

**THE EAST ASIAN FINANCIAL CRISIS:
A REFLECTION ON ITS CAUSES, CONSEQUENCES
AND POLICY IMPLICATIONS**

IDS Discussion Paper 367

Stephany Griffith-Jones

with Jacques Cailloux and Stephan Pfaffenzeller

S U M M A R Y

This paper looks into the causes and the economic and social implications of the East Asian currency crisis. It discusses various approaches to policy design for crisis prevention and better crisis management. Focusing first on the desirability of capital account liberalisation and the preconditions for its economic viability, the discussion proceeds to the topic of international prudential supervisory standards and risk weighted capital charges. With respect to crisis management, the focus is not restricted to adequate liquidity provision but also extends to desirable orderly work-out procedures and thus for private sector participation in burden sharing. We finally look at the need for further research into this area.

We would like to thank DFID, CIDA and IDRC for their valuable financial and intellectual support for this important conference. We are particularly grateful to the Secretary of State, Clare Short, Charles Clift from DFID, Soe Lim from CIDA and Rohinton Medhora from IDRC for their support.

Copyright © Institute of Development Studies, 1998
ISBN 1 85864 232 9

1 INTRODUCTION

On 13 and 14 July 1998, a conference on the East Asian crisis was held at the Institute of Development Studies. This conference brought together top specialists from different regions of the world (with a strong representation from the most affected countries). There was an interesting combination of experts from different fields, including international finance, macroeconomic and social policy, as well as development strategy. Perhaps most interesting was the fact that senior colleagues came from diverse fields, such as the private sector – especially from financial institutions –and multilateral organisations. This efficiently complemented the presence of policy-makers from developing countries and from bilateral aid agencies, as well as academics.

An extremely integrated and broad view of the East Asian crisis and its implications arose from discussions by this powerful mixture of colleagues; our discussions drew on a series of background papers, available on the Internet at the address

<http://www.ids.ac.uk/ids/research/easwkshp.html>

Amongst the main conclusions were the following:

1. Crises like the East Asian one have major implications for the development prospects of the affected countries (or 'victim' countries, as several participants called them). If the crisis in East Asia is as prolonged and deep as many informed observers fear at present, there may be major increases in poverty levels in those countries, implying a major reversal from previous trends, as those countries had been in the forefront of poverty reduction. This could imply a threat to the international target of halving the number of poor people in developing countries by the year 2015.
2. Asian-style currency crises – and their extremely high development costs – raise a very serious concern about the net development benefits for developing countries of large flows of potentially reversible short-term international capital. While the high costs of reversals of those flows are evident, the benefits are less clear. This is in sharp contrast with foreign direct investment (FDI) and trade flows, where the very large developmental benefits clearly outweigh the costs. As a result, volatile short-term capital flows emerge as a potential Achilles' heel for the globalised economy and for the market economy in developing countries. If the international community and national authorities do not learn to manage these flows better, there is a serious risk that such volatile flows could undermine the tremendous benefits that globalisation and free markets can otherwise bring.

There was a tremendous sense of urgency, particularly from the East Asian participants, that the current crisis be contained and reversed, that growth be restarted and that future currency crises be prevented. It was felt, in particular, that the lessons from the 1994 Mexican peso crisis have not been learned, even though several proposals have been made to avoid repetition of such a crisis (see, for example, Griffith-Jones, 1996). As a result, insufficient actions have been taken since 1995 to avoid similarly costly

currency crises. A strong plea emerged from the conference that the deeper and wider East Asian crisis should lead to necessary changes, both internationally and nationally, so this would not happen again.

3. There was consensus that surges of short-term flows tend to be pro-cyclical, and not counter-cyclical as economic theory would suggest, in two crucial respects. Firstly, they tend to flow more towards the more successful economies or more successful reformers; in the case of East Asia, they went to countries that already had very high domestic savings rates. Secondly, there tend to be more capital flows at times when economies are already growing fast; as a consequence, they can accelerate a boom initially, whilst later greatly contributing to a 'bust'. As regards the first point, one of the most disturbing aspects of the East Asian crisis was that it occurred in what had been the most successful developing countries for the last three decades.
4. There were important areas of broad agreement at the conference, on both diagnosis and policy suggestions. Amongst the latter, there was almost unanimous agreement that the benefits of full capital account liberalisation were yet to be demonstrated, whilst it was apparent that the associated risks were high. As a consequence, capital account liberalisation should be careful; prudential measures to discourage excessive inflows seemed appropriate, provided they were a complement to – and not a substitute for – good macroeconomic policies and the strengthening of domestic financial systems.
5. There were also important areas where there was either disagreement or – especially – insufficient knowledge, both on diagnosis and on suggestions for desirable policies. These areas include, for example, the issues of what causes herding and disaster myopia on the part of international investors, and what determines overproduction in particular sectors and economies. Further research is urgently required in these and other areas, so as to provide a better knowledge base for policy suggestions.

In Section 2, we explore what caused the East Asian crisis, and why it has been so deep and extensive. Section 3 analyses the economic and social costs of the East Asian crises. Section 4 evaluates policy implications, at both the national and international levels. Section 5 examines the areas where research is most urgently needed to underpin better policies, both for prevention of crises and for better crisis management.

2 CAUSES OF THE CRISIS

2.1 Why Did the Crisis Happen in East Asia?

2.1.1 Domestic factors

As underlined by Reisen (1998) in the case of the Asian and other currency crises, domestic causes generally have their roots in the large capital inflows that those countries experienced. Indeed, so-called domestic causes, such as overvalued real exchange rates and rapidly growing asset prices, were to an in important extent endogenous effects of massive net capital inflows. It is extremely difficult to separate domestic from international factors.

Weakness of the financial system

The **67th Annual Report** of the Bank for International Settlements (BIS 1997) published on 9 July 1997 already stressed the financial fragility of Asian countries, and especially of Indonesia, Malaysia, the Philippines and Thailand: during the 1990s, those countries experienced a more rapid expansion of credit than any industrial country. According to the BIS, the banking fragilities in Asia can be explained by several factors: violent asset price cycles driven by an excessive expansion of bank credit, the loss of degrees of freedom for monetary policy as a result of capital account liberalisation, and the level of bad debts inherited from directed lending policies.

Although financial reforms were introduced during the 1980s and the 1990s, enforcement of regulation of the financial sector did not keep pace, resulting in a significant proportion of credit being allocated to unproductive or speculative investment. It was emphasised at the conference that even in developed countries (e.g. the Scandinavian countries) liberalisation of the domestic financial sector is typically not accompanied by sufficient improvements in financial sector supervision, and, especially, by appropriate enforcement of such supervision. Indeed, Kaminski and Reinhart (1996) find that for the period 1970–95 financial liberalisation, followed by a private lending boom, plays a significant role in explaining the probability of a banking crisis; in turn, they find that banking crises help predict currency crises. In the East Asian case, lending was increasingly channelled towards property and non-traded activities. Ranis and Stewart (1998) stressed that 20 to 25 per cent of commercial bank debt was allocated to real estate in Indonesia and between 15 and 20 per cent in the Philippines, Malaysia and Thailand.

In the East Asian case, lending was increasingly channelled towards property and non-traded activities. Ranis and Stewart (1998) stressed that 20 to 25 per cent of commercial bank debt was allocated to real estate in Indonesia and between 15 and 20 per cent in the Philippines, Malaysia and Thailand.

The International Monetary Fund (IMF) **World Economic Outlook** (1997) also cites inadequacies in the regulation and supervision of financial institutions as a major source of the financial system's weaknesses. The IMF adds:

... limited experience among financial institutions in the pricing and managing of risk, lack of commercial orientation, poor corporate governance, and lax internal controls, all in the face of movements toward liberalisation and increased competitive pressure, had contributed to imprudent lending including lending associated with relationship banking and corrupt practices.

Though agreeing with this diagnosis, the conference rejected broader 'banana republic stories,' that is, an emphasis on 'crony capitalism', as an important explanation of the East Asian crisis. Indeed, it was agreed that problems in particular countries should not simplistically be defined as causes of crises.

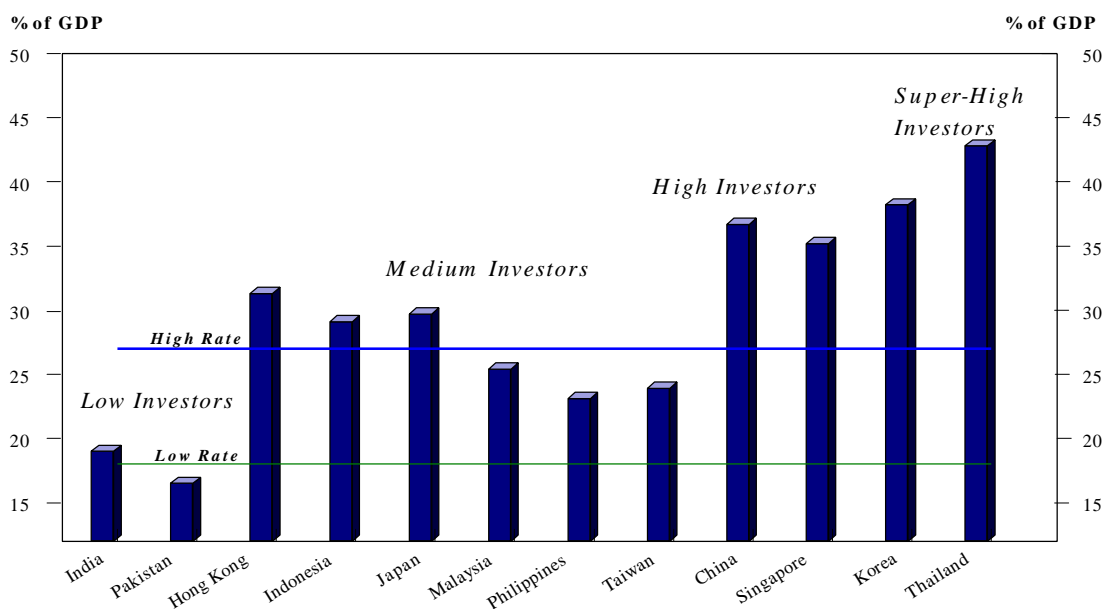
Inadequate banking supervision together with poor assessments of financial risks largely contributed to the sharp increase of credit towards unproductive investments. Credit was combined with the prevalence of large unhedged foreign-currency-denominated corporate and bank debt. An important lesson should have been learned from countries like the United Kingdom, where prudential limits were placed on foreign currency exposure by banks when capital flows were liberalised. More broadly, it would seem desirable that in general in developing countries bank lending in foreign currency to companies that sell to the domestic market should be carefully restricted. After massive devaluations, this lending contributed in East Asia (as previously in Mexico) to

very high levels of non-performing loans. These high levels of bad loans combined with low capital-to-asset ratios brought most of the banks into unsustainable situations (Reisen 1998).

