



II

Buildup to Present Difficulties

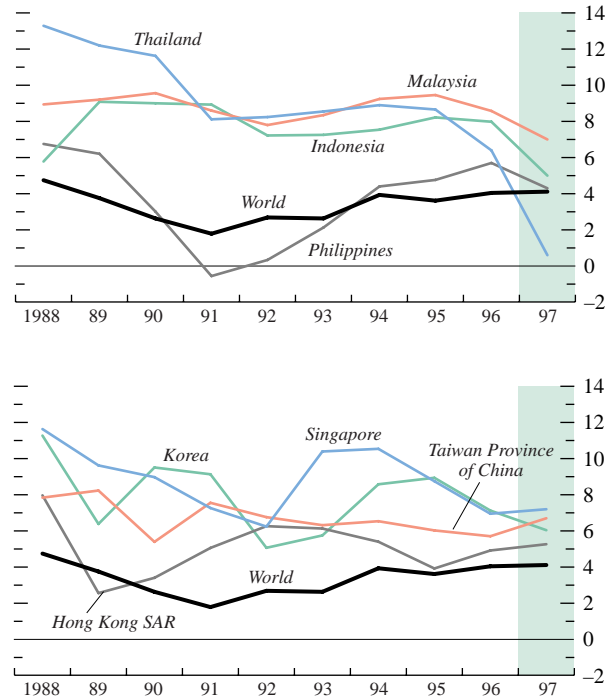
The recent crises in east Asia have arisen from the large-scale shift of funds out of domestic financial markets, beginning in Thailand. Consideration of why this has occurred with the impact that it has had points to the importance of four sets of factors that had been in operation over the preceding several years. These factors together help to explain the scale of financial inflows into these economies since the early 1990s, shortcomings in the deployment of these flows and in their intermediation by the financial systems of the countries concerned, and their unsustainability and eventual reversal. They relate, first, to the successful elements in these countries' economic performance; second, to various features of their external economic environment that at first were favorable, including in their promotion of capital inflows, but that turned sour in several respects in 1996–97; third, to shortcomings and inconsistencies in domestic macroeconomic and exchange rate policies; and, fourth, to various structural weaknesses, particularly in the financial sector, that made these economies and especially their financial systems increasingly fragile and vulnerable to adverse developments. As far as policy lessons are concerned, particularly for the countries suffering the crises, the third and fourth sets of factors are the most important, but the other factors also help to explain the buildup to the crises.

The factors considered below do not, of course, fully explain the crises. In particular, changes in market sentiment, which played a large role in bringing the crises to a head and in determining the course of contagion (which is considered in Chapter III), cannot be fully explained, especially with regard to their timing, by economic fundamentals alone.

Successful Performance

First, the unusually successful performance, in many respects, of most of the economies concerned contributed to the rapid growth of net capital inflows to the region during the early to mid-1990s and hence to the policy challenges associated with them. During 1992–95, the developing economies of Asia experienced average real GDP growth above 9 percent, significantly above their recent historical averages and probably unparalleled at any time by any group of economies of comparable size. Although double-digit

Figure 1. Selected Asian Economies: Real GDP¹
(Annual percent change)



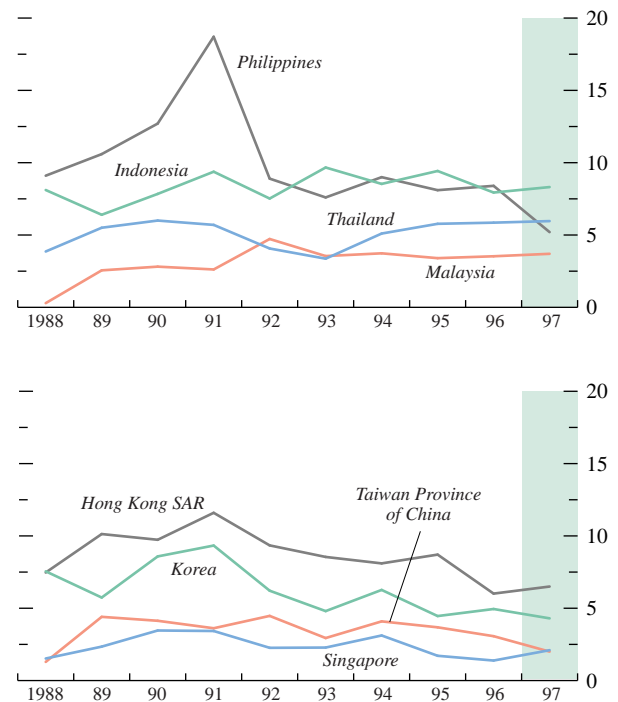
¹Shaded areas indicate IMF staff projections.

growth rates in China formed the largest single component of this regional growth performance, Indonesia, Malaysia, and Thailand all experienced average growth above 7 percent in this period (Figure 1). The Philippines was the only laggard among the group of countries known as the ASEAN-4 (Indonesia, Malaysia, and Thailand being the other members of this group), but its growth gradually rose to above 5 percent by 1995–96. Among the newly industrialized economies of Asia, annual output growth reached 7½ percent in 1994–95, with Singapore’s growth exceeding 10 percent in 1993–94 and Korea’s approaching 9 percent in 1994–95. The performance of the Asian economies was equally impressive in terms of the growth of trade, which displayed the outward orientation of their growth strategy.

Rapid, outward-oriented growth was among several features of these economies that attracted foreign investment. In most cases, the standard indicators suggested macroeconomic stability. Inflation was moderate, at least by developing country standards: only in China and the Philippines had inflation risen significantly above 10 percent at any time since the late 1980s (Figure 2). And the absence of significant fiscal imbalances in most cases confirmed the discipline of macroeconomic policies: among the ASEAN-4, only the Philippines incurred persistent general government deficits in the late 1980s and 1990s; Thailand, in contrast, recorded general government surpluses every year between 1988 and 1996 (see Statistical Appendix, Table A1).¹ With fiscal positions healthy in most cases, the sizable external current account deficits being run up persistently in some cases—most notably in Malaysia and Thailand—reflected not public sector dissaving but shortfalls of private saving relative to private investment; and such deficits, it could be argued, were not a matter for policy concern if monetary policy was set appropriately and private sector decisions were not subject to significant distortions (such as artificial encouragement of consumption or investment through the tax system) (Figures 3 and 4).² Moreover, the private saving shortfalls were associated not with low saving but with extraordinarily high investment, which seemed to be related to these countries’ growth performance and which was presumably adding to their future productive and foreign exchange

Figure 2. Selected Asian Economies: Consumer Price Inflation¹

(Annual percent change)

