sup>2</sup>Based on data for the current balance, including a surplus on unrecorded trade transactions, as estimated by IMF staff.

and 0.9 percent of GDP larger than the projection for 2004.

The other estimates of underlying balances shown in the table were obtained in the same way. Thus Japan's underlying surplus is estimated to be only 0.2 percent of GDP below the 3.2 percent surplus recorded in 1998, the difference being more than fully accounted for by the severity of its current recession; the closing of output gaps abroad and exchange rate effects that have not yet occurred would both tend to increase Japan's underlying surplus. For the euro area, the estimated underlying balance is equal to its actual balance in 1998 and not significantly different from the balance projected for 2004. By contrast, the estimated underlying current account deficits for Australia and New Zealand are smaller than the actual deficits in 1998, largely reflecting the impact of lagged exchange rate effects. To the extent that the recent depreciations of the currencies of these countries reflect a weakening in their terms of trade through depressed commodity prices, the standard trade elasticities may overstate the effects of these depreciations.

These estimates suggest that, even after adjusting for the effects of business cycle asymmetries and the Asian crisis, and the effects that have yet to feed through of past exchange rate changes, the underlying current account positions of a number of advanced economies are of a magnitude that could result in growing stocks of external liabilities or assets in relation to GDP.<sup>6</sup> The WEO baseline projections confirm this tendency toward growing imbalances over the next five years (Figure 2.4).

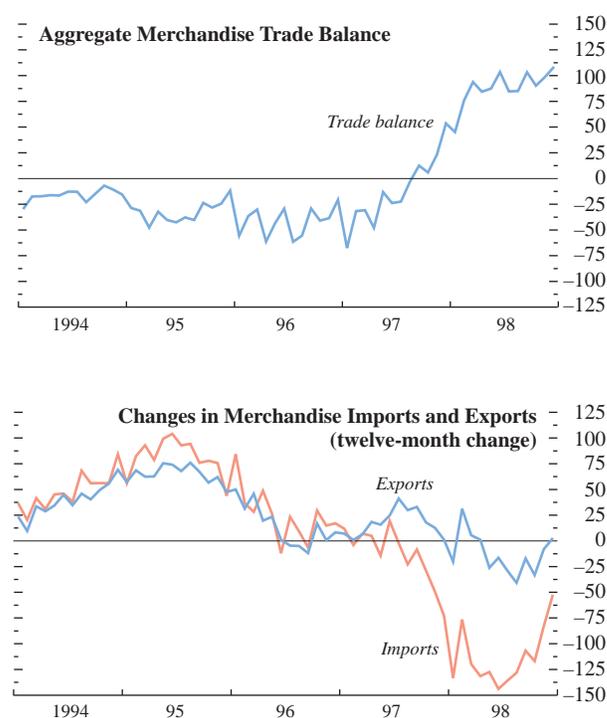
Estimates of underlying current account balances do not take into account possible future changes in exchange rates or in domestic saving and investment. Thus, the current international pattern of deficits and surpluses could be reversed over time by a depreciation of the U.S. dollar relative to the euro and the yen, with accompanying adjustments in relative growth rates of domestic demand. This reduction in current account imbalances would be accompanied—and indeed could be triggered—by changes in domestic saving and investment rates because, fundamentally, the balance of domestic saving over investment must be identical to the external balance. Thus today's current account imbalances could be consistent with a sustainable long-run path, provided that changes in domestic saving and investment are expected in the future. Demographic factors, including the more rapidly aging populations of Japan and most of Europe, imply that saving rates in these regions will eventually, in the

<sup>6</sup>Imbalances which result in growing debt (or asset) ratios to GDP are sometimes considered unsustainable. See the May 1998 *World Economic Outlook*, Box 8, pp. 86–87. Stable debt ratios, however, are seen as a necessary but not sufficient condition for sustainability because debt ratios could stabilize at levels that would be resisted by financial markets.

### Figure 2.3. Asian-5 Economies: Trade Developments<sup>1</sup>

(Billions of U.S. dollars: annualized monthly data)

In the Asian-5 economies, the surplus in merchandise trade has stabilized as the reduction in imports has come to an end.



Sources: WEFA, Inc.; and IMF, *International Financial Statistics*.

<sup>1</sup>The Asian-5 economies are Korea, Indonesia, Malaysia, the Philippines, and Thailand.

**Table 2.7. Selected Countries: Estimates of Underlying Current Account Balances***(Percent of GDP)*

	Current Account Balance			Adjustment due to:		
	Actual 1998	WEO 2004	Underlying	Domestic output gap	Foreign output gap and Asian crisis	Exchange rate effects
United States	-2.7	-2.4	-3.3	0.3	0.4	-1.3
Japan	3.2	2.9	3.0	-0.9	0.5	0.2
Euro area	1.4	1.9	1.4	-0.4	0.4	—
United Kingdom	-0.8	-2.0	-3.2	0.3	0.7	-3.4
Canada	-2.1	0.4	1.0	-0.6	—	3.7
Australia	-5.0	-3.3	-3.0	—	0.5	1.5
New Zealand	-6.0	-3.5	-2.9	-0.6	0.6	3.1
Switzerland	9.3	8.9	10.5	-0.8	1.3	0.7
Asian-5	9.8	0.1	0.1	...	...	...

Source: IMF staff calculations.

coming decades, decline relative to the United States.<sup>7</sup> This will tend to reduce current account imbalances slowly over time. Experience shows, however, that in practice external imbalances are often corrected through abrupt shifts in saving and investment associated with cyclical fluctuations and changes in financial conditions. The implications of the current saving-investment imbalance in the United States are discussed at the end of this chapter.

### Foreign Exchange and Financial Markets: The Impact of Brazil's Devaluation and Other Developments

The fallout in global financial markets from the *crisis in Brazil* has been much less intense and widespread than that observed following the crises in Mexico, Asia, and Russia. In the advanced economies, there has been little impact on currency, equity, or other financial markets. In emerging market economies, bond spreads initially rose but they fell back in most cases within a few days of Brazil's devaluation, albeit still to relatively high levels. In Asia and the transition countries of central and eastern Europe, exchange and equity market reactions have been muted and short-lived. One explanation for the relatively limited financial market spillovers from the Brazilian crisis is that investors may already have deleveraged much of their exposure to emerging markets in general following the August

1998 Russian crisis and the additional turmoil caused subsequently by the near-bankruptcy of Long-Term Capital Management. In addition, the risk of a Brazilian devaluation may already have been discounted to a large extent.

On January 4, 1999 European financial markets opened for business in a new era with the *introduction of the euro*, which went smoothly; some minor difficulties with payments and liquidity management were quickly resolved. The European Central Bank (ECB) had preannounced a narrow corridor between its deposit and emergency lending rates to help banks manage liquidity during the transition period. On January 22, the ECB widened the interest rate band by raising its lending rate and lowering its deposit rate in order to encourage market participants (particularly banks) to manage liquidity more effectively. The ECB's main policy interest rate, the repo rate, which was left unchanged at 3 percent through the first quarter of 1999, was reduced to 2½ percent at the April meeting of the Governing Council. In announcing the move, the Council cited worsening growth prospects and no risk to future price stability. This reduction was about ¼ of 1 percentage point more than assumed in the baseline projections.

Elsewhere among the industrial countries, *policy interest rates* have been held unchanged in the United States since the Federal Reserve lowered the target federal funds rate to 4¾ percent and the discount rate to 4½ percent in late November. But in a number of other countries, central banks have acted to lower short-term interest rates. In mid-February, the Bank of Japan lowered the target overnight call rate from 0.25 percent (where it had been set in September 1998) to 0.15 percent and indicated that it would seek to reduce the rate as low as possible and provide short-term liquidity through increased repurchase operations in government bonds. By early March, the overnight call rate had fallen virtually to zero. This further easing of

<sup>7</sup>For discussions of aging and the intertemporal benefits of current account imbalances, see Paul R. Masson and Ralph W. Tryon, "Macroeconomic Effects of Projected Population Aging in Industrial Countries," *IMF Staff Papers*, Vol. 37 (September 1990), pp. 453–85. Current account deficits also permit higher levels of investment through inflows of foreign savings. See United States, Council of Economic Advisors, *Economic Report of the President* (Washington, 1999), pp. 237–66.

monetary policy in Japan was undertaken after a period in which increases in longer-term interest rates and an appreciation of the yen had signified a tightening of monetary conditions. In the United Kingdom, with inflation remaining close to its target and the prospect of demand pressures receding, the Bank of England lowered its repo rate in a series of steps reaching 5¼ percent in April, 2¼ percentage points below the peak that prevailed between June and October 1998. Since the beginning of 1999 short-term interest rates have also been cut in Canada, Denmark, Norway, Sweden, and Switzerland.

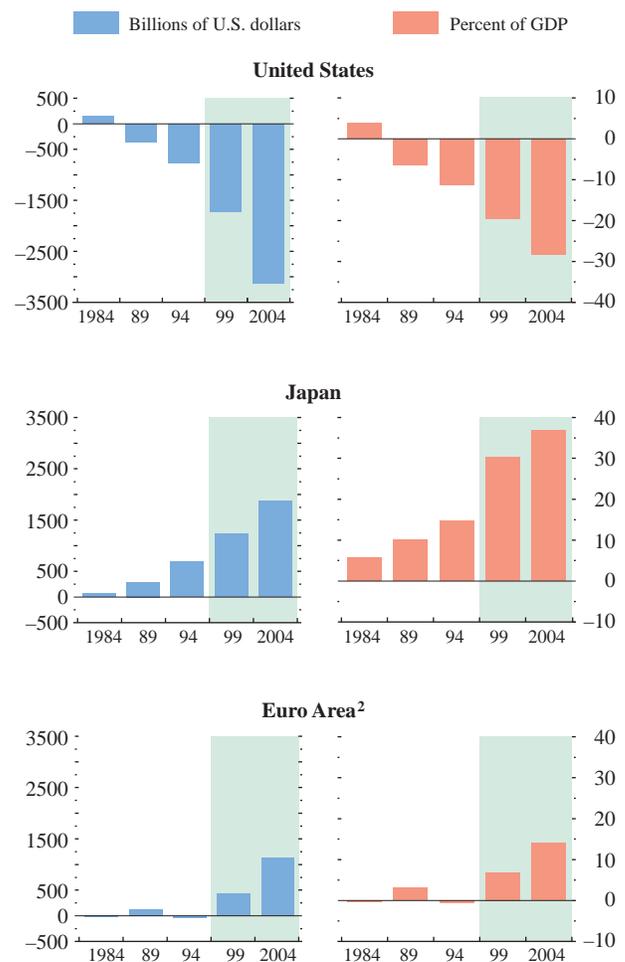
In government bond markets, *long-term interest rates* in the United States rose by about 60 basis points between the end of 1998 and early April, adding to the rise from the 30-year lows reached when the financial market pressures following the Russian crisis were most intense in early October (Figure 2.5). This further rise in yields may be attributed in large part to the way in which U.S. economic growth again outperformed expectations. Yields, however, tended to ease somewhat toward the end of this period on signs of strong U.S. growth and little inflation. The rise in government bond yields has been accompanied by a continued narrowing of corporate yield spreads, as financial market conditions have continued to improve following the sharp recovery late last year. Corporate spreads have still not fallen back to the levels of early 1998, however, suggesting a continuing level of heightened aversion to risk.

The increase in U.S. long-term rates also tended to spill over into euro-area bond markets, so that in spite of indications of weakening growth, long-term rates rose by about 15 basis points between the end of 1998 and early April in most of the core countries of the area. Intra-area yield spreads also widened somewhat, perhaps reflecting differences in demand pressures as well as in concerns about fiscal positions. In Japan, by contrast, long-term rates fell by about 40 basis points between the end of 1998 and early April. In the beginning of 1999, bond yields continued their rise from the unprecedented lows of around 0.7 percent reached in October 1998, peaking at close to 2.4 percent in early February (the highest level since June 1997) as the supply of government debt increased and as it appeared that public sector institutions would be reducing their bond purchases. Subsequently, however, yields fell back to about 1.6 percent as monetary policy was eased.