Overproduction

The Asian crisis is a crisis not of overconsumption, as was the case in Mexico in 1994, but of overproduction. As underlined above, the boom in bank loans was mainly channelled towards investment rather than consumption. This overinvestment (reaching in the case of South Korea and Thailand levels higher than 35 per cent of GDP during several consecutive years) led logically to overproduction. Average fixed investment rates are reported in Figure 1.

Figure 1: Average Fixed Investment Rates Across Asia, 1993–95 (As a percentage of GDP)



Source: Howell (1998)

A number of external factors seem to have contributed to overproduction. Among others, the depreciation of the yen against the dollar, which started in mid-1995, coupled with the Chinese devaluation in 1994, hit the competitiveness of East Asian countries; this occurred largely because the East Asian currencies were effectively pegged to the US dollar. The decline in competitiveness was reinforced by upward pressures on real exchange rates due to large capital inflows. Decreasing exports led to overcapacity which is particularly dramatic today in the car, electronics (semi-conductors) and textile industries. The recession in Japan also contributed to the region's economic problems as it reduced that country's demand for imports.

Park and Song (1998) stress that it was foreign capital that led to the investment boom. Looking at the correlation between capital-inflow-to-GDP and current-account-deficit-to-GDP ratios, the authors show that the liberalisation of the domestic financial sector combined with the opening up of the capital account increased the availability of foreign capital and thus largely contributed to the financing of new projects: 'capital inflow

was driving domestic investment, not the other way around' (Park and Song 1998). This leads us to the factors that relate to the international environment and which certainly played the greatest role in triggering the crisis.

2.1.2 External factors

External capital flows

The five Asian crisis countries received extremely high levels of private external finance between 1994 and 1996. In 1997, there was a dramatic reversal of capital flows. According to figures from the Institute of International Finance (IIF 1998), the five East Asian countries hardest hit by the crisis (South Korea, Indonesia, Malaysia, Thailand and the Philippines) experienced a turnaround of US\$105 billion in a single year, a shift from an inflow of US\$93 billion in 1996 to an estimated outflow of US\$12 billion in 1997, an outflow projected to continue in 1998. Most of this swing occurred in commercial bank lending, followed by short-term portfolio flows, whilst foreign direct investment remained constant. The turnaround of US\$105 billion in the five Asian economies represents more than 10 per cent of their combined GDP; this shift thus is larger than the 8 per cent shift that occurred in Latin America in the early 1980s as the debt crisis exploded.

Portfolio flows turned out to be negative in East Asia in 1997 with an outflow of more than US \$10 billion, whilst in 1996 more than US \$10 billion had flowed in (IIF 1998). International bank credit reached the highest levels among private flows, with about US \$50 billion both in 1995 and 1996. This upsurge in international bank loans was dramatically reversed in 1997 with an estimated outflow of US \$20 billion. Not only had the scale of lending grown rapidly, but its maturity was also very short, making these countries more vulnerable to a loss of confidence. About 70 per cent of total international bank claims on South Korea and Thailand had a maturity shorter than a year. In mid-1997, Indonesia and Malaysia had about 60 per cent of their claims maturing in less than a year's time. These levels were far above other emerging economies and about ten percentage points higher than the average share for Latin America (BIS 1998). Even more seriously, at the onset of the crisis, the ratio of short-term debt to international reserves ranged from 0.6 for Malaysia to 2.1 for South Korea. This implied a high dependence of those countries on the willingness of foreign creditors to roll over existing short-term credit. This is very similar to the high level of Mexican, dollar-denominated treasury bills (Tesobonos) which triggered the crisis in late 1994 as their level was higher than Mexican foreign exchange reserves; one difference was that in the Asian case, the debt was private.

The highly volatile flows into the East Asian Crisis countries were mostly intermediated through the banking system: Corsetti et al. (1998) compute ratios of intermediation that show that, on average, more than 70 per cent of the external borrowings of the five Asian countries were intermediated through the banking system except for Indonesia where only 40 per cent were intermediated. As Howell (1998) puts it, Asian banking systems and capital markets acted as trampolines rather than shock absorbers, quickly leveraging foreign currency inflows, and later outflows.

The steep increase in short-term foreign borrowing has several causes. The BIS (1996) argues that an increasing differential between local and foreign interest rates driven by tighter domestic monetary policies encouraged foreign borrowing. Reisen (1998) stresses, however, that, in part, interest rate differentials in East Asia may have been due to structural deficiencies in the financial sector. As a consequence, liberalising the

capital account before these structural deficiencies were removed may have been inappropriate. Indeed, the liberalisation of domestic financial systems and the opening up of capital accounts attracted high levels of short-term, potentially reversible loans. The narrowness of local equity and bond markets also added further pressure to borrow from abroad.

Changes in perceptions by international investors and lenders

What seems most disturbing about the Asian crisis is that it happened to countries that had been so successful for a long period, not just in terms of economic growth but also in terms of great dynamism in their exports, low rates of inflation, high rates of savings and a rather equitable income distribution. Even though several of these countries had high current account deficits in their balance of payments, this had been seen as acceptable for quite a long time by both analysts and markets alike, for two reasons: firstly, these deficits were financing very high investment rates; secondly, as mentioned above, the current account deficits did not originate in fiscal deficits – on the contrary, the Asian economies had fiscal surpluses – but were caused by private sector deficits.

Clearly there were problems in the Asian economies. But these problems did not change abruptly and cannot explain the scale of the crisis and especially its timing (Griffith-Jones 1998a; Reisen 1998). There is another causal factor, which relates more to the international dimension, and in particular to the behaviour of international capital flows and to perceptions of investors which can deteriorate very rapidly. This aspect is linked to certain imperfections of international capital markets that have almost always featured in the financial panics of earlier times, but whose impact has increased significantly due to the speed with which markets can react in today's global economy (Griffith-Jones 1998a). Paradoxically, this impact appears to be strongest for economies that either are or are perceived to be in the process of becoming highly successful. In these situations, euphoria in international capital markets and in rating agencies interacts perversely with complacency on the part of governments in recipient countries.

Successful economies offer high returns by way of yields as well as capital gains. If international investors can find ways to enter these economies, or if their entrance is facilitated by capital account liberalisation, they tend to rush in, generating a surge of capital inflows that affects key economic variables. Exchange rates become overvalued; the prices of key assets – like shares or real estate – rise quickly and sharply. There is an increase both in real income and in perceived wealth. Banks tend to relax lending standards, lifting liquidity constraints on businesses, as they assume that current trends will continue. The balance of payments deteriorates, often quite rapidly, as both consumption and investment rise. Initially, this is not seen as a problem, as foreign lenders and investors are willing to continue lending or investing. Economic authorities delay the necessary adjustment, confident that their previous success will be continued, and that crises happen elsewhere. This latter problem was particularly serious in East Asian countries, as these countries had a long history of growth and no recent experience of balance of payments crises.

Then, something changes. The change may be domestic or international, economic or political, important or relatively small. **This change triggers a sharp modification in perceptions, leading to a large fall in confidence in the economy among internationally mobile investors**, that is both foreign investors and nationals able to take their liquid assets out. The change of perception tends to be both large and quick. A country that was perceived as a successful economy or a successful reformer – for which no amount of praise

was sufficient – suddenly is seen as fragile, risky and crisis-prone. The change of perception tends to be far larger than the magnitude of underlying change in fundamentals warrants. Furthermore, any weakness in economic fundamentals is then discovered and magnified by markets. As in East Asia, there can be much overshooting. Exchange rates collapse, stock markets and property prices also fall sharply.

This pattern helps explain the currency and banking crises in the Southern Cone of Latin America in the early 1980s and the Mexican peso crisis. It also provides important elements for understanding the 1997 East Asian crisis. There are significant differences between these crises and previous ones throughout the centuries, and amongst East Asian economies. But the boom–bust behaviour of short-term lenders and investors, driven not just by real trends but by dramatic changes in perceptions, is a common denominator to these crises. So is the complacency of the economic authorities in recipient countries during the period of boom. The damage that can be done by sharp changes in capital flows is far greater when, as in East Asia, a high proportion of the inflows are short-term and easily reversible.

In East Asia, clearly the largest reversal of flows occurred in bank flows, apparently disproportionately by smaller banks, which seem less informed and more prone to herd behaviour. Park and Song (1998) also analyse the role played by mutual Asian country funds based in New York in the deepening of the crisis. Following the same methodology as Frankel and Schmukler (1996), they find that the crisis spread from Thailand to three Southeast Asian countries, Indonesia, Malaysia and Singapore, and that the funds did play a role as a transmission channel. Indeed, according to the authors, following the Thai shock, funds from other countries in Asia may have liquidated part of their holdings fearing potential redemptions. The crisis spread from Thailand to other Southeast Asian countries through mutual fund prices first and then impacted on local stock prices. This is a very important result as it confirms, to some extent, that institutional investors played a role in spreading the crisis to other Asian countries.

