Chapter III

INTERNATIONAL FINANCIAL INSTABILITY AND THE EAST ASIAN CRISIS

A. Introduction

In less than a year from mid-1997 the East Asian economies have gone from being examples of the most successful development experience in modern history to economic stagnation and decline. Growth rates that had averaged 8-10 per cent per annum over many years have turned negative, economies that had enjoyed continuous high employment and experienced labour shortages now suffer from extensive and rapidly rising unemployment, and assets in stock markets that had led global diversification into emerging markets have lost half their value and more. In much less time than it took the 1929 stock market crash to turn into the Great Depression of the 1930s, the Asian economies that were once held up as examples of prudent and sustainable economic policies have been transformed in the minds of many from economic "miracles" into structurally unstable systems incapable of formulating their own economic policies and have been assigned to the tutelage of IMF. Never has the economic outlook for such a large group of economies changed so radically and so rapidly.

The curtain rose on the first act of the East Asian crisis in early July 1997, when the Bank of Thailand withdrew support for the baht, allowing it to move outside its exchange rate band with the dollar, a step soon followed by the other countries in the region. However, instead of creating expectations of improved competitiveness and payments adjustment needed to sustain rapid growth, the shift to floating exchange rates triggered massive outflows of capital throughout the region, driving equity prices and currencies down to record low levels. Economic damage usually associated with war or natural disaster was caused when an exchange rate adjustment was transformed into a virulent disease that infected the entire region with financial panic.

A popular explanation of the crisis emphasizes the reaction of currency and equity markets to payments disequilibrium and weakened economic fundamentals. One of the factors most commonly cited as contributing to the crisis is lax regulation and supervision of the financial system. This, together with implicit government guarantees, is considered to have led to moral hazard and produced excessive external borrowing. In addition, pervasive government intervention in economic decision-making led to corruption and cronyism that further distorted incentive structures and reduced the efficiency of investment.

While this diagnosis contains some elements of truth, it does not provide a satisfactory explanation of why the panic broke out when it did, or where it did, or of why it spread to the entire region. More important, this explanation of the crisis relies on characteristics specific to the economic systems of the region and ignores similarities with the crises in developed and developing economies organized under rather different socio-economic systems. Indeed, financial instability has occurred with increasing frequency since the late 1970s, as

evidenced by the banking and debt crisis in the Southern Cone in South America, the Latin American debt crisis of the 1980s, the banking and real estate crises in the United States lasting more than a decade from the late 1970s, and the major slumps in the global stock market in 1987 and 1989. Despite the increased prevalence of sound macroeconomic policies and greater price stability in the 1990s, crises have shaken financial systems at approximately two-year intervals: the European Monetary System (EMS) currency crisis of 1992 was followed by the Mexican crisis of 1994, and the Mexican crisis by the East Asian crisis of 1997. The latter crisis, despite its distinctive features, thus appears to be part of what has come to be an endemic feature of the globalized economy.

This chapter seeks to explain the East Asian crisis in the context of the increase in systemic global financial instability. Section B examines various elements that have characterized financial crises since 1970. An analysis of the factors that created financial vulnerability in East Asia as a prelude to the crisis, and an assessment of the basic factors that spread it throughout the region and globally, are provided in section C. Since there is clear evidence that the policy response to the crisis has contributed to its severity, section D examines this issue, while section E sets out the social consequences of the crisis. The chapter concludes with a brief discussion of the general implications of the crisis for the East Asian model of economic development.

B. Anatomy of the crises in the post-Bretton Woods period

Since the collapse of the Bretton Woods system increased global capital mobility has been accompanied by an increased frequency of financial crises in both the developed and the developing countries. These have taken various forms: domestic financial crises affecting the banking sector and/or the financial market, currency turmoil and external debt crises. Experience shows that in developing countries domestic financial crises often translate into currency turmoil, payments difficulties and even external debt crises. Similarly, reversal of external capital flows or attacks on currencies almost invariably threaten domestic financial stability in developing countries. By contrast, currency turmoil in industrial countries does not usually spill over into domestic financial markets, nor do domestic financial disruptions necessarily lead to currency and payments crises. External indebtedness, together with the dollarization of the economies in the South, accounts for much of this difference.

The annex to this chapter summarizes the salient features of three episodes of crisis in the post-Bretton Woods era: a currency crisis, a banking crisis, and a crisis that combined internal and external financial instability, including external debt-servicing difficulties. In the first one – the EMS crisis of 1992 – there was significant turmoil in the currency markets, but it did not threaten the banking and financial system in the countries concerned. In the second episode – the United States banking and real estate crisis – the major difficulties were in the domestic financial system, but they did not spill over to currency instability. Nor did they during the global stock market slumps of 1987 and 1989 and the bond market crash of 1994. However, in all of these three cases the difficulties were contained within the financial markets, with little impact on the stability of banking systems. The third episode – the Southern Cone crisis of the late 1970s and early 1980s – had features similar to those of the recent East Asian crisis: it combined domestic and external instability, resulting in external debt-servicing difficulties. In both cases, and in contrast to the Mexican crisis of 1994 and the Latin American debt crisis of the 1980s, the build-up of external indebtedness was almost completely within the private sector.

While each episode has its own characteristics, a number of common features have marked the history of the post-Bretton Woods crises. First, many of them have been preceded by liberaliza-

tion of the economy, notably the financial sector. In particular, financial deregulation and capital account liberalization appear to be the best predictor of crises in developing countries. Second, all episodes of currency instability have been started by a sharp increase in capital inflows followed by an equally sharp reversal. Such swings in these flows are related to internal or external policy changes that produce large divergences in domestic financial conditions relative to those of the rest of the world. These divergences are frequently reflected in interest rate differentials and prospects of capital gains. Reversals of capital flows are often, but not always, associated with a deterioration in the macroeconomic conditions of the recipient country. However, such deterioration often results from the effects of capital inflows themselves as well as from external developments, rather than from shifts in domestic macroeconomic policies. Finally, financial crises tend to be associated more closely with certain types of financial flows and certain classes of lenders and borrowers than with others. However, the conditions under which such crises have occurred have been rather diverse with respect to types of financial flows, and of borrowers and lenders.

1. Liberalization and international arbitrage

Liberalization, interest rate differentials and nominal exchange rate stability are the main factors attracting capital inflows. Rapid liberalization often gives rise to expectations of improvements in economic fundamentals and of large capital gains, as well as to perceptions of reduced risks. Interest rate differentials provide a strong incentive for domestic firms and banks to reduce their cost of finance by borrowing abroad (interest rate arbitrage), while allowing foreign investors to increase their return on capital by diversifying their portfolios and lending in developing countries. Such differentials arise from the risk factor, but they can also be due to differences in inflation rates or to differences in the stances of monetary policy. In conditions of generally stable exchange rates, both lenders and borrowers tend to be willing to bear substantial foreign exchange risks. This is particularly true of local borrowers in a recently deregulated economy, who are not always aware of all the risks associated with borrowing in foreign currencies. In most cases exchange rate stability is part of economic policy. Capital inflows themselves often reinforce prevailing market expectations with regard to foreign exchange risks by leading to appreciation.

Indeed, the existence of massive arbitrage flows taking advantage of large international interest rate differentials appears to be an important element in each currency crisis in the post-Bretton Woods period. In the Southern Cone, the decision to remove controls on capital inflows in the presence of tight monetary policy, combined with the introduction of a fixed exchange rate, brought massive inflows. In the Latin American debt crisis it was the combination of excess global liquidity, relatively low international interest rates and the absence of profitable investment opportunities in industrial countries in the aftermath of the oil crisis that encouraged lending to developing countries. In the 1992 EMS crisis, it was again interest rate differentials that played a major role - high rates in Italy and the United Kingdom relative to those in Germany and the United States that attracted arbitrage funds, encouraged by the Italian decision to lift all remaining controls on capital flows and adopt the narrow exchange rate band of the Exchange Rate Mechanism (ERM). In the build-up to the Mexican crisis of 1994, the flows were due to a policy of low interest rates in the United States introduced to deal with debt deflation, and to an exchange-rate-based stabilization policy in Mexico, accompanied by widespread privatization and a speculative boom in equity markets. The East Asian crisis had its origins in the same period, as low rates in the United States drove investors in search of higher returns into emerging markets. The high growth rates and high interest rates in East Asia, together with the problems in Latin American markets, produced large differentials that proved too attractive for international investors to resist. They were encouraged by a 10-year experience of currency pegs producing fluctuations of no more than 10 per cent in rates relative to the dollar.

In its traditional concept, arbitrage is not permanent and is eventually eliminated while being pursued. However, international interest rate arbitrage flows tend to be self-reinforcing rather than self-eliminating, thus making it more difficult to sustain domestic policies. If not sterilized, they lead to an appreciation of the currency, thereby reinforcing capital flows and worsening external payments. Sterilization first increases domestic reserves, giving the impression of strong backing for the exchange rate. However, it requires issu-

ing domestic debt, thereby putting further upward pressure on interest rates, reinforcing the interest rate differential and attracting yet more arbitrage flows. Also, sterilization through high-interest-rate domestic debt may lead to fiscal deficits. Thus, in the absence of controls, capital inflows generally result in an unsustainable combination of an appreciating real exchange rate, a rising foreign deficit and/or a rising fiscal deficit.

2. Nature of financial flows

One factor that differs appreciably among the different experiences of crisis in the post-Bretton Woods era is the form of capital inflow. In the Southern Cone it took primarily the form of lending by foreign banks, and before the Latin American debt crisis syndicated bank lending evolved to meet the needs for recycling the surpluses of oil producers. In the aftermath of the 1982 debt crisis, bank lending virtually disappeared, to be replaced by bond issuance. This process was initiated with the issue of Brady bonds, and sovereign issues were subsequently used to pay off outstanding external debt. In the Mexican crisis the inflows were primarily portfolio investment in equity and government debt, both denominated in pesos.[1] The Asian crisis represents the return of international bank lending, with a high share of short-term lending. Thus, the form of lending has come full circle – from lending by individual banks to syndicated bank loans, to sovereign bonds, to portfolio flows and back to bank lending. The Asian countries originally had relatively high proportions of direct investment flows, and since the Mexican crisis such flows to Latin America have increased substantially.

