

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

TRADE AND DEVELOPMENT REPORT, 1998

Offprint from Part One

Chapter III

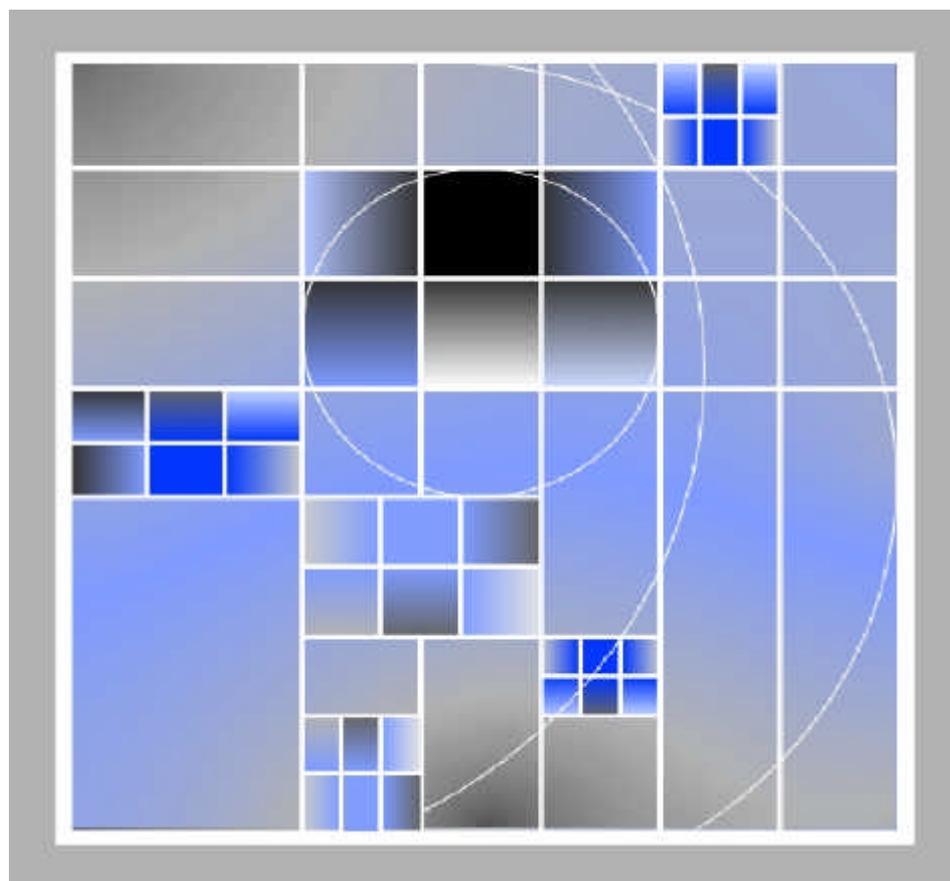
INTERNATIONAL FINANCIAL INSTABILITY AND THE EAST ASIAN CRISIS

Chapter IV

THE MANAGEMENT AND PREVENTION OF FINANCIAL CRISES



UNITED NATIONS



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 out-

flows 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 in-

flows 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 arbitrageurs. The banks thus accepted credit risks, but the market and exchange rate risks were borne by the arbitrageurs. 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	Banks	Non-bank private sector	Public sector
	(\$ million)	(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	Loans with a maturity of								
	All loans			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.

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 in-

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.

vestment 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 standards⁷ 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.

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)

Economy	Annual real rate of expansion ^a		Percentage of GDP
	1981-1989	1990-1997	
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**

<i>Economy</i>	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

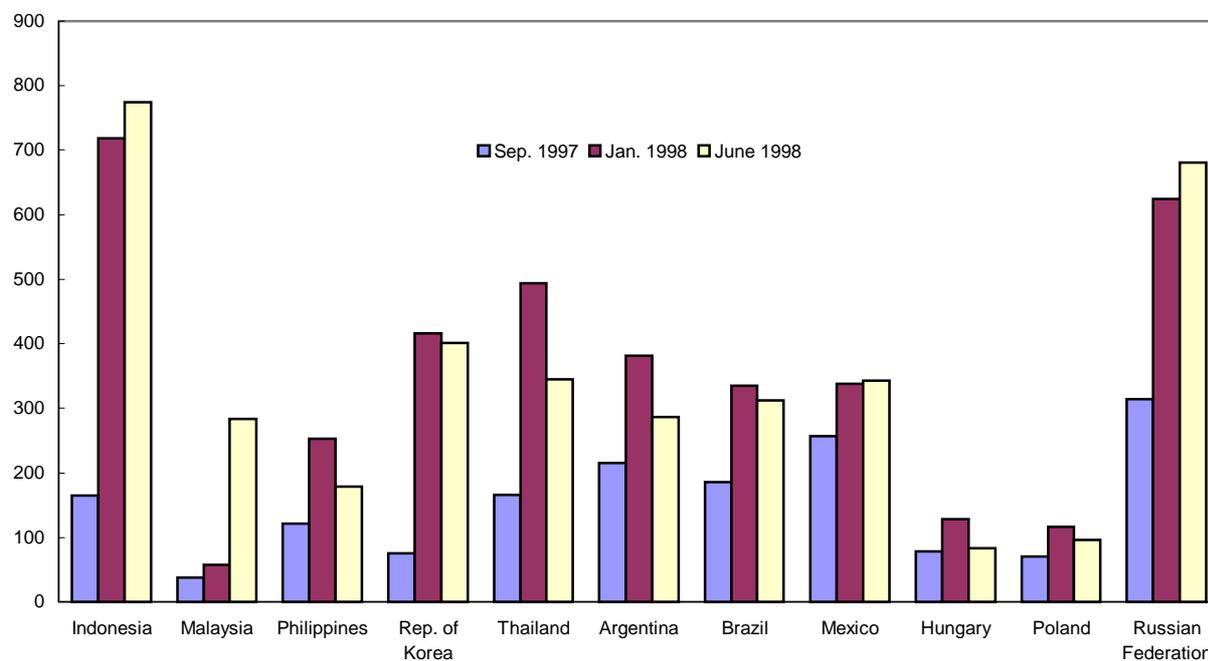
institutions seeking to escape from the squeeze on their balance sheets caused by rising domestic cash needs to service foreign debt and falling cash flows to meet them. This triggered the downward spiral characteristic of a debt deflation in which firms' efforts to escape insolvency simply worsened 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 com-

mitted 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 1997 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).

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.

Table 31

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

(Percentages)

	<i>External debt</i>	<i>Domestic debt</i>
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.

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
<i>Interest payments on external debt</i>				
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
<i>Interest payments on domestic debt</i>				
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

Economy	IMF, <i>World Economic Outlook</i>				SSB ^a	UNCTAD
	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.

THREE POST-BRETTON WOODS EPISODES OF FINANCIAL CRISIS

I. The Southern Cone experience

There are many points of similarity between the experience of the Southern Cone countries in Latin America during the late 1970s and early 1980s, particularly the Chilean experiment during that period, and the recent East Asian financial crisis: excessive borrowing abroad in foreign currencies intermediated by recently deregulated banks without adequate supervision in conditions of fixed exchange rates and large interest differentials, eventually leading to widespread bankruptcies, and banking and foreign exchange crises.¹

In Chile the liberalization process started in 1974 with the return of fully nationalized banks to the private sector through auctions supported by generous credit arrangements. As part of a strategy to eliminate financial repression, interest rates were freed, reserve requirements were reduced and the newly created *financieras* were allowed to operate without any restriction. Despite earlier announcements by the authorities that deposits were not insured and that there would be no bailouts, the Government intervened heavily in 1977 when an important bank was in serious trouble and rescued both the depositors and the bank.

The experiment took another turn in 1979 when the nominal exchange rate of the peso against the dollar was fixed and restrictions on convertibility and capital movements, including private borrowing abroad, were relaxed. The ra-

tionale for the latter was expressed at the time by a high IMF official in the following terms:

In the case of the private sector, I would argue that the difference between domestic and foreign debt is not significant – barring government interference with the transfer of service payments or other clearly inappropriate public policies – if it exists at all. The exchange risks associated with foreign borrowing are presumably taken into account as are the other risks associated with borrowing, whether it be from domestic or foreign sources. More generally, private firms can be expected to be careful in assessing the net return to be derived from borrowing funds as compared with the net cost since their survival as enterprises is at stake.²

Capital inflows surged in 1981 and the real exchange rate rose rapidly. This was a period of sharply rising dollar interest rates, when a capital outflow might have been expected, but real domestic rates were over 30 per cent since monetary policy was kept tight in view of a rapidly rising current account deficit brought about by the currency appreciation, a consumption boom and bubbles in financial and real assets. The trade deficit rose from around \$350 million in 1979 to \$2,700 million in 1981 as consumer imports surged. Domestic borrowers quickly shifted from

peso to dollar loans to reduce financing costs, expecting that international interest rates would fall more quickly than domestic rates. The capital inflows were primarily loans from international banks denominated in dollars. They were mostly on-lent by the newly privatized banks to local borrowers in dollars: in 1981 dollar-denominated local bank loans to the building sector increased by 280 per cent compared with a 13 per cent rise in peso lending. Much of the increased lending was used to finance the purchase of public assets that were being privatized. The ratios of bank debt to income rose sharply to over 50 per cent for most sectors of the economy, and debt-equity ratios for large conglomerates exceeded 90 per cent.

The exchange rate regime collapsed in 1982. An important part of the banking system was already insolvent when foreign lending started to expand rapidly in 1980. In 1981 the Government liquidated three commercial banks, four *financiera* banks and a development bank, which accounted for 35 per cent of total lending. In 1983 another eight banks, with 45 per cent of financial system loans, were taken under the control of the central bank, which by 1988 held bad bank loans equal to nearly 20 per cent of GDP. Only one commercial bank survived without government support. It was at this point that serious thought was given to prudential supervision and regulation of the banking system.

II. The United States banking and real estate crisis and debt deflation

The sharp rise in United States interest rates that created difficulty for Latin American borrowers in the early 1980s also created problems for United States savings and loan associations (S&Ls).³ The phasing out of Regulation Q, which gave the Federal Reserve powers to set limits on deposit rates, led from 1980 onwards to increased competition for deposits both among banks and between banks and other institutions. It left S&Ls with large portfolios of 30-year fixed-rate mortgage loans at low interest rates when competition was pushing up the deposit rates. The result was to render most of these institutions instantly insolvent; they faced the choice of either raising their deposit rates above the rates they received on their loans, or watching their deposits drain out until they no longer had liquid resources to meet withdrawals. Consequently, pressures developed for deregulation on the asset side of the balance sheets, which eventually resulted in excessive risk-taking and debt creation. Congress granted S&Ls increased freedom to engage in new areas of activity with higher returns, including non-investment grade (junk) bonds, futures and options contracts, commercial real estate loans, and consumer and credit card loans, while the size of the minimum deposit benefiting from the Federal Deposit Insurance guarantee was increased. In effect, the new legislation was an invitation to

the S&Ls to grow out of their difficulties by investing in high-risk, high-yielding assets.

This created a potential for fraud and moral hazard. Since most of the S&Ls were already insolvent, their only chance of survival was to expand into high-risk areas of activity, financed by deposits that were now guaranteed up to the limit of \$100,000 but were no longer subject to maximum interest rate limits. Investment banks soon developed a lucrative business as insured deposit brokers, providing funds in \$100,000 federally insured bundles to the S&Ls, which in turn invested them in high-risk projects. Commercial banks, pension funds and insurance companies all followed the S&Ls in acquisition, development and construction loans that gave rise to a bubble in the property markets. Opportunities for alternative business were also provided by lending to consumers during the recovery that started in 1983, and by providing highly leveraged financing for mergers and acquisitions.

In this process, business firms and consumers raised their indebtedness to unprecedented levels, while financial institutions increased their lending against risky assets. Consequently, both corporate and household incomes and spending became increasingly sensitive to interest rates.

Thus, when the Federal Reserve started tightening monetary policy after the 1987 stock market crash in order to throttle asset-price inflation, the result was one of the deepest postwar recessions. Falling property prices caused capital losses and widespread insolvency, reducing the willingness and ability of banks to lend and of business and consumers to spend. However, in reaction to the weakness in the financial system and the economy, short-term interest rates were reduced in the early 1990s almost to negative levels in real terms, thus providing relief not only for banks, but also for firms and households, which were able to ride the yield curve and refinance debt at substantially lower interest-servicing costs. This eventually produced a boom in the securities market, thereby lowering long-term interest rates and helping to restore balance sheet positions, thus producing a strong recovery.

A number of important lessons emerged from the United States experience of financial liberalization. First, it confirmed what had been learned

from the Chilean experience, namely that appropriate prudential regulations must accompany the accelerated liberalization of deposit-taking institutions. Second, it showed that while deposit insurance is seldom the initial cause of morally hazardous behaviour that gets a bank into difficulty, its existence can generate such behaviour once a bank finds itself in difficulty; it then leads to substantial additional losses since there is no longer any downside risk. The proper policy response is not to eliminate insurance, but to ensure prompt closure so that an insolvent bank cannot use deposit insurance to gamble on a recovery in earnings. This has now been made part of formal federal prudential regulations that provide precise guidelines for the rapid closure or take-over of banks in difficulty.

Finally, the policies pursued in the early 1990s were exemplary in the way they addressed debt deflation, making it possible for the United States economy to enjoy one of the longest post-war recoveries.

III. The EMS currency crisis

Much like the Asian crisis, the 1992 crisis in the EMS which forced Italy and the United Kingdom to opt out of the ERM was driven by large movements of short-term arbitrage funds responding to interest rate differentials and prospects of capital gains in conditions of fixed exchange rates and increasing external imbalances. The outflow of arbitrage funds was triggered by an appreciation of European exchange rates and a rise in interest rates in Germany. There was also a rapid contagion, as the decision to devalue the Italian lira led to heavy speculation against the pound sterling that eventually drove both currencies from the ERM, and a delayed contagion that produced a speculative attack on the French franc in the summer of 1993. In addition, deregulation was involved, since Italy had lifted all its remaining capital account restrictions and adopted the narrow fluctuations band in the EMS in 1991.