On the other hand, Howell (1998) has argued that the narrowness of local capital markets did not allow for large liquidations and thus did not permit foreign institutional investors to liquidate large amounts of their holdings. Howell argues that hedge funds could have played an important role in the foreign exchange markets. Hedge funds are unregulated financial institutions which use one or more alternative investment strategies, including hedging against market downturns and utilising return-enhancing tools such as leverage, derivatives and arbitrage. Estimates of the size of this fast-growing industry vary but are usually around US\$200 billion of assets. Although this represents a relatively small share of total institutional investors' assets, hedge funds rely heavily on leverage which could make them control about US\$1 trillion of assets.

A number of recent studies have tried to evaluate the impact of those investors on the Asian crisis. Eichengreen and Mathieson (1998) find little evidence that hedge funds led the crisis. They nonetheless propose a set of policies such as better reporting systems or possible restrictions on domestic currency loans to hedge funds to prevent large short positions against local currencies. Howell (op.cit.) confirms that the absence of data on a number of hedge funds transactions, such as OTC derivative contracts written by major investment banks, clearly leads one to underestimate their speculative role against currencies.

In the light of these recent studies and of discussions at the IDS conference, it seems firstly that institutional investors played a role, if not in triggering the crisis, then in its deepening and spreading within Asia and, secondly, that there is a need to distinguish between types of investors. For example mutual funds impacted

on Asian stock exchanges whereas hedge funds played a more important role in currency markets. It is clearly important to carry out further research on herding behaviour among institutional investors in the time of a crisis, as well on other aspects of institutional investment (see Section 5).

2.2 Why Was the Crisis in East Asia So Deep?

What was unexpected about the East Asian crisis was not just that it happened, but that it was so deep and prolonged, and that there was so much contagion within the region. This relates to inappropriate management of the crisis – both by the countries themselves and by the IMF – as well as to exogenous factors, such as slow growth in Japan, which then turned into recession. Furthermore, close trade links between the East Asian countries, which were a source of strength when rapid growth characterised the region, became a source of weakness as recession weakened demand for intra-regional imports.

As regards inappropriate management of the crisis, East Asian countries seem to have had less experience in these matters than some other regions, as – unlike Latin America, for example – they had not faced balance of payment crises for a long time. This may have contributed to some initial delays in recognising the depth of the crisis and the need to act quickly, as well as to the mistakes in crisis management. Indeed, maybe interesting lessons for Asia on crisis management and resolution can now be drawn from Latin America.

However both the East Asian countries and especially the IMF faced a new and difficult challenge. Capital-account-led crises, which relate to expectations of private investors and lenders, may need different responses to traditional balance of payments crises, provoked by problems on the current account, and caused by public sector deficits. In the new capital-account-led crises, the key challenge is to restore the confidence of private actors. Several conference participants argued that IMF programmes, with their stringent macroeconomic conditions and overambitious requisites for rapid and deep structural reforms, had not been particularly effective in restoring confidence. Indeed, an asymmetry in the assessment of IMF evaluations by the markets was noted. Whilst negative information on countries from the IMF got attention and further undermined confidence, positive assessments had far less effect in restoring confidence. This seemed particularly clear in South Korea, which had carefully followed an IMF programme, including the restructuring of banks. However, due to the seriousness of the recession, and other factors, confidence has not been restored, as evidenced by very high premium costs of international borrowing and – even – difficulties in restoring trade credits; this, in turn, makes not only increasing exports but also economic recovery and restructuring more difficult (see Park and Song 1998).

Another vicious circle that has emerged in East Asia is that recession leads to increased unemployment and poverty (see Section 3), which undermines political stability, which in turn erodes confidence further. Restoration of growth, as well as a more democratic and participatory society, were seen as crucial elements for private sector confidence rebuilding.

3 THE SOCIAL AND ECONOMIC COSTS OF THE EAST ASIAN CRISIS

The East Asian 'tiger economies' which, prior to the current crisis, were seen as models for economic development, were not only successful in terms of *per capita* income growth in average terms but also achieved

substantial poverty reduction. Ranis and Stewart (1998) report a strong decrease in the proportion of the population classified as poor on the basis of their private income: in Indonesia this proportion fell from around 57 per cent in 1970 to 15 per cent by 1990; the corresponding numbers for Malaysia are 50 per cent and 15 per cent respectively. In South Korea 4 per cent of the population were classified as poor in 1984 while in Thailand the proportion fell from 39 per cent at the end of the 1960s to 13 per cent in 1992 (for all these data see Ranis and Stewart 1998, p 9).

Improved access to social services was relatively less important, although some successes could be observed in this field also: access to public health and education improved throughout the region. In spite of the fact that overall levels of government spending were low, social allocation ratios – the proportion of government expenditure dedicated to social issues – were relatively high. The sum of education and health expenditure as a percentage of government spending in selected East Asian countries was high and amounted on average to 16.7 per cent during the period 1990–1995 (Ranis and Stewart 1998).

The basis of this success in poverty reduction was a sustained period of high and reasonably equitable private income growth rather than government efforts at improved social service provision. The outward-oriented growth strategy of these economies focused on rapidly growing labour-intensive exports. It was through these sectors and their absorption of labour that widespread increases in private income were realised and poverty reduction was mainly achieved. Up to the first half of the 1990s most of the region's countries experienced high national income growth at annual rates of around 8 per cent. However, as we now know, this was not to last.

3.1 Limping Tigers

The history of high growth was reversed by the financial crisis of 1997 and gave way to a recession which today (July 1998) is still continuing. This is the most obvious cost of the crisis, taking the form of forgone or even negative growth. GDP contractions are expected for a number of Asian economies in 1998. The Thai economy is expected to shrink by at least 8 per cent after being stagnant at 0.5 per cent in 1997 and after having grown at around 8 per cent during the first half of the 1990s. Korean GDP is expected to fall 4 per cent from 5.5 per cent in 1997, Indonesia is forecast to contract by 12 per cent in the fiscal year 1998/99 after maintaining growth at 4.7 per cent in 1997. In Malaysia, GDP growth is expected to fall from 8 per cent in 1997 to between -4 per cent and -5 per cent during 1998. In other cases, growth rates have stayed positive but slowed dramatically between 1997 and 1998: from 7.8 per cent to between 0.5 per cent and 1.5 per cent in Singapore, and from 5.1 per cent to 2.8 per cent in the Philippines.¹

The effect of the crisis on Indonesia has been particularly severe. The situation of Indonesia is complicated in so far as the country is simultaneously suffering the effects of the financial crisis, of political instability and of adverse climatic conditions. Before the crisis, Indonesia had been one of the most successful East Asian newly industrialised countries (NICs) (World Bank 1998). Following the dramatic reduction in the proportion of the population classified as poor, to around 15 per cent in 1990, it is now expected that 'about half of the country's 200 million people will be unable to afford food and basic needs'.² The poverty line is defined by a *per capita* income of around one dollar a day (World Bank 1998), a threshold value which – in so far as it is denominated

in US dollars – is directly affected by devaluation. Such a focus is adequate as prices of basic necessities have been affected by exchange rate changes (Reuters 1998c): a devaluation can sharply lower domestic real income in a developing country by increasing the price of imported commodities. All this is exacerbated by the effects of this year's strong El Niño current. Indonesia is one of the worst-affected countries and suffered food shortages as a consequence of extensive droughts as well as widespread forest fires (FAO 1997).

In general, the crisis can be expected to affect the region's economies through several channels: it has been mentioned above that one immediate effect of a devaluation on an export-oriented corporate sector will be an increase in international competitiveness. In a regionally contagious crisis – as in the Asian case (cf. Park and Song 1998) – this can lead, and has led, to competitive devaluations as each of the affected countries attempts to restore export competitiveness (cf. Coretti et al. 1998).

Devaluations affect part of the domestic manufacturing sector in a more direct manner: they increase the domestic currency value of the foreign-denominated debt burden (see Corsetti et al. for the case of Korean *chaebol*; also Wade 1998). This is particularly damaging in the case of short-term debt which has to be repaid before the exchange rate can recover. Yet even in the case of longer-term obligations, a devaluation increases the domestic currency value of debt servicing costs. This problem is further exacerbated if interest rates have to be raised in order to stabilise the value of the currency, since such a move also increases the debt-servicing cost of loans denominated in domestic currency³. Furthermore, exchange rate devaluations can have adverse effects on domestic firms as prices of imported inputs increase. This can lead to dismissals of workers and, in cases of serious deterioration, to bankruptcies.

The increased profitability of exports in domestic currency terms would in principle provide an incentive to increase exports, yet this is subject to two further problems: on the one hand, a simultaneous increase in exports by the region's economies could depress world market prices if those exports are concentrated in the same sector. On the other hand the ability of emerging economies to increase exports is closely linked to the availability of trade credit. In the East Asian case, this credit has not been available after the crisis, and the 'wave of cheap exports' to the developed economies is yet to arrive (cf. Wade 1998; Park and Song 1998). There is a more fundamental problem: trade credit may facilitate exports to developed-country markets but the major part of trade prior to the crisis took place within the region. With falling demand in East Asian economies including Japan, export markets are unable to compensate for deflationary pressure on domestic markets (cf. Howell 1998).

3.2 Haunting Asia – the Vagaries of the Spectre of Poverty

Given that poverty reduction in Asia was mainly based on high growth and given that it is in this area that the financial crisis has its most devastating effects it should come as no surprise that the most significant impact on poverty levels takes the form of reductions in private income. The prime channels through which this effect takes place are rising unemployment and falling wages.