Similarly, the maturity of the financing has gone from predominantly short-term, to medium-term (some syndicated loans had maturities of up to 10 years), to long-term (bonds and equities) and back to short-term. Interest rates charged on lending have been both fixed and floating. However, despite these differences in the form of the lending, the maturity and the conditions, there is one constant factor, namely the extreme volatility of financial flows in periods of crisis. The divergences in the form of the flows received by a country do not seem to have made a substantial difference to the impact of these flows on domestic conditions and to their subsequent reversal.

There is also variability among the borrowers of funds. In the Southern Cone crisis, borrowers were mainly private banks and firms, as also in East Asia. Although it is often suggested that the 1982 Latin American debt crisis differed owing to the predominance of sovereign borrowers, this is not quite correct. The predominance of loans with sovereign guarantee emerged only after the crisis had broken out and attempts to restructure the debt were under way.[2] The eventual resolution of the crisis was thus effected by banks in conjunction with governments, and discussion of loan rescheduling was conducted between the same two parties.

The distinction between private and public borrowing is of some importance because private sector borrowing takes place in response to market signals, while public sector borrowing is presumed to be driven by political convenience, often leading to an inefficient use of funds. One expression of this view is the famous Lawson doctrine. This states that if there is a private sector savings shortfall that produces borrowing abroad to finance a balance-of-payments deficit, no action needs to be taken to remedy the imbalance, since this merely represents consumption smoothing, i.e. private savings will rise in the future and permit the country to repay what it has borrowed. Alternatively, if foreign borrowing is used to finance investment, the expected higher rates of return from the current investment will produce the revenue to pay off the foreign debt. However, expectations of future conditions may not be fulfilled and the expected future savings or expected higher returns may fail to materialize, leaving the imbalance to produce a crisis. Indeed, the experience of the post-Bretton Woods period suggests that the nature of the borrower does not significantly alter the probability of a crisis.

For every borrower there is a lender. Much of the impetus for the increased capital flows in the post-Bretton Woods period is related to the commercial banking crisis in the major industrial countries. In the early 1970s the share of total assets intermediated by banks in the United States started to decline. Furthermore, banks were suffering from both a loss of quality borrowers and low interest margins as competition from non-bank financial intermediaries increased. Expanding their foreign lending enabled them to increase interest margins, with what were considered to be acceptable increases in risks. In the Latin American episode there was the idea that credit risk was absent in lending to governments. At the same time,

the increased international diversification of the loan portfolio was meant to reduce the volatility of bank earnings. There was thus an increase in the supply of funds as banks attempted to increase their risk-adjusted return on assets by augmenting their foreign lending. However, as it turned out, the assumptions underlying this increase did not turn out to be correct.

Nevertheless, the resolution of the 1980s debt crisis, by rescheduling repayment through the issue of Brady bonds and then of new sovereign bonds, provided banks with the possibility of making a profit from trading the bonds in the secondary market, as well as from the fees and commissions earned by advisory work and underwriting in connection with the new sovereign issues, and with the equity issues for privatization programmes. Thus, the different role of the banks in the 1982 and 1994 Latin American crises reflects their shift in emphasis from increasing income through interest margins to the less risky increase in earnings from fees and commissions on underwriting and trading. This was a major reason for the shift in flows from loan syndication to portfolio investment, as the banks now encouraged investors to use their services to invest in emerging markets. By the time of the EMS crisis commercial banks had become the source of funding for large investment banks and hedge fund arbitragers. The banks thus accepted credit risks, but the market and exchange rate risks were borne by the arbitragers. In the Asian crisis it was the banks themselves that adopted the arbitrage strategy through proprietary trading. Without the pressure on banks to find alternative sources of business to increase returns to capital, much of the increase in capital flows and the shifts in their distribution among countries would most likely never have taken place. Competition in the financial sector caused by deregulation is thus as much a cause of the increased financial instability as anything else.

3. Reversal of capital flows and financial instability

A common characteristic of the recent financial crises is that the large increase in capital inflows was eventually reversed with an equally large and rapid outflow when the conditions that created the inflows were reversed or when the latter had rendered domestic economic policies and conditions unsustainable. In general, almost all episodes of capital outflows and debt crises in developing countries have been associated with rising international interest rates. Again, currency appreciation and/or widening external deficits are among the significant features associated with such crises. Domestic policies that appear sustainable in conditions of rapid growth and high capital inflows appear less so as funds flow out.

Large capital inflows usually lead to an overextension in bank lending that is exposed when the flows are reversed, resulting in instability or a collapse of the banking system. There is now a tendency to relate this instability to inappropriate domestic regulation of the financial sector or lax supervision of the implementation of regulations, and to emphasize the importance of appropriate sequencing of liberalization with an effective system of prudential regulation. This is a welcome but delayed response. For instance, among the 10 lessons drawn by the World Bank from the Latin American debt crisis on its tenth anniversary, the importance of access to international capital markets was given prominence, but no mention was made of sequencing or prudential regulations.[3] On the other hand, as discussed in the next chapter, there is a limit to what prudential regulations can achieve. While it is certainly true that in the crises in Chile, Mexico and East Asia the banking systems had just undergone liberalization and deregulation, and that regulators and supervisors are notoriously slow in adjusting to changes in the structure and activity of financial markets, there is no known case in any country, developed or developing, where a large increase in liquidity in the banking sector has not led to an overextension of lending, a decline in the quality of assets and increased laxity in risk assessment.

Excessive lending by banks during the period preceding a crisis was in general greatly facilitated by their ability to borrow abroad at much lower rates than they charge for domestic lending. While that allowed them to earn higher margins, they often tended to take less care in assessing credit risks. In most crises the increase in bank lending was the result of banks' moving into an area of activity for the first time, and bank lending served primarily to finance a rapid increase in asset prices – so-called asset bubbles. Property and equity prices rose very rapidly in the Chilean case, as well as in the run-up to the Mexican crisis and in most South-East Asian countries. In almost all these cases, banks had recently expanded their involvement in lending against residential and commercial prop-

erty and their investments in finance and property companies. Because they were new to such activities bank loan officers usually had little expertise in valuation of collateral and tended to accept market prices which might be far above any reliable estimate of liquidation values.

In all but the EMS crisis, the reversal of capital flows was accompanied by a crisis in banking systems. This was due not only to overlending, as described in the preceding paragraph, but also to the existence of substantial currency mismatches on balance sheets which accompanied the borrowing in foreign currencies to profit from interest differentials. Dollar lending dominated the expansion of credit in Chile; the Latin American debt crisis almost entirely involved syndicated bank lending of United States dollars; and the Asian crisis was also characterized by large exposure of both banks and firms in foreign currencies. Only in the EMS crisis was this factor absent. In that instance investors were speculating on gains on foreign assets due to interest rate changes, but, even so, the necessity of hedging the currency risk was what eventually brought the crisis to a head.

Foreign currency exposure presents two risks to stability. One is interest rate risk, since foreign currency borrowing is usually short-term and responds quickly to changes in international interest rates, thus making differentials volatile. The second is exchange rate risk. Large changes in exchange rates can produce rapid changes in the domestic value of foreign liabilities, without producing any substantial corresponding change in the value of assets – for banks or companies without foreign sales there will be no immediate impact on the value of assets. A lower exchange rate thus results in an increase in outstanding liabilities relative to assets, leading to instant capital losses and a decrease in equity capital. A sufficiently large exchange rate swing may make foreign exchange borrowers not only illiquid but also insolvent. Since a rapid capital outflow will usually lead to a currency crisis and depreciation, it will be accompanied by an automatic increase in the financial fragility of banks and the vulnerability of firms. Efforts to stem losses through repaying the debt or hedging the remaining risk put further pressure on the currency. Thus, in those cases where foreign currency lending by banks and foreign currency borrowing by firms is substantial, capital outflows are usually accompanied by multiple bank failures and corporate bankruptcies.

4. A typical post-Bretton Woods crisis

Given the large number of common factors in the crises of the post-Bretton Woods period, it is possible to outline the characteristics of a typical financial crisis combining internal and external instability. Such a crisis involves an increased interest rate differential, often associated with tight monetary policy designed to attain or maintain price stability. Financial market deregulation and capital account liberalization are introduced alongside currency regimes that maintain stability of the nominal exchange rate. These combine to produce arbitrage margins large enough to attract liquid and short-term capital and to reinforce the stability of the exchange rate peg. Liberalized and deregulated, banks are free to expand into new areas of business internally, and domestic firms are free to borrow abroad, avoiding high domestic interest rates but building up foreign currency risk exposure. The combination of success in controlling inflation and nominal exchange rate stability tends to cause a real appreciation of the currency, weakening the foreign balance. Attempts to sterilize the impact of the capital inflows on domestic credit expansion lead to greater pressures on interest rates. Since domestic bonds are issued to finance sterilization of the inflows that are then held as reserves in foreign centres at lower interest rates, the fiscal position tends to deteriorate.

Eventually, either the foreign balance or the fiscal balance goes out of control, and domestic financial conditions deteriorate substantially (or both), creating vulnerability to a change in perceptions and to rises in foreign rates which can trigger a rapid outflow and eventually break the exchange rate peg, leading to capital losses on the balance sheets of banks and firms carrying unhedged foreign currency exposure. The increased demand for foreign exchange generated by the attempt to cover these losses can create a free fall in the currency, producing widespread bankruptcies.

Such a process can occur under varying conditions with respect to borrowers and lenders and types of financial flows. It starts not with unsustainable policies, but with the introduction of policies designed to maintain macroeconomic stability and to integrate the economy into the global system and so take advantage of global market opportunities. However, in the absence of effective controls, the impact of capital flows distorts the effects of policies, making it very difficult for them to attain their original objectives.