Given the relative stability of exchange rates after 1987, there was a widespread expectation that the then existing ERM exchange rates would remain stable and become the conversion rates for the creation of the single European currency in the third stage of Economic and Monetary Union (EMU). In the high-inflation, high-growth economies of Italy and the United Kingdom the exchange rate stability during this period was achieved through tight monetary policies that created large interest rate differentials with the rest of Europe, particularly Germany. This triggered large capital inflows, financed by funds borrowed at low interest rates in Germany and the United States. These inflows were initially dominated by United States banks, which were also speculating that the creation of the common currency would bring a downward convergence of interest rates and so produce capital gains on their holdings of Italian

and British securities. Thus, unlike in East Asia, the lending was in the domestic currency in order to take advantage of the expected capital gains. On the other hand, the exchange rate risk was expected to be small; since the EMS had always had “within band” realignments, the largest possible exchange rate movement would be less than 4.5 per cent.

United States banks also invested borrowed dollar funds in these high-yielding markets, but since the dollar was floating against the European currencies, the currency risk was greater. Nevertheless, given the difficulty of hedging against the lira, the large size of the differentials and the weakness of the dollar, these positions were initially unhedged, and then hedged through the DM against an appreciation of the dollar on the assumption that the lira/DM rate could not diverge by more than the narrow exchange rate band of 4.5 per cent. Sterling could be hedged directly.

The large capital inflows generated by the interest rate differentials and prospects of capital gains strengthened these currencies, and the large

build-up in reserves led to the belief in their stability. However, because of inflation differentials, they also produced real appreciation and rising current account deficits. At the beginning of 1992 it became clear that the increasing external deficits could not be sustained, and there were large capital outflows from Italy. The continued depreciation of the dollar made the loss of competitiveness even greater, while increased interest rates set by the Bundesbank reduced the attractiveness of the arbitrage gains. The view gained ground that the lira would require an adjustment that was greater than the traditional “within band” adjustment, probably as much as 10-15 per cent. As Italian reserves declined, the markets in September 1992 forced a lira devaluation, leading to an exchange rate that proved unsustainable, and pressure soon spread to sterling; Italy and the United Kingdom then suspended their participation in the ERM. Unlike East Asia, both countries experienced a very rapid recovery on the back of a strong rise in exports, using the freedom they had gained as regards monetary policy to reduce interest rates relative to those in Germany.⁴ ■

Notes

1 For this experiment see C. Diaz-Alejandro, “Good-bye financial repression, hello financial crash”, *Journal of Development Economics*, Vol. 19, No. 1/2, 1985; S. de la Cuadra and S. Valdes, “Myths and facts about financial liberalization in Chile”, in P.L Brock (ed.), *If Texas Were Chile: A Primer on Banking Reform* (San Francisco: Institute for Contemporary Studies Press, 1992); and R. Ffrench-Davis, M. Agosin and A. Uthoff, “Capital movements, export strategy, and macroeconomic stability in Chile”, in R. Ffrench-Davis and S. Griffiths-Jones (eds.), *Coping with Capital Surges: The*

Return of Finance to Latin America (Boulder, Colorado: Lynne Rienner Publishers, 1995).

2 The statement was by A.W. Robichek, the then Director of the Western Hemisphere Division of IMF, quoted in Diaz-Alejandro, *op. cit.*, p. 9.

3 For a more detailed account of this episode see *TDR 1991*, Part Two, chapter II; *TDR 1992*, Part Two, chapter II; and *TDR 1994*, Part Two, chapter II.

4 For a further discussion of these developments see *TDR 1993*, Part Two, chapter I; and *TDR 1994*, Part Two, chapter II.

THE MANAGEMENT AND PREVENTION OF FINANCIAL CRISES

A. Introduction

This chapter discusses key issues regarding both the management or containment of financial crises and policies that could help to prevent them. Here it is necessary to distinguish between banking crises (which frequently include runs on parts of the banking sector) and currency crises (which involve flight from the currency by residents and non-residents), although the two may be, and (as discussed in chapter III) in developing countries usually have been, closely connected. In the case of banking crises a conceptual distinction cannot reasonably be made between management, on the one hand, and prevention on the other; strengthened financial regulation and supervision, for example, are manifestly directed at meeting both objectives. Chapters III and IV focus principally on crises where attacks on the currency were accompanied by threats to the banking system. In such cases the distinction between management and prevention is useful, and the section which follows concerning crisis management and resolution discusses policies which can be adopted in response to a currency attack for the purpose of halting or reversing it and so limiting the resulting damage to the domestic economy.

The subjects taken up under crisis management are macroeconomic policies, management of reserves and access to credit, international lender-of-last-resort financing, and international standstill and workout procedures for debtor countries. In

view of the high costs and uncertain outcomes associated with reliance on domestic policies in the debtor country under attack and on external financing under arrangements which are currently in place or can reasonably be envisaged, special attention is focused on the last of the approaches mentioned, i.e standstill and workout procedures.

Measures for crisis prevention can be taken at global, national or regional levels, and the treatment here takes up policies and proposals classified under headings which broadly follow that order. However, the policies and proposals surveyed do not always fit neatly into this pattern. Global surveillance, for example, clearly belongs to the first of the three levels mentioned, and regional consultation and collaboration to the third. But in the case of other measures (such as financial regulation, controls over international lending and portfolio investment, capital controls and exchange rate policies), even though action generally takes place at the national level, in recent years such measures have been increasingly the subject of global or regional initiatives because they have significant cross-border spillovers, involve free-rider problems (arising from the advantages accruing to a country from other countries' compliance with rules, standards or norms which it does not itself observe), or restrict national policy autonomy. As explained below, the first two considerations have been particularly important for

international initiatives regarding financial regulation and supervision, and also for multilateral cooperation at regional and global levels to prevent disorder in currency markets and competitive devaluations. The third consideration motivates the global regime for currency convertibility for current international transactions, and various

regimes agreed by smaller groups of countries for the removal of restrictions on capital transactions. The WTO regime for international trade in goods and services reflects all three considerations, and its agreements contain provisions explicitly designed to deal with problems under each of them.

B. Managing and resolving financial crises

1. *Self-fulfilling debt runs*

While every financial crisis in developing countries is different, such crises have a common feature: the rush of investors and creditors to exit and the consequent financial panic. Indeed, whatever the proximate causes of financial crises or the events that trigger attacks on currencies, international investors and creditors of developing countries often manifest herd-like behaviour in exiting as well as investing or lending. The debt crisis of the 1980s witnessed a drastic cutback in lending by international banks to sovereign debtors, while during the 1994-1995 Mexican crisis the rush for the exits by international creditors took the form of rapid liquidation of government paper and conversion of the proceeds into dollars. Again, in the more recent turmoil in East Asia, the refusal to roll over short-term loans together with the attempt of unhedged debtors to avoid exchange rate losses was the principal factor deepening the crisis.

Creditor overreaction to debtors' financial difficulties is often explained in terms of a collective action problem. Even though the creditors as a group are better off if they continue to roll over their maturing claims on a debtor, an individual investor has an incentive to rush for the exits. A debtor who could normally generate sufficient resources to service his outstanding stock of debt would face a liquidity problem if more than a certain number of creditors refused to renew their maturing claims. Without access to liquidity, he would be forced to curtail operations or to resort to distress sales of assets, which in turn would lower his income and wealth, thereby further constraining his ability to service debt and

hence damaging the interest of creditors as a group. In this sense, debt runs reflect the failure of markets to coordinate individual decisions so as to generate a superior outcome for the creditors as well as the debtors.

The consequences of a generalized debt run by international creditors triggered by a loss of confidence are much more serious than those of the debt run by creditors of domestic debtors. Such behaviour can easily turn a liquidity problem into widespread insolvencies and defaults by altering key asset prices, interest rates and exchange rates. In the absence of a large stock of reserves or access to international liquidity, the ability of a debtor developing country to repay its entire stock of short-term external debt on demand is no greater than the ability of a bank to meet a run by its depositors. Where external liabilities are in the form of direct securities denominated in domestic currencies, as was the case with Mexican *cetes* and *tesobonos*, the demand for foreign currency comes directly from the creditors. In the case of bank lending, withdrawal of loans by foreign creditors could trigger a rush by unhedged debtor banks and firms into foreign currency as they seek to pay debt or cover their open positions. That would in turn drive down the value of the domestic currency and raise interest rates, making it more difficult for debtors to service their debt and forcing them to liquidate assets, thereby deepening the debt deflation process. It is not only the international debtors that would thus be hurt; there would also be broader macroeconomic consequences, including a sharp decline in employment and output.

Additional pressures on exchange rates and asset prices would arise from two other sources.

First, residents tend to flee from domestic currency assets, and can do so easily when the economy is dollarized and there is easy access to foreign exchange assets. Second, debt runs by foreign creditors are often associated with a flight from non-debt instruments held by non-residents, notably from the equity market. Since such investors face a decline in prices when they attempt to liquidate their holdings, the selling pressure in the currency market would be weakened. Moreover, since they would also suffer from depreciations, they may have less inducement to exit. However, investor overreaction could still amplify destabilizing feedbacks between equity and currency markets. Indeed, there has been a very close correlation between the collapse of equity prices and exchange rates in recent episodes of financial crisis in developing countries, and this linkage has been particularly strong in East Asia.

Theoretically, there are four lines of defence against a massive attack on the currency of a debtor country:

- domestic policies, particularly monetary and interest rate policy, to restore market confidence and halt the run;
- hedging by keeping sufficient foreign reserves and credit lines;
- use of an international lender-of-last-resort facility to obtain the liquidity needed;
- a unilateral debt standstill and exchange restrictions, and initiation of negotiations for an orderly debt workout.

The last three mechanisms affect not only crisis management but also the likelihood of emergence of debt crises by discouraging runs against the currency. The threat of a unilateral debt standstill could also dampen short-term capital inflows, thereby reducing the build-up of external financial fragility.

The following sections discuss the feasibility and costs and benefits of establishing and/or using such mechanisms. The policy response to a debt run has generally proved ineffective, and building up reserves to meet speculative attacks is extremely costly and barely practicable. In addition, there are serious difficulties in setting up an international lender-of-last-resort facility to provide the kind of liquidity needed to counter such attacks on a currency. An effective way of dealing with them would be to establish an international framework

for debt standstills and workouts to prevent the resulting liquidity crises from leading to insolvency.

2. **Monetary policy and market confidence**

Interest rate differentials are undoubtedly an important determinant of international capital flows. Higher domestic interest rates, *ceteris paribus*, would stimulate capital inflows by increasing the profitability of arbitrage with foreign money markets. Also, they could signal the determination of policymakers to remove certain macroeconomic imbalances, such as excess domestic spending and large external imbalances, when these threaten to put pressure on the currency. Under such circumstances, restrictive monetary policy and higher interest rates can play an important role in stabilizing capital flows.

However, as the events in East Asia show, when financial markets panic the likely effects of monetary tightening and higher interest rates on capital flows are quite different, because they exert a strong influence on credit risk. The withdrawal of foreign lending and flight from the currency began in the first place because lenders and investors did not expect to receive the return on their assets. Higher interest rates simply signal declining creditworthiness and rising default risk, and the expected rate of return adjusted for risk will tend to fall as interest rates are raised.

For international lenders with claims denominated in dollars, higher domestic interest rates in the debtor country do not alter the rate of return on their assets. But by increasing the financial difficulties of their debtors and reducing their incomes and net worth, they increase the likelihood of default. Thus, they provide no incentive for foreign lenders to roll over their existing loans or extend new credits.

Again, high interest rates are not always effective in stemming capital flight into foreign currency triggered by expectations of sharp depreciations. Even double-digit rates are unable to persuade people to keep their capital in domestic currency assets when they believe that such rates are politically difficult to maintain, as seen in some European countries during the 1992-1993 European Monetary System (EMS) crisis, and domestic assets have high default risks.

If persistently applied, monetary tightening and high interest rates can no doubt eventually stabilize the currency by intensifying the difficulties of the debtors and increasing bankruptcies and defaults – that is, by reducing the sales rather than by increasing the purchases of domestic currency. As debt deflation and recession deepen, debtors will become increasingly insolvent and unable to raise funds to purchase foreign exchange to service their debt or to hedge against the exchange rate risk. However, markets would be stabilized by depressing the economy and increasing defaults rather than by bringing back the foreign capital.

Quite apart from the ineffectiveness of monetary tightening in stemming self-fulfilling debt runs, there is also little economic justification in defending the exchange rate at the expense of a hike in interest rates. Devaluations tend to hurt primarily those who have currency mismatches between their asset and liability positions, which often reflect speculative behaviour. By contrast, a hike in short-term interest rates also hurts domestic investors with maturity mismatches. Moreover, traded goods sectors are hurt more by high interest rates than by devaluations; this makes it more difficult to undertake a payments adjustment based on export expansion rather than on import compression.

3. Reserve policy

It is sometimes suggested that debtor countries should maintain adequate reserves to meet their short-term obligations in order to avoid currency turmoil in the face of a massive withdrawal of foreign loans and investment. Proponents of such a policy point to the experience of economies with large reserves (e.g. China; Taiwan Province of China; and Hong Kong, China), arguing in this respect that large reserves would also deter speculative attacks on the currency.

However, the consequences of building up a large stock of reserves by borrowing are quite different from when the reserves are accumulated through trade surpluses. One way of building up such reserves is to sterilize a large proportion of capital inflows, i.e. to purchase the proceeds through the issue of domestic debt instruments. However, there is a certain degree of circularity in such a strategy. In effect, it means that a country should borrow short only when it does not use

the proceeds of such loans to finance investment and imports. Such a strategy can be very costly to the economy since the return on foreign reserves generally falls short of the cost of external borrowing.

Moreover, the cost of sterilizing private borrowing falls entirely on the public sector. Indeed, public sector losses will exceed the foreign exchange cost of carrying such reserves since real domestic interest rates on government debt exceed by a large margin the rates earned on reserves. There will thus be a net transfer from the public to the private sector in addition to the net cost incurred by the economy as a whole. Indeed, experience shows that such a strategy can give rise to large fiscal deficits or central bank losses (quasi-fiscal deficits).