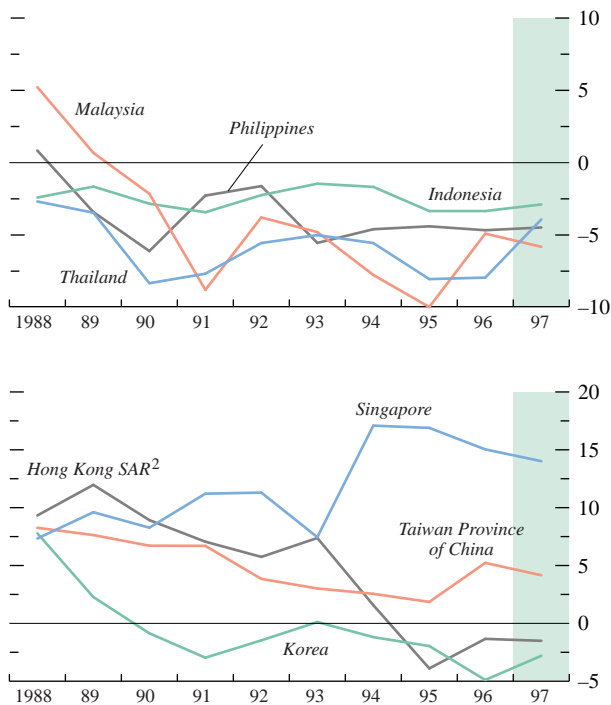


¹Shaded areas indicate IMF staff projections.

¹Data for fiscal balances of the public sector broadly defined are unavailable for Hong Kong Special Administrative Region of China (Hong Kong SAR), Indonesia, Korea, and Taiwan Province of China; for other economies they show broadly the same picture.

²This argument, sometimes referred to as the “Lawson doctrine,” was put forward by U.K. Chancellor Nigel Lawson in his IMF/World Bank Annual Meetings speech of September 1988; see IMF, *Summary Proceedings of the Forty-Third Annual Meeting of the Board of Governors* (Washington, 1988), pp. 78–85. Its limitations, apart from being demonstrated by the subsequent experience of the United Kingdom itself, were particularly clear in the case of the Mexican crisis.

**Figure 3. Selected Asian Economies:
Current Account Balances¹**
(In percent of GDP)



¹Shaded areas indicate IMF staff projections.
²Includes only goods and nonfactor services.

earning potential. (In this respect particularly, the situation was quite different from that of Mexico in the period before its crisis of 1994; see Box 1.) It seemed quite natural that a significant part of this investment was being financed by foreign capital attracted by relatively high returns.

But these successes brought mixed blessings. Absorption of the capital inflows posed challenges, in terms of their productive deployment and their prudent intermediation through financial systems that were not well developed. The potential variability of the inflows also posed challenges not only for the financial systems involved but also for macroeconomic policy and exchange rate policy. These challenges were associated much less with foreign direct investment (FDI) and other long-term flows than with short-term flows, especially flows into banks and other financial institutions. The scale of the difficulties that arose therefore depended on macroeconomic policies and the soundness of financial systems, factors that will be considered below. Data on the different kinds of capital flows suggest that there was relatively little cause for concern on these scores in such cases as China and Vietnam, where FDI dominated net private inflows; more cause for concern in Indonesia, Korea, Malaysia, and the Philippines, where short-term inflows were substantial; and the most danger in Thailand, where short-term inflows were dominant, amounting to 7–10 percent of GDP in each of the years 1994–96, while FDI languished at about 1 percent of GDP (Table 1). A large proportion of short-term flows is accounted for by international bank lending, with European and Japanese banks being particularly active in the emerging market countries of Asia (Table 2). Data on capital flows and their classification are, however, notoriously uncertain, and, in particular, some flows recorded as FDI may be more in the nature of foreign borrowing.

The strengths of these economies also had the drawback of masking significant weaknesses, including in the ways that the challenges posed by capital inflows were addressed—weaknesses in the quality of investment as well as in financial systems and the framework of macroeconomic policy. These will be discussed further below.

Changes in External Environment

The second set of factors underlying the buildup to the recent crises consisted of changes that occurred in the external economic environment of the countries concerned.

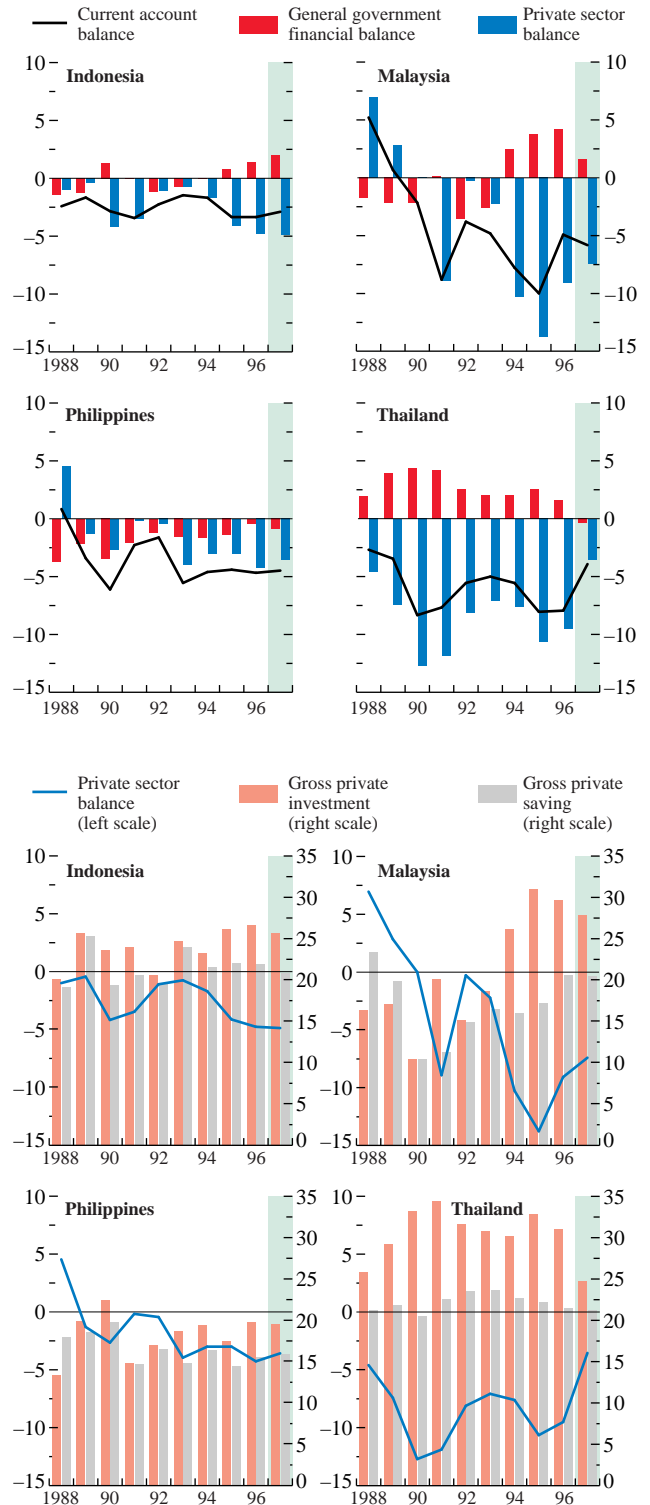
A development that contributed to the surge in capital inflows to emerging markets in the early to mid-1990s was the decline in asset yields in the industrial economies. Weak economic performance in many industrial countries in this period led to accommodative monetary policies, abundant liquidity, and low interest