Unemployment in the region has increased dramatically since the onset of the crisis and is set to continue increasing in the future. In Thailand, unemployment had increased from an annual average rate of 1.54 per cent in 1996 to 5.6 per cent by 1998 (ILO 1998). The situation has continued to deteriorate, with around 2,000 job

losses occurring daily since the beginning of July 1998 (Reuters 1998d). In South Korea, unemployment has risen from 2.3 per cent to 7 per cent, the highest unemployment rate on record (Reuters 1998e). The immediate effect of this has been a dramatic fall in the income of the affected workers since unemployment provision is almost universally absent (with the partial exceptions of South Korea and Japan). Other negative effects of this rise in unemployment have been underlined at the conference: employees in the formal urban sector often contributed to the maintenance of dependent family members who now suffer reductions in transfer incomes as these contributions are no longer available (Robb 1998). Furthermore, rising unemployment may depress the wages of those who remain in employment.

Another labour market phenomenon has been increased informal-sector participation which certainly depressed earnings in this sector. This has occurred in the urban informal sector as well as in rural areas (Robb 1998). In urban areas, however, there have been further repercussions on those sub-sectors of the informal sector that are closely linked to formal-sector activities and therefore suffer more directly from the crisis (Ranis and Stewart 1998). Increased informal-sector participation is closely linked to rising female participation which can take the form of prostitution. It has also led to an increase in child labour with the corresponding adverse effects on education (Robb 1998). An increase in prostitution in general as well as an increase in child prostitution in consequence of rising poverty and unemployment is reported from Indonesia (Reuters 1998f).

Other factors impacting on living standards have been price and interest rate rises. Food price rises in the wake of the crisis have depressed real wages (Robb 1998). This further exacerbates the impact on those who already suffer income losses as a consequence of the crisis, all the more so as poor households tend to spend a higher proportion of their income on food. Price rises of imported goods as a consequence of devaluation are a major problem. Health service access has worsened as the price of imported medical drugs has increased. Interest rate rises have been damaging not only to local businesses but also to households, who increasingly find it necessary to access informal lenders. Credit is available on local, informal markets on expensive terms, and there are reports of loan sharks increasingly resorting to violence to recover loans (Robb 1998).

Households' coping strategies have incorporated attempts at expenditure reduction. The burden of reduced consumption tends to be unequally distributed within households: women and children are likely to suffer disproportionately (Robb 1998). There may be further problems in the case of budget cuts. Reduced health and education spending can be expected to lead to quantitative reductions in human capital formation or to lower quality of human capital. Reduced health care expenditure – in particular against the background of a higher incidence of prostitution – can lead to an increase in HIV infections.

In Southeast Asia – perhaps more so than in other regions – welfare issues are closely linked to the performance of the external sector. Financial turmoil thus has to be seen as more than a mere nuisance depressing corporate profits and upsetting balance of payments statistics. High private sector growth and successful export performance have been at the heart of successes in poverty reduction and human development achievements in Southeast Asia. It is in this area that the crisis is showing some of its most dramatic effects. It is evident, therefore, that global financial instability can exacerbate poverty in Asia in a number of ways, both during the current crisis and in the future, through adverse effects on productive capacity and on the quality of the human capital stock.

3.3 The Policy Fallout

If macroeconomic policy measures are to lead to social improvements, it is important that they are designed to avoid further recessionary impacts. This makes it necessary to reconsider the kind of austerity prescription that has traditionally been implemented in Latin American crisis scenarios. The IMF has recently begun to make some concessions in this direction after insisting initially on contractionary and high-interest-rate policies (Reuters 1998e). (The issue of interest rate measures in currency crises is further explored in Section 4.)

A number of concerns should be borne in mind considering immediate, short-term policy measures. It has been pointed out by Ranis and Stewart (1998) that macroeconomic measures should aim to restrict unnecessary expenditure and that social allocation ratios should at least be stabilised. They also propose a series of relief measures on a microeconomic level. In the long run they suggest that the main concern should be with establishing universally accessible social security systems. There are doubts, though, as to how far the implementation of social security systems will be affordable in the foreseeable future.

Useful as all these proposals may be, in the long run there is a more fundamental concern for the region. Social security systems may help to spread the cost of the crisis over the whole of society – and this can make an important difference to those worst affected. Yet the primary concern should be how to avoid crises of this kind from occurring in the first place. In small, open and highly trade-focused economies like those of East Asia, any involvement in international financial turmoil is highly disruptive for the countries' external economic relations in general. This can be expected to have a highly recessionary impact which in turn threatens achievements in poverty reduction.

The central lesson of the East Asian crisis therefore is: financial stability matters! A chain can only be as strong as its weakest link and the weak link in the East Asian development process has been unstable external finance. If economic growth is to pull the region out of poverty once more, the link needs to be strengthened and stabilised. This is an essential precondition for sustained and equitable economic growth and therefore for lasting poverty elimination.

4 POLICY IMPLICATIONS, FOR BOTH CRISIS PREVENTION AND CRISIS MANAGEMENT

Within present arrangements, there is growing concern that the volatility and reversibility of some categories of capital flows, as dramatically illustrated by the East Asian crisis, and their very negative effects imply that the costs of these flows to countries' development may be higher than their benefits, at least during certain periods. As a consequence, there was broad consensus at the IDS conference that important changes need to be made in the international monetary system as a whole and in recipient country policies to avoid costly crises, as well as to manage them better if they do occur. This will help to limit the negative effects of financial globalisation on emerging economies. Care must be taken, however, that the measures adopted contribute to broaden access of all developing countries to capital flows, particularly long-term ones. In this context, foreign direct investment is especially beneficial, as it contributes not only a more stable source of capital flows, but also technological and managerial know-how as well as better access to markets.

It seems urgent to do the following: (a) identify the possible changes required to achieve these aims, (b) evaluate carefully the potential economic effects of such changes, and (c) adopt the required measures, including possible institutional developments where gaps exist for implementing such measures.

Two broad areas of action need to be focused on, in relation to currency crises: crisis prevention (discussed in Section 4.1) and better crisis management (discussed in Section 4.2). In both areas, changes are required, nationally and internationally. National and international aspects involve public and private actors (Table 1 provides a matrix of the categories of actions required, the actors that need to be involved and examples of essential actions that need to be adopted).

4.1 Crisis Prevention

4.1.1 Domestic measures in capital-receiving countries

Capital account liberalisation and strengthening of the domestic financial sector

At the conference there was consensus that capital account liberalisation should be done in a very careful and gradual way. A problem is that capital account liberalisation tends to be driven not just by considerations of efficiency, but also by vested interests, both international and domestic. Some participants stressed the particularly strong emphasis on capital account liberalisation emerging from the US Treasury. Others stressed that financial interests in the Asian countries, keen for large profits, had also played an important role in pushing for capital liberalisation. However, it would be crucial to define a path of capital account liberalisation, based on developmental efficiency, and not on pressures from interest groups.

Furthermore, capital account liberalisation should be accompanied by appropriate prudential regulation, especially that related to the financial sector. In the UK case, when capital account liberalisation was implemented, foreign currency exposure by British banks was restricted. Similar rules need to be applied or strengthened in developing countries. Careful limits also need to be placed on foreign currency borrowing by corporate entities, especially from local banks: even though banks can have matched foreign exchange assets and liabilities, apparently protecting them from devaluation, they will not be protected from credit risk if their corporate borrowers sell to the domestic market but have foreign-exchange-denominated debt; they could become insolvent in the face of a large devaluation. This indirect exchange rate risk for banks, needs to be limited and properly assessed, for prudential purposes.

The Asian crisis proved again that capital account liberalisation can only work well if appropriate prudential supervision and regulation of the domestic financial system are in place, tasks which are very difficult, particularly but not only in developing countries (as illustrated by the Scandinavian banking crises). The importance for the good functioning of domestic financial, and especially banking markets, of certain basic pre-conditions was stressed at the conference. These preconditions include well-established bankruptcy procedures, clear accountancy rules consistent with international standards, protection of minority shareholders and others. Conference participants agreed that such minimum standards do not imply that all developing countries should have identical financial systems, in the same way that the requisite of good plumbing does not require all people to having similar houses.

Table 1

Actors	Capital-receiving Countries		Capital-supplying Countries		IFIs		
Types of Measures	Authorities	Markets	Authorities	Markets	IMF	BIS	IBRD
Crisis Prevention	<p>Restrict short-term inflows</p> <p>Improve prudential regulation and strengthen domestic financial sector</p> <p>Liberalise more carefully</p>	<p>Develop equity and forward markets</p> <p>Avoid uncovered foreign currency debt exposure</p>	<p>Risk weighted cash requirements on foreign investments for institutional investors</p> <p>Avoid regulatory bias towards short-term lending.</p>	<p>Use more available information more efficiently</p>	<p>Last-resort lending</p>	<p>Extend international regulation and supervision of bank loans and portfolio flows to emerging markets</p>	
Better Crisis Management	<p>Use interest rates policies with care</p> <p>Allocate rescue package to protect the poorest first</p>	<p>Participate in burden-sharing</p>		<p>Participate in burden-sharing</p>	<p>Make funds available faster</p> <p>Promote market confidence through conditionality</p> <p>Allow for orderly debt workouts</p>		<p>Contain the social impact of crises</p>

As regards capital account liberalisation itself, the standard recommendation that long-term capital flows need to be liberalised first and short-term flows should be liberalised last is confirmed by events in East Asia. Indeed, capital account liberalisation and incentives in some East Asian countries had particularly encouraged short-term capital inflows. An example was the establishment of the Bangkok International Banking Facility (BIBF), which was widely seen to have greatly eased access to foreign financing and especially encouraged – by tax and other measures – short-term inflows. Such explicit incentives to short-term flows should clearly not be used in the future. There was some disagreement at the conference about whether, in the case of South Korea, the sharp increase in short-term flows was mainly due to inappropriate sequencing of liberalisation (biased towards short-term flows) or whether there was a high proportion of short-term flows because it became more difficult and expensive to borrow internationally long-term. The importance of developing long-term instruments, e.g. the long-term domestic bond market, was highlighted. Pension fund reform may help increase the domestic supply of long-term capital.