A variant of this proposal is for the public sector to fully cover the external short-term liabilities of the private sector by borrowing long and investing short abroad. However, not all governments have access to long-term foreign borrowing. More important, the cost of such an operation could be prohibitive, particularly when the international long rates exceed short rates by a large margin and the risk premium on long-term sovereign debt is high.

A similar strategy is to maintain credit lines with foreign private banks and to use them when faced with an attack, which is tantamount to arranging a private lender-of-last-resort facility. Again, however, this will work only if the amounts are small. Moreover, the costs involved can be very large and there is no guarantee that the banks will keep to such arrangements when there is a massive withdrawal of foreign lending.

A further problem is that vulnerability to withdrawal of funds is not confined to short-term liabilities. In this respect, what matters is liquidity rather than maturity of liabilities. Massive withdrawal of funds from equity and/or bond markets can cause similar difficulties in the currency market, even though declines in the prices of such assets tend to alleviate the pressures on the exchange rate. When stock and bond markets are sizeable and foreign presence is significant, bearish moods in such markets can easily translate into a flight from the national currency, necessitating large-scale interventions to stabilize the exchange rate. The cost of maintaining reserves large enough to meet this eventuality would be prohibitive.

4. *Bailouts and international lender-of-last-resort facilities*

Provision of liquidity from an international lender of last resort to stabilize currency markets has not been the policy response to currency crises in developing countries. Rather, assistance coordinated by the IMF has usually come after the collapse of the currency, in the form of bailout operations designed to meet the demands of creditors and to prevent default. Such operations, however, pose problems for a number of reasons. First, they protect creditors from bearing the full costs of poor lending decisions, thereby putting the burden entirely on debtors. Second, they consequently tend to create moral hazard for international lenders, encouraging imprudent lending practices. Not only do they reduce the concern of creditors about liquidity risk, but often, by securing *ex post* public guarantees for private debt, they also tend to reduce the perceived default risk. Third, the international financing required has involved increasingly large amounts that have been difficult to raise.

However, there are also serious impediments to creating a genuine international lender of last resort to avoid such problems. The effective functioning of such a facility depends on two conditions: there should be reasonably well defined rules and conditions that the borrower must satisfy, and the lender of last resort should have the discretion to create liquidity in fulfilling its function.

Amongst existing multilateral arrangements for the provision of external financing the facilities available within the EU perhaps come closest to meeting these two conditions. These facilities provide short-term support both for EU member countries participating in the EMS exchange rate mechanism (ERM) and for non-participants in this mechanism, as well as other longer-term financing. Access to short-term external financing is guaranteed to an ERM participant for intervention in exchange markets to keep its currency within prescribed fluctuation limits; borrowing under this facility becomes subject to additional conditions only if the maturity of the loan is extended beyond an initial period, which may be as long as approximately two and a half months. Other short-term external financing is available to EU member countries up to certain limits after agreement has been obtained in accordance with established procedures. Medium-term external financing is also

available up to specified limits subject to similar multilateral agreement concerning the borrowing country's need (after taking account of policies it undertakes to overcome its difficulties).

Strictly speaking, the IMF does not satisfy either of the above conditions to qualify as a lender of last resort. Indeed, that institution was not originally conceived to provide financing to its members encountering liquidity problems associated with capital flows. Article VI of its Articles of Agreement specifically precludes lending to finance persistent capital outflows. So far in its interventions for this purpose the IMF has relied on the provision of funds by its major shareholders. A proposal was made on the eve of the Mexican crisis to create a new "short-term financing facility" (STFF) for this purpose.¹ The facility was to be used by countries with close integration with international capital markets, including industrial countries and emerging markets. However, a number of difficult issues were raised by this proposal.

The first issue concerns the conditions under which financing should be made available to countries facing liquidity problems. In the STFF proposal two kinds of drawing were envisaged: an automatic right to draw (analogous to the gold tranche) and a drawing subject to the approval of the Executive Board. Such a two-tier approach was thought to strike a balance between speed and risk. While automatic access would ensure a timely response to market pressures, it could also create a greater risk to the IMF and give rise to moral hazard for the borrower. By contrast, conditional withdrawal would reduce the risk to the Fund, but negotiations and approval could cause long delays and uncertainties which might in turn further undermine market confidence. The Fund paper suggested that for conditional withdrawal the request should be made at the time of the article IV consultations, and that the facility should not be made available to finance unsustainable current account deficits. In that sense, the Fund's agreement to access would indicate a seal of approval of the country's underlying external payments position.

In principle, access to a lender-of-last-resort facility should depend on the fulfilment of specified conditions in advance, rather than on a commitment to undertake certain actions after the crisis occurs. Such conditions may relate not only to the sustainability of exchange rates and current

account positions, but also to factors that affect financial stability, such as the size and maturity structure of external debt and effective prudential regulations. The lender of last resort should have the authority and capacity to monitor the extent to which these conditions are fulfilled and to determine eligibility.

There are, however, serious difficulties in implementing such a procedure. First of all, it may require considerable extension of article IV consultations regarding matters related to the capital account, and it is not clear whether this would necessitate amending the Articles of Agreement in order to give the Fund jurisdiction over such matters. Second, it may not be easy to agree on what constitutes the relevant set of policies and institutions. For instance, there has been considerable controversy over the policies demanded by the Fund as part of its rescue package for the Republic of Korea; indeed, some of the conditions imposed have been regarded as interfering “unnecessarily with the proper jurisdiction of sovereign government” rather than as technical matters for dealing with the payments problem.² Moreover, the adequacy of national policies for exchange rate sustainability and financial stability when a country is integrated with international capital markets involves matters of interpretation going beyond those traditionally raised under IMF surveillance. Thus, considerable differences may emerge between the Fund and the member concerned during the article IV consultations over the fulfilment of eligibility conditions. Finally, while experience strongly suggests that financial crises can occur despite effective prudential regulations and sustainable macroeconomic positions, there is a tendency to assume that they are caused primarily by poor policies and the weakness of the institutional machinery. For instance, a number of flaws in policies and institutions in East Asia came to light only after the crisis, although the policies and performance of these countries had been highly praised earlier. If the simple fact that a crisis has occurred is taken as *prima facie* evidence of poor policies and institutions, it may never be possible for developing countries to be eligible for recourse to a lender-of-last-resort facility without additional and as yet unspecified commitments to undertake certain actions.

A second set of problems relates to the level of access and the adequacy of funds. In the 1994 proposal these were envisaged to be commensurate with the size of reserve losses that countries

could sustain, but the facility was not envisaged to finance shocks fully. Three hundred per cent of quota was considered as a possible upper limit. Such an amount would indeed be quite modest in relation to possible needs arising from sudden outflows, but it could absorb an important proportion of Fund resources. For instance, in the 1994-1995 Mexican crisis, the initial offer of IMF funding of \$7.8 billion was three times the country's quota. Even though this was subsequently raised to \$17.8 billion, representing no more than one third of the total rescue package, this amount was widely regarded as unusually high and risky for the Fund.

The recent intervention by the IMF in East Asia was again far above the quotas of the countries concerned, and was funded through special arrangements under emergency financing procedures established after the Mexican crisis on the assumption that “use of these emergency procedures [was] expected to be rare, and the IMF's role [would] remain catalytic”.³ With the deepening of the crisis in East Asia, the IMF Executive Board approved in December 1997 the Supplemental Reserve Facility to provide financing to countries experiencing exceptional payments difficulties under a highly conditional Stand-By or Extended Arrangement for up to one year.⁴

Ideally, the SDR could play a key role in creating a lender-of-last-resort facility, so that it would become a true fiduciary asset and enhance its role and share in global reserves. Indeed, after the outbreak of the Mexican crisis, in his statement to the Copenhagen Social Summit in March 1995, the Managing Director of the IMF suggested that an effective cure depended on “convincing our members to maintain, at the IMF level, the appropriate level of resources to be able to stem similar crises if they were to occur”, adding that this would imply a decision, *inter alia*, for “further work on the role the SDR could play in putting in place a last-resort financial safety net for the world”.⁵ Such a step would require an amendment of the Articles of Agreement and could face opposition from some major industrial countries. Since it is insisted that the IMF should remain largely a quota-based institution, funding through bond issues by that institution is also ruled out. This leaves the Fund's normal resources, together with its borrowing facilities, as the only potential sources of funding. However, they alone would not provide financing on the scale made available by the IMF and other sources during the recent Mexican and East Asian crises.

Bailout operations by the IMF will thus continue to rely on ad hoc arrangements with major industrial countries. In view of the increased public concern over burden-sharing and moral hazard, and the constantly growing size and risk of such operations, there is no guarantee that the required funds will always be forthcoming in the future. Critics point increasingly to the non-transparent nature of such operations. Moreover, there is also concern about the risk of default to countries providing the funding for bailouts. Although Mexico was able to repay quickly its debt to the United States from the bailout operation by refinancing it in international capital markets, there is no guarantee that other distressed borrowers will be equally capable. Questions are thus raised whether such a transformation of external debt could not be achieved without going through IMF bailout operations and creating risks for taxpayers in creditor countries.⁶ In this respect, the application of insolvency principles, discussed in the next subsection, may provide an effective alternative.

5. *Insolvency procedures and international debt crises*

(a) *Insolvency principles*

Commenting on the debt crisis of the 1980s more than a decade ago, the UNCTAD secretariat expressed the main dilemma facing the debtor countries as follows:

The lack of a well-articulated, impartial framework for resolving international debt problems creates a considerable danger, which has in part already materialized, that international debtors will suffer the worst of both possible worlds: they may experience (and many are experiencing) the financial and economic stigma of being judged *de facto* bankrupt, with all the consequences that this entails as regards creditworthiness and future access to financing. At the same time, they are largely without the benefits of receiving the financial relief and financial reorganization that would accompany a *de jure* bankruptcy handled in a manner similar to chapter 11 of the United States Bankruptcy Code.⁷

Bankruptcy procedures are especially relevant to international debt crises resulting from liquidity problems because they are designed to address financial restructuring rather than liqui-

ation. In the United States Bankruptcy Code they are based on the premise that the value of the firm as a going concern exceeds the value of its assets in the event of liquidation. No receiver or trustee is appointed to manage the debtors' business, and debtors are usually left in possession of their property, with all the powers of a trustee.⁸ The aim of these procedures is to facilitate orderly workouts in three stages.

At the outset such procedures allow for an automatic standstill on debt servicing in order to provide the debtors-in-possession with a breathing space from their creditors, who are not allowed to pursue lawsuits or enforce the payment of debts. The automatic-stay provision is based on the recognition that a "grab race" for assets by the creditors is detrimental to the debtor as well as to the creditors as a group. It allows the debtor the opportunity to formulate a reorganization plan and ensures that creditors are treated equally. The filing of a bankruptcy petition also fixes all claims against the debtor whereby claims for future interest on pre-petition indebtedness cease to accrue as of the petition date and may not be asserted against the debtor.

In the second stage, between the filing of the petition and the exit from bankruptcy through the reorganization of the debtor's affairs, the Code provides the debtor with access to working capital needed to carry out its operations. This it does by granting a seniority status to debt contracted after the filing of the petition. This debtor-in-possession financing does not depend on the permission of existing creditors, and is approved whenever it is judged that continued operation of the firm will enhance its value.

The final stage is the reorganization of assets and liabilities of the debtor and its operations. The Code discourages holdouts by a certain class of creditors and accelerates the process towards a rapid resolution. The plan does not require unanimous support by the creditors (acceptance by 50 per cent in number and two thirds in amount of the claims is sufficient), and the debtor can obtain court approval of the reorganization plans under the "cramdown" provisions.

These procedures are used not only for private debt. Chapter 9 of the Code deals with public debtors (municipalities) and applies the same principles as chapter 11. The recent successful workout of the Orange County debt was under chapter 9.

Similar arrangements exist in most other industrial countries. Although they do not always go as far as the United States in safeguarding the interests and the needs of the debtor, they do not apply a rigid and legalistic approach designed to satisfy the interest of the creditors at any cost.⁹

(b) *International application*

International private debtors may enjoy insolvency protection subject to provisions in their contracts with the creditors even though the application of such provisions involves a number of complex legal questions such as the determination of the relevant law and forum, and enforcement.¹⁰ However, under debt runs such protection does not offer much relief to the country concerned even if the bulk of the external debt is owed by private banks and firms. If there are numerous debtors, it is very difficult to simultaneously initiate insolvency procedures in respect of them all so as to halt the “grab race” by the creditors. Moreover, as in East Asia, most private debtors may indeed be solvent and hence unwilling to file a petition for insolvency, but the country may not have the reserves to meet the demand for foreign exchange.¹¹ However, as noted above, debt runs can make such debtors insolvent, and this danger is greater when external debt is owed by the private sector and exchange controls have been dismantled. With sovereign debt a “grab race” on the currency is limited, and exchange controls can help contain the flight of residents from domestic assets. The task falls on the government to take action to secure the kind of protection provided under the insolvency procedures, particularly debt standstill.

However, current judicial practices and government policies in the major industrial countries do not allow debtor governments to benefit from debt standstill provisions in the case of external obligations (see box 4). In this context, a question arises as to whether the relevant provisions of the Articles of Agreement of the IMF can provide a statutory basis for action by debtor governments through exchange controls. The most relevant provisions are in article VIII, section 2(b):

Exchange contracts which involve the currency of any member and which are contrary to the exchange control regulations of that member maintained or imposed consistently with this Agreement shall be unenforceable in the territories of any member. In addition,

members may, by mutual accord, cooperate in measures for the purpose of making the exchange control regulations of either member more effective, provided that such measures and regulations are consistent with this Agreement.

This article has given rise to a number of different and conflicting interpretations.¹² On one view, it allows governments to take unilateral action for standstill on debt payments, since under article VI, section 3, members are free to impose capital controls without IMF approval. The courts of the member countries cannot refuse to recognize such controls if they are consistent with the Articles of Agreement. It therefore follows that any suspension of debt servicing introduced in the context of exchange controls approved by the IMF would render debt contracts unenforceable in the courts of any IMF member.