rates, and these in turn contributed to rises in stock markets—most notably in the United States up to 1995 but more generally thereafter—that reduced dividend yields and ratios of corporate earnings to equity values. Not only did declines in asset yields in industrial countries make the emerging markets an increasingly attractive investment opportunity: there was also a sharp narrowing of yield spreads (see Figure 14 in Chapter III), signifying an increased preference among asset holders for emerging market investments. (There was also a more general narrowing of risk premiums in asset markets, apparently signifying a shift in preferences toward high yields and an increased willingness to accept—or tendency to underestimate—risk.) This may have stemmed from an increasing desire among wealth holders in the mature economies to diversify their portfolios, as well as increased confidence on their part in the performance of the emerging market economies. There may also have been a shift in preferences in favor of Asian emerging market assets, in particular, following the Mexican crisis of 1994–95. Apart from contributing to the surge in inflows and associated challenges, these developments magnified the potential reversal that could occur if yields turned upward in the industrial countries or if asset preferences turned against emerging markets. And in the early months of 1997, not only did the U.S. Federal Reserve take a first step in raising short-term interest rates in the face of continuing strong domestic expansion, but in addition growth seemed to be gaining momentum in Europe and Japan, giving rise to expectations of a more general upturn in yields. These developments are discussed further in Chapter IV.

Movements in exchange rates among the major currencies in recent years have been another significant external factor, with important effects on the international competitiveness of the ASEAN-4, Hong Kong SAR, and Taiwan Province of China because of their exchange rate arrangements entailing close links to the U.S. dollar. More specifically, when the dollar weakened during 1994 and early 1995, reaching all-time lows against the yen in particular in the second quarter of 1995, these countries generally gained competitiveness as their currencies depreciated in trade-weighted terms (Figures 5 and 6).³ Conversely, when this decline in the dollar was reversed over the two years beginning in mid-1995, with the dollar recovering most markedly against the yen, these countries suffered substantial losses in competitiveness, with adverse effects on net exports and growth. That Japan is the largest or second-largest trading partner of these countries meant that their competitiveness was partic-

³The real effective exchange rate indices shown in Figure 6 are based on consumer price indices, which include the prices of non-tradables. They therefore provide imperfect measures of international competitiveness in traded goods and services.

Figure 4. Selected Asian Economies: Sectoral Financial Balances¹
(In percent of GDP)



¹Shaded areas indicate IMF staff projections.

Table 1. Selected Asian Economies: Capital Flows¹*(In percent of GDP)*

	1983–88 ²	1989–95 ²	1991	1992	1993	1994	1995	1996	1997
China									
Net private capital flows ³	1.2	2.5	1.7	-0.9	4.5	5.6	5.2	4.7	3.7
Net direct investment	0.4	2.9	0.9	1.7	5.3	5.9	4.8	4.6	4.3
Net portfolio investment	0.2	0.2	0.1	—	0.7	0.7	0.1	0.3	0.2
Other net investment	0.5	-0.6	0.7	-2.6	-1.5	-0.9	0.2	-0.3	-0.8
Net official flows	0.3	0.5	0.3	0.8	0.9	0.4	0.3	0.2	-0.1
Change in reserves ⁴	-0.4	-2.2	-3.7	0.5	-0.4	-5.6	-3.2	-4.0	-4.5
India									
Net private capital flows ³	1.5	1.2	1.0	0.3	1.4	1.7	1.5	2.0	2.9
Net direct investment	0.1	0.2	0.1	0.1	0.2	0.4	0.6	0.6	0.7
Net portfolio investment	—	0.5	—	0.1	1.1	1.2	0.8	0.8	0.8
Other net investment	1.5	0.6	0.9	0.2	0.1	0.1	0.1	0.6	1.4
Net official flows	0.7	0.7	1.1	1.0	0.8	0.4	-0.1	0.3	0.2
Change in reserves ⁴	-0.1	-0.7	-0.9	-0.5	-2.6	-2.0	0.3	-1.1	-1.5
Indonesia									
Net private capital flows ³	1.5	4.2	4.6	2.5	3.1	3.9	6.2	6.3	1.6
Net direct investment	0.4	1.3	1.2	1.2	1.2	1.4	2.3	2.8	2.0
Net portfolio investment	0.1	0.4	—	—	1.1	0.6	0.7	0.8	-0.4
Other net investment	1.0	2.6	3.5	1.4	0.7	1.9	3.1	2.7	0.1
Net official flows	2.4	0.8	1.1	1.1	0.9	0.1	-0.2	-0.7	1.0
Change in reserves ⁴	—	-1.4	-2.4	-3.0	-1.3	0.4	-0.7	-2.3	1.8
Korea									
Net private capital flows ³	-1.1	2.1	2.2	2.4	1.6	3.1	3.9	4.9	2.8
Net direct investment	0.2	-0.1	-0.1	-0.2	-0.2	-0.3	-0.4	-0.4	-0.2
Net portfolio investment	0.3	1.4	1.1	1.9	3.2	1.8	1.9	2.3	-0.3
Other net investment	-1.6	0.8	1.3	0.7	-1.5	1.7	2.5	3.0	3.4
Net official flows	—	-0.3	0.1	-0.2	-0.6	-0.1	-0.1	-0.1	-0.1
Change in reserves ⁴	-0.9	-0.8	0.4	-1.1	-0.9	-1.4	-1.5	0.3	-1.1
Malaysia									
Net private capital flows ³	3.1	8.8	11.2	15.1	17.4	1.5	8.8	9.6	4.7
Net direct investment	2.3	6.5	8.3	8.9	7.8	5.7	4.8	5.1	5.3
Net portfolio investment
Other net investment	0.8	2.3	2.9	6.2	9.7	-4.2	4.1	4.5	-0.6
Net official flows	0.3	—	0.4	-0.1	-0.6	0.2	-0.1	-0.1	-0.1
Change in reserves ⁴	-1.8	-4.7	-2.6	-11.3	-17.7	4.3	2.0	-2.5	3.6
Philippines									
Net private capital flows ³	-2.0	2.7	1.6	2.0	2.6	5.0	4.6	9.8	0.5
Net direct investment	0.7	1.6	1.2	1.3	1.6	2.0	1.8	1.6	1.4
Net portfolio investment	—	0.2	0.3	0.1	-0.1	0.4	0.3	-0.2	-5.3
Other net investment	-2.7	0.9	0.2	0.6	1.1	2.5	2.4	8.5	4.5
Net official flows	2.4	2.0	3.3	1.9	2.3	0.8	1.4	0.2	0.8
Change in reserves ⁴	0.5	-1.1	-2.3	-1.5	-1.1	-1.9	-0.9	-4.8	2.1
Singapore									
Net private capital flows ³	5.0	3.8	1.7	-2.7	9.4	2.5	1.3	-10.1	-5.5
Net direct investment	8.7	6.0	8.8	2.1	5.5	4.8	4.9	4.3	5.3
Net portfolio investment	-0.5	0.1	-2.1	3.3	0.5	1.1	0.9	-16.2	-14.4
Other net investment	-3.2	-2.4	-5.1	-8.0	3.4	-3.4	-4.6	1.8	3.6
Net official flows	—	—	—	—	—	—	—	—	—
Change in reserves ⁴	-6.1	-10.3	-9.6	-12.3	-12.9	-6.7	-7.2	-11.1	-14.6
Taiwan Province of China									
Net private capital flows ³	0.2	-4.0	-1.2	-3.2	-2.1	-0.6	-3.6	-3.2	-3.8
Net direct investment	-0.2	-1.2	-0.3	-0.5	-0.7	-0.5	-0.4	-0.7	-0.6
Net portfolio investment	-0.3	—	—	0.2	0.5	0.4	0.2	-0.4	-0.6
Other net investment	0.7	-2.8	-0.9	-3.0	-1.9	-0.5	-3.3	-2.1	-2.6
Net official flows	-0.3	—	—	—	—	—	—	—	—
Change in reserves ⁴	-13.5	-0.6	-5.4	-0.6	-0.7	-1.9	1.5	-0.4	0.7
Thailand									
Net private capital flows ³	3.1	10.2	10.7	8.7	8.4	8.6	12.7	9.3	-10.9
Net direct investment	0.8	1.5	1.5	1.4	1.1	0.7	0.7	0.9	1.3
Net portfolio investment	0.7	1.3	—	0.5	3.2	0.9	1.9	0.6	0.4
Other net investment	1.5	7.4	9.2	6.8	4.1	7.0	10.0	7.7	-12.6
Net official flows	0.7	—	1.1	0.1	0.2	0.1	0.7	0.7	4.9
Change in reserves ⁴	-1.4	-4.1	-4.3	-2.8	-3.2	-3.0	-4.4	-1.2	9.7