*Equity markets* have been buoyant in most industrial countries, with prices in many cases having more than recovered the levels reached before the dips that occurred during August–October 1998 (Figure 2.6). In the United States, price indices reached new record highs in early April, more than 5 percent above end-1998 levels. In the case of the United States, particularly, questions remain about the level of equity prices relative to the level and prospective growth of corpo-

**Figure 2.4. Selected Advanced Economies: Net Foreign Assets<sup>1</sup>**

The net external debt of the United States is sizable and increasing and is reflected in the net asset positions of Japan and the euro area.



Sources: OECD, Analytical Database; and IMF staff estimates.

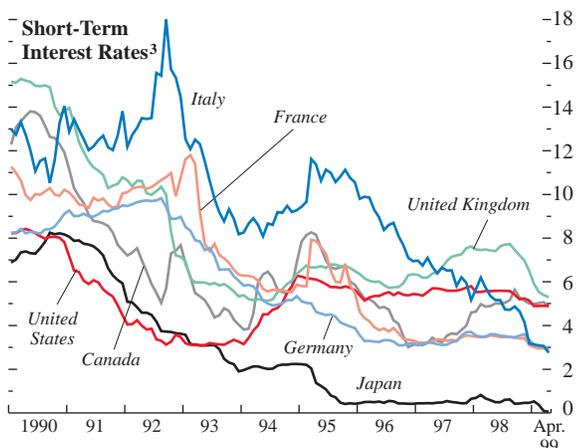
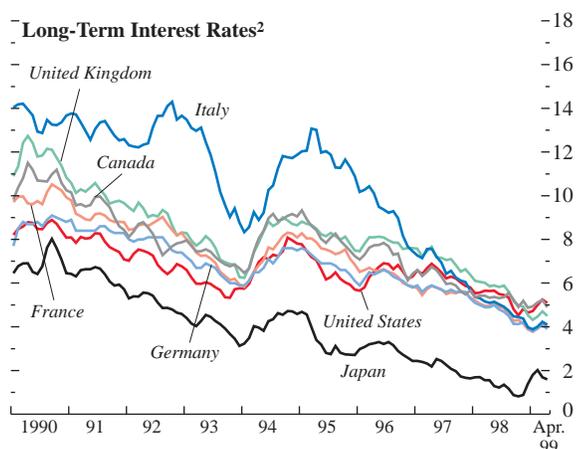
<sup>1</sup>Shaded areas indicate IMF staff projections.

<sup>2</sup>Data for Austria, Ireland, Luxembourg, and Portugal are not included.

**Figure 2.5. Major Industrial Countries:  
Nominal Interest Rates<sup>1</sup>**

(Percent a year)

Long-term interest rates in most industrial countries turned up in late 1998 and early 1999 but have recently eased. Short-term interest rates have declined somewhat further over this period.



Sources: WEFA, Inc.; and Bloomberg Financial Markets, LP.

<sup>1</sup>Data through the first week of April.

<sup>2</sup>Yields on government bonds with residual maturities of ten years or nearest.

<sup>3</sup>Three-month maturities.

rate earnings, especially given the recent rise in bond yields (see December 1998 *Interim Assessment*, Box 3.2, pp. 48–49).

In *foreign exchange markets*, the U.S. dollar has appreciated in terms of most other major international currencies since the end of 1998, reflecting the relative buoyancy of U.S. economic growth and the associated widening of interest differentials in favor of dollar-denominated assets (Figure 2.7). The euro strengthened against the dollar in its first few days, but subsequently depreciated to a level in early April that was 8 percent below its initial value in terms of the dollar and 5 percent lower in effective terms. The yen, also, strengthened in the early weeks of the year, continuing a trend begun in August 1998. It reached a peak of ¥109 per dollar in mid-January—about 25 percent above its August trough—before falling back to around ¥115 per dollar in late January and early February. Following the subsequent easing of monetary policy by the Bank of Japan, the currency fell back further to about ¥120 per dollar and to an effective value about 2 percent lower than at the beginning of the year. The weakening of growth and easing of monetary policy in the United Kingdom contributed to a moderate depreciation of the pound sterling against the U.S. dollar between end-1998 and early April. In effective terms, however, sterling appreciated by about 3 percent over the period, reflecting the currency's strength against the euro.

Among the emerging market economies, in *Brazil* the official exchange rate band came under increasing pressure, and equity prices weakened by around 15 percent in early January as the lack of investor confidence in the authorities' ability to implement fiscal adjustment measures fueled increasing capital outflows. On January 13, the real's exchange rate band was adjusted to 1.20–1.32 per U.S. dollar from 1.12–1.22 per U.S. dollar; the currency immediately moved to the weaker end of the new band, thus depreciating against the U.S. dollar by around 7½ percent. This adjustment of the band failed to stop the pressures; on January 15 the currency was allowed to float, and it immediately depreciated by a further 16 percent. While the equity market rallied by more than 50 percent (around 30 percent in dollar terms), secondary market spreads in the international bond market widened and net capital outflows continued, putting further pressure on the currency (Figure 2.8). In addition to occasional intervention to prevent the exchange rate from overshooting, the authorities also raised interest rates (Figure 2.9). The central bank increased its prime lending rate for banks to 41 percent from 29 percent, and raised through its borrowing operations the overnight interbank (Selic) rate by 9 percentage points to 39 percent. By the middle of February, the currency and the equity market had broadly stabilized, while remaining volatile on a day-to-day basis (Figure 2.10), and international bond

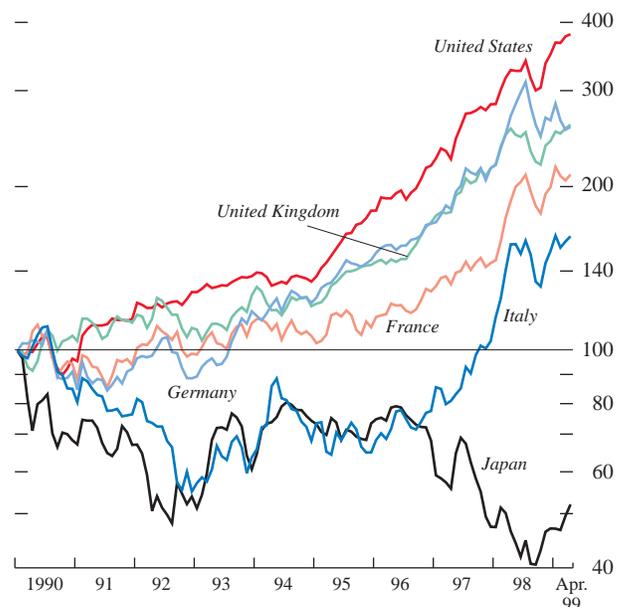
spreads had returned close to end-1998 levels. As the real came under renewed pressure at the end of February and in early March, the central bank further increased the Selic rate from 39 percent to 45 percent on March 4, with immediate stabilizing effects on the exchange rate. Confidence in policies then improved with the announcement of a revised economic program and its approval by the IMF. The real then firmed to around R\$1.73 per U.S. dollar, reducing the currency's depreciation since it was floated in January to around 40 percent. Recent inflation data indicating only a moderate pass-through of the currency's depreciation to prices also bolstered confidence, and with the real's strengthening allowed the central bank to lower the Selic interest rate to 39½ percent by early April. Brazil's Bovespa equity index rebounded sharply, gaining more than 50 percent in dollar terms from its early March low.

Financial markets in the *other Latin American countries*, which already had experienced some contagion effects in the run-up to the abandonment of the Brazilian currency peg, came under significant pressure in the second week of January. The contagion effects were, however, smaller than in the wake of the Russian crisis and generally were short-lived. Interest rates and equity prices were most affected (Figure 2.11). In the days following Brazil's devaluation on January 13, short-term interest rates increased by up to 500 basis points in Argentina and in Mexico, while spreads on Argentinean, Mexican, and Venezuelan international bonds widened by around 200–300 basis points. In the same period, equity prices dropped by more than 10 percent in Argentina, and by more than 5 percent in Chile, Colombia, and Venezuela. The currencies of Colombia, Ecuador, Mexico, and Peru also came under pressure, but the depreciation against the dollar in no case exceeded 5 percent.

Markets in these Latin American countries stabilized again in the second half of January, and the initial contagion effects from the Brazilian crisis generally subsided. Domestic short-term interest rates quickly returned to levels observed at the beginning of 1999, except in Argentina, where interest rates remained higher until the end of February, reflecting tighter liquidity conditions under the currency board arrangement. Spreads on international bonds narrowed again, and Argentina and Mexico reentered the market, issuing sovereign bonds at the beginning of February, with spreads less than 50 basis points higher than the secondary market spreads on comparable instruments observed at the beginning of the year. Equity prices and currency values recovered most of their mid-January losses over the next few weeks and by early April, markets in Chile and Mexico had returned close to year-earlier levels. Ecuador, however, which has been particularly affected by the decline in oil prices and the El Niño weather phenomenon, witnessed a sharp fall in the value of its currency follow-

**Figure 2.6. Advanced Economies: Equity Prices<sup>1</sup>**  
(U.S. dollar terms; logarithmic scale; January 1990 = 100)

Equity markets in the United States and the major European countries except Germany have reached new highs. The Japanese market has recovered significantly since mid-1998.



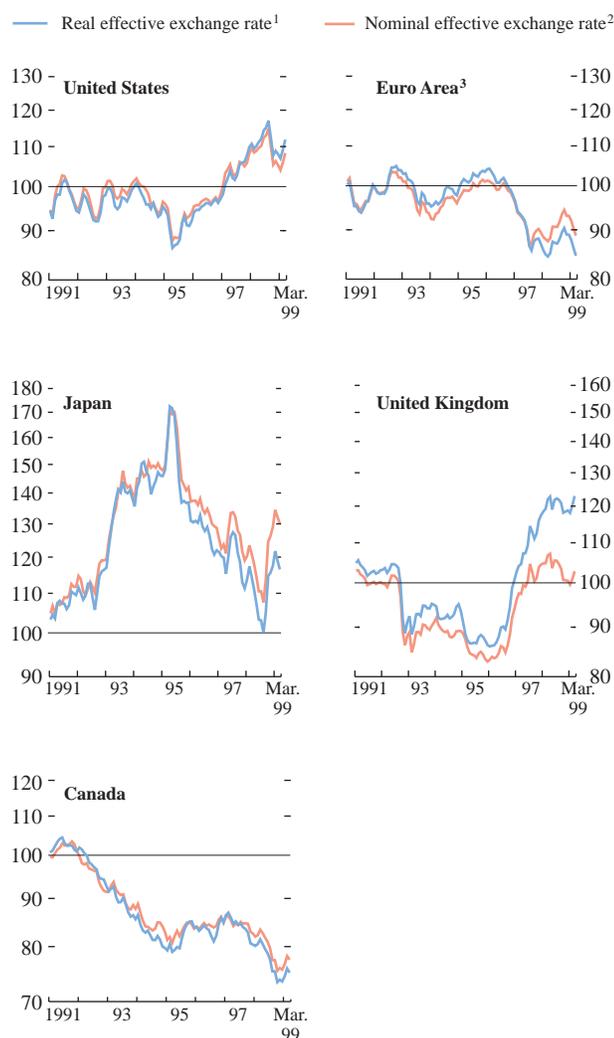
Source: WEFA, Inc.

<sup>1</sup>Data through April 12, 1999.

**Figure 2.7. Major Industrial Countries:  
Effective Exchange Rates**

(Logarithmic scale; 1990 = 100)

Since the beginning of 1999, the dollar has strengthened while the euro and the yen have weakened.



<sup>1</sup>Defined in terms of relative normalized unit labor costs in manufacturing, as estimated by the IMF's Competitiveness Indicators System, using 1989–91 trade weights.

<sup>2</sup>Constructed using 1989–91 trade weights.

<sup>3</sup>Data prior to January 1, 1999 are based on a weighted average of euro-area member currencies. See Box 5.5 of the October 1998 *World Economic Outlook*, pp. 146–48.

ing the decision to abandon its exchange rate band in mid-February; the depreciation of the sucre accelerated in the first week of March, but the currency rebounded somewhat in late March and early April in line with firmer oil prices and following the announcement of fiscal adjustment measures.

