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ABSTRACT

The paper explores the view that the Asian currency and financial crises in 1997 and 1998 reflected structural and policy distortions in the countries of the region, even if market overreaction and herding caused the plunge of exchange rates, asset prices, and economic activity to be more severe than warranted by the initial weak economic conditions. The second part of the paper presents a reconstruction of the Asian meltdown -- from the antecedents in 1995-96 to the recent developments in the summer of 1998 -- in parallel with a survey of the debate on the strategies to recover from the crisis, the role of international intervention, and the costs and benefits of capital controls.

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6 A reconstruction of the Asian crisis

In the first sections of the paper we have carried out a detailed analysis of macroeconomic indicators at the onset of the Asian collapse in 1997. In this section we present a reconstruction of the unfolding of the crisis, in the context of our assessment of the evidence on structural distortions in the Asian region.[1]

The discussion of how the crisis erupted in 1997 is preceded by a country-by-country overview of the build-up of macroeconomic pressures in the region. This overview is focused on the years 1995 and 1996, the period in which the macroeconomic outlook of Southeast Asia was subject to rapid deterioration.

6.1 The period leading to the crisis: 1995-96

In **Thailand**, the year 1995 witnessed a further increase of the current account deficit, that had risen from 5.7% in 1993 to 6.4% in 1994 and 8.4% in 1995. When GDP growth slowed down in 1996, the current account fell even further, up to 8.5% of GDP. By the end of 1996, the macroeconomic conditions of **Thailand** appeared to be very shaky: large external deficits, increasing short-term foreign indebtedness, fragile financial conditions of corporate firms and finance companies that had heavily borrowed abroad to finance the speculative boom in real estate and equity investments. It is worth stressing that the Thai baht came under attack already in November and December 1996.

In **Indonesia**, an acceleration of growth in 1995 brought along worrisome signs of overheating: the inflation rate remained high, while the country's trade surplus suffered a sharp drop. The government response was initially very timid: a mildly deflationary budget and a modest tightening of monetary policy. The Bank of Indonesia (BI) raised interest rates throughout 1995, and increased reserve requirements for commercial banks from 2% to 3% in January 1996. In September 1996, the BI announced that the reserve requirements would further increase to 5% in April 1997. The bank also intensified its efforts to moderate the expansion of bank credit by resorting to moral suasion.

[1]The first part of the paper includes sections 1-5 and tables 1-38. The second part of the paper includes sections 6-10, table 39, and references.

Like many other Asian countries in a similar situation, the BI faced an awkward balancing act: it was aiming at dampening domestic demand, but was reluctant to increase domestic interest rates significantly, in the fear that higher rates would fuel further capital inflows and appreciate the currency. In an effort to reduce the effects of a monetary contraction on capital inflows, the BI widened the rupiah's trading band from 2% to 3% around the daily mid-rate, hoping that the additional trading risk of holding the rupiah would offset the incentive to invest in domestic assets provided by the higher interest rates. The band was further widened from 3% to 5% in June 1996, and again from 5% to 8% in September 1996. But the broader bands did little to discourage capital inflows, as expectations of higher interest rates pushed the rupiah upward on each of these occasions.

Apart from these moves, the government's only other response was a *promise* to increase its efforts to improve the efficiency and competitiveness of the export sector. This promise was met with widespread skepticism, especially when assessed in the light of a number of actual high-profile initiatives that the government undertook in the period.[2] These initiatives raised serious doubts on the government's willingness to address the country's pressing economic problems, and, according to a private Hong Kong survey of expatriate businessmen in March 1997, earned Indonesia the dubious honor of the "most corrupt country in Asia".

The current account deficit had widened between 1993 and 1995 also in **Malaysia**, reaching 8.8% GDP in 1995. Notably, in 1994 and 1995 foreign direct investment failed to cover the full amount of the deficit. In 1995 there

[2]In February 1996, for instance, the heavily indebted Asri Petroleum group — established under controversial circumstances by a group of prominent local businessmen including Suharto's son, Bambang Trihatmodjo — was given significant tariff support, fueling worries of increased costs for downstream producers. In the same month, Suharto inaugurated a National Automobile Program, in which qualified 'pioneer' firms would be exempt from sales tax and tariffs on imported components. The only firm to qualify was an obscure company owned by Suharto's youngest son Hutomo (Tommy) Mandala Putra, which had entered into an agreement with the Korean firm Kia, but had yet to produce a single car. To make the true intention of the government even clearer, it was announced that the exemptions would not be extended to any other car manufacturer for a period of three years, even if these met the qualification criteria. By the same token, when in December 1995 the ASEAN Free Trade Area deadline for trade liberalization was brought forward to 2003, Suharto insisted on a list of exemptions for goods such as cloves, rice, wheat flour, and sugar, most of which were supplied by lucrative monopolies owned by Suharto's family or their close associates.

was a surge in public investment, which grew by 25% because of a series of large infrastructure projects designed to facilitate Prime Minister Mahathir's goal of earning Malaysia the status of industrialized country by 2020 ("Vision 2020"). The government dismissed concerns that such a goal was placing too great a burden on the country's resources and skills, pointing at the low CPI growth rates as evidence that the economy was not overheated. In contrast with this official view, a number of commentators stressed that Malaysia was an open economy with effective price controls on items that were heavily weighted in the CPI basket. In this case, overheating would be more likely to translate into a deterioration of the trade balance, rather than an increase of the price level. And the trade balance was indeed deteriorating, moving from a virtual balance in 1993 to a deficit as high as 3.75% of GDP in 1995.