C. Financial fragility and crisis in East Asia

1. Capital inflows and the build-up of external vulnerability

The crisis in East Asia, like crises almost everywhere else, was preceded by a sharp increase in capital flows to the region. Starting in the early 1990s there was a rapid increase in short-term lending by commercial banks to both banks and firms in the region. The Asian economies had long supplemented high domestic savings rates by foreign borrowing, but their external debt-export ratios never reached levels similar to those that caused difficulty in Latin America in the 1980s; indeed, their economies were considered models of successful management of external borrowing. This was in part because of explicit or implicit government guidance to ensure that foreign borrowing was used to finance investment with a capacity to generate export earnings, and in part because generalized government budget surpluses meant that there was little sovereign borrowing.[4]

In the 1990s some economies – for example, Hong Kong, China; Malaysia; and Singapore – relied primarily on FDI, while others, including the Philippines and the Republic of Korea, obtained external financing mainly through internationally issued portfolio investments.[5] Bank lending, which had virtually disappeared in the aftermath of the Latin American debt crisis, was not significant except in Indonesia until the middle of the decade, when banks became an increasingly important source of financing. Most bank lending was directed to non-financial borrowers in the private sector, but in the Republic of Korea, and to a lesser extent elsewhere, the financial sector was also an important recipient of funds (table 25). In contrast to the syndicated bank lending during the 1970s, this lending was primarily non-syndicated and much of it was at short maturities (table 26).

There are a number of reasons for this increase in short-term bank lending to Asia, on both the supply and the demand sides. In the early 1990s, the major industrial countries adopted low interest rates in response to the recession, those in Japan being reduced dramatically after the failure of its economy to recover from the collapse of property and stock market bubbles in 1989-1990. The relatively higher returns in high-growth, low-risk Asian economies with a record of relatively stable exchange rates made them attractive investment locations. The Mexican crisis reinforced this market perception. By 1994 an increasing volume of this investment consisted of short-term arbitrage funds seeking to profit from the interest rate differentials, rather than funds seeking long-term returns on productive investment.

Short-term borrowing in foreign currency at low foreign interest rates allowed Asian firms to reduce their financing costs and isolate themselves from domestic monetary conditions that were often the result of policies aimed at restraining the economy in order to keep payments balances under control. Also, firms were driven by reduced earnings resulting from a series of external and internal factors to seek lower financing costs. While the 1990-1991 recession in industrial countries had little impact on Asian export growth, paradoxically trade started to slow when recovery started in those countries in 1994-1995, because of a decline in their import propensities. As a result of falls in foreign demand and export prices, the growth rate of export earnings dropped markedly in 1996 throughout the region, notably in Malaysia (by over 15 percentage points) and in Thailand (by over 20 percentage points).

As suggested in *TDR 1996*, for many countries in South-East Asia it was becoming increasingly difficult to maintain competitiveness in labour-intensive manufactures because of the entry of low-cost producers. This fact was reflected in the emergence of global excess supply and rapidly falling prices of many of the manufactured products exported from East Asia. With the increased "commoditization" of low-technology manufactures, the terms of trade declined rapidly in many of the countries in the region just as the developed world was moving to higher rates of expansion and

Table 25

LENDING BY BIS REPORTING BANKS TO SELECTED ASIAN ECONOMIES, BY SECTOR, END JUNE 1997

Economy	All sectors ($ million)	Banks (Percentages)	Non-bank private sector (Percentages)	Public sector (Percentages)
Hong Kong, China	222 289	64.8	33.9	0.5
Indonesia	58 726	21.1	67.7	11.1
Malaysia	28 820	36.4	57.1	6.4
Philippines	14 115	38.9	48.0	13.1
Republic of Korea	103 432	65.1	30.6	4.2
Singapore	211 192	82.8	16.6	0.5
Taiwan Province of China	25 163	61.6	36.8	1.6
Thailand	69 382	37.6	59.5	2.8

Source: BIS, *The Maturity, Sectoral and Nationality Distribution of International Bank Lending*, *First Half 1997*, Basle, January 1998.
Note: Figures relate to consolidated cross-border claims in all currencies and local claims in non-local currencies. The shares of banks, the non-bank private sector and the public sector do not always add up to 100 per cent because of unallocated claims.

Table 26

MATURITY DISTRIBUTION OF LENDING BY BIS REPORTING BANKS TO SELECTED ASIAN ECONOMIES

(Millions of dollars)

Economy	All loans			Loans with a maturity of: Under 1 year			1 to 2 years		
	June 1996	*Dec. 1996*	*June 1997*	*June 1996*	*Dec. 1996*	*June 1997*	*June 1996*	*Dec. 1996*	*June 1997*
Hong Kong, China	211 238	207 037	222 289	179 784	170 705	183 115	5 119	5 248	4 417
Indonesia	49 306	55 523	58 726	29 587	34 248	34 661	3 473	3 589	3 541
Malaysia	20 100	22 234	28 820	9 991	11 178	16 268	834	721	615
Philippines	10 795	13 289	14 115	5 948	7 737	8 293	531	565	326
Republic of Korea	88 027	99 953	103 432	62 332	67 506	70 182	3 438	4 107	4 139
Singapore	189 195	189 235	211 192	176 080	175 228	196 600	2 707	1 799	1 719
Taiwan Province of China	22 470	22 363	25 163	19 405	18 869	21 966	585	483	236
Thailand	69 409	70 147	69 382	47 834	45 702	45 567	4 083	4 829	4 592

Source: BIS, *The Maturity, Sectoral and Nationality Distribution of International Bank Lending, First Half 1997,* Basle, January 1998.
Note: Figures relate to consolidated cross-border claims in all currencies and local claims in non-local currencies.

was increasingly concentrating on more technologically advanced production. Many Asian economies reacted by augmenting investment in productive capacity in the hope of increasing market shares and expanding into new areas of production, but adding in the process to global excess supply.

The drive to expand capacity and market share may be seen in the increase in the ratio of investment to output from already high levels (table 27), which was facilitated by the availability of relatively low-cost foreign funding. This expansion in capacity occurred at a time when growth rates in the region were declining from an average of around 10 per cent to around 8 per cent, a combination which suggested that the return on investment was declining. Indeed, the return on assets of *chaebols* in the Republic of Korea fell to around 1 per cent, despite their extremely high financial leverage, and the return on equity in Indonesia, Thailand and Malaysia between 1992 and 1996 fell below domestic short-term interest rates.[6] There were thus strong incentives for firms to seek to reduce their financing costs or increase their returns on equity. The latter would have required increasing their leverage, while the former was achieved by seeking low-cost financing through short-term borrowing from foreign banks.

Table 27

INVESTMENT AS A PERCENTAGE OF GDP IN SELECTED ASIAN COUNTRIES, 1986-1995

(Annual averages)

Country	*1986-1990*	*1991-1995*
China	27.8	35.3
Indonesia	26.3	27.2
Malaysia	23.4	39.1
Philippines	19.0	22.2
Republic of Korea	31.9	37.4
Singapore	32.4	34.1
Thailand	33.0	41.1

Source: UNCTAD secretariat calculations, based on data from the Asian Development Bank, *Key Indicators of Developing Asian and Pacific Countries,* various issues.

These structural difficulties were aggravated by adverse movements in exchange rates originating from swings in the dollar-yen rate. Stable exchange rates were an important ingredient of the export-oriented development strategy of the East Asian countries. Their importance was further increased by the integration process in the context of the "flying geese" pattern of the regional division of labour. Because of the heavy concentration of Asian exports in dollar-denominated markets, exchange rates in the region, although not fixed, had been generally stable within a band of around 10 per cent in relation to the dollar since the late 1980s (see box 2).

The yen-dollar rate was extremely volatile in the 1990s, with the yen appreciating by some 40 per cent to reach 80 yen per dollar in the spring of 1995, and then falling back to around 130-135 yen per dollar by the end of 1997, a depreciation of over 50 per cent. While the earlier appreciation of the yen against the dollar brought an increase in the burden of yen-denominated debt, this was accompanied – unlike in the Latin American countries facing dollar appreciation in the 1980s – by lower interest rates and increased Japanese investment in East and South-East Asia. By contrast, yen depreciation reduced not only the incentive of Japanese firms to invest in East Asia, but also the competitiveness of those East Asian producers that maintained stable exchange rates vis-à-vis the dollar. Thus, the slow appreciation of the dollar that started at about the same time as global demand and the terms of trade began to fall brought declining competitiveness, reduced foreign direct investment from Japan and lower exports to Japan and other markets. Moreover, in the same period China took steps that resulted in an adjustment of the external value of its currency, thus increasing the competitive challenge to East Asian NIEs.

Loss of competitiveness and declines in export earnings increased the exposure to foreign exchange risk, since an export-oriented firm that borrows in foreign currency implicitly hedges against foreign exchange risk with export earnings. The earlier experience of rapid growth in foreign exchange earnings had created expectations of perpetuating such increases. Thus, against the background of a decade of relatively stable exchange rates and sustained high export growth, little of the currency risk in foreign loans needed to be explicitly hedged. The same factors also

Box 2

EXCHANGE RATE REGIMES IN EAST ASIA

At the beginning of the crisis, the East Asian economies most seriously affected (with the exception of Hong Kong, China) operated foreign exchange regimes under which the central bank intervened to stabilize the spot rate according to explicit guidelines. For its part, Hong Kong, China, had a currency board arrangement, with its currency pegged to the United States dollar. The aim of the guidelines was either stability in terms of a particular currency or a basket of currencies, or gradual appreciation or depreciation. The Thai baht, for example, was linked to a basket of currencies of the country's major trading partners (with a weight of 80 per cent for the dollar), and the baht/dollar rate had moved in a narrow range in the 1990s until the crisis. Indonesia allowed the rupiah/dollar rate to fluctuate within a range around a mid-rate, adjusted to depreciate the currency by 4 per cent a year so as to offset the difference between domestic and international inflation. In Malaysia and the Philippines intervention was designed to stabilize the exchange rate in terms of the dollar. For Malaysia this policy had been associated since the beginning of the 1990s with a gradual appreciation of the ringgit, while for the Philippines movements of the peso in relation to the dollar had been small since 1993. Singapore's intervention was designed to stabilize the Singapore dollar against a trade-weighted basket of currencies, while allowing a nominal appreciation of the effective exchange rate of 3.5-4.0 per cent per annum. The won was allowed by the Republic of Korea to float every day within a band of plus and minus 2.25 per cent around the previous day's average won/dollar rate. A period of slight appreciation in dollar terms since 1994 ended in mid-1996, and was followed by one of more rapid depreciation, which amounted to 13 per cent during the 12 months from the end of May 1996.

Movements of the real exchange rates of these countries were mostly fairly limited during 1990-1996: Indonesia experienced a small depreciation followed by a reversal, Malaysia a small appreciation, the Republic of Korea a depreciation until 1993 followed by a reversal, and Thailand a slight appreciation between 1993 and 1996. In the Philippines and Singapore, on the other hand, the currencies appreciated significantly – by almost 30 per cent in the case of the Philippines.