In the emerging market economies of *Asia*, during the week following the devaluation of the Brazilian currency, stock prices fell by up to 8 percent, short-term interest rates rose, and currencies depreciated moderately in many of these economies. Sovereign bond yield spreads widened by up to 80 basis points in several countries, not nearly to the same extent as in previous bouts of market volatility in the past two years. By the end of January, short-term interest rates had resumed their downward course, and exchange rates were near early-January levels in most of these countries, as investor sentiment stayed mostly positive. By early April, stock prices in most of these countries had staged rebounds, but had not returned to pre-1997 crisis levels.

Although spillovers from Brazil have generally been modest, financial market pressures have remained significant in several Asian countries because of local factors. In Indonesia, for example, the rupiah weakened throughout January, reflecting continuing social unrest, domestic political concerns, and uncertainties about the implementation of the financial and corporate restructuring program.

Among the currencies of the main emerging market economies of *central and eastern Europe*—the Czech Republic, Hungary, and Poland—the Polish zloty was most affected by the Brazilian crisis, with a depreciation of almost 5 percent against the euro in the middle of January. During the same period, equity prices fell by 10–15 percent in Hungary and Poland. Exchange rates and equity prices subsequently rebounded. More notable than the transitory signs of contagion from Brazil has been an improvement in investor perception of these economies relative to other emerging market economies, in part reflecting prospects for convergence with the euro area. At the end of January, the Hungarian government was successful in introducing a ten-year euro-denominated Eurobond at a spread of only 87 basis points above the German Bund rate. In February, however, the Czech koruna and the Polish zloty again weakened significantly, but this reflected domestic developments, including sizable cuts in official interest rates in response to reductions in inflation and signs of weakening activity and rising current account deficits. The Hungarian forint also came under downward pressure during the month and depreciated by around 2 percent within its 4½ percent-wide intervention band. The currencies of these three countries halted their slide and returned to relative stability in March and early April.

Financial market developments in *other transition countries* have continued to reflect the repercussions

of the Russian crisis, with developments in Brazil having little discernible impact. In Russia, the domestic treasury bill market reopened in the middle of January after a five-month shutdown. Market activity has been low, however, partly owing to a yield limit imposed by the central bank and the nonparticipation by foreign investors, who have not agreed on the terms for the restructuring of treasury bills frozen in August 1998. Equity prices rebounded in February and March in anticipation of the conversion into equity claims of part of the stock of treasury bills frozen. The Russian ruble broadly stabilized against the dollar in the middle of January and through February, but depreciated again in March. By early April, the ruble had lost around 80 percent of its value since the August 1998 crisis, and international reserves were at a three-year low. The market value of Russia's external debt has continued to reflect the anticipated negotiations on the rescheduling of Soviet-era debt obligations to London and Paris Club creditors and concerns regarding the servicing of Russia-era Eurobonds (Figure 2.12). Kazakhstan, Moldova, and Ukraine have had no access to foreign markets since the Russian crisis. The Kazakh currency, which had come under pressure because of the fall in the value of the ruble, depreciated sharply in early April after the Kazakh authorities announced they would refrain from further intervention in the foreign exchange market.

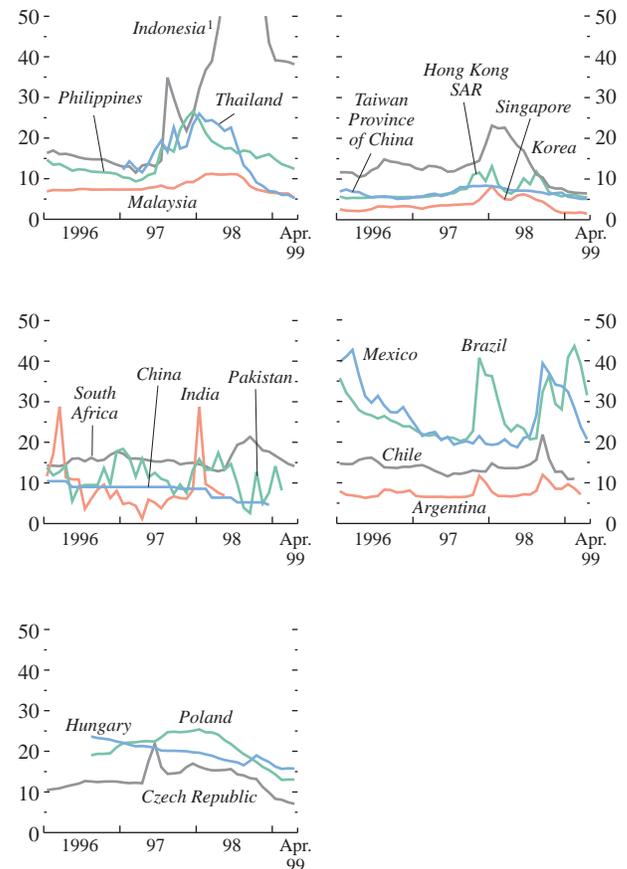
### Why Are Some Emerging Market Countries Relatively Unaffected by the Financial Crisis?

In the developing world, China, India, and Africa appear to have weathered recent financial crises reasonably well, with the important exception that several countries in Africa have been particularly hard hit by falling commodity prices. Especially with regard to India and Africa, the general resilience reflects the limited trade links between these regions and the countries in crisis and also their relatively low reliance on private capital inflows (Table 2.8). China has recorded current account surpluses, while India and many countries in Africa have not exhibited large current account deficits of the kind experienced in many of the crisis countries.

In *China*, the emerging market crises have been felt mainly through a weakening of export demand, a deteriorating capital account, and occasional pressures in financial markets. Financial market pressures have been short-lived, however, in part reflecting the maintenance of controls on capital account transactions. China has also taken a number of policy actions to stimulate domestic demand, including reductions in interest rates and a large increase in public investment outlays, particularly since mid-1998. As a

**Figure 2.8. Selected Emerging Market Countries: Short-Term Interest Rates (Percent)**

Short-term interest rates were adjusted upward in many emerging market economies in periods of exchange rate pressure, but they generally declined as the crises waned.



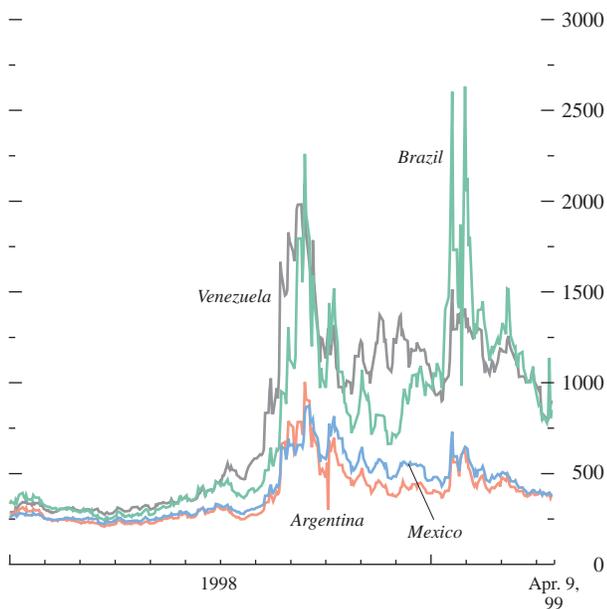
Sources: Bloomberg Financial Markets, LP; and IMF, *International Financial Statistics*. Three-month interbank rate or, if unavailable, comparable market-determined short-term rate.

<sup>1</sup>The Indonesian short-term rate in the first half of September averaged 70.7 percent.

**Figure 2.9. Selected Latin American Countries: Brady Bond Spreads<sup>1</sup>**

(Basis points)

The Brazilian crisis led to temporary and differentiated increases in spreads across Latin America in January. High spreads in Venezuela partly reflect large fiscal imbalances.



Sources: Reuters; and Salomon Brothers.

<sup>1</sup>Stripped yields are adjusted to exclude both the value of collateral held as security against repayment of the bond and the value of coupon payments. Spreads are calculated relative to a U.S. treasury bond of comparable maturity.

**Table 2.8. China, India, and Sub-Saharan Africa: International Trade and Financial Links**

(In percent of GDP)

	China		India		Sub-Saharan Africa	
	1997	1998	1997	1998	1997	1998
<b>Trade</b>						
Exports of goods	20.3	19.1	8.4	8.3	26.7	24.6
Imports of goods	15.1	13.9	12.2	12.6	24.2	25.2
<b>Exports to:</b>						
Japan	3.5	...	0.4	...	0.8	...
ASEAN-4 + Korea	1.7	...	0.5	...	0.8	...
Hong Kong and Singapore	5.3	...	0.7	...	0.3	...
European Union	2.6	...	2.0	...	8.5	...
United States	3.6	...	1.6	...	4.6	...
Other countries	3.4	...	2.7	...	10.3	...
<b>Financial flows</b>						
Foreign direct investment	4.6	3.7	0.7	0.7	1.9	1.7
Portfolio investment	0.8	-0.2	0.5	0.1	0.9	1.1
External commercial borrowing	0.2	0.5	0.4	0.4	-0.1	0.9

Sources: IMF, Direction of Trade Statistics database; and IMF staff estimates.

result, GDP growth during 1998 was only slightly below the government's 8 percent target (Table 2.9). Business conditions and sentiment have remained weak, however, and consumer prices declined about 1 percent in the year to January 1999, partly owing to continued excess supply in domestic markets. Growth is projected to decline only moderately in 1999, but prospects are uncertain given the accumulation in recent years of excess inventories in many enterprises, evidence of overbuilding, potential cutbacks in external financing in the wake of recent uncertainties about the health of some of China's international trust and investment corporations, and other financial sector fragilities.

A concern of many analysts, especially when many other regional currencies were at their lows in mid-1998, has been China's international competitiveness in the wake of the Asian crisis. This concern has also been linked to the need to absorb labor from state-owned enterprises as they restructure, a process that could be complicated by weak export or domestic demand. IMF staff estimates suggest that the real effective exchange rate of the renminbi had appreciated by about 10 percent in mid-1998 compared with a year earlier—that is, before the Asian crisis forced devaluations in neighboring countries—but this appreciation has since been largely reversed by the appreciation of the yen and other regional currencies against the dollar in the second half of 1998. This, together with China's maintenance of market share in major export markets, suggests that the bulk of the export slowdown reflects weakening foreign demand. The

authorities have appropriately maintained the renminbi's de facto peg to the dollar and thereby have helped to restore stability in Asia during this period of turbulence. China's exchange rate policy is further supported by its continued relatively strong overall external position.

Output growth in *India* slowed from 7–8 percent in 1994–96 to 5½ percent in 1997–98. The slowdown has reflected mainly domestic factors, particularly the stalling of the structural reform process and the deterioration in government finances, rather than the regional crisis. India is a relatively closed economy—exports comprise only about 8 percent of GDP, with only about 13 percent of exports directed to the rest of Asia (excluding Japan)—so that the adverse effect of the crisis on the balance of payments and domestic activity has been relatively modest.

Capital controls, while entailing longer-term costs, appear to have helped to limit India's vulnerability to abrupt movements in short-term capital. Net inflows of private capital during 1992–96 averaged only 1.5 percent of GDP in India, compared with 8.8 percent in Thailand, 10.5 percent in Malaysia, and 4.8 percent in Indonesia. Although longer-term inflows have been adversely affected by the regional turmoil, as well as the sanctions that followed nuclear tests in May 1998, India's limited dependence on foreign capital, as well as the \$4.2 billion issue of Resurgent India Bonds to nonresident Indians in late 1998, have helped to cushion the impact. As a result, during the recent period, India's foreign exchange reserves have remained at the equivalent of a comfortable 6½ months of imports.