An interesting distinction was made between the opening up of foreign financial services, broadly seen as very positive because foreign firms improve efficiency in the financial industry, and opening up of the capital account, which can be more problematic. However, some doubts were expressed about whether this analytically sharp distinction was so relevant practically, that is, if the establishment of foreign firms in the financial sector did not facilitate foreign capital flows.

To summarise, long-term inflows should be liberalised before short-term inflows. Outflows should be liberalised after inflows have been liberalised. However, restrictions on outflows should not be reimposed during crises, since this is clearly counter-productive, as was again demonstrated in the Asian crises.

There is a strong case for market-based 'Chilean-style' measures (such as non-remunerated reserve requirements on flows of up to one year), to discourage excessive surges of short-term, potentially reversible inflows and to improve the maturity structure of external debt. This could help reduce the likelihood of currency crises. However, further study is required to establish a taxonomy of measures taken in different countries, both developing (e.g. Chile, Colombia, Malaysia) and developed (e.g. Spain and Germany) and to evaluate their costs and benefits (see Section 5). Furthermore, it is important that such measures should not be seen as a panacea, but that they should be part of a package of policy measures that include sound and counter-cyclical macroeconomic fundamentals as well as a strong and well-regulated domestic financial system.

Indeed, it is in periods of excessive surges of capital inflows that recipient countries have greater degrees of freedom for policy-making. Here, counter-cyclical monetary and fiscal policies play an essential role in reducing excessive growth of domestic absorption, and/or current account deficits. It is important that economic authorities 'lean against the wind' with their macroeconomic policies in periods of large surges of capital inflows and/or domestic credit booms. The recent experience and literature indicate that a tightening of macroeconomic policies is particularly desirable when indicators of vulnerability to currency crisis start to deteriorate quickly or pass certain thresholds. This includes cases where current account deficits start to grow rapidly – and certainly if they exceed 4 per cent of GDP – where the proportion of easily reversible capital flows to total flows is high and rising and, particularly, where short-term external liabilities grow rapidly and start approaching the same level as or even exceed foreign exchange reserves. Thus, high levels of foreign exchange reserves and limits on the level of short-term external liabilities are crucial for currency crisis avoidance. Low current account deficits also help

reduce the likelihood of crises, though it needs to be mentioned that, in 1997, South Korea had a fairly low and decreasing current account deficit and still had a major currency crisis.

An appropriate exchange rate regime is also essential for relatively small, open economies, so as to make them less vulnerable to currency attacks. This is a complex issue, and the choice of exchange rate regime should be linked to the country's specific circumstances. A freely floating exchange rate acts as an automatic stabiliser for capital flows, but can cause competitiveness problems. Fixed exchange rates offer apparently secure yields to very short-term investors, and can encourage domestic corporations to borrow abroad. Furthermore, fixed exchange rates can – when the situation deteriorates – offer fixed goalposts for hedge funds and others to attack. International evidence seems to show that exchange rate regimes using wide bands – with a possible crawling peg element – offer a good combination of flexibility with some desirable guidance to the market and an anchor for monetary policy. However, further research is required on exchange rate regimes in open economies (see Section 5) when the situation deteriorates.

A counter-cyclical approach should also be applied to the supervision and regulation of the financial system, and particularly the banking system. In boom times, supervision and regulation of banks – as well as credit decisions by banks themselves – should not be based solely on expectations of a continued growth scenario among borrowers. Good economic periods are bad times to evaluate creditworthiness; as a consequence, stress-testing for bank loans is essential. Indeed, potential downside risks, including the possibility of capital flows slowing down or being reversed – and the economic slowdowns – need to be considered both in credit decisions and in supervisory evaluations of loans, as well as the assessment of collaterals, (such as property) whose value is linked to the business cycle. Such a counter-cyclical approach would moderate booms of domestic bank lending which often exacerbate the impact of excessive surges of capital inflows. High liquidity and capital requirements for banks can also provide a valuable additional cushion for downside risks.

4.1.2 International measures

The current international discussion – in forums like the G-7, the IMF and the G-22 – has stressed improved information and surveillance of developing countries as an important mechanism to make future crises less likely. Not enough emphasis is being placed on international capital market surveillance, which would also be very useful. Furthermore, at the conference there was a general feeling that whilst improved information on countries is extremely valuable, it is clearly insufficient. As discussed above, often the key problem is not lack of information (important as that may be), but how available information is analysed. Indeed, the description of a glass as half-empty or half-full does not mainly depend on whether the glass is clean, but on the mood of the viewer; similarly, with markets' perceptions of emerging economies. Therefore, additional tools to improve information are required, including better and more complete regulation of international capital flows.

The main responsibility for discouraging excessive reversible inflows – as well as managing them – falls on the recipient countries. However, the large scale of international funds – compared to the small size of developing country markets – leads us to question whether measures by recipient countries to discourage excessive short-term capital inflows are enough to deal with capital surges and the risk of their reversal. Three strong reasons make complementary action by source countries and international bodies necessary. Firstly, not

all major recipient countries will be willing to discourage short-term capital inflows, and some may even encourage them. Thus the tax and regulatory measures taken to encourage the Bangkok International Banking Facility, encouraged short-term borrowing. Secondly, even those recipient countries that have deployed a battery of measures to discourage short-term capital inflows have on occasions found these measures insufficient to stem very massive inflows. Thirdly, if major emerging countries experience attacks on their currencies that also result in difficulties servicing their debt, they will be forced to seek large official funding. There is a clear need for international and/or source country regulation that will discourage excessive reversible capital inflows. If this is not developed, international private investors and creditors might continue to assume excessive risks, in the knowledge that they will be bailed out if the situation becomes critical. This is the classical moral hazard problem (see Section 4.2.2).

There is a growing consensus on the need to complete and improve international prudential supervision and regulation, to adapt it to the new scale and nature of private flows. Indeed, the conference noted that there is at present a large asymmetry in regulation, as domestic financial markets are highly regulated, whereas there is limited international regulation of financial markets (FitzGerald 1998). There are two categories of flows to emerging markets where additional international and/or source country regulation and supervision may be particularly necessary, as these flows seem insufficiently regulated and their surges, as well as outflows, have played a particularly prominent role in sparking off recent currency crises; the latter would seem to occur particularly because they are reversible. The first of these is short-term bank loans (particularly important in the Asian crisis); the other is easily reversible portfolio flows (especially important in the Mexican peso crisis).

International bank loans (including short-term loans) are already regulated by industrial countries' central banks; these national regulations are coordinated by the Basle Committee. However, existing regulations were not enough to discourage excessive short-term bank lending to several of the East Asian countries. A key reason was that until just before the crisis most of these East Asian countries (and particularly countries like South Korea) were seen by everybody including regulators as creditworthy. Another important reason seems to have been current regulatory practice, as agreed by the Basle Committee. For example, for non-OECD countries loans of residual maturity of up to one year have a weighting of only 20 per cent for capital adequacy purposes, whilst loans over one year have a weighting of 100 per cent for capital adequacy purposes. As a result of this rule, short-term lending is more profitable for international banks. Thus a regulatory bias that encourages short-term lending is added to banks' economic preference for lending short-term, especially in situations of perceived high risk. The issue needs to be rapidly examined of whether the capital adequacy weighting differential is too large in favour of short-term loans for non-OECD countries, resulting in excessive incentives for short-term lending. A narrowing of this differential may be desirable. A further distinction in the capital adequacy rules of the Basle Committee that may require some revision is that between OECD and non-OECD countries. A more appropriate distinction could be according to the quality of banking supervision, with lower risk weighting being given to countries with better banking supervision.

As regards portfolio flows to emerging markets, there is an important regulatory gap, as at present there is no international regulatory framework for taking account of market or credit risks on flows originating in institutional investors, such as mutual funds (and more broadly for flows originating in non-bank institutions) (Griffith-Jones 1998b). This important regulatory gap needs to be filled, to protect both retail investors in

developed countries and developing countries from the negative effects of excessively large and potentially volatile portfolio flows. An innovative aspect of this type of regulation is that it would protect recipient countries more than investors.

The East Asian crisis confirms what was already clearly visible in the Mexican peso crisis. Institutional investors, for example mutual funds, given the very liquid nature of their investments can play an important role in contributing to currency crises. It seems important, therefore, to introduce some regulation to discourage excessive surges of portfolio flows. This could perhaps best be achieved by a variable risk-weighted cash requirement for institutional investors, such as mutual funds. Introducing a dynamic risk-weighted cash requirement for mutual funds (and perhaps other institutional investors) is in the mainstream of current regulatory thinking and would require either that standards be provided by relevant regulatory authorities or that they be agreed internationally. The guidelines for macroeconomic risk, which would determine the cash requirement, would take into account such vulnerability variables as the ratio of a country's current account deficit (or surplus) to GDP, the level of its short-term external liabilities to foreign exchange reserves, the fragility of the banking system, as well as other relevant country risk factors. It is important that quite sophisticated analysis is used, to avoid simplistic criteria stigmatising countries unnecessarily. The views of the national central bank and the treasury in the source countries and of the IMF and the BIS should be helpful in this respect. The securities regulators in source countries would be the most appropriate institutions to implement such regulations, which could be coordinated internationally by the International Organisation of Securities' Commissions (IOSCO).

The fact that the level of the required cash reserves capital charge would vary with the level of countries' perceived macroeconomic risk would make it relatively more profitable to invest in countries with good fundamentals and relatively less profitable to invest in countries with more problematic macroeconomic or financial sector fundamentals. If these fundamentals in a country should deteriorate, investment would decline **gradually**, which it is to be hoped would force an early correction of policy, and, a resumption of flows. Though the requirement for cash reserves on mutual funds' assets invested in emerging markets could increase somewhat the cost of raising foreign capital for them, this would be compensated by the benefit of a more stable supply of funds, at a more stable cost.