¹Net capital flows comprise net direct investment, net portfolio investment, and other long- and short-term net investment flows, including official and private borrowing. Shaded areas indicate IMF staff projections.

²Annual averages.

³Because of data limitations, other net investment may include some official flows.

⁴A minus sign indicates an increase.

Table 2. International Bank Lending to East Asia¹
(In billions of U.S. dollars)

	U.S. Banks	Japanese Banks	European Union Banks	Total International Lending
China	2.7	17.8	26.0	55.0
Hong Kong SAR ²	8.7	87.5	86.2	207.2
Indonesia	5.3	22.0	21.0	55.5
Korea	9.4	24.3	33.8	100.0
Malaysia	2.3	8.2	9.2	22.2
Philippines	3.9	1.6	6.3	13.3
Singapore ²	5.7	58.8	102.9	189.3
Taiwan Province of China	3.2	2.7	12.7	22.4
Thailand	5.0	37.5	19.2	70.2
Vietnam	0.2	0.2	1.0	1.5
East Asia total	46.4	260.6	318.3	736.6

Source: Bank for International Settlements.

¹Outstanding at end-1996.

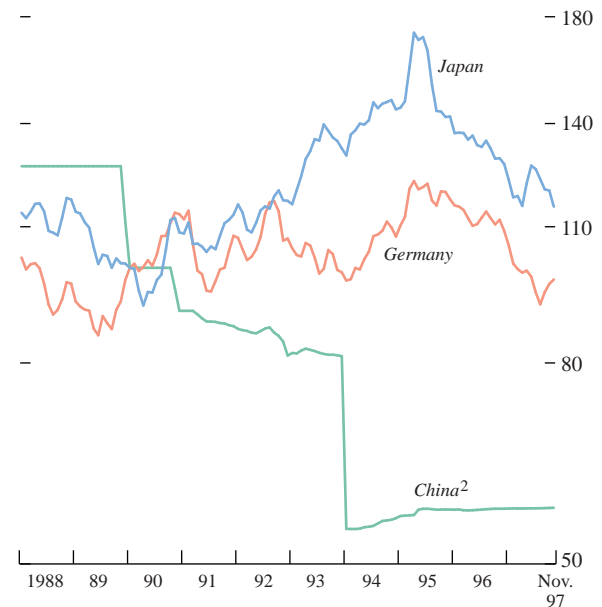
²The data for Hong Kong SAR and Singapore reflect their roles as international financial centers.

ularly sensitive to changes in the yen/dollar exchange rate. These swings in competitiveness have tended to affect not only the current account but also the capital account of the balance of payments, notably through their effects on the profitability of the production of traded goods and services and on investors' expectations of future exchange rate changes.⁴

At the same time that a number of east Asian economies were suffering from losses of international competitiveness during 1996, they were also feeling the impact of another adverse external development—a marked slowing in the growth of export markets (Figure 7). This combined with weakness in certain export prices, the losses of competitiveness just discussed, and various country-specific factors to produce a sharp slowing of export revenues in most east

⁴It has been argued by some observers that the devaluation of the Chinese yuan at the beginning of 1994 also had a significant adverse effect on the competitiveness of southeast Asian economies. In terms of the U.S. dollar, the unification of the official and swap exchange rates of the yuan implied a devaluation of the official rate by 50 percent, which is comparable to the yen's depreciation between mid-1995 and mid-1997. However, since by late 1993 a large proportion (estimated at 80 percent) of foreign exchange transactions was already essentially carried out at the swap market rate, the effective depreciation is estimated to have been less than 10 percent. Moreover, reflecting the pattern of trade, China's weights in the IMF's effective exchange rate indices for the ASEAN-4, Korea, Singapore, and Taiwan Province of China are far smaller than Japan's weights. (While third-country competition is in principle taken into account in these weights, it could be somewhat underestimated.) The yuan's devaluation therefore had a much smaller impact on these countries' international competitiveness than the depreciation of the yen during 1995–97. Structural reforms in China may have been a more important source of improvements in its international cost competitiveness in recent years; these may be inadequately reflected in real exchange rate data and may have affected the trade performance of China's Asian competitors significantly.