On another view, this was not the original intent of the clause. Indeed, there are considerable ambiguities regarding concepts such as exchange controls and exchange contracts, allowing different interpretations. While the courts in France appear to favour a broader interpretation, those in the United States and the United Kingdom tend to define exchange contracts to include only contracts having as an immediate objective the exchange of international means of payments, rather than any contract that affects a country's foreign exchange reserves. Consequently, on this interpretation, international loan agreements are not “exchange contracts”, and hence do not fall within the ambit of the article.¹³

In practice, governments are reluctant to resort to unilateral suspension of debt servicing and exchange controls even in the extreme event of financial panic. The reasons put forward by the IMF are that:

Because there exists no well-defined and accepted legal process that is applicable in such cases, the process of debt resolution by involuntary restructuring is necessarily ad hoc with an uncertain outcome. Bond holders may try to seek redress, on an individual or coordinated basis, by attempting to seize the assets of the borrowers or by threatening to disrupt their trade and payments systems ... “Free riders” may also undermine any negotiated solutions by trying to attempt to enforce their individual claims. In addition, involuntary debt restructuring will damage creditworthiness

and may increase the cost of accessing international markets in the future.¹⁴

However, the Fund also recognizes that “there may be sound economic and political reasons for involuntary restructuring supported by an economic calculus that trades off higher future financing costs against the deadweight loss of rapid and deep domestic adjustment”.¹⁵

In view of the deficiencies of current institutional arrangements for dealing with debt crises, and the increased capacity of financial markets to inflict serious damage, there is now a growing recognition of the need for reform. As noted above, there are serious difficulties in using national insolvency procedures for resolving international debt crises. Moreover, it would be difficult to replicate these procedures at the international level for cross-border loan contracts. It also has to be recognized that reorganization of international debt inevitably has a substantial political dimension. All this has to be borne in mind in designing a global framework for dealing with international debt problems.

Discussions of reform have so far concentrated on sovereign debt and the ways and means of applying internationally the type of bankruptcy principles and procedures in chapter 11 (or chapter 9) of the United States Code. One proposal is to create an international bankruptcy court in order to apply an international chapter 11 drawn up in the form of an international treaty ratified by all members of the United Nations. Under such an arrangement, the international court would be empowered not only to impose automatic stay and allow debtor-in-possession financing status, but also to restructure debt and to grant debt relief. Arbitrators would be nominated by both creditors and debtors, and to ensure impartiality no court in either a creditor or a debtor country should chair the proceedings.¹⁶

A less ambitious and perhaps more feasible option would be to establish a framework for the application of key insolvency principles, namely debt standstill and debtor-in-possession financing, to international debtors, and to combine them with the established practices for restructuring debt, including negotiations involving the IMF, which would play a major role in the application of these two principles.

On one view, standstills would need to be sanctioned by the IMF: “upon determination by

the Executive Board of the IMF, the debtor government would be protected from legal challenges by its creditors for immediate debt collection”.¹⁷ This would require a broad interpretation of article VIII(2)(b), which could be provided either by the IMF Executive Board or through an amendment of the Articles of Agreement so as to cover debt standstills. The latter could be authorized once a certain proportion of reserves is lost and/or the currency falls below a certain threshold.

On another view, a more informal process would suffice:

Encouraging the IMF to advise the debtor or another agency on the justification (or not) for a suspension of debt service payments would allow the Fund to carry out an important signalling function; a government which received approval for its standstill would suffer relatively little damage to its reputation, while the possibility that the Fund would not approve would discourage governments from utilizing the option strategically. Naturally, the IMF should limit its *ex ante* advice to the debtor government and share its opinion with the markets only *ex post* to avoid inciting a panic. A definitive reinterpretation of article VIII(2)(b) would support the IMF in this role even if it did not have legal effect in national courts.¹⁸

However, several objections have been raised against giving the Fund so much power, on grounds of conflict of interest. It has been argued that the Executive Board of the IMF is not a neutral body which could be expected to act as an independent arbiter, because countries affected by its decisions are also among its shareholders. Moreover, since the Fund itself is a creditor and a source of new money, and acts as the authority imposing conditionality on the borrowing countries, there can be conflicts of interest vis-à-vis both debtors and other creditors.¹⁹

An alternative procedure would thus be to establish an independent panel to determine whether the country concerned is justified in imposing exchange restrictions with the effect of debt standstills according to article VII(2)(b). Such a ruling would need to have legal force in national courts for the debtor to enjoy insolvency protection. The decision for standstill could be taken unilaterally by the debtor country, and then submitted to the panel for approval within a specified period. Such a procedure would help avoid “inciting a panic”, and be similar to WTO safeguard

Box 4

**COURT RULINGS IN THE UNITED STATES ON THE APPLICATION OF CHAPTER 11
OF THE BANKRUPTCY CODE TO INTERNATIONAL DEBT**

In 1982 payments difficulties prompted the Costa Rican Government to suspend debt servicing by three state-owned banks. Initially, the case opened by the creditors in the District Court in New York in 1983 was dismissed on the grounds that the action by the Costa Rican Government constituted an act of State – i.e. that it was “governmental” (as opposed to commercial) – both in nature and in purpose.¹ The Court of Appeals upheld this ruling, though on different grounds; namely, that the action was consistent with the law and policy of the United States, with reference in particular to chapter 11 of the Bankruptcy Code. It ruled that Costa Rica’s action was “not a repudiation of the debt but rather was merely a deferral of payments while it attempted in good faith to renegotiate its obligations”, and was “in entire harmony with the spirit of bankruptcy laws, the binding force of which, upon those who are subject to the jurisdiction, is recognized by all civilized nations”, prompting such remarks in the financial press as that New York was “unsafe for loan agreements”.²

However, after rehearing the case the same court reversed itself in 1984, when it was “bluntly told by the US Government that the court’s earlier decision had incorrectly interpreted US policy as supporting the enforcement of the Costa Rican decrees”.³ The court ruled that the Justice Department’s brief clearly established that the Government’s policy was to support “the debt resolution procedure that operates through the auspices of the International Monetary Fund”, and that “Costa Rica’s attempted unilateral restructuring of private obligations ... was inconsistent with this system of international cooperation and negotiation, and thus inconsistent with United States policy”.

This final ruling in effect established that for foreign governments to enjoy insolvency protection in United States courts, their actions should be in conformity not only with United States law, but also with the policy of that country with respect to international debt restructuring. Indeed, this ruling gave rise to such remarks as “existing US legal doctrines ... could not easily be stretched into creating what amounted to a code of international bankruptcy practice when there was no statutory or other basis for such a result ... Absent some guidelines as to what constituted a good-faith renegotiation of sovereign debt, the suspension of creditor legal remedies might empower a foreign sovereign to act unilaterally and arbitrarily in matters directly affecting US banks and indirectly affecting the stability of the US banking system”.⁴

¹ For an extensive discussion of this case see L.C. Buchheit, “Act of State and comity: Recent developments”, in Sassoon and Bradlow, *op. cit.*; and *TDR 1986*, box 6. The quotations below from court rulings are taken from these two sources.

² *Financial Times*, 24 May 1984.

³ Buchheit, *op. cit.*, p. 103.

⁴ *Ibid.*, p. 102.

provisions allowing countries to take emergency actions.

There would also be a need to combine debt standstills with debtor-in-possession financing in order to replenish the reserves of the debtor country and provide working capital. This would mean IMF “lending into arrears”. The funds required for such emergency lending would be much less

than the scale of bailout operations. Moreover, the Fund could also help arrange emergency lending from private capital markets with seniority status.

As regards sovereign debt to private creditors, reorganization could be carried out through negotiations with the creditors, and the IMF could be expected to continue to play an important role

by providing a forum for bringing all creditors into negotiation with the debtor government. Special arrangements might be needed for bonds, which are often more difficult to restructure. For private debt, negotiations could be launched with private creditors immediately after the imposition of debt standstill. Judicial procedures might also be applied to individual debtors according to the law and the forum governing the contracts at issue. Their application would be greatly facilitated by the existence of proper bankruptcy procedures in debtor countries.

In past episodes of debt crisis, negotiated settlements often resulted in the socialization of private debt when the governments of developing countries were forced to assume loan losses.²⁰ This leads not only to a regressive redistribution of wealth in the debtor country, but also to moral hazard for both private debtors and creditors. The

introduction of automatic stay, together with debtor-in-possession financing, could help relieve such pressures.

Certainly, a number of issues would need to be addressed in establishing procedures that would protect the debtors from the consequences of self-fulfilling debt runs and allow them to carry out their operations without creating moral hazard and opportunities for abuse of exchange controls. The recent East Asian crisis has shown once more that there is a need to safeguard debtor countries from the overreaction of financial markets, "in entire harmony with the spirits of bankruptcy laws, the binding force of which, upon those who are subject to the jurisdiction, is recognized by all civilized nations" (see also box 4).²¹ Adoption of the principle of automatic stay for international creditors and investors is certainly one of the most helpful steps which might be taken in that direction.

C. Prevention of financial crises

1. Global surveillance

Global surveillance has not been successful in preventing international financial crises. In part this failure reflects belated, and so far only partial, adaptation of existing procedures to the problems posed by large autonomous private capital flows. But perhaps more fundamentally it is due to the unbalanced nature of these procedures, which give too little recognition to the disproportionately large global impact of monetary policies in a small minority of OECD countries.

In view of the growing size and integration of financial markets, every major financial crisis now has global ramifications. Consequently, preventing a crisis is a concern not only for the country immediately involved, but also for other countries which are closely integrated into the global trading and financial system and which can be affected in a number of ways. As already noted,

contagion can occur through various channels, including those resulting from liquidity and credit interdependencies among major financial institutions and markets in the world, from expectations of competitive exchange rate adjustments, and from changes in perceptions regarding risks associated with a certain class of markets. Global surveillance of national policies is thus called for, with a view to ensuring stability and sustainability of exchange rates and external payments positions.

However, financial crises are not always home-grown. As noted in the preceding chapter, international financial crises are typically connected with major shifts in macroeconomic indicators external to the countries where the crises first manifest themselves. This is true of the debt crisis of the 1980s and of the Asian financial crisis. The origins of the former are to be found in shifts in the macroeconomic policies of major OECD countries in response to inflationary pressures. The inconsistency between contractionary mon-

etary policy and expansionary fiscal policy in the United States, combined with the overall deflationary stance of macroeconomic policies in other major industrial countries, resulted in a sharp rise in interest rates in the United States and the appreciation of the dollar, both of which played a crucial role in the developing country debt crisis.²² The Asian crisis was influenced by similar factors. The large capital flows before the crisis to East Asian countries (which over-financed their current account deficits) began in the early 1990s to a significant extent in response to an easing of monetary conditions in major OECD countries, on the one hand, and high interest rates and relatively stable exchange rates in the Asian countries, on the other. Again, as discussed above, the reversal of these flows was closely connected with the swings in exchange rates and monetary conditions in the United States and Japan. Various other recent examples of external influences on capital movements and currency markets come easily to mind, such as the fluctuations in private external financing for Latin American countries, an important determinant of which has been shifts in monetary conditions in the United States. Indeed, econometric research indicates that internal and external factors were about equally important in the surge in capital flows to Latin America during the early 1990s.²³

The objectives of IMF surveillance, as formally stated, are limited to exchange rate policies, focusing primarily on the sustainability of exchange rates and external payments positions and on the appropriateness of the associated economic policies of individual countries. However, its scope has tended to broaden over time. For instance, the guidelines established in 1977 for surveillance made an explicit reference to the obligations of a member to avoid manipulating exchange rates or the international monetary system to gain an unfair competitive advantage over other members.²⁴ Again, in the 1980s the major members of the Fund came to favour a broader interpretation and recognized that “to be effective surveillance over exchange rates must concern itself with the assessment of all the policies that affect trade, capital movements, external adjustment, and the effective functioning of the international monetary system”.²⁵

However, the modalities of IMF surveillance do not include ways of responding to and dealing with unidirectional impulses resulting from changes in the monetary and exchange rate policies of the United States and a few other OECD countries

which exert a strong influence on international competitiveness and capital movements. In the absence of incentives and enforcement procedures linked to the process of peer review under IMF surveillance, countries elsewhere in the world economy lack mechanisms under the existing system of global economic governance for redress or dispute settlement regarding these impulses. In this respect, governance in the area of global finance lags behind that for international trade, where such mechanisms are part of the WTO regime.²⁶

The need for strengthening IMF surveillance in response to conditions produced by greater global financial integration and recurrent financial crises has been recognized by the Interim Committee. For example, at its meeting in April 1998, the Committee agreed that the Fund “should intensify its surveillance of financial sector issues and capital flows, giving particular attention to policy interdependence and risks of contagion, and ensure that it is fully aware of market views and perspectives”. It made special reference to the risks posed by abrupt reversals of capital flows and to the need for efforts by the Fund and the World Bank to help member countries to strengthen their financial sectors, and for an improved communication process between the IMF and member countries, requesting the Executive Board to develop a “tiered response” involving increasingly stern warnings to countries believed to be following policies seriously off course.²⁷

However, despite the reference to interdependence, it is not evident that these proposals extend to weaknesses arising from the lack of balance in existing procedures. The focus of attention continues to be on the impact of domestic policies in generating financial fragility and crisis rather than on external influences produced by monetary and exchange rate policies of the major industrial countries.

Moreover, even within the current limits of surveillance, the IMF has a mixed record of diagnosis of build-up of financial fragility and external vulnerability. Thus, various questions emerging from recent experience can be posed regarding the direction which should be taken by more concrete guidelines for article IV surveillance as a follow-up to the Interim Committee’s Communiqué:

- In the context of such surveillance can confidence be placed in the improvement of capacities to identify factors likely to cause

such crises in a world of increasingly liberalized capital flows?²⁸

- In the absence of such capacities might it not be more prudent to place greater reliance as a matter of course on capital controls and other measures at the national level directed at external assets and liabilities (such as those discussed in subsection 5 below)?
- If the latter approach is adopted, should new guidelines for IMF surveillance not specify circumstances in which the Fund should actually recommend the imposition or strengthening of capital controls?
- How far should IMF surveillance be extended to cover subjects such as financial regulation and standards for financial reporting and accounting?
- What should be the relations between IMF policy surveillance and the consultation and collaboration procedures of regional bodies, which in future are likely to include not only existing agreements such as those of the EU but also new ones among developing countries, an example of which is described in subsection 7 below?
- Finally, how can more effective implementation of the policy recommendations put forward as part of surveillance be achieved?