This proposal needs to be examined further. In particular, it is critically important that any regulatory provisions of this kind should ensue from guidelines formulated through international consultations such as those employed in developing the 'Core Principles for Effective Banking Supervision'. The guidelines could be developed by a working group consisting of representatives of the national regulatory authorities in source countries together with those from emerging market countries. Due account should be taken of relevant existing regulations, such as the European Commission's Capital Adequacy Directive.

Finally, it is important to stress that additional regulation of mutual funds should be symmetrical with regulation of other institutions (e.g. banks) and other potentially volatile flows.

Further study is required to detect and cover any other existing monitoring or regulatory gaps, e.g. as relates to instruments such as derivatives and institutions such as hedge funds. The possible need to supervise rating agencies may also require further investigation, as do the norms that could be set to supervise them adequately.

The possible need for regulation of rating agencies arises from the mistakes made by these institutions before, during and after the East Asian crisis.

More generally, further work is required to gain a better understanding of recent changes in global credit and capital markets, and – more specifically – of the criteria used by different categories of market actors – including small and large banks, mutual funds, hedge funds and others – to go in and out of countries as well as the incentives that encourage particular patterns of market actors' behaviour which contribute to speculative pressures on individual countries and to contagion to other countries. A better understanding of behavioural patterns and of trends in outflows could help in the design of measures – to be taken by individual firms, by parts of the financial industry via self-regulation, by regulators and/or by governments (e.g. via tax measures) – to discourage market imperfections, like disaster myopia and herding, that contribute to currency crises.

A further measure that may deserve more investigation is a cross-border uniform tax on spot transactions in foreign exchange. This could complement measures for improving and completing international prudential supervision for credit and capital markets as described above. The aim of such a proposal is broadly to slow down speculative, short-term capital flows (which would be more affected as by definition they cross borders often, and would be taxed every time), while having only a marginal effect on long-term flows. More generally, a multilateral tax agreement (with effective multilateral taxation of corporate profits or perhaps of dividends) could be a desirable step in this context. Such an agreement – if appropriately structured – could not only improve the fiscal revenue position of developing countries and reduce the use of tax incentives to foreign investors, thus increasing resources for social infrastructure, but also contribute to stabilisation of financial flows.

It can be concluded that a package of measures needs to be taken to make currency crises in emerging markets far less likely, and therefore ensure the efficient operation of the market economy in emerging markets, which should be a basis for sustained development. The objective of crises avoidance seems to require some discouragement and regulation of excessive and potentially unsustainable short-term inflows. Such measures would be most effective if they are applied both by source and recipient countries (though the main responsibility lies with recipient countries), if these measures avoid discouraging more long-term flows (which on the contrary need to be encouraged) if the rules designed are simple and clearly targeted at unsustainable flows and, particularly, if they are complemented by good policies in the emerging economies.

4.2 Crisis Management

Though prevention is far better than cure, if prevention fails and major currency crises do unfortunately occur, measures need to be in place to manage them as well as possible. Thus, measures for better crisis management – both nationally and internationally – are clearly complementary to measures for crisis prevention.

4.2.1 National measures

The policy options at a domestic level once a currency crisis explodes are very limited, and the trade-offs are very problematic. The standard response required by the markets includes sharp increases in interest rates and significant fiscal tightening, the latter even in countries with fiscal surpluses.

There was a great deal of discussion at the conference about appropriate macroeconomic responses to speculative attacks on currencies, with some disagreements, especially on the correct response of monetary policy.

Some participants, drawing on the experience of countries like Brazil, Chile and the Czech Republic, stressed that interest rate increases could be effective in some cases in preventing large currency depreciations, especially if they were timely, sharp and temporary. However, other participants argued that a positive correlation between exchange rates and interest rates was uncertain, especially in East Asian countries where companies have high debt equity ratios. Also, in countries like Malaysia, large corporations that borrow abroad were hit by depreciation, whilst small companies that borrow domestically were hit by high interest rates. More generally, the possibility of a 'Laffer-curve type' interest rate – exchange rate link was raised; this would imply that exchange rates could be defended effectively, using interest rates up to a certain level, but that the relationship failed to hold beyond a certain point. There was also broad agreement that sustained high real interest rates had important negative effects, both on the financial system and on the real economy. As a consequence, it seemed desirable that East Asian economies should continue prudently to lower interest rates. However, further research is required on interest rate policies in open economies, that are consistent with currency stability, strong financial systems and – above all – sustained growth.

4.2.2 International measures

Sufficient liquidity and appropriate conditionality

The first response internationally when a large currency crisis starts unfolding in one or more countries is to activate quickly a sufficiently large financing package to provide the important public good of stability. The key institution in this has been the International Monetary Fund, through its own resources and its catalytic role in attracting other resources, both public and private. The key problem is that the resources that official sources – and particularly the IMF – can command are relatively small, in proportion to the scale of private sector flows. This was more clear in the case of the Asian crisis, whereas in the Mexican peso crisis the official financing package was proportionally larger and more effective than in East Asia.

According to some participants at the conference, the limited funds of the IMF imply that a very high proportion of its loans goes indirectly to the creditors; furthermore, because creditors are aware that official funds are limited, they are insufficient to restore confidence, and may provide an additional incentive to leave the country quickly. For these reasons, though official financing is very large, little of it stays in the domestic economy to help sustain economic activity and recovery. A further related problem is that short-term lenders and holders of very liquid assets tend to be protected, whilst long-term lenders may suffer losses; this provides the wrong signal, as it further encourages short-term lending and discourages long-term lending for the future. The effects of official financing packages therefore benefit creditors more than developing countries; within the group of creditors, they are more beneficial for short-term lenders. In both aspects, the outcome is the opposite of what would be desirable from a developmental perspective.

To overcome these serious problems in current arrangements, three avenues can be pursued. The first one is to enhance resources for official and other financing (see below). The second avenue is for the IMF to play a

far greater role in determining burden-sharing between developing countries and their creditors, by encouraging debt reschedulings where the problem is one of liquidity, and debt reduction where necessary. This makes it very important to develop orderly workout procedures, which will reduce the required scale of international lending (see below). Several participants at the conference argued that specifically in the case of some East Asian countries debt reduction may be needed, to avoid a 'lost decade to development', as occurred in Latin America in the 1980s. Furthermore, as was shown in the case of Latin America, a reduction in the debt overhang can help restore confidence to private investors, both foreign and domestic. However, debt reduction in the Asian case needs to be adapted to the fact that the problems are of excessive private debt and of private insolvency. Mechanisms such as debt equity swaps may be useful as a way forward. The third avenue to be pursued is to reduce the likelihood of currency crises, with preventive measures along the lines discussed above, which will limit moral hazard (see next section) and discourage surges of short-term capital inflows.

Given the large scale of the resources required – and the limitation of IMF resources – complementary avenues for sufficient provision of early liquidity need to be explored. One possible modality is via enhanced central bank cooperative arrangements, through greatly enlarged swap arrangements, both within regions as well as particularly between G-10 members and non-members. Another possible avenue is via pre-committed stand-by arrangements with private banks, as Argentina and Mexico have recently made; however, these latter arrangements are still untested, and it is unclear how well they would operate in a severe crisis. The problem is a crucial one as in order to be effective for restoring confidence, the liquidity provided needs to be large. It is important that in facing currency crises, an appropriate combination of adjustment, financing and, if necessary, debt workouts be adopted. Also, an appropriate combination of resources needs to be made available to enable the IMF to work towards stabilisation and to put the World Bank in a position that allows it to deal with the social effects of crises.

A number of issues arise relating to the IMF's role in providing liquidity. Besides the crucial issue of the scale of resources, which has just been discussed, other issues include: timing, conditionality and ways to avoid moral hazard.

The issue of timing is important as currency crises happen so quickly. Though the IMF and the international financial community have made important efforts to develop emergency procedures to speed up significantly the response to currency crises, it is still not fast enough. A currency crisis is able to unfold for a couple of weeks before a financing package can be put in place. As markets move so fast and overreact, a great deal of damage can occur in that period. Due to contagion, the crisis can spread rapidly to other countries. A solution worth considering is to have increasing recourse to IMF-supported preventive programmes; a country could make a request for the right to borrow from the IMF before a crisis happens. The country would only draw on this facility if a crisis occurred, but could then do so immediately.

An additional serious problem, particularly relevant for low-income countries, is that when such large volumes of IMF – as well as World Bank and Regional Development Bank – funding are channelled towards middle-income countries in a crisis, funding available from those institutions for low-income countries can fall drastically.

A final issue is the nature of the IMF conditionality that should accompany the large financial packages linked to currency crises. It is crucial that IMF conditionality contributes to rebuild, and not undermine, markets'

confidence in countries. As a consequence, it is counterproductive for the IMF to be critical of many structural features of crisis economies, as this further undermines markets' confidence. As far as possible, IMF conditionality should focus on macroeconomic policies, and not be too intrusive or too comprehensive. Only where more structural reforms are essential for confidence building, and can be effectively implemented in the short run, should they be included as part of short-term policy conditionality. Other structural reforms could be undertaken later, once stabilisation has been achieved and growth has been restored. Indeed, it is essential that the time within which structural reforms are required is realistic.

Orderly debt workouts

As pointed out above, the Asian crisis has lent a sense of urgency to the search for ways of managing financial crises more effectively. The scale of capital flows in the 1990s means that public funds can no longer be relied upon to offset the private outflows during a crisis. In response to this situation, there is a growing consensus that better means of burden sharing are required, with the private sector taking some of the responsibility for the ongoing provision of credit to borrowers in crisis countries.

This consensus is also a response to the increased concern over moral hazard issues, a consequence of the scale of the IMF-led rescue packages in Asia, together with the one put together for Mexico during the peso crisis. Moral hazard occurs when the party that assesses the level of risk of a given transaction receives the gains from, but does not bear the full costs of, the risks taken. The knowledge that IMF-led lending would be likely should a country hit difficulties may discourage investors and lenders from adequately assessing risks.