**Figure 5. Selected Economies:
Bilateral U.S. Dollar Exchange Rates¹**
(Logarithmic scale; January 1990 = 100)

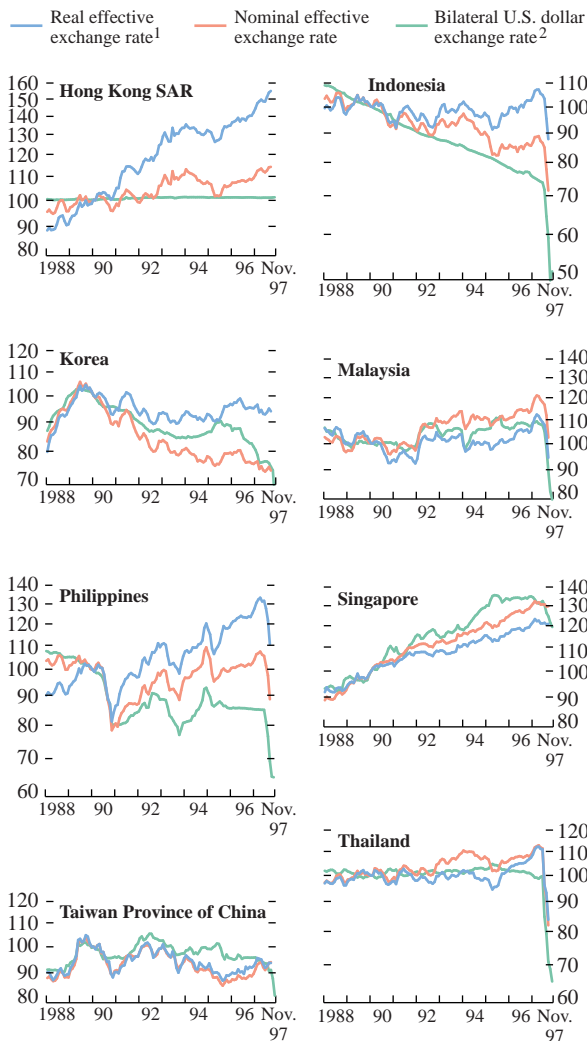


¹In U.S. dollars per currency unit.

²Official rate.

**Figure 6. Selected Asian Economies:
Exchange Rates**

(Logarithmic scale; 1990 = 100)



¹Based on movements in consumer price indices and 1988–90 trade weights.

²In U.S. dollars per currency unit.

Asian countries in 1996, especially in dollar terms, with China, Korea, Malaysia, Singapore, and Thailand experiencing particularly dramatic export slowdowns (Figure 8).⁵

With regard to the export markets of the ASEAN-4, the trade-weighted average growth of trading partners' imports weakened from 11–12 percent in 1994–95 to around 8 percent in 1996. Korea and Singapore experienced a similar slowing, while for Hong Kong SAR and Taiwan Province of China the deceleration was even more marked. A number of developments contributed to the slowing in export markets—among them, a widespread deceleration of imports by the industrial countries, stemming partly from the sluggishness of activity in Europe but also from a general decumulation of inventories; a glut in the global electronics market that resulted in a sharp fall in prices, which had a particularly large impact on Korea, Malaysia, and Singapore; and a slowdown of growth in much of the Asian region itself—including in China, India, Malaysia, and Thailand—partly in response to measures that had been taken in some countries to contain overheating pressures that had begun to emerge.

Macroeconomic Management and Exchange Arrangements

This leads to the third set of factors that contributed to the buildup to the Asian crises—difficulties and shortcomings in macroeconomic and exchange rate policy management, particularly in the context of the pegged or relatively fixed exchange rate arrangements maintained by most of the countries concerned (Korea being the most notable exception from 1996 onward).

The concern most commonly raised about the macroeconomic performance of the southeast Asian economies during the early to mid-1990s was the risk of overheating, which in turn raised questions about the sustainability of exchange rate policy. Even though there were few signs of higher inflation in output prices, substantial and growing external current account deficits—especially in Malaysia and Thailand, and to a lesser extent in Indonesia, Korea, and the Philippines—indicated that the growth of demand was indeed pressing on resources, and possibly also that competitiveness problems were building. Rates of inflation prevailing during 1993–96 were in most cases somewhat higher than the weighted average of trading partners' inflation rates, thus contributing to the erosion of competitiveness. There were also clear signs of asset price inflation, including in real

⁵One of these country-specific factors was the phased reduction, in China, of the rate of value-added tax refunds to exporters.

estate markets (where prices strengthened significantly in Thailand in 1994–95, by 15 percent a year in the Malaysian housing market in 1995–96, and by 40 percent in Singapore in 1994 alone) and in equity markets.

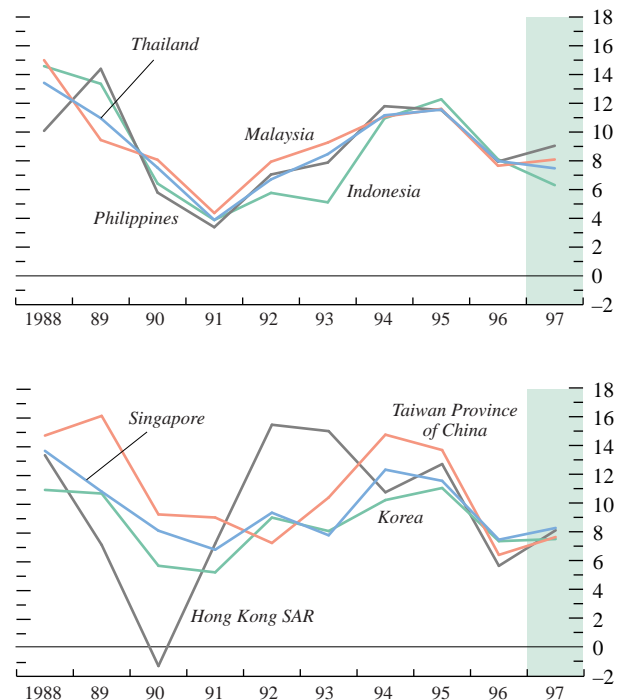
In some cases, including Korea and Malaysia, true fiscal positions were not as tight as they appeared to be, because of extrabudgetary and quasi-fiscal operations. But a more important source of demand pressures was the growth of financial system credit to the private sector. This accelerated sharply between 1992 and 1994–95 in each of the ASEAN-4 economies (see Statistical Appendix, Table A2). In Thailand, for example, the growth of private sector credit rose from 20 percent in 1992 to 30 percent in 1994—more than twice the growth rate of nominal GDP—before moderating to 24 percent in 1995. The increasing growth of private sector credit was largely attributable, in turn, to burgeoning capital inflows, including directly into the banking system, which were reflected in rising official foreign exchange reserves, increasing commercial bank liquidity, and expanding foreign liabilities of commercial banks (Figure 9).⁶ Thus Thailand's foreign exchange reserves more than doubled between early 1992 and early 1996 (reaching \$38 billion at their peak), while over the same period its commercial banks' foreign liabilities grew from \$5 billion to \$46 billion, or from 6 percent to 24 percent of their total liabilities. Among the incentives encouraging borrowing from abroad were the relatively high domestic interest rates by international standards and exchange rate policies that appeared to provide assurance that the price of foreign currency would not increase to outweigh the interest differential.