In the face of large capital inflows during the 1990s the governments generally chose to intervene in order to prevent appreciation. Thailand practised limited sterilization by running fiscal surpluses and depositing the proceeds with the central bank. In Indonesia during 1990-1993 Bank of Indonesia certificates were issued and thereafter fiscal surpluses were used for sterilization. Malaysia's response initially involved reliance on heavy interbank borrowing by the central bank, but when this technique proved insufficient, the Government also had recourse to capital controls.

led creditors of exporting firms to consider it unnecessary to explicitly hedge credit risk due to currency fluctuations. As export growth decelerated, the implicit hedging decreased and firms were left with increasing foreign exchange risk exposures.

Thus, after the middle of the decade, the rapidly growing East Asian economies suffered a deterioration in earnings and returns on investment due to changes in the global environment. While short-term foreign borrowing provided some cushion against their financial difficulties, it also rendered firms extremely vulnerable to changes in exchange rates and international interest rates, very much in the same way as in the Southern Cone in the early 1980s (see annex).

2. Financial liberalization and the speculative bubble

The developments described above were accompanied by fundamental changes in the financial system in the region. The East Asian economies were being urged in some quarters to follow Japan

on a path of financial liberalization, granting financial institutions more freedom in their borrowing and lending decisions, and introducing market-based monetary policy by loosening regulatory controls. In the Republic of Korea the departure from the postwar practice of control over private external borrowing coincided with the country's bid for membership of OECD. However, financial liberalization went further among the second-tier NIEs. Thailand created the Bangkok International Banking Facility to intermediate foreign investment expected to be directed to the next tier of Asian NIEs (Cambodia, the Lao People's Democratic Republic, Myanmar and Viet Nam), which might otherwise have gone to Singapore or Hong Kong, China. In reality, it served instead as a conduit for short-term foreign lending to the liberalized Thai banks and finance houses.

Since the financing of Asian development had emphasized the allocation of credits to export-oriented manufacturing, when financial institutions were given more freedom they sought to diversify their portfolios for higher returns. In view of the high levels of private savings, there was little possibility of expansion of consumption lending, while returns on manufacturing were believed to be on the decline. In South-East Asia, with rapid growth and increasing foreign interest, the commercial and residential property sector emerged as an attractive area of high return. Construction and property development companies thus appeared to be good investments from the point of view of both expected returns and diversification by banks, just as they had appeared to the newly deregulated savings and loan associations (S&Ls) in the United States a decade earlier (see annex).

Real estate loans are estimated to have accounted for 25-40 per cent of bank lending in Thailand, Malaysia and the Philippines in 1998, funded to an important extent by short-term foreign borrowing. For example, the net foreign liabilities of the Thai banking system were 20 per cent of its domestic assets. Between one third and one half of Thai GDP growth since 1994 can be attributed to property-related activities. It was associated with sharp increases in property prices, as well as in the equity prices of property investment and development companies, which, together with the expansion of lending to finance stock market speculation, created a bubble on the Thai stock market. The result was an increase in leveraged lending, which made the success of these companies and the banks that financed them dependent on a continuation of the increase in property prices. The value of collateral pledged against bank loans was dominated by the expected increases in asset prices, rather than by a realistic assumption of disposal value in a more modest environment. Banks and property companies were thus extremely vulnerable to a downturn in prices, a rise in interest rates or a depreciation of the baht.

Despite the fact that the East Asian economies had started to improve their regulatory and supervisory systems far earlier than most other developing countries, these were ineffective in checking the excessive build-up of risk and fragility in the financial sector (see box 3). It is notoriously difficult for bank supervisors to prevent real estate bubbles, since the value of the assets involved is based on expected future income growth or, in the case of property companies, on market prices, which are often taken as the correct basis for valuation. It is even more difficult to assess liquidation values, since property always has the aura of having some real objective value that is independent of financial assets, although such considerations are irrelevant to the health of the bank providing the finance. Moreover, not only were Asian regulators and bank supervisory personnel inexperienced in dealing with new liberalized systems, but also many financial institutions were essentially unregulated and, in regimes with lax accounting standards[7] and without proper rules for the reporting of non-performing loans, supervisors had no clear idea of their exposure to risks. Finally, much of the private borrowing from international banks was by non-bank firms – one third in the Republic of Korea, around 60 per cent in Malaysia and Thailand, and even more in Indonesia (table 25).

The search for new and low-cost sources of funding and new forms of high-margin lending produced not only a rapid expansion of short-term foreign borrowing but also of domestic lending, notably in Malaysia and Thailand (table 28). The result was very similar to the situation in the United States in the 1980s, when rapidly increasing commercial property lending created an aura of expansion in real incomes that had no basis in real productive activity and tended to mask the structural and cyclical difficulties faced by the real economy (see annex). However, in the Asian case the leverage was based on foreign borrowing. Instead of creating an export base to earn the foreign exchange needed to service external debt, the foreign borrowing financed investment in the property

Box 3

BANK REGULATION IN EAST ASIA

The quality of financial regulation varies considerably among the countries of East Asia. At one extreme Singapore and Hong Kong, China, have well-developed systems, reflected in the strength of their banks (as indicated by features such as high ratios of capital to risk-weighted assets and low proportions – by regional standards – of non-performing loans in total loans). Interestingly, bank exposure to property is particularly great in Hong Kong, China. Conscious of the banks' resulting vulnerability, the authorities have imposed exceptionally restrictive rules regarding the permitted levels of the value of a loan in relation to that of the property on which it is advanced, with the objective of protecting the sector against the effect of large falls in property values.[1] In other countries affected by the crisis, large parts of the banking sectors have weaknesses in some or all areas, such as the regulation of credit and market risk,[2] control of currency mismatches, the classification of and provisions for non-performing loans, and the quality of banking supervision. Since the beginning of the 1990s steps have been widely taken towards the introduction of proper systems of banking regulation, but at the outbreak of the crisis important gaps in legal frameworks remained and full implementation of existing regulations had often not yet been achieved.

In Thailand, for example, Basle capital standards for credit risk were adopted in 1993 and came fully into force in January 1995, a somewhat more lenient version having been applied to finance companies from July 1994. Many of the problems associated with the crisis were due to financial firms' exposure to market risks in a regulatory regime lacking proper controls for such risks, poor standards of classification and provisioning for non-performing loans, lax collateralization of property loans, and inadequate controls over currency risks. In the Republic of Korea, Basle capital standards had been in force since 1995, and there were plans for a major overhaul of the system of financial regulation and supervision. But in 1997 capital still widely fell short of the 1995 requirements, and lax accounting standards did not permit adequate reporting. The latter was particularly important in the area of non-performing loans, where publicly announced levels were generally believed to be much too low and provisions for loan losses too few. In Indonesia, too, before the crisis, banks were supposed to be subject to Basle capital standards, but enforcement of these standards and other regulations was patchy: in 1996 several banks had capital ratios below the regulatory minimum of 8 per cent, and there was also a widespread failure to observe other prudential rules such as those concerning net overnight positions in foreign exchange.

The East Asian crisis has led to extensive efforts to strengthen regulatory regimes, many of the measures being taken in fulfilment of conditions attached to IMF packages of financial support. In Thailand this strengthening has included the imposition of higher capital requirements on finance companies, more rigorous classification of non-performing loans and a new bankruptcy law. In the Republic of Korea banks with capital ratios below 8 per cent are to establish schedules to meet this level within two years, and adequate provisioning for loan losses is to be introduced within the same time-frame. In Indonesia, which experienced a banking panic in the aftermath of the decision to close 16 insolvent banks as a condition of the IMF support package, regulatory changes have included a wide-ranging guarantee of claims on locally incorporated banks and the use of the Indonesian Bank Restructuring Agency (IBRA) as an instrument to enforce banking standards, with the transfer to IBRA of banks failing to meet certain criteria. In Malaysia, a country with fewer banking problems than the three countries just mentioned, steps are being taken to tighten the rules regarding the classification of non-performing loans and provisions for loan losses, to increase banks' capital ratios from 8 per cent to 10 per cent, and to expand the framework of capital adequacy to include market risk. Moreover, Indonesia, the Republic of Korea and Thailand have all liberalized rules regarding foreign equity participation in local banks. This liberalization will, it is hoped, lead to inflows of foreign equity that facilitate the recapitalization of the countries' banking systems, the cost of which is estimated at 20-30 per cent of GDP. The changes just described indicate the thrust of policy in the countries in question, but effective implementation of the measures can be expected to take place only fairly slowly.

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[1] Useful as they are, these rules were not capable of providing complete protection against large movements in asset prices with an unfavourable impact on banks' profitability, as was illustrated by the scale of the decline in share prices in October 1997, which could be translated into implicit reductions in property prices of as much as 50 per cent. See JP Morgan, *Emerging Markets Data Watch*, 24 October 1997, p. 5.

[2] Credit risk results from the possibility that a bank's counterparty will default on its obligations, and market risk is the risk of loss due to changes in the market value of a bank's asset before it can be liquidated or offset in some way.

and other non-traded sectors which provided much of the stimulus for growth. In consequence, the sustainability of growth depended on continued capital inflows to provide low interest rate financing.

The increased reliance on foreign capital and the new structure of external borrowing thus enhanced the vulnerability of the region to changes in the pace of foreign capital inflows. The clearest result of this situation was the deterioration in external balances in the 1990s that accompanied the change in the size and composition of capital flows into the region (tables 29 and 30). The deterioration was marked in Thailand, where capital inflows were increasingly financing investment in non-traded sectors rather than in activities earning foreign exchange.

International lenders and investors in 1997 were aware of these factors responsible for the increased vulnerability of the East Asian economies, and might have been expected to realize that they pointed to an impending change in the dynamics of growth in the region. However, there were also a number of positive elements to offset the increased vulnerability. Basic macroeconomic fundamentals were good, and the fiscal posture was prudent. The countries in the region received consistent praise from multilateral financial institutions for their economic management. Where the external trade and payments situations were not in equilibrium, policy measures had been introduced which in most cases, notably in Malaysia and the Republic of Korea, showed positive results; also, short-term external indebtedness had started to decline. In financial sectors that were showing clear signs of instability, regulation, supervision and loan-loss disclosure standards were being tightened and rules limiting foreign ownership of property were liberalized.