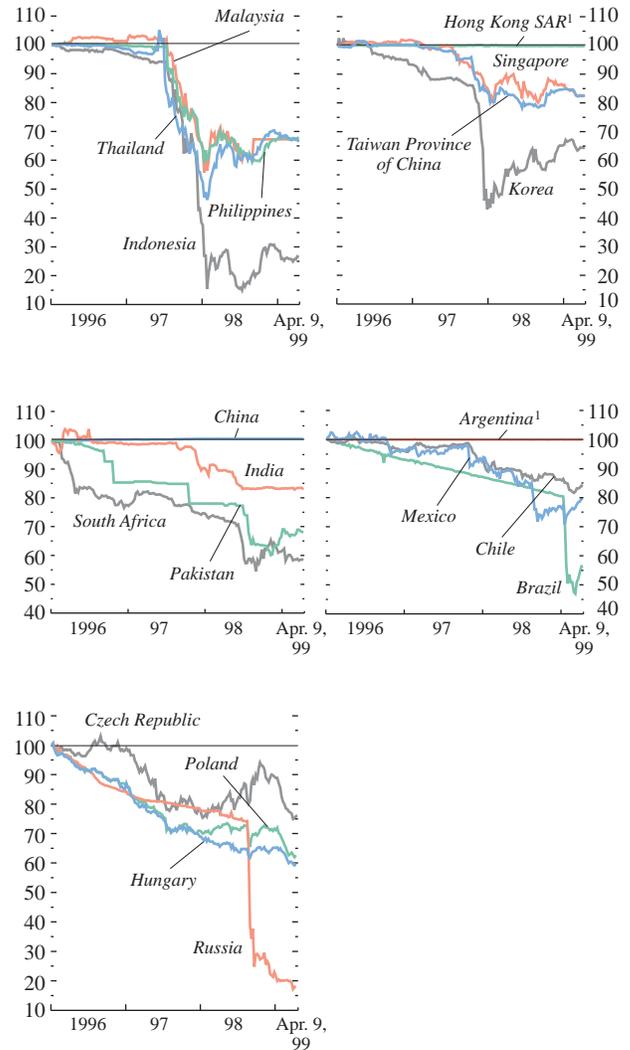
India's medium-term growth prospects continue to be constrained by domestic structural weaknesses. The banking system, although it has not been adversely affected by contagion effects, in large part due to the limited exposure of Indian banks to exchange rate movements and the economies of the rest of Asia, suffers from significant structural problems, which financial reform is only starting to address. Inadequacies in the government's revenue system, as well as rapid growth in current outlays, including for the public sector wage bill and subsidies, will need to be addressed to bring down a fiscal deficit that is expected to exceed 9 percent of GDP in 1998/99. The 1999/2000 budget for the central government, which was presented in late February, holds the promise of a reduction in the deficit of only about ½ of 1 percent of GDP and a more ambitious and front-loaded fiscal adjustment program continues to be needed. There is also an urgent need to reinvigorate the momentum for structural reform, including in the areas of trade policy, the financial sector, and the privatization of public enterprises.

In *Africa*, improvements in policy implementation have helped a number of countries to strengthen their economic performance in the second half of the 1990s,

### Figure 2.10. Selected Emerging Market Countries: Bilateral U.S. Dollar Exchange Rates

(U.S. dollars per currency unit; January 5, 1996 = 100)

Exchange rates in most of the east Asian crisis countries have stabilized. The Brazilian currency fell sharply between mid-January and early March, but has more recently recovered somewhat.

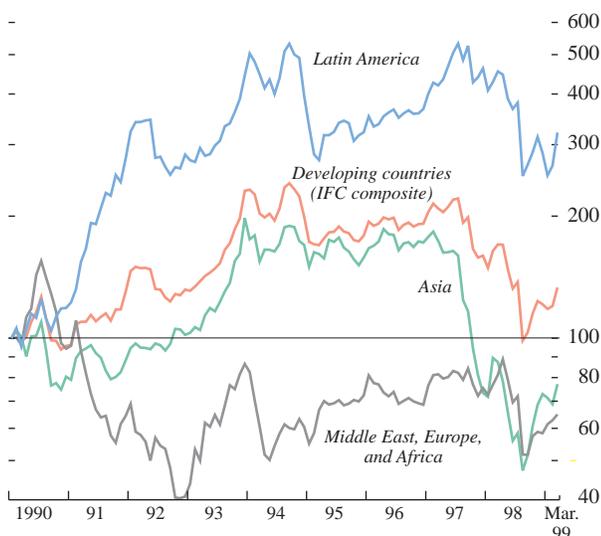


Sources: WEFA, Inc.; and Bloomberg Financial Markets, LP.  
<sup>1</sup>Pegged to U.S. dollar.

**Figure 2.11. Developing Countries: Equity Prices**

(U.S. dollar terms; logarithmic scale; January 1990 = 100)

Equity prices in developing countries rebounded in the second half of 1998 but then temporarily weakened again in Latin America in the wake of the Brazilian crisis.

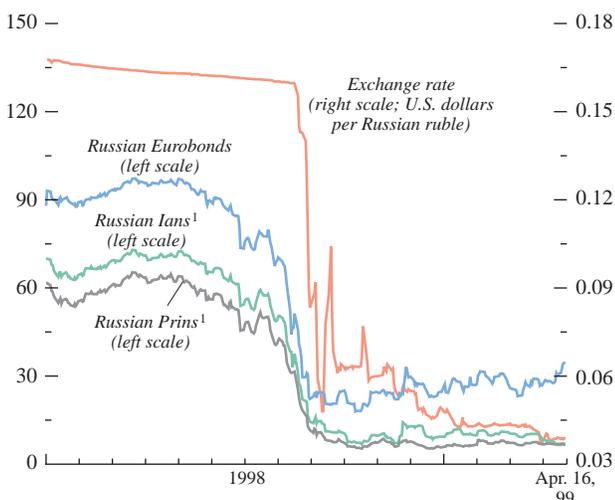


Source: International Finance Corporation (IFC), Emerging Markets Database.

**Figure 2.12. Russia: Exchange Rate and Tradable Debt**

(Secondary market discount unless otherwise noted)

The exchange value of the ruble and the secondary market price of Russia's international debt fell sharply in the wake of the August 1998 crisis.



Source: Bloomberg Financial Markets, LP.

<sup>1</sup>Ians are interest arrears notes. Prins are principal notes.

and some of these may have helped the region to weather the financial crises and their repercussions (Table 2.10). First, structural reforms that have been implemented in many countries have stimulated potential supply. These include the abolition or liberalization of domestic price controls, dismantling of public monopolies and privatization of inefficient state enterprises in some countries, reductions in barriers to external trade, and the reform of exchange and international payment systems. Second, control over government spending has improved in a number of cases, and the ratio of government spending to GDP has fallen from 30 percent in 1992 to 28 percent in 1998. This, coupled with a rise in the revenue ratio, has brought down the average fiscal deficit in the region to 3¾ percent in 1998 from nearly 6 percent in 1992, which in turn has helped to bring down monetary growth and inflation, and to raise investment ratios. Another important policy development was the devaluation of the CFA franc in 1994, which helped to restore the competitive position of the CFA franc zone countries. The competitiveness benefits of the devaluation have been mostly maintained, with inflation in the zone having been reduced considerably since early 1995, following an initial surge in prices. Economic performance in the zone has strengthened considerably since this realignment.

In addition to strengthened policies that have reduced Africa's vulnerability to financial shocks, Africa's debt structure and level of financial development may also have limited the adverse effects of the crises and the threat of contagion. With progress in reducing fiscal deficits and trade liberalization, many countries in Africa are bringing their external debt under control and becoming less dependent on foreign capital flows. In addition, many governments in Africa rely more on longer-term official or government-guaranteed debt than do the crisis countries in Asia and some countries in Latin America (Figure 2.13). The private sector has relatively little exposure in foreign currencies. This debt structure makes Africa less susceptible to swings in interest rates and short-term capital flows that can lead to pressures on currencies and on domestic financial systems. Finally, the instruments often used to create leveraged financial positions that can lead to volatility are not well developed in many African countries because many banking systems are only now emerging from periods of protracted weakness and because asset markets are not developed.

Africa's pattern of trade has helped to insulate most countries from the slowdown in world trade. The main export markets for the region are the EU and the United States, and demand in both of these areas was well sustained in 1998. A much smaller share of African exports goes to Japan and the Asian crisis countries, where import demand has been sharply curtailed. At the same time, many countries in Africa have

**Table 2.9. Selected Asian Economies: Macroeconomic Indicators***(Percent change from four quarters earlier unless otherwise noted)*

	1997				1998			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>China</b>								
Output growth <sup>1</sup>	9.4	9.5	9.0	8.8	7.2	7.0	7.2	7.8
Inflation	5.2	2.9	2.1	1.0	0.2	-0.9	-1.4	-1.2
Trade balance <sup>2</sup>	6.8	11.4	12.8	9.7	10.6	11.7	12.8	8.2
Import value growth <sup>3</sup>	-2.1	0.6	8.0	2.5	2.4	2.4	-2.8	-5.5
Export value growth <sup>3</sup>	25.8	26.8	20.6	14.0	12.6	2.4	-2.1	-7.4
<b>Hong Kong SAR</b>								
Output growth <sup>1</sup>	5.7	6.9	6.1	2.8	-2.6	-5.1	-6.9	-5.7
Inflation	6.1	5.7	6.1	5.5	5.0	4.4	2.8	-0.8
Trade balance <sup>2</sup>	-6.2	-6.2	-4.0	-4.1	-4.2	-4.5	-0.8	-1.0
Import value growth <sup>3</sup>	4.3	4.8	5.6	5.8	-5.1	-6.1	-15.5	-18.2
Export value growth <sup>3</sup>	2.2	4.2	2.6	7.4	-1.0	-3.1	-10.3	-13.6
Export volume growth	4.0	6.2	4.4	9.6	1.4	-0.5	-7.0	-9.6
<b>Indonesia</b>								
Output growth <sup>1</sup>	7.7	6.6	3.3	2.4	-4.0	-12.3	-18.4	-19.5
Inflation	5.2	5.1	6.0	10.1	29.9	52.2	79.7	79.2
Trade balance <sup>2</sup>	1.7	2.2	0.8	1.7	3.9	4.1	4.2	3.4
Import value growth <sup>3</sup>	11.0	-7.8	-2.6	-10.1	-31.3	-26.9	-31.2	-38.8
Export value growth <sup>3</sup>	10.4	7.5	9.6	2.4	-1.0	-10.5	-6.3	-22.4
Export volume growth	26.2	20.4	33.5	33.0	32.8	11.1	25.6	2.5
<b>Korea</b>								
Output growth <sup>1</sup>	4.9	6.2	5.5	3.6	-3.6	-7.2	-7.1	-5.3
Inflation	4.7	4.0	4.0	5.1	8.9	8.2	7.0	6.0
Trade balance <sup>2</sup>	-7.3	-1.8	-1.5	2.2	8.6	11.3	9.0	10.1
Import value growth <sup>3</sup>	3.9	0.8	-3.8	-14.8	-36.2	-37.0	-39.9	-28.7
Export value growth <sup>3</sup>	-5.6	7.1	15.6	3.6	8.4	-1.8	-10.8	-5.5
Export volume growth	16.8	24.1	35.5	23.2	32.5	20.5	10.5	...
<b>Malaysia</b>								
Output growth <sup>1</sup>	8.6	8.3	7.4	6.8	-2.8	-6.6	-9.0	-8.1
Inflation	3.2	2.5	2.3	2.7	4.3	5.7	5.7	5.4
Trade balance <sup>2</sup>	0.8	-1.9	0.4	0.4	2.3	3.3	4.0	5.1
Import value growth <sup>3</sup>	-1.1	11.2	1.5	-8.2	-19.9	-33.3	-29.3	-20.5
Export value growth <sup>3</sup>	6.1	0.1	2.1	-5.3	-11.4	-10.1	-10.8	4.5
<b>Philippines</b>								
Output growth <sup>1</sup>	5.5	5.6	4.9	4.8	1.6	-0.8	-0.7	-1.8
Inflation	5.4	5.4	5.9	7.5	7.9	9.9	10.4	10.6
Trade balance <sup>2</sup>	-2.9	-2.7	-2.8	-2.3	-1.2	-0.3	0.5	0.8
Import value growth <sup>3</sup>	14.2	7.9	11.1	10.4	-4.3	-17.8	-21.4	-25.1
Export value growth <sup>3</sup>	17.5	26.5	24.7	22.2	23.8	14.4	19.2	11.5
<b>Singapore</b>								
Output growth <sup>1</sup>	4.2	8.5	10.7	7.6	6.2	1.8	-0.6	-0.8
Inflation	1.7	1.7	2.3	2.3	1.0	0.3	-0.8	-1.6
Trade balance <sup>2</sup>	-0.2	0.8	-0.2	0.7	2.7	4.0	4.1	4.1
Import value growth <sup>3</sup>	-2.6	2.7	8.8	-5.1	-16.2	-24.9	-28.5	-23.3
Export value growth <sup>3</sup>	-3.2	4.0	3.2	-4.0	-7.0	-13.9	-14.9	-12.3
Export volume growth	-0.3	8.8	10.5	7.8	7.5	-2.1	-1.9	-5.4
<b>Taiwan Province of China</b>								
Output growth <sup>1</sup>	6.7	6.2	7.1	7.1	5.9	5.2	4.7	3.7
Inflation	1.7	1.0	1.1	-0.2	1.6	1.7	0.6	2.9
Trade balance <sup>2</sup>	1.8	1.7	2.0	2.2	-0.1	1.3	3.4	1.3
Import value growth <sup>3</sup>	9.5	7.4	19.2	11.9	0.1	-7.0	-15.4	-10.7
Export value growth <sup>3</sup>	5.5	2.0	7.2	6.4	-6.6	-7.9	-9.8	-12.9
Export volume growth	6.3	1.1	9.4	10.9	2.7	3.7	-0.4	-10.5
<b>Thailand</b>								
Output growth <sup>1</sup>	3.8	5.1	-3.2	-7.5	-13.4	-12.8	-9.5	-3.7
Inflation	4.4	4.3	6.2	7.5	9.0	10.3	8.1	5.0
Trade balance <sup>2</sup>	-3.2	-3.1	-0.9	2.5	3.1	2.6	3.2	3.4
Import value growth <sup>3</sup>	-7.7	-7.6	-11.4	-27.5	-39.8	-38.2	-34.3	-18.9
Export value growth <sup>3</sup>	-1.0	2.2	7.1	6.7	-2.9	-5.3	-8.7	-9.9
Export volume growth	-1.7	4.3	11.7	16.3	14.1	12.2	5.7	0.8