The interrelated problems of overheating, excessive credit growth, and large capital inflows could be addressed by a number of policy instruments, but each was perceived to have drawbacks: sterilization of inflows tended to be costly to the budget as well as ineffective; fiscal consolidation was often difficult to justify, given the healthy state of public finances and the growing calls for public spending, especially on infrastructure and human capital; monetary tightening would tend to encourage even larger inflows; capital controls would lead to questions about the authorities' commitment to market-based policies and would have limited effectiveness; and greater exchange rate flexibility would tend to lead, through nominal appreciation, to further adverse changes in competitiveness and the current account, unless introduction of the possibility of depreciation was effective in discouraging capital inflows. The first three of these options

⁶The increase in the growth of private sector credit, especially during 1993–94, also reflected in part the rebooking of nonbank external borrowing as borrowing through the newly established Bangkok International Banking Facilities, counted as part of the domestic banking system.

**Figure 7. Selected Asian Economies:
Export Market Growth¹**

(Annual percent change)



¹Calculated as the weighted average of import volume growth of partner countries; the weight for each partner country is the share of the indicated country's exports to that partner in the total exports of the indicated country. Shaded areas indicate IMF staff projections.

Box 1. Overconsumption Versus Overinvestment: The Crises in Mexico and Thailand Compared

The factors behind the buildup to the financial crisis in Thailand bear some resemblance to those underlying the crisis that erupted in Mexico in late 1994. As in Thailand, in the period before the Mexican crisis the economy experienced a large surge in short-term private capital inflows. Private sector credit grew rapidly, and the current account deficit widened sharply. Although the proximate causes of the crises differed, in both cases there were concerns about the sustainability of a large current account deficit and losses in competitiveness associated with real exchange rate appreciation. There were also concerns about the fragility of the banking system in both countries, although they were more acute in the case of Thailand and also related more directly to the financial crisis because of the private sector's large external indebtedness.

There are also important differences, however, between the Mexican and Thai cases. In Thailand, the capital inflows financed increases in investment, whereas in Mexico the inflows sustained a boom in private consumption. In Thailand, the rate of investment, which had been increasing steadily since 1983, reached around 40 percent of GDP in 1990 from an average of 28 percent in 1983–89, and fluctuated around the 40 percent mark throughout the 1990s. The rise in investment was shared between the public and private sectors. Public sector investment was concentrated largely on infrastructure projects, and private investment was used partly to build industrial capacity and partly in the construction of non-industrial real estate. Although domestic saving increased, it remained short of the high level of investment. In particular, throughout the 1990s gross private saving remained essentially unaltered at around 21 percent of GDP. The large gap between domestic saving and investment was financed by net capital inflows and large current account deficits (see Table 1 and Figure 4 in the text).

The increase in productive capacity and large investment in real estate carried two important risks. First, the continued rapid growth in demand, especially for exportables, that was needed to absorb the increased capacity might fail to materialize. Second, the investment in real estate was generated partly by inflation in property values associated with the overheating of the economy, while the quality of the banking system's loan portfolio became increasingly dependent on the maintenance of property prices, since real estate was the main collateral for loans to this sector. Moreover, apart from opening up these risks to the economy, investment in the 1990s had

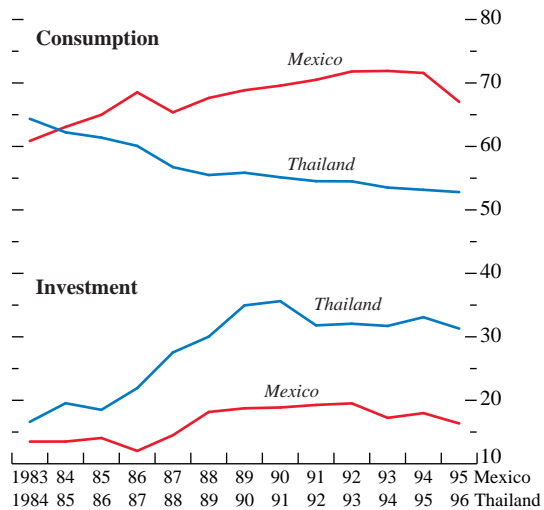
were tried in a number of cases, but to inadequate effect.

Financial Sector and Other Structural Weaknesses

The fourth set of factors that contributed to the conditions that led to the Asian crises consisted of finan-

Mexico and Thailand: Private Consumption and Private Gross Fixed Investment

(In percent of GDP)



become substantially less efficient in generating growth than in the 1980s. In the period 1983–89, an investment rate of around 28 percent of GDP was associated, on average, with an annual growth rate of about 8 percent; during the period 1990–96, although the rate of investment rose to over 40 percent of GDP, the rate of growth increased only to 8½ percent.¹ In the event, the sharp drop in export growth in 1996 coupled with a fall in property

¹This means that in the first period the incremental capital-output ratio (ICOR) was about 3.5, whereas in the second period it was about 4.7. Such a rise in capital intensity could conceivably be associated with a structural shift toward more capital-intensive production that increases the long-run potential output of the economy. Even then, however, in the short to medium term—that is, during the transition period to the higher long-run growth path—the fall in the income-generating ability of investment can raise concerns about the capacity to repay borrowed funds.

cial sector weaknesses and other structural weaknesses in the economies concerned that contributed to the problem of low-quality (or excessive) investment and that made the economies vulnerable to adverse developments.

As events unfolded, weaknesses in the financial sector became particularly stark in Thailand, Indonesia, and Korea, although lack of transparency delayed public realization of the scale of the prob-

prices led to concerns about the ability of the economy to maintain such a high rate of investment through foreign borrowing, helping to trigger the reversal in capital inflows initiating the crisis.

In Mexico, in the buildup to the 1994–95 financial crisis, the large current account deficit and growth in private sector credit was largely a result of sustained increases in private consumption (*see figure*). In the preceding years, as the reform measures initiated in the 1987 stabilization program started to bear fruit, particularly in reducing inflation, the economic outlook had improved and boosted expected future income and wealth. This led to a sharp increase in private consumption and an associated decline in private saving. The rate of private sector saving, which had been close to 20 percent of GDP in 1988, fell to 13 percent of GDP in 1990 and then continued to decline to about 11 percent of GDP in 1994. In sharp contrast to Thailand, the rate of investment fluctuated around 21 percent of GDP throughout the precrisis period. Despite the recovery in public sector saving, at least during 1989–92, the gap between investment and domestic saving widened continually. As in the case of Thailand, this led the current account deficit to increase from around 1 percent of GDP in 1988 to 7 percent in 1994, financed mostly by private capital inflows.²

These differences in the buildup to the two crises have important implications for the recovery process. In particular, in Mexico, although the financial sector was affected adversely by the impact of higher domestic interest rates, the devaluation of the peso, and the collapse of economic activity on the capacity of domestic residents to service their borrowing, it suffered relatively little from deflation of asset values. In Thailand, the sharp devaluation and the deflation in the property sector, into which a significant portion of foreign borrowing was channeled and which has an important bearing on the balance sheets of commercial banks and on the stock market, will require much greater efforts to restructure the financial sector. If the recovery of the financial sector is delayed, then the turnaround in the economy will be hindered considerably. Therefore, the resolve with which the authorities tackle this challenge will be critical for the recovery process.