Thus, at the beginning of 1997, while there was clear evidence of increased vulnerability and instability, there were also a number of encouraging factors, including policy actions. The Thai economy exhibited the most visible symptoms of external disequilibrium and instability in the financial sector. That foreign investors continued, nevertheless, to pour funds into the region does not mean that the problems were not recognized, but simply that they considered that the positive factors outweighed the negative ones. Indeed, sovereign credit ratings remained extremely favourable until the crisis actually started.

Table 28

BANK CREDIT TO THE PRIVATE SECTOR IN SELECTED ASIAN ECONOMIES, 1981-1997

(Percentages)

	Annual real rate of expansion[a]		*Percentage of GDP*
Economy	*1981-1989*	*1990-1997*	*1997*
Hong Kong, China	13	8	157
Taiwan Province of China	15	13	138
Indonesia	22	18	57
Malaysia	11	16	95
Philippines	-5	18	52
Republic of Korea	13	12	64
Singapore	10	12	97
Thailand	15	18	105
Memo items:			
United States	5	½	65
Japan	8	1½	111
G-10 Europe[b]	6	4	89

Source: BIS, *68th Annual Report*, Basle, June 1998, table VII.1.

a Current values deflated by the consumer price index; 1997 data are preliminary.

b Belgium, France, Germany, Italy, Netherlands, Sweden, Switzerland and United Kingdom. Weighted average, based on 1990 GDP and PPP rates .

3. *The outbreak of the crisis and contagion*

What, then, caused the sudden and catastrophic change in the willingness of foreign investors to continue to hold Thai assets and liabilities? It is difficult to identify a particular cause of the shift in market perceptions. Given the need for strong measures to remedy the foreign imbalance and the growing instability of the financial sector, the prevailing political uncertainty was clearly important. Indeed, the baht had been under intermittent speculative pressure since late 1996, but central bank intervention had succeeded in maintaining the currency within the fluctuation band.

Table 29

CURRENT ACCOUNT BALANCE AND EXTERNAL FINANCING OF ASIA-5[a], 1994-1998

(Billions of dollars)

	1994	*1995*	*1996*	*1997[b]*	*1998[c]*
Current account balance	-24.6	-41.3	-54.9	-26.0	17.6
Net external financing	47.4	80.9	92.8	15.2	15.2
Direct equity flows	4.7	4.9	7.0	7.2	9.8
Portfolio flows	7.6	10.6	12.1	-11.6	-1.9
Commercial bank lending	24.0	49.5	55.5	-21.3	-14.1
Non-bank private lending	4.2	12.4	18.4	13.7	-3.3
Net official flows	7.0	3.6	-0.2	27.2	24.6
Change in reserves[d]	-5.4	-13.7	-18.3	22.7	-27.1

Source: Institute of International Finance, "Capital flows to emerging market economies", Washington, D.C., 29 January 1998, p. 2.
a Indonesia, Malaysia, Philippines, Republic of Korea and Thailand.
b Estimate.
c Forecast.
d A minus sign indicates an increase.

Paradoxically, the most important factor in precipitating the crisis seems to have been the sudden reversal of the dollar relative to the yen in early May 1997 and the widespread expectation of a rise in Japanese interest rates that it engendered. This caused the short-term arbitrage funds from South-East Asia to flow back to Japan and generated strong selling pressure on the baht. An all-out defence of the currency left the Bank of Thailand with net foreign exchange reserves of $2.5 billion by the middle of the month. Although official figures put reserves at around $30 billion, the Bank had virtually exhausted its net position, in large part through commitments in forward trade, and could no longer counter baht selling pressure without substantial borrowing from abroad. Further defence of the currency had thus to rely on administrative measures and selective market controls, including restrictions on the sale of baht to non-residents. With the financial sector in near-collapse and no reserves, the Bank of Thailand succumbed to market pressures and formally abandoned the exchange rate band on 2 July.

Because of the financial vulnerability of the Asian economies, the major impact of the exchange rate adjustment was on the foreign exposure of banks, businesses and property developers. First, the floating of the baht made clear the risks of unhedged foreign borrowing. Second, it produced an instant increase in the baht value of the foreign liabilities of Thai firms without providing any equivalent increase in the income-earning capacity of assets, except for exporting firms (as described in section B above). Third, it brought an increase in the cash commitments for the payment of interest on foreign debt. Thus, the first reaction was to depress the net present value of companies; indeed, equity prices had been falling throughout the year as rumours of devaluation dominated the market. Banks, without the cushion of foreign investment earnings, were in even more difficult circumstances.

Recognizing increased risk on their outstanding loans, foreign lenders started to call in loans to firms and banks when they fell due. Reduction of exchange risk and the cost of foreign debt servicing required firms either to hedge their existing exposure or to eliminate that exposure by repaying foreign currency debt. Either response required the selling of baht against dollars. Since the new exchange rate regime did not specify a new band but left the currency to float freely, it was rational

Table 30

CURRENT ACCOUNT BALANCES AS A PERCENTAGE OF GDP IN SELECTED ASIAN ECONOMIES, 1989-1997

Economy	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*
China	-1.3	3.9	4.3	1.4	-2.7	1.3	0.2	0.9	1.2
Hong Kong, China	11.5	8.5	6.6	5.3	7.0	2.1	-3.4	-1.0	-1.0
India	-2.3	-2.2	-1.5	-1.5	-1.5	-0.9	-1.7	-1.2	-1.1
Indonesia	-1.2	-2.8	-3.7	-2.2	-1.3	-1.6	-3.4	-3.4	-3.6
Malaysia	0.8	-2.0	-8.9	-3.7	-4.4	-5.9	-8.5	-5.3	-5.9
Philippines	-3.4	-6.1	-2.3	-1.9	-5.5	-4.4	-4.4	-5.9	-4.5
Republic of Korea	2.4	-0.9	-3.0	-1.5	0.1	-1.2	-2.0	-4.8	-3.9
Singapore	9.6	8.3	11.2	11.4	7.3	15.9	17.7	15.0	13.7
Taiwan Province of China	7.6	6.9	6.7	3.8	3.0	2.6	1.9	3.8	3.1
Thailand	-3.5	-8.5	-7.7	-5.7	-5.6	-5.9	-8.0	-8.0	-4.6

Source: UNCTAD secretariat calculations, based on international and national statistics.

for firms and banks and foreign lenders to move as soon as possible. As the exchange rate continued to fall, the costs of delaying became higher, and the pressure to sell became more intense. Thus, much of the increasing pressure on the exchange rate was produced primarily by the attempt by firms and banks to hedge or liquidate debt by buying dollars, and by foreign banks calling in existing loans.

Since the decision to float the baht called into question the assumption of exchange rate stability upon which existing regional dynamics had been built, the Philippine peso and the Malaysian ringgit came under pressure as soon as the Thai move was announced. After market intervention supported by increased interest rates, both currencies were allowed to float. Because it was generally accepted that Indonesia had better underlying fundamentals, particularly regarding its current account, it took some time for the selling pressure to move to that country. The Bank of Indonesia responded quickly, enlarging the intervention band in an attempt to stop contagious speculation, but soon the rupiah was also traded down.

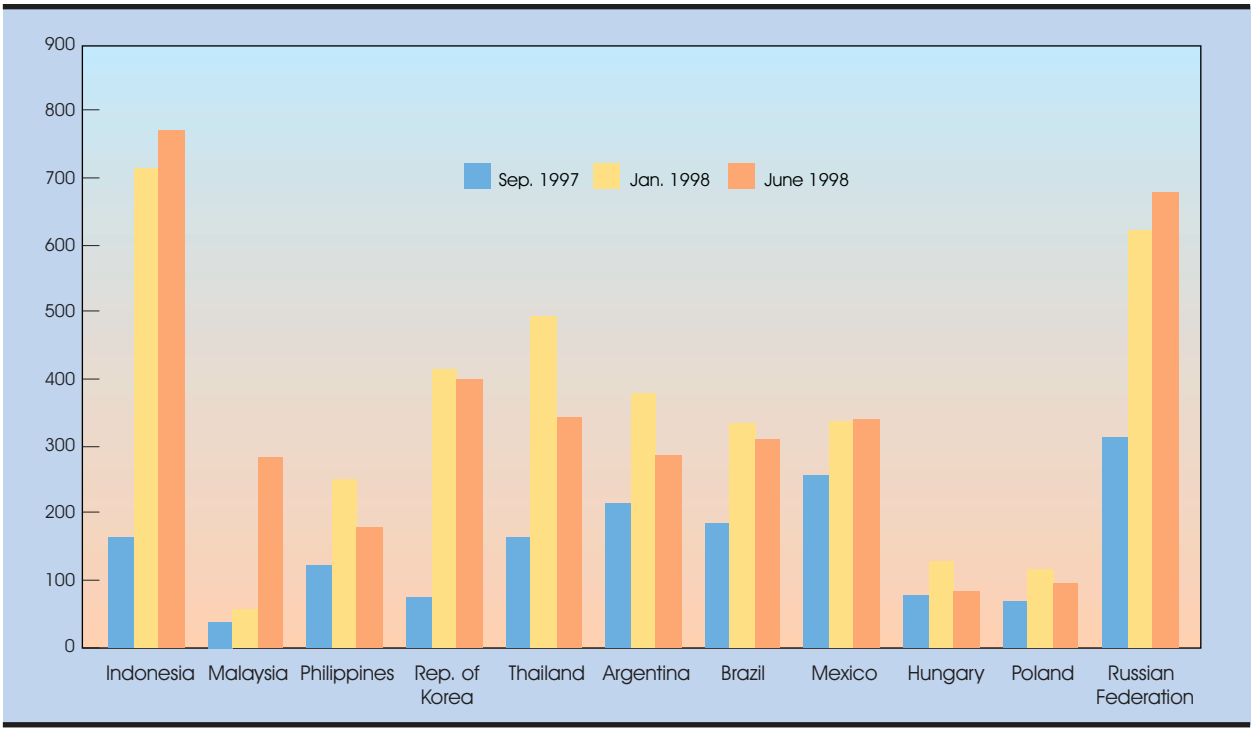
As the panic spread to the whole region and currencies collapsed, foreign exchange traders and speculators selling baht were joined by an increasing number of domestic firms and financial institutions seeking to escape from the squeeze on their balance sheets caused by rising domestic cash needs to service foreign debt and falling cash flows to meet them. This triggered the downward spiral characteristic of a debt deflation in which firms' efforts to escape insolvency simply worsened their balance sheet positions by driving down exchange rates and asset values even further.