However, the problems involved in collective action, and the risk of contagion are a clear justification for official intervention in crises. The problems of collective action were clearly illustrated during the 1980s debt crisis, when the long-, drawn-out debt negotiations were an important factor in delaying recovery in Latin America. A further example is that of Indonesia in the current crisis, where it took six months for the country to reach agreement with foreign banks on a private-sector debt restructuring programme. During the intervening period, January to June 1998, the Indonesian economy deteriorated to the point where debt rescheduling may no longer be sufficient, that is, the liquidity crisis may have turned into a solvency crisis.

There is clearly a need for a system that can bring about a more rapid solution of crises, while limiting the problems of moral hazard. There is now a growing consensus that ways need to be found to encourage a greater assumption of risk by the private sector, as well as to involve the private sector at an early stage in crisis resolution in order to achieve equitable burden-sharing vis-à-vis the official sector. In a short-term liquidity crisis, which is what many now believe the Asian crisis was, at least at the outset, the timely provision of significant further credit could avoid the imposition of damaging austerity measures on affected economies. In such cases, the official sector, rather than bailing out private creditors, could bail them in by enforcing early debt negotiations. The private creditors could be encouraged to retain their exposure, and to restructure their short-term credits over a longer term, as a condition of official assistance. In cases of insolvency, the official sector could play a vital role in coordinating the debt workout, including compelling private creditors to write off debt where necessary. As pointed out above, debt reduction and/or debt equity swaps may become necessary in some Asian countries.

Mechanisms need to be established for orderly debt workouts in future crises. These would include: (i) changes in the provisions of loan contracts and bond covenants to facilitate restructuring; (ii) the use of a unilateral stay on payments; and (iii) the potential for lending into arrears by the IMF.

The search for more effective ways to manage financial crises remains a priority as crises will never be eliminated altogether. The orderly debt workout proposals being discussed offer important ways to improve the existing mechanisms for dealing with crises, while minimising moral hazard and therefore reducing the likelihood of crises occurring in the first place. It is unfortunate that though these orderly workout initiatives had been endorsed by the G-10 report produced after the Mexican peso crisis, nothing had come of them by the time the Asian crisis began in the summer of 1997.

The current standard crisis response, which concentrates on imposing tough stabilisation measures on debtors, has had a particularly debilitating effect on the Asian countries affected by the present crisis. The lengthy negotiations to agree debt restructuring in Indonesia, and the disarray when foreign banks were asked to roll over loans to South Korea are potent examples of the failings of the present arrangements. Valuable time was wasted, and crises which may well have been short-term liquidity crises at the outset became full-blown economic and financial crises, with serious social and political consequences for the country as well as consequences for the global economy. It is imperative that significant improvements are made to the mechanisms for managing crises before the next crisis occurs. The official sector should now press for the implementation of contract clauses in bonds and other credit instruments to facilitate restructuring, and the IMF should extend its policy for lending into arrears, which now only applies in some cases to arrears to commercial banks.

A new financial architecture

In our discussions at the conference, both on international measures for currency crisis prevention and management, the focus was on how existing institutional arrangements might be improved, and existing gaps might be filled. However, almost inevitably the discussion was broadened to the deeper issue of what desirable institutional structures would look like if they are to meet development needs in the context of new and more globalised private capital and credit markets.

In particular, three functions of global financial market management need to be appropriately met:

1. The provision of appropriate surveillance and prudential regulation of financial intermediaries, both in developing and developed countries. Though part of this task is carried out by the Basle Committee and other coordinating mechanisms, important gaps particularly in international, but also in national, prudential regulation remain. An interesting question is how these new needs should be met, whether by development of, or improved coordination between, existing institutions or by creation of some new institutional mechanisms.
2. The provision of international official liquidity to the market, including last-resort lending in distress conditions. Currently, this function falls implicitly on the IMF – although it has, at present, insufficient funds and can only lend to governments, and only does so to emerging economies' governments. Though

performing valuable functions, the IMF does not act as a classical lender of the last resort, as it does not have unlimited liquidity and does not lend to international banks. Through what mechanisms/institutions should the provision of official liquidity be enhanced? Should it continue to be provided to emerging economy governments, so as to indirectly help finance international creditors?

3. As discussed above, there are limited methods for orderly debt workouts, and therefore the weight is on developing country adjustment and, occasionally and often too late, on relatively ad hoc debt reschedulings and reductions. How should such international debt workout arrangements best be developed? What should the institutional mechanisms for its operation be?

Major changes in institutional structures may be difficult and time-consuming to achieve. However, it seems highly desirable to develop a clear vision of an appropriate international framework that would allow an orderly global financial market to continue to support the development process and would help avoiding developmentally and financially costly crises like the Asian one. Such a vision could then guide more gradual steps towards a more appropriate global framework.

5 RESEARCH IMPLICATIONS FROM THE IDS EAST ASIA CONFERENCE

Six major research topics clearly emerged at the conference, as being highly relevant for policy design and as having very important implications for long-term development prospects.

5.1 On the Supply Side of Capital Flows

If there is a great development promise in increased access to international capital flows, recent experience also cautions us about the risks involved, including major and costly currency crises. The Mexican peso crisis was the first of these major currency crises. The recent currency crises in East Asia, their magnitude and their deeply negative impact on development and poverty again show the importance of the new policy challenges involved. What is remarkable, given the new magnitude of capital flows moving into and out of developing countries, the importance accorded to these in national policies, and the large impact of capital flows on these economies' development prospects, is how little the complex factors that are influencing the supply of these flows have been studied and how little they are understood. It is difficult to imagine an area where new and appropriate knowledge is more urgently required and of greater immediate policy relevance. The recent IDS-DFID Conference on the East Asian crisis highlighted the urgency of this research.

The proposed research is directed towards helping to fill that gap. It would have to address three more specific objectives:

1. Improve significantly empirical knowledge of how and with what criteria different institutional investors (pension funds, mutual funds and hedge funds), and their fund managers allocate their assets globally and to developing countries. This empirical work is very important, as existing knowledge on institutional investors' criteria, and their impact on the supply and stability of capital flows to developing countries is very limited. Similar analysis is required with respect to criteria for bank lending.

2. Analyse the empirical evidence gathered, to try to determine if a 'ranking of volatility' can be established for different types of institutions (e.g. different types of mutual funds, between mutual funds and pension funds). How does bank lending (of different maturities) fit into a 'ranking of volatility'? What role do domestic actors play in sparking off currency crises?
3. Identify the policy implications of the previous analyses, for both developed and developing governments, as well as for international institutions, on subjects such as regulation, self-regulation, taxation of institutional investors and incentives for fund managers in developed countries, to encourage more long-term flows and possibly attempt to moderate short-term flows when these become excessively large.

The target audience for the resulting research output would be practitioners in the private sector and policy-makers in developed and developing countries, and in international organisations, as well as academics and journalists. Representatives of these groups would be directly involved by writing some of the papers, acting as commentators, and being invited to dissemination presentations.

It may be a useful approach to adopt a methodology that combines reviews of the academic and other literature, gathering of empirical material available from both private and public sources, and extensive interviews of institutional investors and bankers. This type of research would have to be collaborative, involving well-known experts. A study group, involving private sector actors and regulators, would guide the research carried out.

5.2 Developmental Impact of External Capital Flows

Standard economic theory assumes that international capital flows contribute to growth and development through a number of mechanisms. However, the standard view has been increasingly challenged theoretically. Moreover, there is empirical evidence that certain categories of flow (especially short-term, easily reversible flows) have serious development costs, as dramatically exemplified by the East Asian Crisis. As Joseph Stiglitz (1998), the Chief Economist of the World Bank, has concluded recently:

although there is by and large a consensus amongst economists – based on a wealth of studies – that trade liberalisation brings significant economic gains, there is no such consensus about capital account liberalisation. There is savage debate and even outright hostility on this point. What is required here is patient, systematic and credible scholarship, the outcome of which will bear directly on the future of any development model and approaches to poverty alleviation.

Research in this area should aim to contribute to the development of a more consensual view by undertaking further study of the net growth and development effects of different categories of capital inflows and outflows (foreign direct investment, portfolio flows, bank loans of different maturities, etc.) for different types of developing countries. The conclusions of this research would have important policy implications for when and how different categories of developing countries should liberalise their capital account, and what regulatory and other measures should accompany such liberalisation.

It is important that this research (a) is systematic and (b) assesses capital flows and capital account liberalisation from the perspective of their impact on development and particularly on poverty alleviation, and not – as is conventionally done – purely by their impact on financial markets.

5.3 Management of Capital Flows by Developing Countries

Research on this topic should examine two categories of issues:

1. The first is macroeconomic management, especially of exchange rates and interest rates, for open developing countries. Again the growth and development impact of different options would be given highest priority in the analysis.

As regards exchange rates, research is required into arrangements that are sufficiently flexible to cope with large capital flows and their changes, but that do not discourage investment and employment. As both overvalued and volatile exchange rates discourage investment, especially in tradables, this is an important issue. A second key variable is interest rate policy. Managing capital flows often requires very high levels of interest rates, especially when there is pressure on the currency; this tightening of monetary policy has negative effects on private investment and employment. On the other hand, if interest rates are not raised, there is a risk of a large currency crisis, which is also very negative for growth and development.

This analysis is in the context where in open economies, economic authorities currently have the classical Tinbergen dilemma, of having too few instruments to achieve all their objectives.

2. Any research undertaken with respect to this issue should also establish a taxonomy of prudential measures to discourage excessive inflows of potentially volatile short-term capital. This taxonomy should include instruments that already exist in a variety of developing countries (e.g. Chilean-style non-remunerated reserve requirements as one of many possibilities) and that have been implemented in developed economies. A rigorous assessment of the impact of these instruments would be carried out, as well as an assessment of how they could best be implemented. This could be helpful in contributing to develop 'best practice' criteria for developing countries on prudential measures.