These are clearly delicate questions involving not only formulation of an appropriate framework and development of technical competence, but also powers and responsibilities in areas where multi-lateral bodies other than the IMF already exist.

2. Information and transparency

The Asian financial crisis has accelerated initiatives to improve the timeliness and quality of information concerning key macroeconomic variables as well as the financial reporting of banks and non-financial firms. The first of these subjects was accorded by the IMF's Interim Committee in April 1998 an essential position in its proposals for strengthening the architecture of the international monetary system.

The central element of the IMF's own initiatives in this area is the Special Data Dissemination Standard (SDDS), established in April 1996 to

guide member countries in the public dissemination of economic and financial information in the context of seeking or maintaining access to international financial markets. At the time it was hoped that the new, more stringent rules associated with the SDDS would serve as an early warning system that would help to prevent future financial crises. However, in the event the rules did not make such a contribution in the case of the Asian crisis.

Countries subscribing to the SDDS commit themselves to certain standards regarding data dissemination in four areas: coverage, periodicity and timeliness; public access; integrity of the data; and quality of the data. The subjects to be covered comprise national accounts, production, conditions in the labour market, prices, the determinants and principal features of the government's fiscal balance and debt position, the accounts of the central bank and of the financial sector (which include monetary aggregates and credit), interest rates and stock prices, the balance of payments and international reserves, international investment, and spot and forward exchange rates. In April 1998 the Interim Committee proposed a broadening of the SDDS, clearly inspired in part by what it considered to be the role of informational deficiencies in the Asian crisis, so that the system would also cover additional financial data such as net reserves (after allowance for central banks' liabilities under forward or derivative transactions), the debt (especially the short-term debt) of economic agents, and other indicators bearing on the stability of the financial sector.

While initiatives such as the SDDS are capable of furnishing additional, more timely and reliable information to investors and policymakers, emphasis on inadequate information as the major reason for failure to forecast the Asian crisis appears misplaced or exaggerated. Data were generally available concerning key variables in the countries concerned, such as their balance of payments, both their short- and longer-term external debt and net external assets (in particular in the periodic reports of the Bank for International Settlements [BIS] concerning international bank lending), their capital inflows, the exposure of banks and other financial firms to different sectors or categories of economic activity, the problems of the property sector, and (in the Republic of Korea) the precarious balance sheets and low recent profitability of many non-financial firms. The crisis has pointed to weaknesses in available information pertinent to governments' ability to

manage capital flows and external debt: for example, in some cases existing data systems provided inadequate indications about the scale and nature of the exposure of Asian banks to other countries in the region, and about the country of ultimate risk in international inter-bank lending involving such banks. But these weaknesses were not an essential part of the failure to forecast the crisis. Rather, what was missing was adequate evaluation of the implications of available information for countries' ability to continue to obtain funding from the international financial markets.

Furthermore, it should be noted that quicker access to macroeconomic and financial information may also be a source of instability. General dissemination of certain up-to-date data (including some bearing on unfavourable developments affecting countries' external assets and liabilities) is capable actually of increasing the volatility of capital flows. If, in consequence, a decision were to be taken to restrict the availability of such information in the interest of avoiding volatility, a difficult and perhaps invidious choice might have to be made regarding the parties to whom disclosure would be made.

The Asian crisis has also focused special attention on standards of accounting and financial reporting. Efforts in these areas were already under way before the crisis as part of the upgrading of financial markets not only in Asia but also in other regions. But the crisis has provided additional impetus to the process, particularly as part of the strengthening of bank regulation and supervision, of which adequate accounting and reporting are integral components.

3. Domestic financial regulation and supervision

Weak credit evaluation and speculative lending, as well as failure to control currency risk among banks and other financial firms, contributed both to the outbreak of the Asian financial crisis and to its amplitude. The growth of doubtful and non-performing loans, accompanied in some countries by widespread insolvencies in the financial sector, will create major problems for government budgets and be a drag on the availability of lending for a considerable time to come. There is general agreement that regulatory reform is an essential part of the strengthening and re-

structuring of the financial sectors of most countries affected by the crisis. However, such reform is not a fail-safe way of preventing financial crises, though it can reduce their likelihood and help to contain their effects.

In recent years there has been widespread reform and strengthening of financial regulation at the national level, accompanied by a proliferation of international initiatives to raise regulatory standards and to improve cooperation among supervisors. These processes have been largely driven by concerns raised in relation to financial liberalization and global financial integration. On the one hand, the diversification of their services and the increased competition that are associated with liberalization have exposed financial firms to new levels of risk, which have necessitated overhaul not only of financial regulation but also of firms' systems of internal control. On the other hand, global financial integration has brought in its train much greater exposure among countries to each other's financial and macroeconomic conditions and increased possibilities for the cross-border transmission of destabilizing influences. Such exposure has been dramatized by various events since the beginning of the 1970s. For example, the insolvencies of two international banks in 1974 (Bankhaus Herstatt and Franklin National Bank) pointed to the danger of cross-border spillover effects from the failures of financial firms, and provided the initial impetus for international initiatives regarding financial regulation and supervision. Subsequent efforts to strengthen standards and international cooperation in this area have also been partly a response to, and their substance has been influenced by, such events as the developing-country debt crisis of the 1980s and failures of individual financial firms such as Banco Ambrosiano (1982), Bank of Credit and Commerce International (1991) and Barings (1995), each of which in their different ways exposed weaknesses in banking regulation and in cross-border cooperation among banking supervisors.

The main vehicles for international initiatives regarding financial regulation and supervision have been the Basle Committee on Banking Supervision and other bodies with close links to the BIS, other groups of financial supervisors, associations of exchanges, and organizations concerned with accounting standards. The initiatives of the Basle Committee have included the adoption of principles designed to ensure that no international bank escapes adequate supervision and the prescription of levels of capital commensurate with

the risks that banks run: agreements under the latter heading were reached concerning credit risks in 1988 and concerning market risks in 1996.²⁹ The Basle Committee has also devoted considerable attention to the improvement of banks' systems of internal control and, together with the International Organization of Securities Commissions (IOSCO), has developed guidelines for the disclosure by banks and securities firms of their trading and derivatives activities. Furthermore, the Committee on Payment and Settlement Systems has made several proposals designed to reduce the risks due to financial firms' exposure to the possibility of non-payment by their counterparties in international transactions.

Membership of the various bodies linked to the BIS which are concerned with different aspects of banking supervision is limited to a small group of countries. However, efforts have been made to promote Basle standards through contacts with other groups of banking supervisors, and special attention has recently been paid to regulation and supervision of emerging financial markets. One important outcome of these efforts is the recent release of the statement entitled *Core Principles for Effective Banking Supervision*, the drafting of which involved extensive consultations with parties in developing countries. The coverage of these principles includes the permissible activities of banks, licensing criteria, the vetting of banks' controlling interests, capital and risk management, guidelines on lending to related companies and individuals, "know your customer" procedures intended to prevent the criminal use of banks, the information and methods required for effective supervision, the powers of supervisors, and consolidated supervision of international banks. However, the introduction of improved standards in this field takes considerable time and the full benefits of international initiatives so far are unlikely to be experienced soon. Moreover, the coverage of international regulatory and supervisory cooperation is incomplete, thereby restricting its effectiveness: offshore financial centres and several increasingly important actors in international capital flows such as investment funds are still only partly included or not included at all. And the networks of cooperation and information exchange among financial supervisors required for the effective implementation of international agreements are still being developed.

Strengthened financial regulation can at best reduce the probability of financial crises. But the

periodic incidence since the beginning of the 1980s of banking crises in industrial countries such as the United States, the United Kingdom and parts of Scandinavia exemplifies its inability to eliminate them. This inability stems partly from imperfections in the regulatory process itself, such as its tendency to lag behind changes in financial firms' practices, and the difficulty of imposing regulatory transparency on such firms.³⁰ Perhaps more fundamentally for the assessment of what regulation can and cannot do, no loan or other asset on a bank's balance sheet should be classified generically as "good". However reasonable the original managerial decision to make a loan and however justified its initial classification as low-risk by banking supervisors, the loan is vulnerable to the possibility of an eventual deterioration in its status. Unfavourable changes in macroeconomic conditions (of external as well as domestic origin) are a factor frequently cited here. Arguably, the deterioration in the status of many loans is in fact an intrinsic feature of the boom-bust process often associated with financial crises. During this process risks take time to build up and to become widely evident. Indeed, for a time the quality of a loan can be validated or even enhanced by the effects on values of the very financing boom of which it is a constituent part. Thus, during booms the incentives for herd-like behaviour are not limited to speculative lenders. As a result, "risk-based competition propels the entire system towards excessive levels of indebtedness",³¹ but excess capacity generated by the boom itself (widely exemplified during the savings and loan crisis in the United States discussed in the annex to chapter III) as well as the over-extended positions of financial firms do eventually make themselves felt, often in conjunction with rises in interest rates or downturns in economic activity.

The limits on the crisis-preventing potential of financial regulation are generally recognized by specialists in the field,³² so that its primary objectives are regarded as having more to do with reducing financial firms' liquidity and solvency problems, protecting depositors, and preventing systemic risks due to contagion effects. This is not to deny that beneficial connections among regulation, incentives and internal controls are capable of enhancing the safety of financial firms. Capital requirements appropriate to the credit and market risks run by these firms can improve the quality of their lending and their portfolio management, and lead to better pricing of the services which they supply. But as should be evident from

the argument above, some of the risks faced by financial firms arise from circumstances over which they have little or no control. Against such risks robust financial regulation provides cushions both to individual firms and to the financial system. However, the protection thus afforded has repeatedly been shown to be only partial.

If absence of complete protection from crises is characteristic even of financial sectors subject to relatively developed regimes of regulation and supervision, then unsurprisingly the same is *a fortiori* true of those subject to weaker regimes in the great majority of developing countries, whose vulnerability has been graphically illustrated by some of the examples discussed in chapter III above. Moreover, the financial sectors in the latter countries frequently have to withstand more severe macroeconomic shocks than their counterparts in industrial countries.³³ The severity and frequency of such shocks cannot always be reduced by macroeconomic policy. True enough, financial regulation and supervision can be improved until they attain the levels of prevailing best practice (though, as already suggested, that will generally take several years), but even then financial crises will remain possible.

4. Tighter control of international lending and portfolio investment

It could be argued that in a well functioning world economy no separate rules or restrictions would be required for international lending and portfolio investment beyond those associated with national prudential regulation of financial firms in both the source and recipient countries, and with the regulation of issuance and trading procedures for organized exchanges and other markets for financial assets and instruments. In such a world international capital flows would be closely related to payments and financing in international trade and investment, and driven by the economic fundamentals of firms and other recipients. But reality is otherwise. Much bank lending and portfolio investment in short-term debt securities is a response to interest rate arbitrage margins, which reflect the exigencies of monetary policy and can persist for long periods (frequently being eliminated by large eventual devaluations), or to differences among countries in the regulatory and tax treatment of external borrowing. Furthermore, much international portfolio investment responds

less to the long-term economic prospects of individual firms than to expectations of short-term capital gains and losses, of which a major determinant in many cases is the ebb and flow of international portfolio investment itself, because effects on equity prices reflect the disparity between the limited capitalization of many stock markets and the large size of funds at the disposal of investment institutions of major industrial countries. The frequently tenuous connections between the forces influencing international lending and portfolio investment, on the one hand, and the fundamentals of economies and firms, on the other, have led to booms and busts in such financing which bear many similarities to the analogous fluctuations in bank lending at national level described under domestic financial regulation.

Risks of loss in this system are unevenly distributed. While during financial crises large losses may be incurred by external investors in stock markets, banks are often protected from losses on their international lending in various ways – by formal or informal protection against insolvency provided by the governments of borrowing countries to their domestic banks (often large recipients of funds borrowed from abroad),³⁴ in some cases by explicit guarantees extended by governments on foreign deposits in their banks, and (as noted in chapter III) by the IMF bailouts.

Controls over international lending and portfolio investment can be imposed at source, by the recipient, or at both levels. Controls by the recipient belong under the heading of those over capital transactions and are discussed above. The motivation of proposals for control at source is the belief that not all the responsibility for, and the costs of, such controls should be borne by recipients, and that even when controls by recipients are in place, controls at source are capable of further reducing the probability of potentially destabilizing capital flows and financial crises. Many ideas for controlling capital flows at source have been put forward in recent years, several of those directed at international bank lending having originally been a response to the developing-country debt crisis of the 1980s.³⁵ Proposals for checking excessive international bank lending typically involve mechanisms for capping external indebtedness which could not be expected to emerge through the operation of competitive financial markets, such as cartel-like arrangements among banks to impose country credit ceilings or the acceptance by lenders of guidelines regarding

a country's sustainable level of borrowing set by a multilateral institution. Unsurprisingly, the Asian financial crisis has served as a stimulus for new proposals, and greater attention has been given to portfolio flows, which were not prominent in the debt crisis of the 1980s. The general conclusion of the discussion of proposals which follows is that the more ambitious ideas have features which are an obstacle to their adoption, while the contribution of ameliorative changes which seem more likely to be within reach is not such as to remove the need for capital controls imposed by recipient countries.

One proposal, which would lead as a by-product to better control of international lending, is for a radical strengthening of existing supervision of financial firms through the establishment of an international body – the Board of Overseers of Major International Institutions and Markets – with wide-ranging powers for the oversight and regulation of commercial banking, securities business and insurance (activities now bestrode in some cases by financial conglomerates). For this purpose, it would be “empowered to set mutually acceptable standards for all major institutions, to establish uniform trading, reporting and disclosure standards for open credit markets, and to monitor the performance of institutions and markets under its jurisdiction”.³⁶ This proposal would address problems associated with the significant differences which still characterize national regimes for financial regulation. Such differences, as mentioned above, are one of the causes of capital flows in the form of international bank lending with often only a limited connection with real economic activity. But despite progress under recent international initiatives concerned with financial regulation and supervision towards objectives which include both the raising of standards and greater convergence among national regimes, the proposal seems utopian.