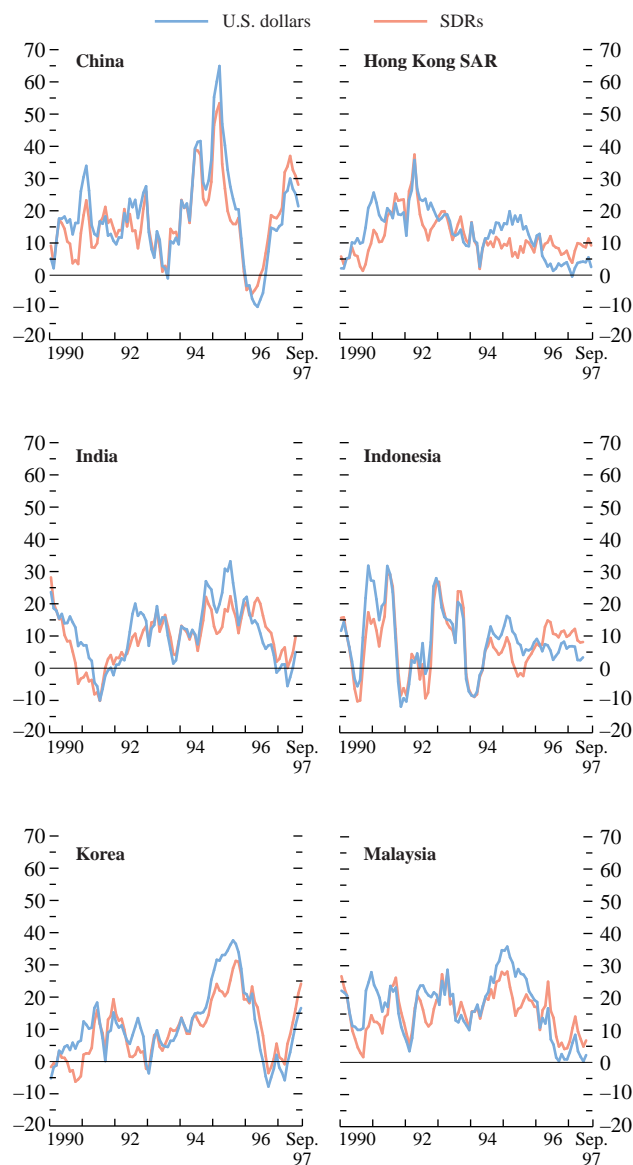
²For a more detailed analysis of the Mexican crisis, see Annex I in the May 1995 *World Economic Outlook*, pp. 90–97.

lems.⁷ (In Hong Kong SAR and Singapore, by contrast, notably strong financial sectors probably helped to contain contagion.) Inadequacies in the regulation and supervision of financial institutions—as well as

⁷For more details, see *International Capital Markets: Developments, Prospects, and Key Policy Issues* (Washington: IMF, 1997), pages 149–53.

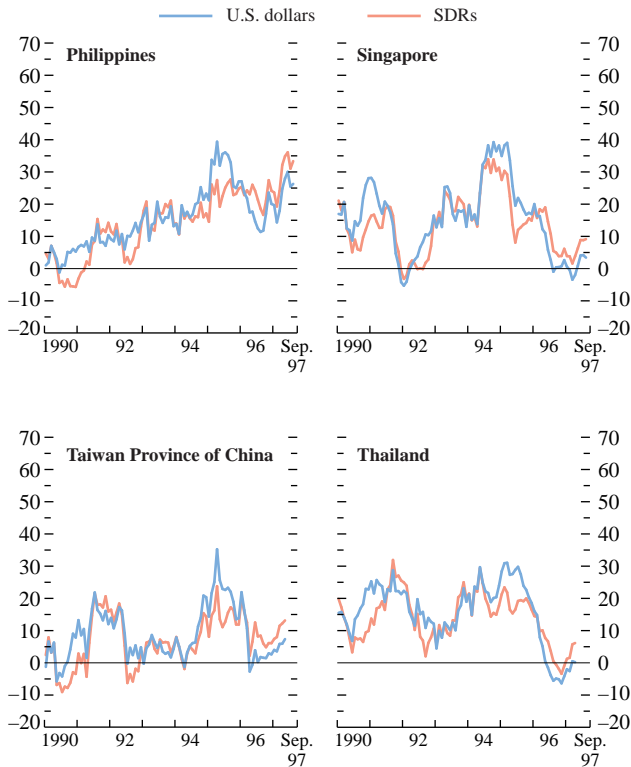
**Figure 8. Selected Asian Economies:
Growth in Export Revenues¹**

(Percent change from 12 months earlier;
three-month moving averages)



(Continued on following page)

Figure 8 (concluded)



¹Trade in goods and services.

limited experience among financial institutions in the pricing and managing of risk, lack of commercial orientation, poor corporate governance, and lax internal controls—all in the face of movements toward liberalization and increased competitive pressure, had contributed to imprudent lending, including lending associated with relationship banking and corrupt practices.⁸ The vulnerability of financial institutions to deteriorations in asset quality became clear in 1996–97 as a result of the economic slowdown, tighter financial policies, declines in domestic real estate and equity markets, and eventually currency depreciations that placed in difficulty customers with uncovered foreign currency liabilities. This eventually became apparent in the scale of nonperforming loans threatening the institutions' liquidity and solvency.

In Korea, in particular, substantial difficulties accumulated in the financial sector as a result of a combination of weaknesses both in that sector and, more generally, in the financial structure of the Korean economy. Large corporate conglomerates (*chaebol*) became heavily dependent on debt as opposed to equity finance, with much of the corporate debt supplied directly by, or guaranteed by, Korean financial institutions. Corporate entities that fell into economic and financial difficulty were kept afloat by unwise further extensions of credit, often at the behest of government authorities. The vulnerability of the banking system was increased not only by large exposures to *chaebol*, but also by directed lending (with banks required to allocate a certain proportion of marginal loans to small and medium-sized enterprises), politically influenced lending, and regulations and institutional factors that combined to encourage the channeling of international borrowing through the financial system for on-lending to corporations. Large amounts of foreign currency credit were taken on, directly or indirectly, by Korean financial institutions to provide finance for Korean enterprises at home and abroad, and many Korean firms took on increasing amounts of short-term foreign cur-

⁸Improvements in the regulation and supervision of financial institutions have been made in a number of cases in recent years, but sometimes with limited effectiveness. In Indonesia, banking regulations were improved in 1993 and 1994 to bring them into line with international standards, but their implementation remained uneven, particularly in the case of limits on lending to connected parties. Improvements were also introduced in Malaysia following the financial sector crisis there in the mid-1980s, and reforms were accelerated in the 1990s. In the Philippines, a number of reforms in banking sector regulations were introduced beginning in 1994, including an increase in the minimum capital-asset ratio, tighter rules on foreign currency exposure, the introduction of a net worth to risk ratio, and restraints on real estate loans. In early 1995, Thailand strengthened regulations relating to the net open foreign position of banks, reduced the loan/deposit ratio, and raised reserve requirements for nonresident baht accounts. Subsequently, in June 1996, reserve requirements for short-term foreign borrowing by financial institutions and the minimum capital adequacy ratio were raised.

rency debt, little of which is thought to have been hedged.