The contagion to North-East Asia resulted from the recognition that the extent of the exchange rate adjustments in South-East Asia had reached the point of disturbing relative competitiveness within the entire East Asian region. First Taiwan Province of China and then Hong Kong, China, came under pressure. For the same reason, the Republic of Korea's won also came under speculative attack. Although the Republic of Korea had not experienced a speculative property bubble, it had suffered a number of large corporate bankruptcies and there was speculation that its banks had been weakened by associated losses. Again, much of the foreign exchange reserves were committed under forward cover. Conditions were not helped by the announcement by Taiwan Province of China that it would not intervene in support of its currency. As exchange rates came under pressure in the rest of Asia, market participants soon became aware of the similarities in the vulnerability of financial structures in nearly all

Chart 2

SELECTED EMERGING MARKET BONDS: AVERAGE YIELD SPREAD OVER US TREASURY BONDS

(Basis points)



Source: UNCTAD secretariat calculations, based on data compiled from Datastream.

countries, as well as the inadequate levels of reserves. With currencies depreciating, the South-East Asian scenario was thus repeated in North-East Asia as domestic debtors attempted to hedge or reduce their foreign exposure, causing a downward spiral of currency values. Thus, the implicit assumption of stable exchange rates that had dominated financing behaviour was replaced by the expectation of a free fall, and attempts were made to hedge not only against the current declines but also against the expected future declines, giving an additional impetus to the downward spiral.

The impact of the crisis on exchange rates and asset prices was not restricted to Asia. Exchange rates were under pressure wherever there had been large inflows of foreign borrowing as lenders attempted to repatriate funds. Initially, rates in South Africa, Latin America and Eastern Europe came under attack. South Africa, Brazil and the Russian Federation all suffered substantial capital outflows. Although the Czech Republic had already been forced to abandon its fluctuation band before the difficulties in Thailand, its currency came under additional selling pressure.

Since institutional investors tend to treat emerging markets as an asset class, expectations of losses in one emerging market tend to spread quickly to other emerging markets, irrespective of their economic fundamentals. This was undoubtedly a factor in the spread of the crisis to Eastern Europe and Latin America. However, the increasing globalization of financial relations also played a part. For example, banks in the Republic of Korea and Hong Kong, China, held leveraged investments in a number of developing countries or transition economies, including Indonesia, the Russian Federation and Brazil. Since these positions were financed by borrowed funds, they quickly turned to loss when borrowing rates increased and the value of the assets fell in response to the exchange rate turbulence, causing the banks to withdraw financing to these countries in order to unwind their positions and reduce losses. This led to sales of Latin American Brady bonds and

Russian treasury securities and served to transmit the crisis from Asia to other emerging markets. The extent of this interrelation can be seen in the very rapid and similar increase in the spread of Asian and Latin American bonds traded in secondary markets over benchmark United States government securities (see chart 2).

The existence of a large number of similarities, such as a pegged exchange rate regime with a tendency to real appreciation and a deteriorating current account and fiscal deficit, also led investors to reassess their position in Brazil. After the attack on the Hong Kong dollar, investors reviewed the strength of the currency board regime in Argentina. Both Brazil and Argentina suffered large capital outflows and currency sales in the speculation that hit global markets in October 1997. Brazil responded by increasing interest rates to over 40 per cent and introducing a fiscal austerity package. After the loss of reserves totalling some $10 billion between October and December, confidence in the economy recovered and by March reserves exceeded pre-crisis levels. Argentina committed itself to an IMF programme, even though it had no intention of drawing funds or need to do so.

The impact of the crisis on capital flows to emerging markets in Asia has been substantial: there was an inflow of $97.1 billion in 1996, compared with an outflow of almost $12 billion in 1997. No net inflows are expected in 1998. Current projections by various financial institutions indicate that no significant declines are expected in capital flows to Latin America and Eastern Europe. According to one estimate, the net private financial flow to Latin American emerging markets will fall slightly, from $96.4 billion in 1997 to $94.8 billion in 1998, and to Eastern Europe from $60.9 billion to $58.8 billion.[8] However, it is notable that the spreads on emerging market bonds that increased sharply in the autumn of 1977 have not really declined, indicating that there is a continued perception of high risks in these markets (chart 2). This, together with rising current account deficits in most Latin American and Eastern European countries, suggests that there may be serious downside risks.

D. The policy response

Much as in the 1982 Latin American debt crisis, perceptions of the nature and magnitude of the Asian crisis changed radically over time. Just as in 1982 when the crisis was initially regarded as a short-term liquidity problem, the Asian problem was initially perceived to be about the exchange rate and payments adjustment. Consequently, the crisis was dealt with as a "traditional" payments crisis, aggravated by structural weakness in the banking system. It was indeed argued in a working paper of the IMF that "(a) financial crisis calls for a similar response from the Fund as any other balance of payments problem except that the response must be quicker and possibly larger than in a more traditional case".[9] Thus, the standard instruments of monetary and fiscal tightening and high interest rates were brought in as a remedy even though the payments imbalances were neither caused by budget deficits nor due to a loss of competitiveness because of domestic inflation.

It appears that there were two principal rationales for applying traditional policies in response to the crisis. First, they were expected to help restore market confidence, halt the decline of exchange rates and reverse capital outflows. Second, they were considered necessary for correcting the underlying fundamentals, mainly to reduce payments imbalances. The fiscal restriction was also justified as necessary for funding government expenditure on recapitalization of the banking system without jeopardizing the fiscal surplus. The policies were, however, unsuccessful in achieving the former aim, and unnecessary for the latter. Given the financial vulnerability of indebted firms, they simply served to intensify the debt deflation, pushing the economies deeper into recession.

High interest rates were largely unsuccessful in stopping the downward spiral in exchange rates. They had little impact on the decisions of firms

and banks to reduce their exchange rate exposure, while making the substitution of domestic for foreign sources of funding more onerous. The response was not to reduce the sale of domestic currencies to pay off or hedge foreign debt, but simply to liquidate assets and reduce activity levels. For example, in Indonesia interest rates reached 100 per cent, without any appreciable impact on flight from the currency, even as currency traders were declaring that there was no good reason for its collapse in view of the country's strong economic fundamentals. Although Indonesia and Thailand kept their interest rates higher than Malaysia, they experienced greater difficulties in their currency and stock markets. By the same token, strict adherence to the orthodox programme did not protect the Philippines against contagion.

In this respect, useful lessons could have been drawn from previous experience. For instance, in the 1992 ERM crisis, which has a number of striking similarities to the Asian currency turmoil, high interest rates were not efficient deterrents against market pressure, and were quickly abandoned. As a result, in the aftermath of the crisis, low interest rates and fiscal expansion were part of a successful adjustment policy in the countries most affected.

Clearly, there was a need to reduce the payments deficit in Thailand, which would have called for currency depreciation and some slowdown in growth, but that was not so in the Republic of Korea and Indonesia, where current account deficits were moderate. There was no strong case for a drastic reduction in domestic absorption in any of these countries, since the exchange rate correction itself could have been expected to achieve much of the adjustment needed not only by restoring competitiveness, but also through its adverse effects on indebted banks and firms. More important, since the crisis was not caused by an expenditure imbalance between exports and imports, focusing policy on payments adjustment aggravated financial instability.

The situation was characterized by a stock disequilibrium rather than a flow imbalance that could be corrected by expenditure reduction. Since most of the external borrowing had been undertaken in foreign currency without adequate hedging, the fall of the currency created a balance sheet disequilibrium for indebted banks, property companies and firms; that is, at the new exchange rates, the stock of outstanding foreign debt became too large to be supported by expected income flows. The value of firms, and asset prices more generally, thus declined. Since these assets had been the collateral for much of the increased lending, the quality of bank loans automatically deteriorated. Rather than ease the burden of refinancing on domestic firms by granting additional credit, the recommended policy response was to raise interest rates. This depressed asset prices further and increased the balance sheet losses of firms and their need to repay or hedge their foreign indebtedness quickly by liquidating assets and selling the domestic currency.

While the traditional policies have been applied in response to the crisis, the objective of IMF lending has departed from the traditional adjustment programmes, where such lending is usually designed to support the new exchange rate reached after adjustment. In East Asia, the exchange rates were left to float, in the expectation that market forces would produce new stable rates, and lending was designed to instil market confidence and restore capital flows. Thus, rather than guaranteeing the new exchange rate, the Fund's lending has been aimed at ensuring the maintenance of the domestic currency's convertibility and free capital flows, and guaranteeing repayment to foreign lenders. The latter, unlike domestic lenders, emerge from the crisis without substantial loss, even though they had accepted exposure to risk just as other lenders had done.

Since the currency turmoil was sustained by the attempt of debtors to make a stock adjustment in their balance sheets, the only effective way to deal with the crisis would have been to block the stock adjustment or slow it down. Clearly, this is a problem of inter-temporal allocation. A bank that suffers a run lacks the liquidity to repay every depositor, but if it has the time to allow its investments to mature, it can eventually repay. The bank is in difficulty only if the ultimate recovery value of its portfolio is less than its liabilities, for then it is insolvent. Some of the East Asian debtors engaged in speculative activities may have been in such a position even without the collapse in exchange rates. For most, however, the crisis was initially one of liquidity rather than of solvency. There is no evidence to suggest that any of the East Asian countries would not have been able to generate the foreign exchange needed to repay their external debt with an exchange rate adjustment that would have restored competitiveness (say 10-15 per cent), as long as they were given sufficient time to realize investments. Countries

with savings rates around 40 per cent and high export capacity should not have had difficulty in repaying debt over a reasonable period of time.