Another proposal, which focuses more narrowly on international bank lending, is for the establishment of an International Credit Insurance Corporation (ICIC) “as a sister institution to the IMF”.³⁷ This body would guarantee international loans for a modest fee but would set a ceiling on the amount of borrowing by particular countries which it was willing to insure. The ceiling would be based on evaluation of data concerning all of its borrowings, which a country would be obliged to furnish to the ICIC. In consequence, countries would be able to borrow at low rates of interest

up to their ceilings, but beyond them lenders would be much more cautious and money would be available only at rates of interest incorporating a substantial risk premium (or not at all). The likelihood of excessive credit expansion would thus be reduced, as would that of the financial crises which can follow in its wake.

This proposal poses questions concerning feasibility, the quality of credit rating and the powers which would be conferred on such an institution. Feasibility does not appear to be an insurmountable problem: more widespread application of well-established modalities for the provision of credit insurance would be involved. These modalities comprise establishment of risk criteria, decisions about particular borrowers' creditworthiness as measured by these criteria which enable the setting of insurance premiums, and the administration of the insurance facilities. Such tasks are already carried out by export credit agencies (ECAs) of OECD countries. The major departure under the heading of an ICIC would be conferring on a single body the responsibilities regarding the risk criteria and creditworthiness indicators for the lending covered by its insurance facilities.³⁸ Administration might actually be carried out by existing institutions such as ECAs. However, it is questionable whether generally acceptable indicators could be developed by an ICIC, given the current state of the art in this area. The record of credit rating agencies, for example, in assessing the creditworthiness of developing-country borrowers exemplifies the difficulties entailed by the evaluation required, although an ICIC would not have to depend, as the agencies sometimes do, largely on published information.³⁹ Surveillance by the IMF, on the other hand, which involves evaluation similar in some respects to that carried out for credit rating, not only has been characterized on occasion by failures to identify weaknesses which could result in financial crises but also illustrates the political sensitivities associated with the disclosure of the evaluations of an official multilateral body bearing on countries' creditworthiness (even when, as in this case, the disclosure is less directly linked to access to borrowing than it would be under the proposal for an ICIC). Nevertheless, better information concerning borrowers could be expected to lead in time to the possibility of improved evaluation of countries' creditworthiness.⁴⁰ On the final question posed above concerning an ICIC's powers, however, the prospect of international agreement to confer such powers on either a new or existing international agency seems remote.

In debate about ways to exercise better control over international bank lending attention has also focused on inter-bank flows. There is widespread agreement that improved monitoring of such flows could contribute to better decision-making by participants in financial markets and better management of the international financial system.⁴¹ But it is also believed that inter-bank lending is often associated with weaker credit assessment and with levels of bank capital which do not adequately reflect the credit risk involved. This has led Alan Greenspan, for example, to suggest that international inter-bank lending is an area requiring regulatory changes which would have the consequence of raising the cost to banks of such lending so that they better reflected its risks.⁴² Steps in this direction would represent a reversal of long-term tendencies to reduce the costs associated with international bank lending.⁴³ One possible starting-point for action here would be the 1988 Basle Capital Accord, under which claims incorporated on banks outside the OECD area with a residual maturity of up to one year and all claims on banks incorporated in the OECD area are attributed a low (20 per cent) risk weight for the purpose of calculation of capital requirements. Yet the short-term exposure of international banks has been a major feature of recent external debt crises. Thus one way of causing tighter control to be exercised over banks' international inter-bank exposure would be to increase the risk weight for such exposure in the setting of capital requirements.

Such a step should lead to better internal accounting by banks for the risks of this type of international lending but would none the less be a crudely calibrated method of dealing with problems caused by banks' inter-bank exposure to countries with deteriorating creditworthiness. A more flexible approach might be based on existing country-specific procedures for monitoring banks' external exposures as part of bank supervision. These procedures frequently provide supervisors with authority to determine the levels of reserves appropriate to banks' external exposures, and could easily be used for the purpose of a more rigorous treatment of their inter-bank exposures to riskier countries (though, again, the effectiveness of the measure would depend on the quality of supervisors' systems for credit rating).

As already noted, proposals for controlling capital inflows triggered by the Asian crisis have

also covered forms other than bank lending. One such proposal is designed to increase the stability of mutual funds' investments in securities issued by entities in developing countries by requiring the funds to hold liquid reserves amounting to some proportion of such securities.⁴⁴ These reserves could then be tapped into in the event of large declines in the securities' market value and would thus reduce the incentives to dump such securities for the purpose of obtaining the liquidity needed to meet redemptions. Also, the hope is expressed that although such reserve requirements would reduce the speculative returns to mutual funds' investments in emerging financial markets, the resulting reduction in market risk would none the less increase their attractiveness to long-term investors.

Mandatory requirements for mutual funds to hold liquid reserves of this kind would represent a radical break with existing regulatory practice. Moreover, another feature of this proposal which would entail variations in these liquidity requirements in accordance with the creditworthiness of the countries in which mutual funds made their investments (making the requirements "risk-weighted" in the author's words) would require the introduction of supervisory procedures for such funds analogous to those for banks (and under this heading an agreed system for rating creditworthiness – a task involving problems that have already been mentioned).

Nevertheless, despite the problems it poses, this proposal represents an attempt to confront a source of potential volatility for an increasingly important category of financial flows to emerging financial markets. As such it may serve to stimulate discussion concerning other possible measures for this purpose. An alternative approach, for example, might build on the exit fees which are a feature of some mutual funds.⁴⁵ These fees can vary with the holding period of investments and might thus be expected to act as a disincentive to investors seeking short-term returns. If this approach were deemed appropriate, ways could be sought to generalize exit fees for emerging-market mutual funds. It has the advantage that it would build on existing market practice. However, it would require agreement among the countries serving as major domiciles of emerging-market funds in order to prevent a flight of such funds to jurisdictions not imposing the exit fees, and an agreement of this kind would not be easy to achieve.

5. **Capital controls and other measures for the management of external assets and liabilities**

Management of a country's external assets and liabilities is linked to many other dimensions of economic policy, such as good macroeconomic fundamentals, effective financial regulation and supervision, and even good corporate governance. However, experience shows that these are necessary but not sufficient conditions for the avoidance of financial crises. It also shows that a key role here is played by policies aimed specifically at external assets and liabilities – most importantly capital controls but also certain other measures designed to influence borrowing, lending and asset holding.

Controls on capital flows are imposed both as part of macroeconomic management and in pursuit of long-term policy objectives related to national economic development and autonomy. Controls imposed for macroeconomic reasons are typically closely related to other monetary and fiscal measures, their function being to reinforce such measures or to substitute for them when reliance on other policy instruments is thought likely to be ineffective or to cause undesirably large movements of key variables such as interest and exchange rates. Controls under the second heading have such aims as ensuring that the capital of a country's residents is invested locally or that certain types of economic activity are reserved partly or wholly for residents.

The transactions which may be subject to capital controls are manifold and from some points of view avoid simple categorization. This applies, for example, to attempting to distinguish between short- and longer-term transactions: certain assets or instruments are clearly associated mostly or exclusively with short-term transactions, but others serve equally for short- or longer-term transactions so long as there exists a liquid secondary market for them.⁴⁶ Moreover, legal and administrative distinctions embodied in national regimes of capital control do not necessarily correspond neatly to the conceptual classification used by economists (for example, with respect to direct as opposed to portfolio investment). A by no means exhaustive list of the assets involved in capital transactions might include direct investments, long-term and short-term loans, cross-border holdings of real estate, domestically and internationally

issued equity and debt (the latter ranging in maturity from money-market instruments to longer-term notes and bonds), collective investment securities (such as in shares in mutual funds), deposits with banks and other financial firms, guarantees and financial back-up facilities, life insurance contracts, various assets associated with personal capital movements (such as gifts, dowries and inheritances), blocked funds owned by non-residents, and derivative instruments.

Because of institutional and regulatory features of financial systems and of effects on incentives, controls imposed on capital inflows or external liabilities may also influence capital outflows and external assets, and vice versa. Such influences can be seen, for example, in controls on portfolio equity and direct investment, where rules concerning the repatriation of capital clearly affect the incentives for inflows. Likewise, rules applying to the portfolios of foreign firms regarding such matters as the freedom to engage in outward as well as inward investment transactions will influence their willingness to establish a commercial presence through direct investment. More generally, rules concerning the cross-border capital transactions open to financial firms in a country, as well as the matching of the currency denominations of their assets and liabilities, affect their willingness to depend on such inflows and their efforts to attract them.

In view of the close connections between capital controls, on the one hand, and certain other instruments of policy, on the other, classification of measures under one or the other heading may be somewhat arbitrary. For example, special reserve requirements concerning banks' liabilities to non-residents (a policy to which frequent reference is made in the following discussion) can reasonably be classified as either an instrument of monetary policy or a capital control. Moreover, since such requirements affect the quality of financial firms' balance sheets, they can equally be (and often are) classified as a "prudential" measure. Similar alternative classifications might also be attributed to restrictions on banks' net assets or liabilities in foreign currencies.

Traditionally, capital controls focused mainly on cross-border transactions of residents and non-residents. However, owing to deregulation and developments in banking technique making possible the supply of increasingly diversified services, accounts and transactions denominated in foreign

currencies are now often available to residents, and they affect macroeconomic conditions, particularly exchange rates, in much the same way as cross-border financial transactions.

Many different measures are available for controlling capital movements, some with a broad incidence and others aimed at more narrowly defined transactions. Controls on inflows of FDI and portfolio equity investment (not always clearly distinguished in the regulations, as mentioned earlier) may take the form of licensing, ceilings on foreign equity participation in domestic firms, official permission for international equity issues, differential regulations applying to domestic and foreign firms regarding establishment and permissible operations, and various kinds of two-tier markets. For example, under a two-tier market investments in a country's securities by non-residents may be limited to those purchased from other non-residents, and transfers of the country's currency for such transactions may be limited to those made possible by purchases and sales of such securities by non-residents (a measure designed to reduce the likelihood of falls in securities prices being accompanied by depreciations in the currency or declines in reserves).

Some of these controls can also be imposed on capital inflows associated with debt securities, both bonds and other instruments. Such inflows can thus be subject to special taxes or be limited to transactions carried out through a two-tier market. Ceilings (possibly as low as zero) may apply to non-residents' holdings of the debt issues of both firms and the government, or approval may have to be sought for the purchase of such issues by foreigners. Moreover, non-residents may be excluded from auctions for government bonds and government paper.

Various other controls are commonly used to restrict external borrowing from banks: the special reserve requirements concerning liabilities to non-residents already mentioned (to raise the costs and reduce the profits associated with on-lending of the capital inflows); forbidding banks to pay interest on the deposits of non-residents or even requiring negative interest rates ("commission") on such deposits; taxing foreign borrowing to eliminate the arbitrage margin between domestic and foreign interest rates;⁴⁷ and the imposition on both financial and non-financial firms of cash deposits at the central bank amounting to a certain proportion of their external borrowing (a meas-

ure pioneered by Germany in 1972 under the name of "Bardepot").

Controls on outward transactions for direct and portfolio equity investment can apply to residents as well as to non-residents. Restrictions on the latter can be directed at the repatriation of capital, for example, in the form of statutory periods before such repatriation is allowed or regulations providing for phasing of repatriation in accordance with the availability of foreign exchange or the need to maintain an orderly market for the country's currency. Residents may be restricted as to their holdings of foreign stocks, either directly or through limitations on the permissible portfolios of the country's investment funds. Two-tier exchange rates may also be used to restrict residents' foreign investment by requiring that capital transactions be undertaken through a market in which a less favourable rate than for current transactions generally holds. Some of these techniques are also used for purchases of debt securities issued abroad and for other forms of lending abroad. In the case of bank deposits by residents abroad, their availability can be restricted by law.

As already mentioned, the question of controlling "dollarization", in particular residents' bank deposits denominated in foreign currencies, as well as banks' lending to residents in foreign currencies, also falls under the heading of capital controls. Such loans and deposits can increase currency mismatching, which is a potential source of financial instability, and can precipitate and facilitate large shifts between currencies during financial crises, putting pressure on the exchange rate and resulting in widespread insolvencies among debtors.

The Asian crisis has drawn attention to issues deserving separate mention under the heading of measures to manage external assets and liabilities. During that crisis attention focused on the flight to foreign currencies which accompanied depreciations, but it was impossible to distinguish between flight which was due to speculation and flight due to belated attempts to cover foreign exchange exposures. However, as discussed in chapter III, there can be little doubt that mismatches between the currency denominations of the assets and liabilities of non-financial and financial firms made an important contribution, and were facilitated both by the ease of borrowing in foreign currencies and, in some cases, by the issuance to residents of bank deposits denominated in foreign currencies.⁴⁸

To the extent that such liabilities are matched by assets (including loans) denominated in the same currencies, the foreign exchange risks are shifted to debtors, for whom such risks may be hedged by export earnings but frequently translate into credit risk. To the extent that the liabilities are not so matched, the resulting risks fall directly on the banks. The existence of such assets and liabilities, if sufficiently widespread, may thus pose a threat to the financial system.

Part of the solution to this problem can be found in strict enforcement of prudential rules regarding the matching of the currency denominations of financial firms' assets and liabilities and measures increasing the costs of foreign borrowing through the imposition of taxes, special reserve requirements or cash deposits at the central bank. But, as already suggested, tighter restrictions might also be applied to "dollarization" itself. These might take the form of limiting bank lending and deposits in foreign currencies. Non-interest-bearing reserve requirements could be imposed on deposits in bank accounts in foreign currencies, thus reducing or eliminating the interest paid on them and diminishing their attractiveness.

The Asian crisis has also starkly demonstrated the risks that can result from failure to enforce adequate separation between the onshore and offshore activities of a country's banks. A number of Asian countries have established offshore centres, whose activities are subject to lighter regulation and certain tax privileges, with the aim *inter alia* of facilitating participation by their banks in regional or global banking business. One such centre is the Bangkok International Banking Facility (BIBF), established by Thailand in 1992. As discussed in chapter III, BIBF entities increasingly served as a conduit for interest rate arbitrage between the domestic and international financial markets, much of the financing made available through such arbitrage being used to finance speculation in stocks and property.

There is a contrast between this relatively uncontrolled use of offshore financing in Thailand and the functioning of Singapore's offshore banking centre established in 1968.⁴⁹ Offshore banking in Singapore is conducted through Asian Currency Units (ACUs), which are integral parts of licensed banks. Indeed, except with respect to the segregation of its activities for accounting, fiscal and regulatory purposes, an ACU has no identity distinct from that of the bank in which it is located.