5.4 Overproduction

The East Asian crisis has two particular characteristics that suggest its importance as a springboard for future research. First, by (researchable) hypothesis it is less a crisis *of* East Asia but more a global crisis *in* East Asia. And, second, there are underlying trajectories in the real economy that have interacted with global financial flows, boiling over into the financial turmoil that has beset the region over the past twelve months. Contrary to much conventional wisdom, the contribution of the real economy to the financial crisis is to be found in the use to which national and foreign savings have been put in promoting growth through exceptionally high savings and investment ratios. These investments have been concentrated in sectors and in particular niches of sectors, promoting intense competition. This, in turn, has been reflected in sharply declining terms of trade and has contributed to a round of competitive devaluations, which has worsened this particular crisis. However, the nature and extent of this concentrated 'overinvestment' is poorly understood. So, too, are the links between

these concentrated patterns of investment, financial flows, corporate organisation (for example high gearing ratios) and domestic financial intermediation. A greater understanding of the specific and generalisable nature of these complex two-way interactions between the real and financial economies will be helpful in developing an appropriate policy response and thereby avoiding similar crises both in East Asia and in other regions of the global economy.

5.5 Global Financial Market Management

Research under this heading should examine the need for development-enhancing management of global financial markets. In that context, it would make suggestions for changes to be made by financial markets themselves (via self-regulation or other mechanisms), by governments, by regulators, by international financial institutions and by better coordination between the different actors. If and where necessary, due to the existence of clear gaps, suggestions should be made for institutional developments.

Research should focus on three questions: how can more long-term capital be attracted to developing countries, especially the poorest ones? How can costly currency and financial crises be prevented? And how can currency crises be better managed, if they do occur? Three functions of the global financial architecture would be emphasised:

1. provision of appropriate information on, surveillance and prudential regulation of financial markets, in developing and developed countries as well as on a global level. This should cover all financial markets, where the benefits of such prudential regulation outweigh the costs.
2. provision of appropriate and sufficient international liquidity, in times of distress and
3. the creation of adequate mechanisms to share the burdens between debtors and creditors, including orderly workout procedures.

5.6 The Design of Affordable Social Protection Nets

Currency and financial crises can abruptly increase poverty and disrupt existing protection mechanisms for the poor, even in countries where poverty had been rapidly falling, if social protection nets were not properly developed. The design of affordable social protection nets is both essential and difficult for countries undergoing financial and currency crises, and research is needed on the most efficient and most cost-effective mechanisms, from a poverty alleviation perspective, that can be developed for offering social protection; research is also required on how such social protection can best be funded, e.g. by increased taxes or cutbacks in non-essential government spending. The design of affordable social protection nets must be developed in forms that are consistent with, and encourage, economic recovery.

NOTES

1. Data on growth in 1997 and previous years as well as data on growth projections for 1998 for the Philippines are taken from Park and Song 1998. 1998 growth forecasts for South Korea and Thailand were reported in the **Financial Times** of 29 July 1998 (p 3). 1998 growth estimates for Malaysia are from the **Financial Times** of 27 July 1998 (p 2), and the 1998 forecast for Singapore is reported in a Reuters newswire (Reuters 1998a). Indonesia's GDP growth projection for the fiscal year 1998/99 is given in Reuters 1998b.
2. Reuters 1998c. This view on likely increases in poverty is shared by Mari Pangestu of Jakarta's Center for Strategic and International Studies, as quoted in Marshall 1998.
3. For details on interest rate rises during 1997, see IMF 1997. More recent data are only available for a small number of countries. Interest rate data in the IMF's International Financial Statistics for May 1998 indicate that money market rates increased from 11.2 per cent in June 1997 to 23.5 per cent in February 1998 in South Korea, and from 13.67 per cent in June 1997 to 57.18 per cent in February 1998 in Indonesia (IMF 1998).

REFERENCES

- BIS – Bank for International Settlements, 1996 , **The Maturity, Sectoral and Nationality Distribution of International Bank Lending**, First half 1995, January, Basle
- BIS – Bank for International Settlements, 1997, **67th Annual Report**, Basle, BIS
- BIS – Bank for International Settlements, 1998, 'Consolidated international banking statistics for end-1997', BIS press release, 25 May 1998
- Corsetti, Giancarlo, Paolo Pesenti and Nouriel Roubini, 1998, **What Caused the Asian Currency and Financial Crisis?**, Asian Crisis homepage, March 1998,
<http://www.stern.nyu.edu/~nroubini/asia/AsianCrisis.pdf>
- Eichengreen, B. and D. Mathieson, 1998, **Hedge Funds and Financial Market Dynamics**, IMF Occasional Paper No 166
- FAO – Food and Agriculture Organisation, 1997, **Special Report: The Impact of el Niño and Other Weather Anomalies on Crop Production in Asia**,
<http://www.fao.org/WAICENT/faoinfo/economic/giews/english/alertes/nino997.htm>
- FitzGerald, Valpy, 1998, **Global Capital Market Volatility and the Developing Countries: Lessons from the East Asian Crisis**, Paper presented at the East Asia Crisis workshop at the Institute of Development Studies,
<http://www.ids.ac.uk/ids/research/fitz.pdf>
- Frankel, J.A. and S. Schmukler, 1996, **Crisis, Contagion and Country Funds: Effect on East Asia and Latin America**, Pacific Basin Working Paper Series No PB9804, Federal Reserve Bank of San Francisco
- Griffith-Jones, S., 1996, 'How can future currency crises be prevented or better managed?' in Jan Joost Teunissen (ed), **Can Currency Crises Be Prevented or Better Managed?** The Hague, FONDAD
- Griffith-Jones, S., 1998a (forthcoming), **Global Capital Flows**, London, Macmillan
- Griffith-Jones, S., 1998b, **How to Protect Developing Countries from Volatility of Capital Flows?** Paper presented at the East Asia Crisis Workshop at the Institute of Development Studies
<http://www.ids.ac.uk/ids/research/sgj3.pdf>
- Howell, Michael, 1998, **Asia's 'Victorian' Financial Crisis**, Paper presented at the East Asia Crisis workshop at the Institute of Development Studies, <http://www.ids.ac.uk/ids/research/howell.pdf>
- IIF – Institute of International Finance, Inc., 1998, **Capital Flows to Emerging Market Economies**,
http://www.iif.com/PublicPDF/cf_0598.pdf
- ILO – International Labour Organisation, 1998, **The Social Impact of the Asian Financial Crisis**, ILO Regional Office for Asia and the Pacific, Bangkok,
<http://www.ilo.org/public/english/60empfor/cdart/bangkok/index.htm>
- IMF – International Monetary Fund, 1997, **World Economic Outlook: Interim Assessment, December 1997**, Washington, International Monetary Fund
- IMF – International Monetary Fund, 1998, **International Financial Statistics May 1998**, Vol. LI, No. 5, Washington DC

- Kaminsky, G. and C. Reinhart, 1996, **The Twin Crises: The Causes of Banking and Balance-of-Payments Problems**, International Finance Discussion Paper, No 544, Board of Governors of the Federal Reserve System, Washington, DC
- Marshall, Andrew, 1998, 'Indonesia stares into uncharted depths', Reuters: 2 July 1998 12:56 EDT, <http://www.pathfinder.com/money/latest/rbus/RB/1998Jul02/245.html>
- Park, Young Chul and Chi-Young Song, 1998, **The East Asian Financial Crisis: A Year Later**, Paper presented at the East Asia Crisis workshop at the Institute of Development Studies, <http://www.ids.ac.uk/ids/research/parksong.pdf>
- Ranis, Gustav and Frances Stewart, 1998, **The Asian Crisis and Human Development**, Paper presented at the East Asia Crisis workshop at the Institute of Development Studies, <http://www.ids.ac.uk/ids/research/stewart.pdf>
- Reisen, Helmut, 1998, **Domestic Causes of Currency Crises: Policy Lessons for Crisis Avoidance**, Paper presented at the East Asia Crisis workshop at the Institute of Development Studies, <http://www.ids.ac.uk/ids/research/reisen.pdf>
- Robb, Caroline M., 1998, **Social Aspects of the East Asian Financial Crisis: Perceptions of Poor Communities**, Paper presented at the East Asia Crisis workshop at the Institute of Development Studies, <http://www.ids.ac.uk/ids/research/robb.pdf>
- Stiglitz, Joseph, 1998, **Knowledge for Development**, Paper presented at Annual World Bank Conference on Development Economics, Washington DC
- Wade, Robert, 1998, **The Asian Crisis: Debt Deflation, Vulnerabilities, Moral Hazard or Panic?** Paper presented at the East Asia Crisis workshop at the Institute of Development Studies, <http://www.ids.ac.uk/ids/research/wade.pdf>
- World Bank, 1998, **Country Brief: Indonesia**, <http://www.worldbank.org/html/extdr/offrep/eap/in.htm>

Reuters Newswires (July 1998)

- a. Reuters 'Singapore first half growth 3.8 percent', 08:47 a.m. 28 July 1998 Eastern
- b. Reuters 'Indonesia sees GDP falling 12 pct in fiscal '98/99', 11:47 p.m. 15 July 1998 Eastern
- c. Reuters 'Analysis: -hopes for Indonesia recovery remain faint', 10:33 p.m. 18 July 18 1998 Eastern
- d. Reuters 'Thai minister says unemployment worsening', 12:23 a.m. 26 July 1998 Eastern
- e. Reuters 'S.Korea says to create jobs to curb unemployment', 11:25 a.m. 28 July 1998 Eastern
- f. Reuters 'Indonesian economic crisis boosts prostitution', 03:31 a.m. 26 July 1998 Eastern