However, the use of high interest rates, the extent of currency devaluation and the reduction in growth rates that created conditions of debt deflation quickly acted on financial institutions and company balance sheets to create a solvency crisis. As discussed in the next chapter, under such conditions of a sustained attack on a currency, the appropriate action would be to move quickly to solve the intertemporal problem by introducing a standstill and bringing the borrowers and lenders together to reschedule, even before the commitment of IMF funds. That is what was eventually required and achieved in the Republic of Korea, with the agreement of creditors to roll over a sufficient amount of short-term loans to make repayment possible. However, it would have been much better to have started the process with negotiations of this sort, rather than providing funding to repay creditors and putting together a conditional lending package which ensured an increase in bankruptcies, income loss and debt deflation which would itself destroy the ability to repay. A combination of rapid debt restructuring and liquidity injection to support the currency and provide working capital for the economy would also have made it possible to pursue the kind of policies that enabled the United States to recover quickly from a situation of debt deflation and recession in the early 1990s (see annex).

Table 31

EXTERNAL AND DOMESTIC DEBT IN RELATION TO GDP IN SELECTED DEVELOPING COUNTRIES, 1982 AND 1997

(Percentages)

	External debt	*Domestic debt*
East Asia (1997)		
Indonesia	217.9	65.5
Malaysia	62.4	213.5
Philippines	74.4	105.7
Republic of Korea	50.9	181.0
Thailand	74.1	137.9
Latin America (1982)		
Argentina	51.7	154.1
Brazil	30.4	28.9
Mexico	47.6	38.3
Venezuela	53.7	32.6

Source: Deutsche Bank Research, "Is Asia's debt sustainable?", *Market Issues*, 25 May 1998.

The basic problem still facing the Asian economies is the rescheduling of the accumulated debt. The severity of the current crisis can be seen by comparing that debt with the bank debt accumulated in Latin America in 1982 (table 31). The accumulation of external debt in East Asia is far in excess of that in the Latin American crisis, except for the Republic Korea. Moreover, one of the characteristics of the current crisis is the extent to which foreign debt has been a source of increased domestic lending. A comparison of internal indebtedness in the two periods shows that external borrowing has given rise to a much larger amount of internal lending in the Asian crisis than in the Latin American crisis (table 31). The figures suggest that since Argentina, Brazil, Mexico and the other Latin American debtors required special assistance in resolving the crisis and rescheduling debt service, such assistance will also be required to resolve the Asian crisis.

This can also be seen by reference to estimates of the overall debt burden to be met by the Asian countries. The calculations of scheduled interest payments in table 32 for 1998 are based on current three-month interbank rates. It should be noted that commercial borrowers would have to pay substantially higher rates because of their spreads. It is clear that the major problem of adjustment facing the Asian countries is not servicing external debt, but the resolution of the domestic debt burden. As a result of the high interest rates imposed after the outbreak of the crisis, the interest burden as a percentage of GDP has risen significantly. It is quite likely that the net present value of future earnings associated with feasible rates of income growth is less than the net present value of the future interest obligations; this suggests that without write-offs of domestic debt, there will be continued widespread bankruptcies.

Table 32

INTEREST PAYMENTS AS A PERCENTAGE OF GDP IN SELECTED ASIAN COUNTRIES, 1995-1998

	1995	*1996*	*1997*	*1998[a]*
Interest payments on external debt				
Indonesia	3.4	3.2	4.0	9.5
Malaysia	2.4	2.3	2.7	3.9
Philippines	3.2	2.9	4.3	4.6
Republic of Korea	1.2	1.2	1.5	3.1
Thailand	2.6	2.9	3.6	4.9
Interest payments on domestic debt				
Indonesia	7.0	7.5	16.5	31.7
Malaysia	8.9	11.5	13.7	17.9
Philippines	9.7	11.6	15.8	13.0
Republic of Korea	19.0	19.5	30.1	42.8
Thailand	12.6	11.4	21.0	26.7

Source: See table 31.
a Estimates.

E. Social consequences of the crisis

The adverse impact of the financial crisis in East Asia and of the policies adopted in response on economic growth and development is proving much deeper than was originally expected. During the International Monetary Fund/World Bank annual meetings in Hong Kong, China, in September 1997, it was generally held that the ongoing disturbances in Asian financial markets were no more than a blip and would cause only a temporary setback. For example, in October 1997, two months after the collapse of the Thai currency, the IMF's *World Economic Outlook* predicted that these disturbances would lead to only a slight slowdown of growth in the region (table 33). Within less than three months, however, the IMF lowered its estimate, and in May 1998 lowered it even further. Current (June 1998) projections by a number of institutions paint an even bleaker picture. Original estimates of the likely duration of the crisis also proved to be over-optimistic. The Fund at first expected the affected countries to recover in 1998; now the best guess is 2002.

After decades of rising incomes and living standards, household earnings have fallen and unemployment has risen sharply in the Asian countries most affected by the financial crisis. All income groups have been affected, including the rich, who have suffered a decline in net wealth due to the decline in stock and real estate prices. Of particular social concern, however, has been the impact of job losses on low-income urban workers and the second-round effects on the poor in both urban and rural areas.

Table 33

FORECASTS OF GDP GROWTH IN 1998 FOR SELECTED EAST ASIAN ECONOMIES

	IMF, World Economic Outlook				SSB[a]	UNCTAD
Economy	May 1997	Oct. 1997	Dec. 1997	May 1998	June 1998	
China	8.8	9.0	7.5	7.0	6.0	6.0
Hong Kong, China	5.0	5.0	4.1	3.0	-2.0	-2.0
Indonesia	7.5	6.2	2.0	-5.0	-14.0	-12.0
Malaysia	7.9	6.5	2.5	2.5	-3.0	-2.5
Philippines	6.4	5.0	3.8	2.5	0.8	1.0
Republic of Korea	6.3	6.0	2.5	-0.8	-6.5	-6.0
Singapore	6.6	6.0	6.2	3.5	0.9	1.0
Taiwan Province of China	..	3.0	..	5.0	4.8	5.0
Thailand	7.0	3.5	0.0	-3.1	-8.7	-8.0

Source: IMF, *World Economic Outlook*, Interim Assessment, various issues.

a Forecast by the investment house Salomon Smith Barney, Hong Kong, China, as reported by Agence France Presse, 12 June 1998.

The deeper the economic contraction turns out to be and the more recovery is delayed, the less likely it is that the newly poor will be able to recover from deprivation and regain their previous occupational backgrounds and standards of living. The impact on human resources could even spill over to the next adult generation if primary school enrolments decline and child malnutrition increases.

The loss of jobs has not been limited to the debt-laden, export-oriented manufacturing firms and the construction sector; it has also been substantial in firms serving the domestic market, which have been saddled with large internal debt burdens and the consequences of the collapse of domestic financial relations. These firms are generally labour-intensive ones in the manufacturing or service sectors that had helped reduce poverty in the past by absorbing large numbers of low-skilled workers, many of whom were of rural origin. High food prices and reduced social expenditures have further aggravated social conditions and contributed to the growth of poverty in some of the countries concerned.

As can be seen from table 33, the worst-affected countries to date have been Indonesia, Thailand and the Republic of Korea. The deterioration of employment and social conditions in these countries has led to unrest ranging from labour demonstrations in the Republic of Korea to riots in Indonesia, the latter resulting in the death of over 1,000 people.

Because of its deep recession, large population and low per capita income, Indonesia is the shock-affected country where the greatest increase in underemployment and poverty is expected to occur. The collapse of the rupiah and quickening inflation that could reach over 80 per cent in 1998 have further aggravated social conditions by sapping purchasing power and eroding the real value of savings. There could be an additional strain on livelihoods and the social fabric if hundreds of thousands of Indonesian workers are expelled from Malaysia and Singapore and have to be absorbed into the Indonesian economy. Moreover, any rekindled ethnic hostility toward Indonesians of Chinese ancestry could further aggravate the crisis and discourage future domestic private investment that is essential for economic recovery.

In the light of such considerations, Indonesia's Central Bureau of Statistics forecasts that unemployment could reach 15 million in 1998, or 17 per cent of the workforce. Because of the lack

of unemployment benefit schemes, most of the laid-off workers will turn to informal sector livelihoods rather than remain indefinitely unemployed. Judging from the severe contraction of the economy, the UNCTAD secretariat estimates that the proportion of the Indonesian population that will be living in poverty by the end of 1998 will increase by 50 per cent over 1996.

Although not as severely affected, other Asian economies have also seen unemployment rise to record levels. In particular, Thai unemployment rose from 5.4 per cent of the labour force in 1997 to 8.8 per cent in February 1998. The sector most affected to date has been construction, where 1.1 million workers have been laid off. Roughly half of these were from Myanmar and have been expelled from Thailand, while most of the rest were Thais who in the main have returned to their rural areas of origin to eke out a living. The UNCTAD secretariat estimates that the proportion of the poor in Thailand's population will rise by about one third by the end of 1998 because of the effect of job losses in augmenting rural and urban underemployment and in reducing urban worker remittances to rural families. The reduction of household incomes has, *inter alia*, made it harder for families to afford to send their children to school, as a result of which it is reported that the number of elementary school drop-outs in Thailand has almost tripled compared with a year ago.

Employment conditions in the Republic of Korea have also seriously deteriorated. As of June 1998, unemployment was 7 per cent, up from 4.4 per cent in October 1997. Three categories of workers have in particular borne the brunt of the crisis. One is workers in the construction sector, where employment fell over the same period by 22 per cent, as opposed to 14 per cent in manufacturing. Another is unorganized workers in small and medium-sized enterprises, which unlike most of the *chaebols* have little access to credit and are therefore fast going out of business. The third category consists of female employees, who have been disproportionately the first to be laid off. Besides growing unemployment, there has been a decline in real wages of 2.3 per cent owing to the cuts in overtime payments and annual bonuses. The situation is expected to worsen considerably in the months ahead, with unemployment likely to reach 10 per cent by the end of 1998 since 12 of the largest 30 *chaebols* plan to downsize by 20-50 per cent, and the Government intends to reduce public employment by 10 per cent in the near future. It is also likely that real wages will decline further as growing numbers of workers opt for wage reductions in exchange for guaranteed job security.

The social impact of the crisis in the Republic of Korea has been mitigated by the existence and expansion of unemployment benefit schemes, but much less so in Indonesia, which as a poorer country has only minimal safety-net measures in place, and in Thailand, which has virtually no programmes for protecting the unemployed and underemployed. Past complacency and unpreparedness regarding safety-net provisions are understandable since the governments concerned have for a long time reasonably assumed that rapid and sustained economic growth would of itself raise incomes, reduce underemployment and alleviate poverty.