The legal framework for ACUs is designed to facilitate their participation in regional banking business, while restricting the use of the Singapore dollar as an international currency and controlling ACUs' involvement in domestic banking business. ACUs can accept deposits in Singapore dollars only above a certain amount and only from non-residents and from other banks and financial firms, and loans to domestic firms in Singapore dollars are also subject to a ceiling. Since 1983 ACUs have had to obtain official approval for the granting of credit facilities to non-residents of above 5 million Singapore dollars or to residents for use outside the country, a requirement that hinders short selling of the Singapore dollar in currency trading and the use by non-residents of such facilities for portfolio and property investment.

The success of these policies in maintaining the offshore character of Singapore's ACUs can be illustrated from data on their assets and liabilities: 63 per cent of their liabilities in 1996 were from sources outside the country, and 42 per cent of their assets consisted of loans to banks outside the country. By contrast, there are estimates that as much as 95 per cent of the money raised by BIBF entities was lent domestically. The example of ACUs points both to the feasibility of a measure of insulation of offshore banking from the domestic market and to its benefits in terms of the contribution to financial stability.

Use of capital controls has been a pervasive feature of the experience of the last few decades. In early post-war years capital controls for macroeconomic reasons were generally imposed on outflows as part of policies for dealing with balance-of-payments difficulties and for avoiding, or reducing the size of, devaluations. Moreover, there was widespread use by both developed and developing countries of controls on capital inflows for the longer-term developmental or structural reasons mentioned above. With the return to freer capital movements from the 1960s onwards, large capital inflows posed problems at various times for the governments of certain industrial countries such as Germany, the Netherlands and Switzerland, which responded with various controls such as those already discussed on purchases by non-residents of domestically issued debt securities and the bank deposits of non-residents. More recently, a number of developing countries experiencing similar macroeconomic problems as a result of large capital inflows have resorted to capital controls as part of their policy response.⁵⁰

- In Malaysia, initial reliance on sterilization served to widen the difference between domestic and external interest rates, leading to an accelerated surge in short-term capital inflows. In January 1994 the Government responded with the imposition of the following capital controls (gradually removed from 1995 onwards): banks were subjected to a ceiling on their external liabilities not related to trade or investment; residents were prohibited from selling short-term monetary instruments to non-residents; commercial banks were required to deposit at no interest in the central bank monies in ringgit accounts owned by foreign banks; and commercial banks were also restricted in the outright forward and swap transactions they were permitted to engage in with foreigners.⁵¹
- In Chile, too, reliance on sterilization in the early 1990s in response to increasing capital inflows led to a rise in interest rates and an acceleration of the inflows. In consequence, the Government had recourse to various policies designed to slow short-term inflows and even to encourage certain categories of outflow, including the imposition of an unremunerated reserve requirement on foreign borrowing of 20 per cent (subsequently raised to 30 per cent), to be deposited at the central bank for a year.
- In Colombia, sterilization was eventually abandoned as a response to capital inflows in the 1990s, and in its place was established a reserve requirement on loans (other than short-term trade-related credits) with maturities up to five years, which was to be maintained for the loan's entire duration but whose magnitude was a decreasing function of its maturity.
- In Brazil, sterilization policies adopted to deal with increased capital inflows after the implementation of the country's currency reform in mid-1994 were supplemented by an increase in the tax paid by Brazilian firms on bonds issued abroad, the imposition of a tax on foreigners' investment in the stock market, and an increase in the tax on foreign purchases of domestic fixed-income investments.
- In the Czech Republic, a large increase in capital inflows in 1994-1995 led initially to a policy of sterilization, but this was followed

by the imposition of a tax at a rate of 0.25 per cent on foreign exchange transactions with banks, as well as by limits on, and a requirement of official approval for, short-term borrowing abroad by banks and other firms.

Evaluation of these controls suggests that in most cases they were effective to varying degrees: inflows significantly declined as a percentage of GDP after their imposition except in Brazil and Colombia, with short-term inflows actually becoming negative for a time in Chile and Malaysia; and in Chile and Colombia there was shift away from short-term in the composition of inflows.

This recent recourse to capital controls, sometimes for significant periods of time, has taken place in a context marked by international initiatives aimed at restricting countries' freedom to deploy such measures. A major target of these initiatives is the only global regime applying to such movements, that of the IMF.⁵² The primary original aim of this regime with respect to such movements was the promotion of world trade and economic activity through the elimination of restrictions on current transactions. Freedom of capital movements was not a principle of the IMF's original Articles of Agreement. Indeed, under article VI, section 3, members are explicitly accorded the right to regulate international capital movements so long as the controls do not also restrict current transactions, and under article VI, section 1(a), resources from the Fund's General Resources Account are not to be used to finance a large or sustained outflow of capital.⁵³

However, gradual relaxation of initial limitations on the IMF's involvement in the liberalization of capital transactions has been evident in a number of decisions and other changes since the late 1970s. In the amended version of the Articles of Agreement which took effect in 1978, article IV contains the statement that an essential purpose of the international monetary system is to provide a framework that facilitates the exchange of capital among countries. In April 1995 the list of developments that may trigger discussions between the Fund and a member country under IMF surveillance of exchange rate policies was extended to include "unsustainable flows of private capital".⁵⁴ In December 1997 approval was given to the establishment of the Supplemental Reserve Facility, under which financial assistance is extended to a country experiencing balance-of-payments difficulties due to sudden, disruptive

losses of market confidence which are reflected in pressures on its capital account and reserves. Lastly, under a current initiative approved by the Interim Committee the Fund's articles are to be amended to include the liberalization of capital movements amongst the organization's purposes and to provide a formal extension of its jurisdiction to such movements.⁵⁵

If such an amendment is adopted, it is capable of having knock-on effects on other internationally agreed rules. For example, under the WTO agreements regulating trade in goods and services, when a country has recourse to restrictions to safeguard its balance of payments, these restrictions are to be consistent with its obligations under the IMF's Articles of Agreement, and the Fund has the role of assessing the restrictions' justification on the basis of the country's balance-of-payments and reserves position. The proposed extension of the Fund's formal jurisdiction to capital transactions might thus result in a reduction of countries' existing autonomy regarding control of capital transactions under the WTO regime.⁵⁶ But recent financial crises and the frequent recourse by countries to controls to contain the effects of swings in capital flows point to the case for continuing to accord governments such autonomy. The discussion in this chapter does not suggest that ways have yet been found at a global level to eliminate cross-border transmission of financial shocks associated with greater global financial integration or other pressures connected with capital movements which are capable of triggering financial crises. These weaknesses in the existing armoury of policy measures raise serious questions as to the appropriateness of current steps to promote the liberalization of capital movements as an international policy objective. Indeed, for the foreseeable future, flexibility rather than additional constraints or obligations would appear to be necessary.

6. Exchange rate policies

Questions about connections between exchange rate regimes and financial crises have been raised by the contribution of stable exchange rates (with their accompaniment of excessive short-term external borrowing and increased currency risk) to the build-up of financial fragility in East Asia, and by the role of the subsequent movements in exchange rates in triggering the crisis and spreading it throughout the region. The conclusion of

the discussion which follows is that no regime is likely to provide foolproof protection against such crises. However, managed exchange rates, in combination with controls on capital transactions, can do much to prevent large swings in capital flows, thus making an important contribution to macroeconomic stability.

As described in box 2, at the outbreak of the crisis the East Asian economies most seriously affected, except Hong Kong, China, operated foreign exchange regimes under which the central bank intervened to stabilize the spot rate according to generally understood guidelines, while Hong Kong, China, had a currency-board arrangement. During 1990-1996 many East and South Asian countries were recipients of large capital inflows. Faced with such inflows, monetary authorities can either let the currency appreciate or intervene to prevent an appreciation, and most of the East Asian recipients chose the latter course.

The question has been posed whether freely floating exchange rates would have been preferable to the managed rates in force in several East and South Asian countries before the crisis. Floating rates in the early 1990s would probably have led to sharp appreciations in comparison with the levels actually observed, which would almost certainly have provoked stiff political resistance owing to their effects on exports. If freely floating exchange rates had brought about greater instability in relative rates, they might have discouraged arbitrage flows but also ultimately have threatened the pattern of relatively stable exchange rates which underpinned economic development in the region, and might have risked causing tensions in trading relations.

At the other extreme, the suggestion has been made that crises like the Asian one might be avoided by the establishment of currency-board systems involving exchange rates rigidly pegged to an anchor currency. Under such a system there is an unequivocal commitment to supply or redeem monetary liabilities of the monetary authority at a fixed rate. Moreover, these are the only terms on which such liabilities are exchanged. Two particularly well known systems of this kind are those of Argentina and Hong Kong, China, but a number of other countries, including some transition economies, also operate them. In their purest form currency boards cannot extend credit to the government, the banking system or other borrowers,

and interest rates are market-determined, the monetary base being rigidly linked to the country's foreign exchange reserves. These conditions do not hold strictly in so far as the currency board has external reserves in excess of the economy's monetary base (which has recently been the case, for example, in Hong Kong, China) or in so far as the legal framework permits some of the reserves backing the monetary base to be held in forms other than foreign currency (as in Argentina).

The benefits attributed by its advocates to a currency board include the credibility conferred by such a regime on the monetary authority and the elimination of the problems of external debt management which result from mismatches between the currency denomination of borrowings and that of revenues generated by the activities they finance. However, as recent experience demonstrates, such regimes do not insulate economies from instability of external origin since the impact of capital inflows and outflows is transmitted, via their effects on the monetary base, to levels of economic activity and to goods and asset prices. Moreover, in the absence of a lender of last resort, the contraction of deposits which typically follows capital outflows under such a system can threaten banking stability.⁵⁷ A currency-board system may serve an important purpose in certain circumstances, such as to halt hyperinflation. But the consequent reduction in policy autonomy means that such systems will remain acceptable and appropriate only for a small minority of countries.

There is thus no reason to condemn managed exchange rate regimes on the basis of recent experience (though their restoration in East and South Asian countries is impossible in the absence of a return to more orderly conditions in their currency markets). The alternatives of floating or rigidly fixed exchange rates can also impose costs which can outweigh their benefits. However, recent experience has also shown that managed exchange rate regimes are vulnerable to large accumulations of short-term external bank debt and of other potentially volatile external investment. Occasionally, introducing greater flexibility by widening the band of intervention could help to eliminate one-way bets and discourage arbitrage flows. But such regimes are likely to be sustainable only if accompanied by active management of external liabilities, which may often entail recourse to capital controls.

7. Regional consultation and collaboration

Regional economic arrangements often include modalities for mutual consultation and collaboration covering a broad range of subjects of economic policy. Among the aims of these modalities is frequently prevention of financial crises in member countries which might have unfavourable cross-border effects and thus prejudice achievement of the objectives of the arrangement concerned.

There is a comprehensive set of procedures of this kind for the European Union (EU), with the objective of ensuring that the functioning of the common market is not adversely affected by macroeconomic or financial developments in member States. The Treaty of Rome establishing the European Economic Community (Part Three – Title II, chapters 1-3) covered cooperation and consultation among members regarding monetary and other conjunctural policies as well as the balance of payments. Article 107, for example, enjoined members to treat exchange rate policies as a matter of common concern.⁵⁸ Furthermore, consultation and surveillance have been part of EU procedures for the provision to members of financial support for intervention in currency markets and for helping to solve balance-of-payments difficulties.

Collaboration and consultation at the regional level have also been proposed elsewhere for the purpose of helping to prevent financial crises, much of the impetus behind such initiatives coming from the objective of avoiding contagion effects. Some of the ideas put forward in this context involve mutual surveillance intended to help ensure that policies for economic and financial stability designed by the IMF are properly applied. But particular policies are not an integral part of regional collaboration and consultation in pursuit of financial stability. An ongoing initiative in ASEAN, for example, involves a mechanism for monitoring aspects of members' economic positions and policies in accordance with guidelines mutually agreed for this purpose.

Awareness among ASEAN members of the need for cooperation to prevent financial crises was already evident during the period before and leading up to the crisis. For example, at a meeting in March 1997 the ASEAN finance ministers acknowledged that a regional surveillance mecha-

nism might be established for this purpose. Two months later, pressure on the Thai baht prompted coordinated intervention by a number of Asian central banks in support of the currency. However, no such intervention took place at the time of the widespread abandonment of managed exchange rate regimes in July 1997, a fact which suggests a decision by governments that an attempt to defend exchange rates at that stage would have been too costly.