Sources: Country authorities; IMF, *International Financial Statistics* (IFS); and IMF staff estimates.<sup>1</sup>GDP growth except for Thailand, where growth of manufacturing production is shown. For China, growth rates are cumulative from beginning of year.<sup>2</sup>In billions of U.S. dollars; on national accounts basis except balance of payments basis for the Philippines, Singapore, and Thailand, and customs basis for China; 1998: Q3 trade data for Indonesia exclude oil and gas.<sup>3</sup>In U.S. dollars; national accounts basis except balance of payments basis for the Philippines, Singapore, and Thailand, and customs basis for China.

**Table 2.10. Africa: Selected Indicators***(Percent)*

	Average		1996	1997	1998	1999	2000
	1990–94	1995–97					
<b>Total</b>							
Real GDP growth	1.4	4.0	5.8	3.1	3.4	3.2	5.1
Real income effect <sup>1</sup>	-0.4	0.6	1.4	-0.1	-2.6	-0.8	0.9
Consumer price inflation	28.2	23.4	25.9	11.1	8.6	8.6	6.6
Terms of trade <sup>2</sup>	-1.8	2.4	5.9	-0.2	-9.9	-3.3	4.0
<b>Sub-Saharan Africa</b>							
Real GDP growth	1.4	4.5	5.4	3.9	2.9	2.9	5.2
Real income effect <sup>1</sup>	-0.3	0.5	1.2	-0.3	-2.4	-0.6	0.9
Consumer price inflation	33.6	28.5	32.3	13.7	10.2	10.0	7.3
Terms of trade <sup>2</sup>	-1.3	1.9	5.0	-0.6	-9.1	-2.5	3.6
<b>Oil exporters</b>							
Real GDP growth	2.6	4.8	6.8	4.0	2.2	-0.9	5.7
Real income effect <sup>1</sup>	-1.4	3.3	9.9	-1.3	-13.3	-3.5	5.0
Consumer price inflation	49.0	67.8	75.2	15.2	14.6	19.2	13.5
Terms of trade <sup>2</sup>	-2.6	7.7	22.6	1.9	-28.8	-10.4	16.5
<b>Nonfuel exporters</b>							
Real GDP growth	1.1	4.4	5.0	3.9	3.0	4.0	5.1
Real income effect <sup>1</sup>	-0.1	0.1	-0.2	—	-0.2	—	-0.1
Consumer price inflation	30.0	19.6	21.9	13.3	8.9	7.6	5.6
Terms of trade <sup>2</sup>	-0.4	0.1	-1.1	-0.3	-1.3	-0.1	-0.5
<b>CFA countries</b>							
Real GDP growth	-0.1	5.2	5.5	5.2	5.6	5.3	5.5
Real income effect <sup>1</sup>	-0.6	0.4	-0.5	-0.8	-1.6	-0.6	0.1
Consumer price inflation	5.7	8.3	5.4	4.4	3.4	2.4	2.3
Terms of trade <sup>2</sup>	-3.4	0.8	-1.6	-1.5	-4.3	-2.6	-0.2

<sup>1</sup>Change in the nominal trade balance owing to changes in export and import prices, as percent of GDP.

<sup>2</sup>Total trade in goods.

been strongly affected by the recent declines in world commodity prices. While the reduction in export prices did not significantly affect export volumes and therefore real GDP (measured at constant prices), it did involve a significant deterioration of the terms of trade and an estimated 2½ percent decline in real income for the region as a whole. This was absorbed in part by a fall in real consumption and in part by a reduction in saving, with further negative effects on domestic demand and investment. Weaker commodity prices also continued to widen external current account and fiscal deficits, particularly for the oil-exporting countries.

As discussed in more detail below, the impact of falling commodity prices varies according to each country's major export. In the oil-exporting countries of Africa, the approximately 30 percent decline in world oil prices in 1998 reduced real income by an estimated 13 percent and worsened fiscal balances by about 6 to 7 percent of GDP. The terms of trade and other economic indicators of nonfuel commodity exporters have been less affected because lower oil import bills in part offset the impact of lower export earnings. These calculations do not take into account adjustment within the domestic economy and therefore may understate the economic consequences.

### How Are Commodity Exporters Adjusting to the Crisis?

Commodity prices fell dramatically in 1998: the 32 percent decline in the average price of petroleum over the year was the largest drop since 1986, while the 16 percent fall in the price index for nonfuel commodities was the largest decline since 1975 (Figure 2.14). Key factors contributing to these price declines were the adverse effects of the crisis in Asia and the output decline in Japan, which led to falling demand for a wide range of commodities (Figure 2.15). For example, petroleum consumption fell by 3 percent in Japan, and by 15 percent in Korea, while consumption of other primary commodities such as copper and aluminum registered double-digit declines in both countries as well as in other Asian commodity importers, as infrastructure investment was sharply curtailed.

According to an econometric assessment of the relationship between global activity and commodity prices, the decline in activity in the Asian crisis countries and in Japan in 1997–98 can indeed account for most of the decline in the prices of oil and nonfuel commodities in these two years. The major role of short-term demand fluctuations in influencing oil prices contrasts with the 1986 episode. Then, the de-

clining price of oil was associated with a dramatic expansion of supply following the breakdown of OPEC production constraints, which came on top of the longer-term weakening in oil demand in response to higher prices in the 1970s and early 1980s. However, oil and other commodity prices also appear to be subject to an ongoing secular decline, reflecting a gradual increase in global supplies and less robust demand growth, which in turn reflects overall lower growth in the advanced countries and a shift toward less resource-intensive activity. Additional supplies seem to be fueled by advances in technology that are allowing firms to operate more efficiently. Increased privatization and market liberalization have also provided greater incentives for firms to invest and adopt new technology. The combined effect of these factors has led to a trend decline in commodity prices as production costs have fallen.<sup>8</sup>

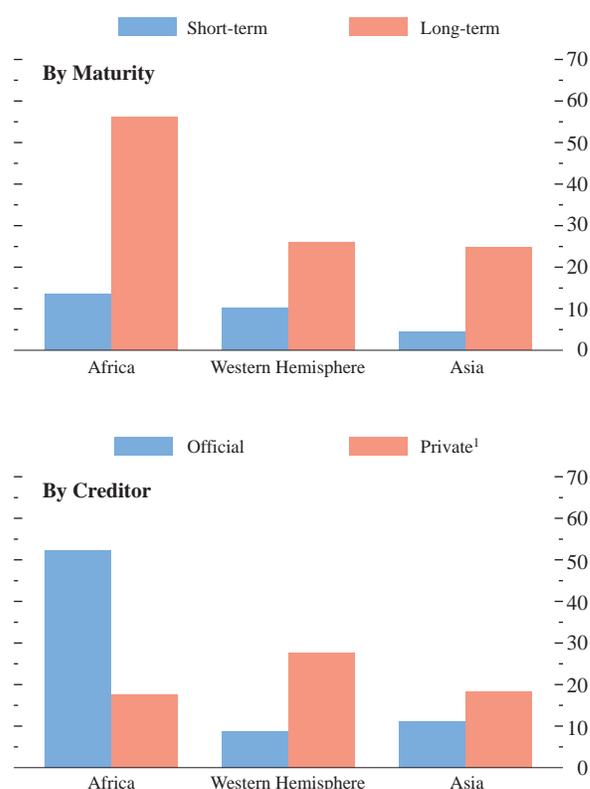
The overall weakness of commodity prices is expected to continue in 1999 because of further unfavorable demand conditions, large supplies, and rising inventories for many commodities. Demand from Asia in particular is expected to stay subdued, since the Asian crisis countries have only begun to recover and economic activity in Japan remains weak. Price developments for individual commodities will also reflect specific supply and demand conditions. Oil prices are expected to be further affected by the global economic slowdown and by the only gradual absorption of the additional supply that was brought to the market in 1998. On the other hand, the production cutbacks announced in March 1999 have recently supported the level of global oil prices, although there remains uncertainty on their longer-term effectiveness. Prices for food and agricultural commodities are expected to reflect, in addition to weak demand outside Europe and the United States, some commodity-specific factors. Wheat prices, for instance, are forecast to remain broadly unchanged in 1999 because EU and U.S. food aid to Russia is expected to sustain demand and because supply conditions are expected to stabilize following the large supply response to the high prices of 1995 and 1996. Sugar prices, in contrast, are likely to fall further owing to large stocks and a steady flow of exports from Brazil. Beyond 1999, commodity prices are forecast to recover, depending on the strength of the global business cycle upturn, but the recovery is expected to be slow. A full rebound from current low levels should not be anticipated, even after the east Asian crisis and the recession in Japan have ended, owing to the secular increase in supplies.

The changes in commodity prices have resulted in sharp terms of trade changes and in a redistribution of world income from oil-exporting countries, in particu-

**Figure 2.13. Developing Countries: External Debt by Maturity and Type of Creditor, 1998**

(Percent of GDP)

African countries rely more on long-term and official debt than do countries in the Western Hemisphere and Asia.