As a result, the vulnerability of the financial system to shifts in international investor sentiment as well as to slower growth increased, with banks' loan portfolios reflecting the increasing difficulties of Korea's nonfinancial corporations. The management, and the supervision and regulation, of financial institutions paid far too little attention to prudent analysis and containment of risks. At the end of 1996, according to unofficial estimates, banks' nonperforming loans, net of reserves, were already equivalent to almost 70 percent of their equity, and true asset quality may have been much worse than this figure indicates. During 1997, an unprecedented number of chaebol moved into bankruptcy, as a result of a number of factors, including excessive investment in such sectors as steel and autos, and a weakening in profitability associated with the cyclical downturn. The bankruptcies severely weakened the financial system, and nonperforming loans rose sharply; by October 1997, according to unofficial estimates, over 20 percent of bank loans in Korea were impaired. At the same time, the steep declines in stock prices have cut the value of banks' equity and further reduced their net worth.

In Thailand also, financial institutions were weakened by the exposure to currency depreciation of customers with foreign currency liabilities. Another source of the vulnerability of the Thai banking system was the investment of banks in nonbank financial institutions with large-scale exposure to the domestic property market.

In Indonesia, nonperforming loans accounted for almost 14 percent of total loans at state banks at end-June 1997, and a number of insolvent institutions were permitted to continue operations, with central bank subsidies. Currency mismatches made the net worth of financial institutions vulnerable to depreciation of the domestic currency, as subsequently became apparent.

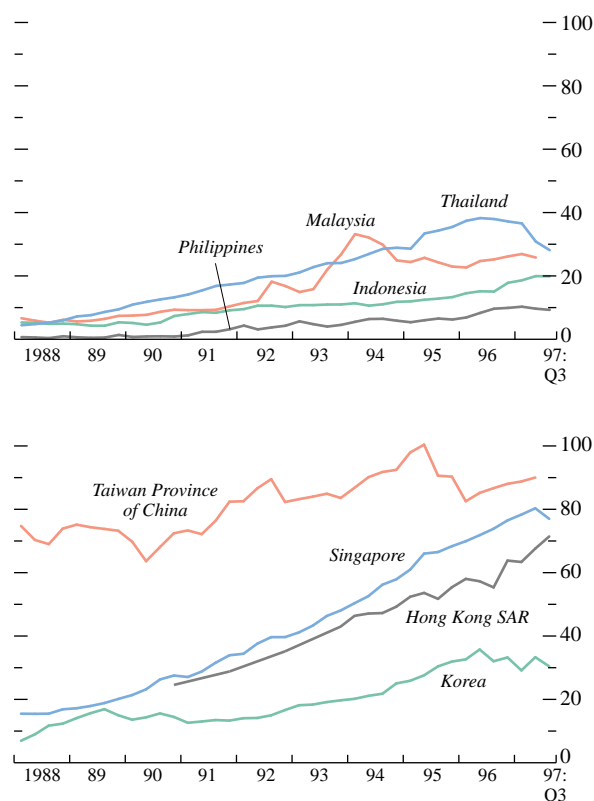
In the Philippines also, in spite of measures that have been taken to improve prudential standards, there have been concerns about the quality of assets in the banking system following the rapid expansion of bank lending generated by the surge of capital inflows since the early 1990s, and the associated exposure of the banking system to real estate.

Inefficiencies in financial systems, stemming partly from constraints on competition, may also have contributed significantly to the scale of capital inflows because the spreads between lending and deposit rates in domestic financial institutions, wide by the standards of the industrial countries, contributed to relatively high lending rates that, together with exchange rate policies, encouraged borrowers to seek funds abroad.

Other structural weaknesses, some outside the financial system, have also become apparent in a number of cases:

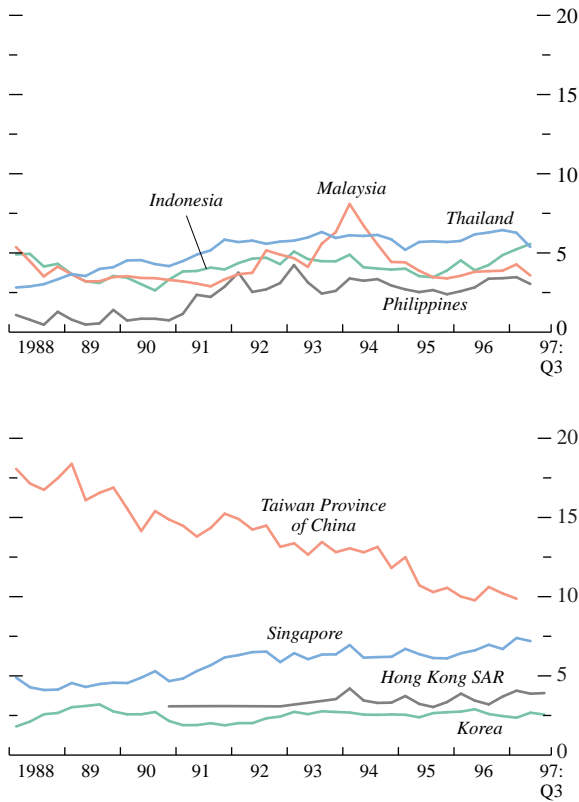
**Figure 9. Selected Asian Economies:
Foreign Exchange Reserves**

(In billions of U.S. dollars)



(Continued on following page)

Figure 9 (concluded)
(In months of imports)



- In Korea, the industrial structure has been heavily influenced by government intervention, including, as well as directed credits, regulations and explicit or implicit subsidies. The resulting lack of market discipline has contributed to the problem of unproductive or excessive investment that has played a role in the buildup to the recent crisis.
- In Indonesia, trade restrictions, import monopolies, and regulations have impeded economic efficiency and competitiveness, and reduced the quality and productivity of investment.
- In Thailand, political disarray at various times during 1996–97, including in the wake of the November 1996 general election, delayed the implementation of necessary policy measures.
- In these and other cases, the power of special interests has often appeared to have had considerable influence on the allocation of budgetary resources and other public policy actions.
- In a number of countries, uncertainty has been increased and confidence adversely affected by inadequate disclosure of information and data deficiencies, particularly with regard to extra-budgetary fiscal transactions, the quasi-fiscal activities of the central bank, directed lending, the problem loans of financial institutions, official foreign exchange reserves and their management (including reserve-related liabilities), and private sector short-term debt. There has also often been a lack of transparency in policy implementation, such as with decisions regarding public infrastructure projects and ad hoc tax exemptions.