Nevertheless, consultations within ASEAN on mutual surveillance continued and at a meeting in December 1997 the ASEAN finance ministers recommended implementation of the proposal for the establishment of a regional surveillance mechanism, which has subsequently come to be known as the ASEAN Monitoring Mechanism. The function of the Monitoring Mechanism would be to help ASEAN govern-

ments to prevent future financial crises *inter alia* by serving as an early warning system which would enable corrective actions to be taken by individual countries or collectively and by protecting the region's interests during the process of global financial integration via examination of financial and monetary issues raised in international forums. This initiative responds to an urgently felt need among ASEAN members but might also eventually lead to the extension of such cooperation to other Asian countries. If in the future a decision were to be taken by ASEAN and possibly other East and South Asian countries to establish more formal arrangements for the provision of mutual external financial support than those deployed in May 1997 in defence of the baht (which might be similar to some of the EU facilities mentioned above), it would be possible to envisage a link between these arrangements and whatever surveillance mechanism is then in place. ■

Notes

- 1 This idea actually goes back to the Committee of Twenty. It was revived by the IMF in 1994, and elaborated in a paper by the management, "A short-term financing facility" (Washington, D.C.: IMF, September 1994). For discussions of the issues raised see E.V.K. Fitzgerald, "Intervention versus regulation: The role of the IMF in crisis prevention and management", *UNCTAD Review*, 1996; and J. Williamson, "A new facility for the IMF", in UNCTAD, *International Monetary and Financial Issues for the 1990s*, Vol. VI (United Nations publication, Sales No. E.96.II.D.7), New York and Geneva, 1995.
- 2 M. Feldstein, "Overdoing it in East Asia", *Foreign Affairs*, March/April 1998, p. 26.
- 3 *IMF Survey*, *Supplement on the IMF*, September 1996, p. 15.
- 4 *IMF Survey*, 12 January 1998, p. 7
- 5 *IMF Survey*, 20 March 1995, p. 86.
- 6 See, for example, A.J. Schwartz, "The world's Central Bank: Time to terminate the ESF and IMF" (Washington, D.C.: National Bureau of Economic Research, 1998), mimeo.
- 7 *TDR 1986*, annex to chapter VI.
- 8 See also J. Sachs, "External debt, structural adjustment and economic growth", in UNCTAD, *International Monetary and Financial Issues for the 1990s*, Vol. IX (United Nations publication, Sales No. E.98.II.D.3), New York and Geneva, 1998; and UNCTAD, *World Investment Report 1992*, box XI.1.
- 9 For a comparison between the United States, the United Kingdom and German bankruptcy codes see B. Eichengreen and R. Portes, *Crisis? What Crisis? Orderly Workouts for Sovereign Debtors* (London: Centre for Economic Policy Research, 1995); and J. Franks, "Some issues in sovereign debt and distressed reorganizations", *ibid.*, annex 2.
- 10 For such issues see D.M. Sassoan and D.D. Bradlow (eds.), *Judicial Enforcement of International Debt Obligations* (Washington, D.C.: International Law Institute, 1987).
- 11 This was also the case in Mexico during 1994-1995 when the Government was solvent, in the sense that it could repay all the outstanding holders of dollar-linked *tesebonos* in pesos, but the contract bank did not have sufficient reserves to allow these holders to convert the pesos into dollars.
- 12 See L. Nurick, "The International Monetary Fund Articles of Agreement", in Sassoan and Bradlow (eds.), *op. cit.*; and Eichengreen and Portes, *op. cit.*
- 13 For a number of rulings based on such an interpretation see Nurick, *op. cit.*, pp. 111-113.
- 14 *International Capital markets. Developments, Prospects, and Policy Issues* (Washington, D.C.: IMF, 1995), p. 11.

- 15 *Ibid.*, p. 11.
- 16 This suggestion has been put forward by K. Raffer. See his "Applying chapter 9 insolvency to international debts: An economically efficient solution with a human face", *World Development*, Vol. 18, No. 2, 1990.
- 17 Sachs, *op. cit.*, p. 52.
- 18 Eichengreen and Portes, *op. cit.*, pp. 49-50.
- 19 For a discussion of these objections see Eichengreen and Portes, *op. cit.*, pp. 43-44; and Raffer, *op. cit.*
- 20 One of the best-known cases is the Chilean debt crisis of the early 1980s, resulting from the so-called Southern Cone experiment with liberalization. A very large part of Chile's external debt during the late 1970s and early 1980s was accumulated by private banks and corporations and without government guarantees. "Those private debts have been included in debt rescheduling being negotiated between the Chilean state and the foreign bank advisory committee for Chile. Apparently the Chilean government caved in under pressure from the bank advisory committee ... To make their viewpoint absolutely clear, foreign banks apparently tightened up their granting of very short-term commercial credits to Chile during the first quarter of 1983, a technique reportedly used with some success 10 years earlier vis-à-vis the same country. The International Monetary Fund, also active in the debt rescheduling exercise, has not publicly objected to this threat" (C. Diaz Alejandro, "Good-bye financial repression, hello financial crash", *Journal of Development Economics*, Vol. 19, No. 1/2, September-October 1985, p. 12).
- 21 From the ruling of the New York Court of Appeals in the Costa Rican case of 1984.
- 22 See *TDR 1986*.
- 23 G.A. Calvo, "The management of capital flows: Domestic policy and international cooperation", in UNCTAD, *International Monetary and Financial Issues for the 1990s*, Vol. IV (UNCTAD/GID/G24/4), New York, 1994.
- 24 Executive Board Decision No. 5392-(77/63) of 29 April 1977.
- 25 Group of Ten, "The functioning of the international monetary system", a report to the Ministers and Governors by the Group of Deputies (Washington, D.C., June 1985), para. 40. For further discussion see J. Williamson and M. Gavin, "International monetary issues in 1985", and Y. Akyüz and S. Dell, "Issues in international monetary reform", both in UNCTAD, *International Monetary and Financial Issues for the Developing Countries* (United Nations publication, Sales No. E.87.II.D.3), New York and Geneva, 1987.
- 26 During relatively short periods a country's real effective exchange rate can vary by amounts which are large in percentage terms in comparison with its average tariff level, and the resulting changes, even away from the equilibrium level of the country's exchange rate, may persist for some time. Thus the economic impact of movements in exchange rates can substantially exceed that of multilaterally agreed tariff changes, even though the estimated elasticities of trade flows with respect to tariff changes are considerably higher than those with respect to variations in exchange rates; see for example C.F. Bergsten and J. Williamson, "Exchange rates and trade policy", in W. Cline (ed.), *Trade Policy in the 1980s* (Washington, D.C.: Institute for International Economics, 1983).
- 27 Interim Committee Communiqué of 16 April 1998.
- 28 There has been much recent econometric analysis of the determinants of currency and banking crises as part of attempts to develop leading indicators of them. While this work has served to clarify the issues involved in the development of such indicators, substantial reliance on them for forecasting financial crises under global surveillance seems unlikely (as indeed is their replacement of existing quantitative and qualitative, if more ad hoc, indicators currently used by banking supervisors and financial analysts in investment banks). Efforts so far have produced indicators which significantly over-predict banking crises. For a brief discussion of these issues see M. Goldstein, "Early warning indicators of currency and banking crises in emerging economies", in *Financial Crises and Asia*, CEPR Conference Report No. 6 (London: Centre for Economic Policy Research, 1998).
- 29 Credit risk results from the possibility that a bank's counterparty will default on its obligations, and market risk is that of loss due to changes in the market value of a bank's asset before it can be liquidated or offset in some way.
- 30 For example, William McDonough, President of the Federal Reserve Bank of New York, has made this point as follows: "... formerly, you could look at the balance sheet of a financial institution and quickly get a sense of exposure and risks. Today balance sheet information is clearly inadequate for this purpose ... the fast pace of activity in today's market renders financial statements stale almost before they can be prepared". See J.A. Leach, W.J. McDonough, D.W. Mullins and B. Quinn, "Global derivatives: Public sector responses", Occasional Paper No. 44 (Washington, D.C.: Group of Thirty, 1993), pp. 15-16.
- 31 R. Dale, *The Regulation of International Banking* (Cambridge: Woodhead-Faulkner, 1984), p. 83. The author's argument concerns crises in international bank lending but could easily be extended to financial crises more generally.
- 32 See, for example, M. Goldstein, "The case for an international banking standard", in *Policy Analyses in International Economics*, No. 47 (Washington, D.C.: Institute for International Economics, 1997), p. 33.
- 33 See M. Goldstein and P. Turner, "Banking crises in emerging economies: Origins and policy options", BIS Economic Paper No. 46 (Basle: BIS, 1996), pp. 9-14.
- 34 The nature of these guarantees has been well described in a recent book on the Asian financial crisis

- as follows: "In every economy, public authorities stand behind the *viability of their domestic financial system* ... This cannot be interpreted as a market distortion; it is a feature of a capitalist economy, in which markets for financial assets are an indispensable feature. These markets, however, cannot be liberalized in the same manner as one would a goods market ... This creates at least an implicit, if not explicit, guarantee that monetary authorities stand behind the foreign liabilities of, as a minimum, the explicitly supervised part of their financial system". M.F. Montes, *The Currency Crisis in Southeast Asia*, updated edition (Singapore: Institute of Southeast Asian Studies, 1998), p. 26.
- 35 For a survey of proposals generated by that crisis see D.F. Lomax, *The Developing Country Debt Crisis* (London: Macmillan, 1986), pp. 255-280.
- 36 H. Kaufman, "Ten reasons to reform", *Euromoney*, November 1992, p. 57. Kaufman has returned to this proposal since the outbreak of the Asian crisis, for example in his speaking notes for the Extraordinary Ministerial Meeting of the Group of 24 in Caracas in February 1998.
- 37 G. Soros, "Avoiding a breakdown", *Financial Times*, 31 December 1997 and 1 January 1998.
- 38 The Multilateral Investment Guarantee Agency (MIGA), an affiliate of the World Bank, provides insurance against certain risks (such as transfer risks) associated with foreign investment and selected other international transactions, including loans linked to insured investments. There is some overlap between its insurance facilities and those of national export credit agencies, but the coverage of risks connected with international lending by the latter is generally more extensive and thus more suitable as a model for an ICIC.
- 39 See, for example, S. Irvine, "Rating agencies: Caught with their pants down", *Euromoney*, January 1998.
- 40 It should be noted, however, that contagion effects of the kind witnessed during recent crises in emerging financial markets, which from the point of view of insurance bear some resemblance to natural catastrophes, would complicate the task of setting the premiums which would be charged by the ICIC. The majority of the ECAs of OECD countries experienced long series of cash-flow deficits on their operations after the developing-country crisis of the 1980s.
- 41 It has been suggested by M. Mayer that "the international community needs some sort of registry that would call attention to any bank's or national banking system's continuing increase in short-term borrowings from financial firms". For most firms which are significant participants in international financial markets such information exists at national level (though for a market such as that for inter-bank transactions, which operates on a continuous basis, the choice of the time at which inter-bank positions must be disclosed may not be easy). See M. Mayer, "The Asian disease: Plausible diagnoses, possible remedies", Jerome Levy Economics Institute Working Paper No. 232 (Annandale-on-Hudson, New York, April 1998), pp. 31-32.
- 42 As reported in an editorial in the *Financial Times*, 11 May 1998.
- 43 These tendencies have been especially evident in banks' Eurocurrency operations. Traditionally, such operations were defined as those in currencies other than the currency of the country of domicile of the participating bank (originally mainly United States dollars but subsequently also those of other major OECD countries). But with the establishment of international banking facilities (IBF) in the United States and Japan the definition has been extended to specified transactions of banks in their domestic currencies, mainly with non-residents or in connection with international activities, subject to a regulatory regime similar to that for traditional Eurocurrency operations. These regimes are generally characterized by lighter regulation than those for domestic banking (though recent deregulation has led to a reduction in these divergences), and they have often also benefited from tax advantages.
- 44 See S. Griffith-Jones, "Regulatory challenges for source countries of surges in capital flows", in J.J. Teunissen (ed.), *The Policy Challenges of Global Financial Integration* (The Hague: Fondad, 1998). As set out there, the proposal is characterized by the somewhat unfortunate term "prudential capital charge" for the liquid reserve requirements of mutual funds, institutions whose liabilities consist of shareholder capital.
- 45 This idea was broached in A. Cornford and J. Kregel, "Globalization, capital flows and international regulation", Jerome Levy Economics Institute Working Paper No. 161 (Annandale-on-Hudson, New York, May 1996), p. 29. For more detail on the exit fees of mutual funds see J.C. Bogle, *Bogle on Mutual Funds* (Burr Ridge, Illinois: Irwin, 1994), pp. 193-194.
- 46 The situation is further complicated by derivatives. Recent innovations have increasingly made possible the engineering of "synthetic" financial instruments and portfolios with cash flows through time that match those of more traditional assets. As a result, if a government wishes to target certain traditional assets in controlling capital movements, it may need to expand the scope of its action to "synthetic" instruments or portfolios.
- 47 This tax is sometimes referred to as an "interest equalization tax". The original tax so designated was imposed by the United States on foreign lending, initially in 1964 on foreign securities with a maturity of more than three years and subsequently, in 1965, extended to bank loans.
- 48 Accounts denominated in foreign currencies are available in the East Asian countries most affected by the crisis, in most cases subject to only limited restrictions. But in most OECD countries such availability is a relatively recent development associated

- with the more general liberalization of capital transactions. As late as the mid-1980s such accounts were still not permitted in some instances.
- 49 Concerning the origins of offshore banking in Singapore see M. Ishihara and H.C. Kim, "Financial system of Singapore", in R.C. Effros (ed.), *Emerging Financial Centres* (Washington, D.C.: IMF, 1982). For more recent developments the discussion in the text relies on an unpublished paper by M.F. Montes and T.K. Giap.
- 50 The account which follows of capital controls in selected developing countries relies heavily on an unpublished paper by C.M. Reinhart and R.T. Smith, "Temporary capital controls", August 1997 (mimeo); and on V.G. Le Fort and C.L. Budnevich, "Capital-account regulations and macroeconomic policy: Two Latin American experiences", in UNCTAD, *International Monetary and Financial Issues for the 1990s*, Vol. VII (United Nations publication, Sales No. E.97.II.D.5), New York and Geneva, 1997.
- 51 An outright forward exchange transaction involves an agreement between two parties to exchange currencies after a period of more than two days hence, while a foreign exchange swap has two separate legs, one consisting of the sale or purchase of a foreign currency and the other of a repurchase or resale of the currency at a subsequent date (thus reversing the first leg).
- 52 Developed countries are also subject to obligations in this area under the OECD Code of Liberalization of Capital Movements and (for members of the EU) under the EEC Council's 1988 Directive on capital movements and the Maastricht Treaty. Some developing countries have undertaken such obligations as part of treaties of friendship, commerce and navigation or of regional agreements such as the North American Free Trade Agreement (NAFTA).
- 53 This restriction does not necessarily apply to the IMF's special facilities, which use borrowed resources.
- 54 IMF Executive Board Decision No. 10950-(95/37) of 10 April 1995 (amending Decision No. 5392-[77/63] of 29 April 1977).
- 55 The financial rescue package presented by the IMF to the Government of the Republic of Korea contained conditions relating to the liberalization of capital transactions.
- 56 For further discussion see A. Cornford and J. Brandon, "The WTO agreement on financial services: Problems of financial globalization in practice", section E, in UNCTAD, *International Monetary and Financial Issues for the 1990s*, Vol. X (forthcoming).
- 57 With the objective of avoiding another liquidity squeeze like that experienced owing to capital outflows in the aftermath of the Mexican crisis in 1995, Argentina has arranged a stand-by financing facility from private international banks for use in the event of the resumption of such outflows.
- 58 These articles were amended by the Maastricht Treaty, which provided for the establishment of Economic and Monetary Union.