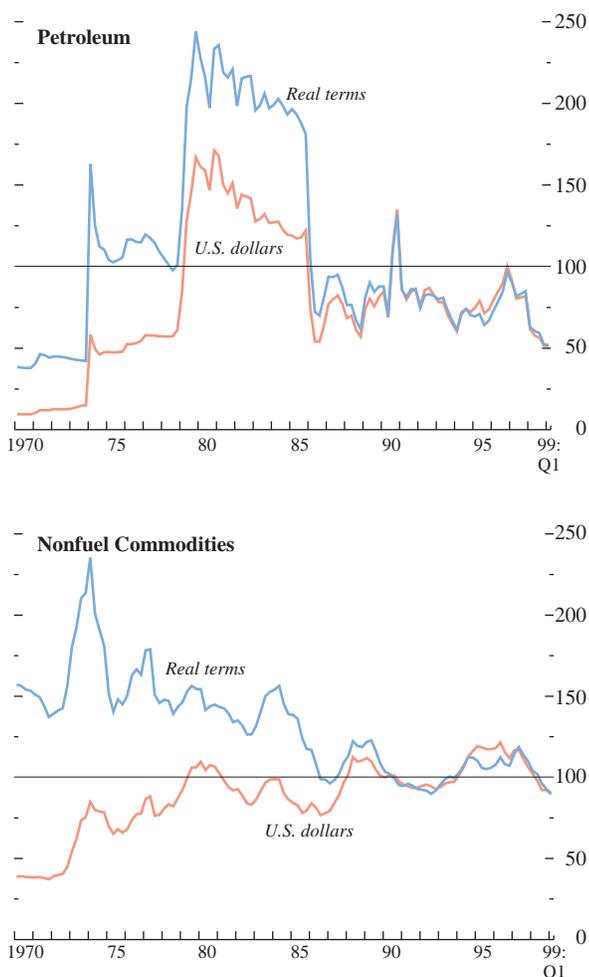
<sup>1</sup>Including banks.

<sup>8</sup>See World Bank, *Global Commodity Markets* (Washington, January 1999).

### Figure 2.14. Prices of Crude Petroleum and Nonfuel Commodities

(Quarterly average; 1990 = 100)

Prices of oil and nonfuel commodities have declined further in 1998, in both nominal (U.S. dollar) and real terms.



lar, to countries that are net commodity importers. Most industrial countries fall into this group. The changes in commodity prices have had different effects on the terms of trade of oil exporters, primary commodity exporters, and the net importers of oil and primary commodities. Table 2.11 shows the changes in the terms of trade of the different groups of countries, and the real income effects of the changes in the terms of trade. In 1998, oil exporters clearly suffered a large loss in their terms of trade, which also led to a strong negative real income effect. For the primary commodity exporters, the reduction in their export prices has been largely offset by the decline in oil prices and, thus, their terms of trade deteriorated only moderately. As a consequence, the impact on their real income was also moderate. The countries that have clearly gained from the changes in commodity prices are the net importers of oil and primary commodities.

With the current account and fiscal positions of a significant number of countries, in the Middle East and sub-Saharan Africa in particular, heavily dependent upon commodity price developments, the price declines since 1997 have had a major impact. The decline in oil prices has severely weakened the external balances of oil-exporting emerging market economies, such as Algeria, the Islamic Republic of Iran, Nigeria, Saudi Arabia, and Venezuela, while exporters of metals, such as Chile and Zambia, have also witnessed a significant deterioration.

The effects have been most pronounced for countries with less diversified export baskets. The export revenue shortfall has been met in many instances by a drawing down of official reserves and increased external borrowing, although conditions in financial markets have constrained access to international borrowing. Since these are short-term solutions, a protracted period of low commodity prices will force governments to make substantial fiscal adjustments, which so far are in only a preliminary stage. With the prices of most commodities projected to remain low in 1999 and to recover only slowly thereafter, countries that have so far relied on reserves and external borrowing to weather the effects on their external balances need to begin to reduce their domestic absorption.

In *Saudi Arabia*, the decline in the value of oil exports in 1998 is estimated to be about \$20 billion, contributing to a fiscal deficit of 10 percent of GDP, which is projected to remain at this level in 1999 (Table 2.12). Although some of the decline in oil revenues has been offset through borrowing and a drawdown of official assets, the oil price decline has also prompted the government to implement fiscal adjustment measures. The *Islamic Republic of Iran's* external current account is expected to deteriorate by 5 percent of GDP in 1998/99. The government has financed this deterioration in the external account through reserves and external borrowing, but a financing gap of about \$2.8 billion remains in 1998/99, and a gap of about \$1.6

billion is projected for 1999/2000. The authorities intend to tighten fiscal policies and target a balanced budget in 1999/2000, down from a deficit of 3.5 percent of GDP in 1998/99. In addition, the authorities have allowed a 24 percent depreciation of the market-based exchange rate since March 1998, and intend to permit further downward flexibility in the period ahead. In *Algeria* the fall in oil revenues has been partially offset by increased sales of gas, but the external current account position nevertheless shifted into a deficit of 2 percent of GDP in 1998. With the adjustment in domestic absorption thus far minimal, international reserves could fall from a reasonably comfortable level of \$7 billion to \$4 billion or less, amounting to about 4 months of import cover.

The effect of the drop in oil prices on the external earnings of oil-exporting countries in *sub-Saharan Africa* is estimated to have led to a deterioration in the fiscal balance of these countries. In *Nigeria*, by far the largest oil exporter in the region, the impact of the reduction in oil revenue was initially aggravated by the adoption of an expansionary budget in 1998 and by additional increases in expenditure, including a large boost in civil service pay late in the year. In response to a further drop in oil prices, and as part of a broad reform program, however, the authorities subsequently introduced strong adjustment measures that included cutting nonessential capital spending, raising domestic petroleum prices, restarting privatization, unifying the exchange rate at market-based levels—a step long sought by the business community and others as a sign of improved economic governance—and halving the pay increase. The fiscal package adopted for 1999, supported by an IMF staff-monitored program, is designed to offset a further projected decline in oil revenues and to reduce the overall deficit to 8.4 percent of GDP.

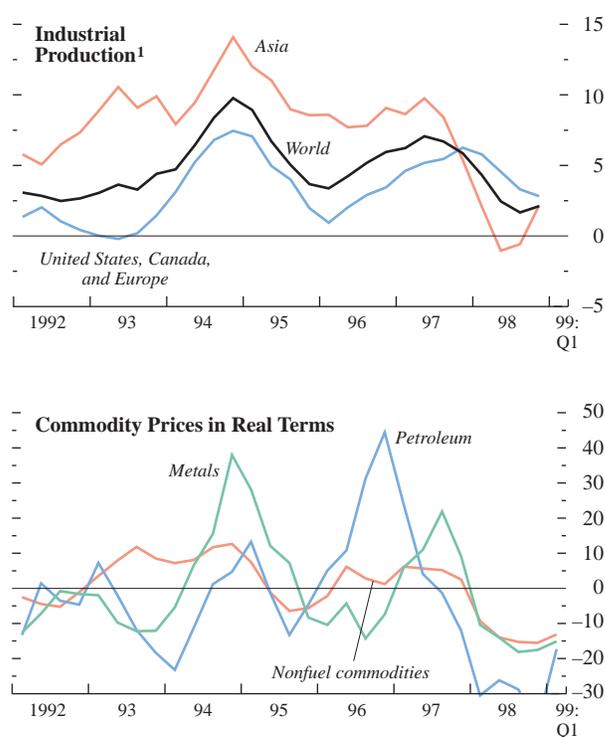
Among the hardest-hit countries in Latin America is *Venezuela*, where oil revenues traditionally ensured a large current account surplus. Oil revenues have declined 30 percent and have changed a current account surplus of 6.8 percent of GDP in 1997 into a 1.6 percent deficit in 1998. This deficit has for a significant part been financed by the drawing down of reserves because external finance has remained tight. The low oil price has also forced the authorities to revise their budget and cut public spending. Although *Ecuador* and *Mexico* are more diversified and less dependent on oil revenues than Venezuela, the fall in oil prices has contributed to a deterioration of external and fiscal balances in both countries, and the authorities have had to reduce operations in the oil sector because of a lack of funds.

Metals prices also experienced large declines. In *Chile*, which derives a large part of its export revenues from copper, the decline in copper prices has resulted in a widening of the trade deficit. Owing to monetary tightening, however, import growth has come down

### Figure 2.15. World Industrial Production and Commodity Prices

(Percent change from a year earlier)

The declines in the prices of petroleum and nonfuel commodities, including metals, in 1997–98 are related to the slowdown in world industrial production.

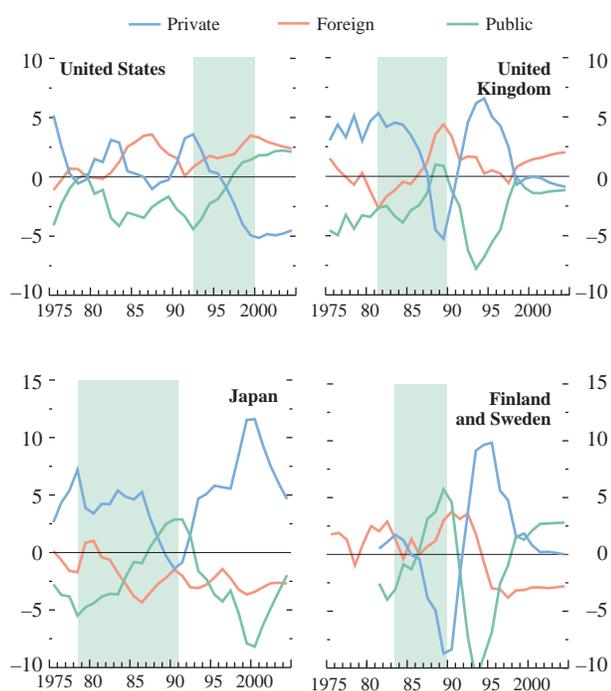


Sources: For industrial production, WEFA, Inc., OECD, and IMF, *International Financial Statistics*; for commodity prices, IMF staff estimates.

<sup>1</sup>Three-month centered moving average, based on data for 32 advanced and emerging market economies representing about 75 percent of world output. Data through 1994 exclude Indonesia.

**Figure 2.16. Selected Advanced Economies: Private, Public, and Foreign Net Saving<sup>1</sup>**  
(Percent of GDP)

The United Kingdom, Japan, Finland, and Sweden have experienced periods of low private net saving that were followed by sharp corrections.



<sup>1</sup>Shaded areas indicate periods during which the net private saving rate declined. Data for 1999 through 2004 are IMF staff projections.

sharply, resulting in a recovery of international reserves. A modest growth in export volume is expected for 1999, when several major new copper mines will come on line. In *Peru*, a more diversified exporter than Chile, the decline in export prices has been offset largely by increased receipts from agricultural and fish exports. In Africa, the drop in metals prices has had a severe impact on *Zambia*, whose main exports are copper and cobalt.

Among the advanced economies dependent on commodity exports for a significant part of their total exports, *Canada* and *Norway*, which both generate about one-third of their export earnings from natural resources, have been most affected. In Canada, price declines for key export commodities (especially lumber, petroleum, and metals) have contributed to strong downward pressure on the currency and to a swing in the current account from a surplus of  $\frac{1}{2}$  of 1 percent of GDP in 1996 to a deficit of 2 percent of GDP in 1998. In Norway, an almost 30 percent drop in the value of oil and gas exports was a major factor underlying a weakening of the currency in the course of 1998 and a deterioration in the current account position from a surplus of about 5 percent of GDP in 1997 to a 1 percent deficit in 1998. The fall in oil and gas export revenues reflected not only lower oil prices, but also reduced export volumes as a result of efforts (in cooperation with other oil-exporting countries) to reduce supplies. The authorities have indicated that oil production and investment in oil projects are being scaled down.

In *Australia* and the *United Kingdom*, in contrast, the effects of the 1997–98 commodity price declines have been more limited. Strong marketing efforts and a redirection of commodity exports to markets outside Asia have left the value of Australia's commodity exports broadly unchanged. Because import growth was strong, owing to robust domestic demand, and noncommodity export revenues increased only moderately, the current account deficit still widened from 3 percent of GDP in 1997 to 5 percent of GDP in 1998. In the United Kingdom, the relatively low contribution of net oil exports to the country's current account position—estimated at around  $\frac{1}{2}$  of 1 percent of GDP between 1995 and 1997—contained the impact of the drop in oil prices. Oil prices have also ceased to be a key determinant of movements in the exchange rate.