Until economic output revives, safety-net palliatives are necessary for cushioning the impact of the crisis on vulnerable and poor segments of the population. In the case of Indonesia, short-term humanitarian assistance of over $1 billion is being organized to this end by the international community. The assistance packages will include a public works programme for laid-off urban workers, rice and medicine imports to stabilize wage good prices and satisfy basic needs, and technical assistance aimed at promoting rural development. These elements should prove helpful in mitigating the effects of the crisis on the poor. An additional measure that could be beneficial would be to expand micro-credit schemes for small entrepreneurs, not least because such approaches, unlike public works projects, enable women as well as men to participate in and benefit from them.

Safety-net measures, however, can have only a marginal and temporary impact in alleviating social hardship. They are in no way long-term solutions to the social crisis. The resumption of high and sustained growth is indispensable in order to reverse the effects of economic contraction and bring unemployment and poverty levels back down to pre-crisis levels. The insistence on high domestic interest rates and balanced budgets has been counterproductive in this regard. Policies of increased domestic expenditure and lower interest rates will be necessary in order to overcome financial difficulties and to reflate domestic demand. The alternative is continued economic depression with attendant consequences for the social and political stability of the region.

F. Conclusions: The crisis and the Asian development "model"

As already noted, in the view of some Western commentators, the crisis in East Asia was caused by structural and institutional shortcomings in the countries concerned, which resulted from the environment in which the economies operate. Broadly, two reasons are singled out as the root causes of the financial difficulties in the region: the close relationship between government and business, and market distortions that insulated business from competitive forces and market discipline. Some commentators go even further and suggest that the crisis marks the end of the "Asian model of development". While they accept that the "model" has been very successful in delivering an unprecedented pace of industrialization and growth, and in eliminating poverty, they consider it is now outdated and has been overwhelmed by global market forces, very much as the Western form of free market capitalism has triumphed over central planning.

There is no question that the way the economies are run and businesses are operated in East Asia differs considerably from the "Western model". However, the analysis presented in this chapter shows that the crisis in East Asia does not differ in its essential features from those experienced in developed and developing countries organized under various institutional and socio-economic systems, including those in countries operating under the Western, Anglo-American model. It is yet another episode in a series of crises that have been occurring with increasing frequency since the breakdown of the Bretton Woods arrangements, and with the introduction of floating exchange rates and the unleashing of financial capital.

Furthermore, there are important differences among the East Asian economies in their institutions and economic structures.[10] Indeed, before the financial crisis, there was a tendency to distinguish a South-East Asian development model from the one followed by the North-East Asian countries (Japan and the first-tier NIEs, except Hong Kong, China), and to recommend it to other developing countries for emulation on the ground that it relied less on interventionist policies and more on conservative macroeconomic management and liberal trade and FDI policies.[11] It is notable that two "interventionist" economies – Singapore and Taiwan Province of China – have not experienced serious currency turmoil and financial crisis even though they have suffered from spillovers, just like many other countries linked to the region by strong trade and financial ties. In South-East Asia, too, the problems faced by Indonesia and Thailand are again quite different from those in Malaysia, which has pursued somewhat more activist policies than the other two countries.

As in the earlier episodes of financial crisis and currency turmoil in developing countries, the crisis in East Asia was preceded by financial liberalization and deregulation which, in some cases, constituted a major break with past practices. In this sense the fundamental problem was not that there was too much government intervention and control, but too little. A similar point has been made by Joseph Stiglitz, Chief Economist of the World Bank:

> Some ideologues have taken advantage of the current problems besetting East Asia to suggest that the system of active state intervention is the root of the problem ... But I will argue that the heart of the current problem in most cases is not that government has done too much, but that it has done too little ... The fault is not that the government misdirected credit ... Instead the problem was the government's lack of action, the fact that the government underestimated the importance of financial regulation and corporate governance.
>
> The East Asian crisis is not a refutation of the East Asian miracle. The more dogmatic version of the Washington Consensus does

> not provide the right framework for understanding both the success of the East Asian economies and their current troubles. Responses to East Asia's crisis grounded in this view of the world are likely to be, at best, badly flawed, and at worst, counterproductive.[12]

The break with past practices has been particularly notable for the Republic of Korea, which, together with Japan and Taiwan Province of China, was generally seen as the most successful "model" of modern industrialization based, *inter alia*, on the features that are now considered to be the root cause of the crisis. However, it is the departure from the "model" rather than its pursuit that is the main cause of the crisis in that country. This departure appears to have occurred in two crucial areas: control over external borrowing and state guidance of private investment. The country drew upon external finance in its postwar industrialization primarily through borrowing from international banks, but this was almost always subject to government approval and guarantee. On the other hand, while private investment was the driving force of industrialization, policy always played a major role in coordinating investment decisions in order to avoid excessive competition and excess capacity. Abandoning this coordination seems to be one of the main reasons for misallocation and overinvestment, while the fact that the Government relinquished control over the financial sector explains why the country became vulnerable to an external debt run and an attack on its currency.

Dismantling checks and balances in these areas has proved to be extremely destabilizing and disruptive for the traditional institutional arrangements regarding corporate investment and finance. High corporate leverage, which was one of the key factors in rapid postwar growth and accumulation,[13] proved fatal when corporations were allowed to raise money abroad without the traditional supervision and control, treating external and domestic debt as perfect substitutes, even though there was no international counterpart to the domestic lender of last resort to smooth out liquidity problems. Thus, the problem was not so much with leverage as with liberalization – a point well illustrated by the Indian example: in India the largest corporations are highly geared by international standards, but the economy has been spared the turbulence in the East Asian financial markets because of its gradual and cautious approach to capital account liberalization.[14]

As for the second-tier NIEs, the jury was still out even before the first signs of crisis became evident. As examined by the UNCTAD secretariat in some detail in *TDR 1996* and elsewhere,[15] while following more liberal policies, these countries had been extremely successful in mobilizing domestic resources and establishing competitive resource- and labour-intensive industries. It was argued that such policies were indeed appropriate in the initial and relatively easy stages of export promotion, but that their limits were being reached and there was a need to turn to the kind of strategy pursued by their northern neighbours in order to progress further in industrialization and development. Coming on top of structural difficulties, financial liberalization increased the dependence of these countries on foreign resources and hence their vulnerability to the whims of international finance. This was perhaps most evident in Thailand, where the establishment of an international banking facility (discussed in section C above), the liberalization of the banking sector and the decontrol of property investment were crucial factors in the crisis.

In *TDR 1997* the view was expressed that successful examples of modern industrialization are distinguished by the way profits and integration into the global economy are managed. This was one of the main lessons drawn from the postwar experience of Japan and the first-tier NIEs. The main lesson of the Asian crisis leaves this conclusion unshaken: when policies falter in managing capital and integration, there is no limit to the damage that international finance can inflict on an economy. There is certainly considerable scope for national policies in preventing and better managing crises of this sort. However, these crises are a systemic problem, and action is therefore needed also at the global level. The next chapter addresses these more fundamental and systemic issues. ■

Notes

1 However, as foreign capital started to leave, the peso-denominated *cétes* were converted into dollar-indexed *tesobonos*.

2 The lending was almost wholly through loan syndications, 53 per cent of which were organized by United States commercial banks in the period 1974-1977, against 39 per cent for 1978-1982. In 1981 over 50 per cent of lending went to private sector borrowers, compared with 45 per cent in 1979. Around two thirds of the lending of United States banks was to private sector borrowers. In 1983, the first year of debt restructuring, the share of publicly guaranteed lending rose to two thirds and eventually reached 85 per cent in 1985. For example, Argentina reported that two thirds of foreign banks' total loan exposure was to private sector borrowers in 1979, 75 per cent in 1982 and under 25 per cent in 1986. Some of the change in the statistical measures of public lending was caused by the nationalization of private banks; see United Nations Centre on Transnational Corporations, *Transnational Banks and the International Debt Crisis* (United Nations publication, Sales No. E.91.II.A.19), New York, 1991.

3 M. Ahmed and L. Summers, "A tenth anniversary report on the debt crisis", *Finance and Development*, Vol. 29, No. 3, September 1992.

4 According to the World Bank categorization, only Indonesia was a "severely indebted" country, while Malaysia, the Philippines and Thailand were all "moderately indebted"; see World Bank, *Global Development Finance 1998* (Washington, D.C., 1998), pp. 65-73.

5 See *TDR 1996*, table 11.

6 World Bank, *op. cit.*, p. 33.

7 The absence of clear rules concerning consolidated accounting for industrial groups has in some cases been of particular importance in this context.

8 Institute of International Finance, "Capital Flows to Emerging Market Economies", Washington, D.C., 30 April 1998, p. 5, table 4.

9 J. M. Boughton, "From Suez to Tequila: The IMF as crisis manager", IMF Working Paper No. 97/90 (Washington, D.C.: IMF, 1997).

10 The common and different features of East Asian economies are discussed in a number of papers prepared as part of UNCTAD research into East Asian industrialization; see *Journal of Development Studies – Special Issue on East Asian Development: New Perspectives*, Vol. 34, No. 6, August 1998.

11 World Bank, *The East Asian Miracle: Economic Growth and Public Policy* (Oxford: Oxford University Press, 1993). For a discussion of this issue see Y. Akyüz et al., "New perspectives on East Asian development", in the *Special Issue* of the *Journal of Development Studies* referred to in the preceding note.

12 J. Stiglitz, "More instruments and broader goals: Moving toward the Post-Washington Consensus", The 1998 WIDER Annual Lecture, Helsinki, January 1998, p. 3.

13 See R. Wade and F. Veneroso, "The Asian financial crisis: The high-debt model and the unrecognized risk of the IMF strategy", Working Paper No. 128 (New York: Russell Sage Foundation, 1998).

14 See A. Singh, "Asian Capitalism and the financial crisis", paper presented at the conference on Global Instability and World Governance, Robinson College, Cambridge, United Kingdom, May 1998; and J. Glen, A. Singh and R. Matthias, "How competitive are the emerging markets? An analysis of corporate rates of return from 9 emerging markets", paper presented at a seminar at the Research Department of the IMF, Washington, D.C., July 1998.

15 See the *Special Issue* of *Journal of Development Studies,* referred to above.