### What Are the Implications of the U.S. Saving-Investment Imbalance?

As highlighted in the December 1998 *Interim Assessment*, the private sector saving-investment balance in the United States has deteriorated in recent years to a deficit of 5 percent of GDP, and it is projected to remain in this neighborhood in the medium

**Table 2.11. Commodity Exporters and Importers: Impact of Large Commodity Price Swings**

	1974	1979	1980	1986	1997	1998
	<i>Percent change</i>					
<b>Terms of trade</b>						
Oil exporters	144.6	30.4	39.9	-48.8	-1.0	-18.0
Nonfuel primary commodity exporters	...	...	...	-3.8	-0.5	-3.2
Net primary commodity importers	-11.7	-3.4	-7.5	8.9	-0.3	1.8
	<i>Percent of GDP</i>					
<b>Change in real income<sup>1</sup></b>						
Oil exporters	65.3	15.9	24.1	-15.0	-0.8	-6.3
Nonfuel primary commodity exporters	...	...	...	-0.5	—	-0.5
Net primary commodity importers	-2.1	-0.6	-1.6	1.3	-0.1	0.3

<sup>1</sup>Change in the nominal trade balance owing to changes in export and import prices, as percent of GDP.

term (Figure 2.16).<sup>9</sup> National saving, however, increased in 1993–98 owing to a 5 percent of GDP improvement in the public sector balance. Nevertheless, a deficit in private net saving of this magnitude has no precedent in the United States in the postwar period for which consistent data are available, suggesting that a correction through a drop in demand is a potential risk to the U.S. and world economies. An important question then is how the private net saving rate might rise—that is, through a gradual improvement as in the baseline scenario or through a more rapid adjustment that could have significant negative implications for global economic growth in the near term.

Concerns about a rapid adjustment scenario are based in part on the experiences of Japan, Finland,

Sweden, and the United Kingdom following periods of falling net private saving in the 1980s. As in the United States now, declines in net private saving rates in these countries were offset by higher public sector saving that helped to limit the deterioration in national saving and the current account.<sup>10</sup> Imbalances in these countries—including asset price bubbles—were corrected by sharp increases in net saving rates and culminated in significant recessions. The experiences of these countries in the late 1980s and early 1990s are compared and contrasted with the situation in the United States in the late 1990s—in particular, with re-

<sup>10</sup>From a global perspective, national saving—and its counterpart the balance on the current account—is a more relevant variable. The third section of this chapter looks at the current account deficits of the advanced economies and corrects them for cyclical and other temporary factors. For a survey of asset cycles and the consequences for real economies, see Garry J. Schinasi and Monica Hargraves, “Boom and Bust in Asset Markets in the 1980s: Causes and Consequences,” in *Staff Studies for the World Economic Outlook* (Washington: IMF, December 1993), pp. 1–27.

<sup>9</sup>The private sector saving-investment balance, or net saving, is the difference between the saving and investment of the household and corporate sectors taken together. By definition in the national accounts it is equal to the sum of foreign sector saving (the external current account balance, with positive sign for a deficit) and public sector saving.

**Table 2.12. Oil-Exporting Emerging Market Economies: Impact of Oil Price Decline**

(In percent of GDP)

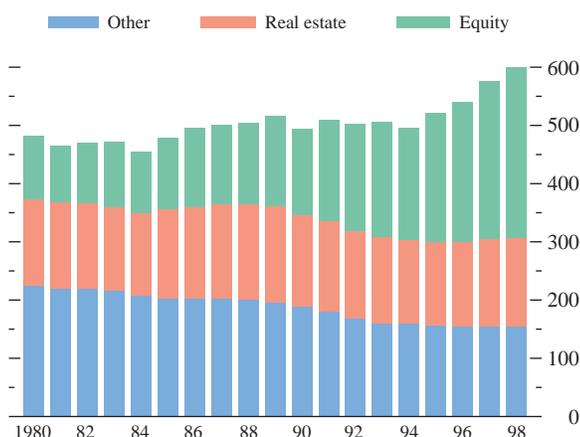
	Impact of Decline of \$1 per Barrel		First-Round Impact of \$6 Decline in Oil Prices from 1997 to 1998 <sup>1</sup>	
	Net export earnings	Budgetary receipts	Net export earnings	Budgetary receipts
Algeria	-1.2	-1.0	-7.8	-6.0
Bahrain	-0.3	-0.1	-1.8	-0.6
Iran, Islamic Rep. of	-0.9	-0.5	-5.1	-3.0
Kuwait	-2.7	-2.7	-16.2	-16.2
Oman	-2.2	-1.9	-13.2	-11.4
Saudi Arabia	-2.1	-1.7	-12.6	-10.2
United Arab Emirates	-1.6	-1.3	-9.3	-7.9

Source: IMF staff calculations.

<sup>1</sup>Assuming no policy responses. The average world oil price (Brent/Dubai/West Texas) declined from \$19.3 a barrel in 1997 to \$13.1 a barrel in 1998.

**Figure 2.17. United States: Household Net Worth**  
(Percent of disposable income)

The rise in the U.S. stock market since 1994 has been the main driving force behind the rise in household net worth.



Source: Haver Analytics database.

gard to the main factors driving saving, investment, and the makeup of balance sheets in the household and business sectors—to help assess the risks of a sharp correction and recession in the United States in the period ahead.

Falling *household saving rates* contributed to domestic imbalances in the comparator countries in the 1980s, and the trend decline in the household saving rate accounts for much of the change in the saving-investment balance also in the United States (Box 2.2).<sup>11</sup> The recent drop in the U.S. household saving rate, which fell below zero in October and December 1998, reflects many factors, including the buoyancy in U.S. equity markets, its impact on household net wealth, and the strong macroeconomic environment. In particular, rising employment and incomes have raised expectations about future income growth, lowered the perceived risk of unemployment, and buoyed consumer confidence. Other factors include low interest rates, falling commodity prices, and the availability of low-cost consumer goods through imports (including from countries with sharply depreciated currencies). The longer-term trend decline in household saving since the early 1980s has been facilitated by financial deregulation, and the associated increase in household access to credit. In addition, a shrinking federal budget deficit since 1993 may have boosted expectations of future after-tax income and encouraged households to raise current spending. These developments have clearly benefited consumers.

While the current situation for households in the United States parallels many aspects of earlier bubble episodes, there are some significant differences. One important consideration is the makeup of *household balance sheets*. In the late 1980s, the run-up in household net assets in many countries stemmed mainly from a surge in housing prices, especially in the United Kingdom and in the two Nordic countries, where gains in home equity accounted for between 65 percent (United Kingdom) and 90 percent (Sweden and Finland) of the gain in net wealth.<sup>12</sup> In contrast, much of the rise in net worth of U.S. households over the period 1994–98 reflects an increase in stock market wealth (Figure 2.17). One possible consequence of this difference is that household consumption may be less affected by a future correction in equity values because consumption in the United States is less sensi-

<sup>11</sup>Changes in data collection methods may have lowered the saving rate by 1¾ percentage points. See Box 2.2 for further information on data problems and conceptual issues related to the measurement of saving.

<sup>12</sup>For the United Kingdom see Schinasi and Hargraves, “Boom and Bust in Asset Markets,” p. 3. For Finland and Sweden, see Lars Jonung, “Depression in the North: Boom and Bust in Sweden and Finland, 1985–1993,” IMF Research Department Seminar Paper 1994–47 (unpublished; Washington, 1994), Table 5.

tive to changes in stock market wealth than to changes in housing wealth.<sup>13</sup> The muted reaction of consumers to the October 1987 market correction supports this view. Because equities make up a larger share of household assets than in 1987, however, a drop in equity prices now could have a larger impact on household assets and might well result in a retrenchment in spending as households try to rebuild their balance sheets.

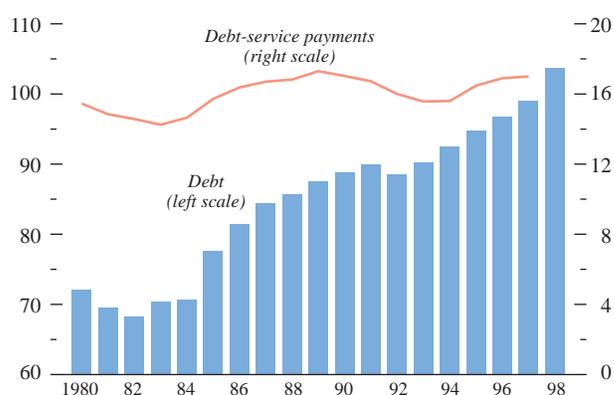
On the liabilities side, consumer debt as a percent of household income has risen steadily since 1984 (Figure 2.18). Debt-service payments, in contrast, while not showing a clear trend, are at the previous peak reached in 1989–90.<sup>14</sup> This clearly suggests that households may be vulnerable in a financial sense to a rise in interest rates or job loss in an economic slowdown.

Rapid growth in *private investment* in the United States has also played a part in the decline in private net saving.<sup>15</sup> During the period 1992–98, the ratio of private investment to GDP—measured in current prices—rose from a low of 12¾ percent to over 16 percent (see Statistical Appendix Table 44). Investment was supported by declining interest rates (related to the improvement in the public deficit and crowding in), the buoyant stock market (which also lowered financing costs), and strong GDP growth. Measured in real terms—to account for declining computer and other investment good prices—the ratio of investment to GDP is now above the historical average. However, because there are only scant signs of overcapacity or overbuilding, it is difficult to make the case that an adjustment in the private saving-investment balance would originate with a fall in investment.

Information in the *balance sheets of financial and nonfinancial corporations* is difficult to read for signs of vulnerability and potential macroeconomic consequences of an economic slowdown or equity correction. Nonfinancial firms have been taking on more debt over the past few years, but ratios to equity have not risen significantly. Perhaps more important, while financial and nonfinancial firms have improved risk management since the 1980s, at the same time the complexity of financial instruments and strategies has increased. In addition, firms have increased their off-balance-sheet operations, making risk positions less

**Figure 2.18. United States: Household Debt and Debt-Service Payments**  
(Percent of disposable income)

U.S. household debt has been rising since 1993, but there is no clear trend in debt service.



Source: Haver Analytics database.

<sup>13</sup>The U.S. Federal Reserve Board has estimated that the elasticity impact on consumption of changes in property wealth are about four times more powerful than changes in stock market wealth. See Flint Brayton, Eileen Mauskopf, David Reifschneider, Peter Tinsley, and John Williams, “The Role of Expectations in the FRB/US Macroeconomic Model,” *Federal Reserve Bulletin*, Vol. 83, No. 4 (April 1997), pp. 227–45.

<sup>14</sup>Declining consumer interest rates over much of the period have made room for higher levels of debt. Average credit card rates, for example, fell by 3 percentage points, to 14 percent, in 1998.

<sup>15</sup>Investment in single family homes amounts to about 15 percent of total private investment and is not discussed here explicitly.

### Box 2.2. Measuring Household Saving in the United States

The rapid increase in U.S. consumer spending in 1998 pushed the monthly household saving rate down into negative territory in late 1998 and early 1999 for the first time since at least the early 1950s. This extended the trend decline in the household saving rate that began in the early 1980s.

Household saving in the United States is officially estimated in two ways.<sup>1</sup> The most often-cited measure—and the one that turned negative for a short period in late 1998 and early 1999—is based on the U.S. Commerce Department's National Income and Product Accounts (NIPA). The second measure is based on the Federal Reserve's Flow of Funds Accounts (FOFA). As household saving rates, both measures are usually expressed as a ratio to personal disposable income (*see figure*). Neither measure is free from technical or conceptual difficulties; both suffer from the fact that they are not direct measures of household saving.

Conceptually, the NIPA household saving measure is based on the after-tax income generated by the current production of goods and services. This measure is computed as the difference between personal income and the sum of personal consumption expenditures, personal interest payments, net personal transfers to the rest of the world, and personal taxes.<sup>2</sup> Each component in this equation is estimated. In addition, sales of existing assets, such as homes or equities, and capital gains on those assets, are not included in the NIPA measure of personal income—only income generated by production is included.

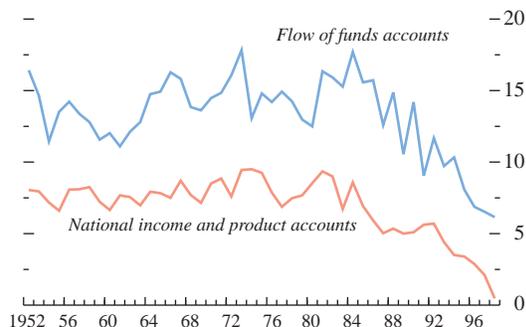
Until recently, however, dividend payments that reflected capital gains income had in practice been included in the NIPA measure of personal income simply because, in the collection of data, dividends were defined without regard to the source of income used to fund them. With

<sup>1</sup>Saving estimates are also derived from household survey data; however, the quality and sampling error of such data are problematic.

<sup>2</sup>U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, Table 2.1.

#### Measures of U.S. Household Saving

(Percent of personal disposable income)



Source: Haver Analytics database.

the sharp rise in capital gains distributions of mutual funds in recent years, the NIPA estimates of personal income and therefore household saving were increasingly overstated because they incorrectly captured a portion of capital gains distributions. In July 1998, the Bureau of Economic Analysis corrected this deficiency in methodology, which reduced the personal saving rate for 1997 by 1.8 percentage points to 2.1 percent (*see table*).<sup>3</sup> Although the revisions to the NIPA personal saving rate, which date back to 1982, are larger in the more recent years, the overall trend in the saving rate has not changed. Based on the revised data, personal saving has fallen

<sup>3</sup>The redefinition does not affect gross private saving (that is, personal plus corporate saving) because the downward revision to personal saving is offset by an increase in the measured undistributed corporate profits of the mutual fund industry.

transparent and thus increasing uncertainty about how both sectors might be affected by a drop in spending or a rise in interest rates. Thus, while the United States is likely to avoid a banking crisis similar to those in Japan or earlier in the Nordic countries, problems in the financial sector cannot be ruled out.

*Policies* can have strong effects on saving rates. In the second half of the 1980s, monetary policies in Japan, the United Kingdom, Finland, and Sweden generally accommodated demand growth and the accompanying declines in net private saving; in some cases, structural fiscal deficits, masked by cyclical surpluses, supported the high levels of demand. Monetary policies were subsequently tightened either to rein in inflationary pressures or to support exchange rate

regimes. These moves led to sharp declines in asset prices, corrections in private saving rates, and slowdowns in economic activity. As these economies slowed, monetary policy was eased to cushion the impact of the adjustment, while the scope for fiscal stimulus was limited by large fiscal deficits that emerged (except in Japan).

The environment for both fiscal and monetary policies in the United States today is somewhat different. For fiscal policy, successful efforts to reduce the budget deficit have acted to strengthen national saving and to dampen demand over the past few years; and looking ahead, the expected fiscal surplus leaves room for countercyclical policies, should activity weaken. For monetary policy, low inflation in the United States

### Revisions to the NIPA Personal Saving Rate (Percent of disposable personal income)

	Previously Published	Revised	Bias
1982	9.1	9.0	-0.1
1983	7.0	6.7	-0.3
1984	8.7	8.6	-0.1
1985	7.2	6.9	-0.3
1986	6.5	5.9	-0.6
1987	5.3	5.0	-0.3
1988	5.5	5.4	-0.1
1989	5.1	5.0	-0.1
1990	5.3	5.1	-0.2
1991	6.0	5.6	-0.4
1992	6.2	5.7	-0.5
1993	5.1	4.4	-0.7
1994	4.2	3.5	-0.7
1995	4.8	3.4	-1.4
1996	4.3	2.9	-1.4
1997	3.9	2.1	-1.8

Source: U.S. Department of Commerce, *Survey of Current Business*, August 1998, p. 30.

from about 9 percent in 1982 to about 0.5 percent in 1998, including two months of negative saving in late 1998.

In addition to the revision in methodology, there are other technical factors contributing to the recent historically low level of personal saving. With the sharp rise in equity prices over the past several years, capital gains realizations have increased as well. Although capital gains are excluded from NIPA income, taxes on these gains are included in tax payments. As a result, capital gains taxes paid have also increased, thereby lowering personal disposable income and hence the household saving rate. In addition, with the rise in equity prices, households have moved their saving away from interest-bearing assets and toward equities, which also lowers measured personal disposable income.

In contrast to the NIPA saving rate, the alternative FOFA estimate of personal saving is based on measures of household assets and liabilities and is computed as households' acquisition of financial assets, plus net investment in tangible assets, less the net increase in liabilities. This measure suffers from a number of shortcomings, including problems associated with how assets are valued.<sup>4</sup> The FOFA saving rate has also trended downward since the 1980s—almost as much as indicated by the NIPA measure but from a higher level—declining from about 14 percent in 1990 to about 6 percent in 1998.

The FOFA and the NIPA saving rates are different primarily because the FOFA measure includes the purchase of durables as a part of household saving, and only the services derived from these durable goods each year—that is, depreciation—are treated as consumption, whereas the NIPA measure considers the purchase of durables as pure consumption.<sup>5</sup> There is, however, one important similarity between the two commonly used measures. Although the FOFA saving rate includes the acquisition of net financial assets, it does not include changes in the valuation of these assets. Therefore, capital gains on equity are correctly excluded from the FOFA measure, just as they are in the NIPA measure. As a result, both measures of saving do not capture the increase in real household net wealth associated with the rise in equity values over the past few years. This sharp rise in household wealth has allowed consumer spending to outpace disposable income, driving down both the NIPA and FOFA measures of saving.

<sup>4</sup>For a detailed discussion of the differences between the NIPA and FOFA personal saving rates, see J.F. Wilson, J.L. Freund, F.O. Yohn, Jr., and W. Lederer, "Measuring Household Saving: Recent Experience from the Flow-of-Funds Perspective," in R.E. Lipsey and H.S. Tice, eds., *The Measurement of Saving, Investment, and Wealth* (Chicago: University of Chicago Press, 1989).

<sup>5</sup>Government insurance and pension reserves are also treated differently.

means that interest rates may not need to be raised—or at least not as much—as was the case in the late 1980s in the comparator countries. As a result, it is possible that the U.S. economy will cool gradually—a soft landing—as households bring spending in line with incomes over time. Nevertheless, there is a chance that inflation may pick up in the period ahead, for example if the recent moderation in employment cost increases seen in the last quarter of 1998 is reversed or if productivity increases slow as is typical near the top of the cycle. Inflation could also rise if the temporary factors, such as falling commodity prices that have restrained price increases over the past few years, diminish or are reversed (see Chapter II of the *World Economic Outlook*, October 1998). In this case

the Federal Reserve might well need to raise interest rates to slow demand, which could result in a correction in equity prices and a sharper adjustment in private demand.

The *World Economic Outlook* baseline scenario is predicated on smooth adjustment in the U.S. and other economies. Growth in U.S. domestic demand is projected to moderate in the medium term, the government surplus to rise, and the external deficit to stabilize and decline slightly as a percent of GDP. The external debt ratio, however, would continue to rise. In the longer term, the IMF staff assumes that a trend rise in U.S. saving rates and corresponding declines in other countries would result in reversals in external imbalances so that external debt and asset posi-

**Table 2.13. Alternative Scenario: Simulation Results<sup>1</sup>***(Percent deviation from baseline unless otherwise noted)*

	First Year	Second Year	Third Year	Fourth Year	Fifth Year
<b>World</b>					
Real GDP	-1.2	-0.8	-0.6	-0.3	-0.2
<b>Industrial economies</b>					
<b>United States</b>					
Real GDP	-1.9	-1.5	-0.8	-0.3	-0.5
Domestic demand	-3.3	-3.5	-3.1	-2.5	-2.3
Net private saving	1.8	2.3	2.3	2.1	2.1
Current account <sup>2</sup>	79.0	173.0	235.0	280.0	282.0
Effective exchange rate	-10.3	-6.8	-3.1	0.9	5.5
<b>Japan</b>					
Real GDP	-1.1	-0.8	-0.5	0.1	0.7
Domestic demand	0.4	1.1	1.6	2.0	2.2
Net private saving	-0.4	-1.2	-1.8	-2.3	-2.4
Current account <sup>2</sup>	-3.0	-44.0	-74.0	-92.0	-90.0
Effective exchange rate	15.8	12.1	8.2	4.5	0.8
<b>Euro area</b>					
Real GDP	-1.2	-0.6	-0.4	-0.2	0.1
Domestic demand	0.7	1.3	1.4	1.4	1.3
Net private saving	-0.1	-0.9	-1.4	-1.8	-1.9
Current account <sup>2</sup>	-8.0	-40.0	-72.0	-100.0	-111.0
Effective exchange rate	10.8	8.8	6.5	4.2	2.2
<b>Developing countries</b>					
Real GDP	-0.8	-1.0	-1.2	-1.3	-1.2

<sup>1</sup>Baseline is taken from the *World Economic Outlook* database, with shocks starting in 2000. The scenario models an increase in U.S. consumers' preference for saving and declines in equity prices, especially in the United States.

<sup>2</sup>Billions of U.S. dollars.

tions would be sustainable.<sup>16</sup> By comparison, a hard-landing scenario might look as follows.

One possible trigger, as noted above, could be higher interest rates brought on by a pickup in inflationary pressures. Another possibility is that the buildup in external liabilities could lead to dollar depreciation and declines in asset prices. To illustrate a hard landing, the alternative scenario assumes a mixture of these conditions in which the household saving rate rises, reflecting in part a 30 percent correction in U.S. equity prices. Market corrections of around 15 percent are assumed in other industrial countries, reflecting strong cross-market correlations but also the greater appreciation in U.S. equity prices since 1990. At the same time, international investors are assumed to reduce their holdings of dollar-denominated assets, resulting in a depreciation of the dollar of around 10 percent.<sup>17</sup>

The scenario results are summarized in Table 2.13. In the first year of the shock, global output falls rela-

tive to the baseline by 1¼ percent, with the largest reduction coming in the *United States*. For the United States, the alternative assumptions result in lower domestic demand (relative to the baseline) and a consequent rise in the net private sector saving balance. The impact of the scenario assumptions is offset in part by countercyclical monetary and fiscal policies. Room for policy flexibility is greater in the United States than in other major industrial countries because of the elimination of the U.S. fiscal deficit over the past few years; deficits in euro-area countries are not large, but the operation of automatic stabilizers is constrained by the Stability and Growth Pact.

In the United States, the level of output remains below the baseline scenario through the five-year period. The lower level of domestic demand is transmitted to partner economies through lower import demand, and with more competitive exports, the U.S. current account improves by \$280 billion after five years. In the *euro area* and *Japan*, output initially falls owing to reduced external surpluses, but it recovers in both areas later in the scenario period as lower interest rates boost investment and offset the negative impact of the correction in the trade accounts. In the near term, the decline in output is somewhat greater in the euro area because the economic rigidities in European labor and product markets tend to hamper adjustment to economic disturbances of this nature. In Japan, policy efforts to offset the de-

<sup>16</sup>The longer-run scenario is explained in Martin D. Cerisola, Hamid Faruqee, and Yutong Li, "Long-Term Prospects for the U.S. Current Account," IMF Staff Country Report No. 98/105 (September 1998), pp. 48–64.

<sup>17</sup>Wealth effects are assumed to be greater in the United States than in other countries. See Frank Smets, "Central Bank Macroeconomic Models and the Monetary Policy Transmission Mechanism," in Bank for International Settlements, *Financial Market Structure and the Monetary Policy Transmission Mechanism* (Basle, Switzerland: BIS, 1995), pp. 225–66.

cline in output growth would be hampered by already low interest rates, especially in the early years. In both the euro area and Japan, lower interest rates boost private investment, and output rises above baseline levels, in particular in Japan, at the end of the scenario period.

Output in developing countries is about 1 percent below the base case in all years of the scenario. Output is mainly affected through trade linkages and lower demand from the industrial economies. In addition, lower world output delays the pickup in global commodity prices that is incorporated in the medium-term

baseline projections, putting further pressure on commodity exporters. These negative shocks are offset to some degree by lower interest rates in the advanced economies that act to reduce debt-service costs in the indebted developing countries. The scenario does not allow for a possible renewed surge in capital flows to emerging market countries similar to the experience of the early 1990s. While this cannot be ruled out completely, the recent emerging market crises and increased aversion to emerging market risks may continue to act as an impediment to private capital flows over the medium term.