Efforts by members of the government to slow expenditure on these projects were actively blocked by the Prime Minister, who appeared to view the projects as symbolic of the government's resolve. With little help on the fiscal side, the Malaysian central bank, Bank Negara (BN), implemented a number of restrictive measures. It placed administrative controls on consumer lending for cars and houses in October 1995, and tightened reserve requirements on Malaysian banks. Furthermore, BN cautiously took advantage of any weakening in the ringgit to raise interest rates. Like Indonesia, the bank tried to walk a fine line, hoping to restrain domestic demand without repeating the experience of 1992/93, in which BN halted a rush of speculative inflows by introducing restrictions and penalties on domestic ringgit accounts and short-term debt instruments held by non-residents. Most of these measures had been dismantled by 1995.

By the end of 1996, concern about overheating had eased. Despite the high rate of public investment, growth had marginally slowed down from 8.2% to 8%. To a large extent, this slowdown reflected a marked drop in the rate of export growth, which fell from 20.9% in 1995 to 7.3% in 1996. But the most important change that materialized toward the end of 1996 was in the market sentiment towards Malaysia as an investment opportunity — foreign fund managers had come to the conclusion that Malaysian interest rates were too attractive to be ignored. In 1996, short-term capital inflows surged to M$11.3 billion, compared to an inflow of M$2.4 billion in 1995 and an outflow of M$8.4 billion in 1994. Malaysia also experienced an overall increase in bank lending as high as 27.6%, with a sharp switch from lending to the manufacturing sector to lending for equity purchases. The availability of property loans drove up asset prices: over the year, the price of up-market

properties in major Malaysian cities grew by 25%.

Korea experienced a serious deterioration of the macroeconomic conditions already in 1995-96. The current account deficit dramatically widened from 1.5% of GDP in 1994 to 4.8% in 1996, leading to an unprecedented accumulation of short-term foreign debt. Export growth fell sharply, especially after negative terms of trade shocks hit the economy in 1996. The 1996 growth rate of industrial production halved relative to the previous year. On average, the profitability of the large Korean chaebols, characterized by very high debt/equity ratios, was low and falling. The financial conditions of the conglomerates and their creditor banks were shaky, raising the possibility of widespread bankruptcies; reflecting such weaknesses, the stock market fell sharply in the two-year period 1995-96, down by 36% relative to the 1994 peak. The won also weakened during 1996.

Relative to the other countries in the region, macroeconomic conditions were more solid in the **Philippines**. Years of structural and macro reforms under IMF supervision had put this economy on a sustainable growth path, albeit lower than some of the neighbors. The government had privatized or was in the process of privatizing the national airline company, the electric power systems, and banks and water supplies. The government's budget was in surplus. Bad bank loans were at a rate of only 3.4 percent by the end of 1996. Nevertheless, the current account deficit was large, and the currency had significantly appreciated in real terms. A very rapid lending boom to the private sector had fueled investment in risky projects, as well as a speculative boom in the property sector.

6.2 Financial distress in the first half of 1997

By early 1997, macroeconomic conditions had seriously deteriorated in most of the region. We have already mentioned that, in the 1990s, finance companies in **Thailand** experienced an explosive growth of lending to the real estate and property sector, mostly financed by borrowing from foreign financial institutions. Troubled financial institutions were receiving official backing. For instance, in the first quarter of 1997 the central bank's Financial Institutions Development Fund (FIDF) had lent over USD 8bn, 17.5% of which to Finance One — at the time, the largest finance company in the country — alone.

It should be noted here that this public intervention implied a very large injection of liquidity in the economic system. After a Thai company (Som-

prasong) missed payments on foreign debt in February 1997, the Thai government on March 10 officially stated its intention to buy USD 3.9bn in bad property debt from financial institutions (a promise that, as discussed below, was then to be reneged upon in June).

A closer look at the government management of the bankruptcy crisis allows us to assess the role of moral hazard and government bail-out guarantees in facilitating the accumulation of foreign loans by domestic financial institutions. Although most of the evidence is anecdotal, the analysis of a few cases can shed light on more general behavioral patterns. The best known is the case of Finance One. Few months before its collapse, ING Bank in Thailand had approved a loan to the company as part of a USD 160m syndication led by the World Bank's International Finance Corporation. According to ING sources, concerns about the viability of Finance One were simply dismissed by the Bank of Thailand, which made explicit reference to a promise of bail-out in case the company had financial problems.[3]

Despite the government-declared intentions to intervene in defense of Finance One, the task of saving this company was particularly difficult and demanding. As reported by the Financial Times, "nearly two-thirds of the company's loans were in three problem areas — property, hire purchase and stock margin lending. As interest rates rose and the economy slowed, Finance One's non-performing loans doubled in 1996, then doubled again in the first quarter of 1997. Meanwhile, the terms of Finance One's assets and liabilities were the most mismatched of any of the top 10 finance companies. It held substantial stakes in several smaller finance and securities companies which themselves were even more vulnerable to the dual pressures of high interest rates and a falling stock market."

On May 23 the government made an attempt to save Finance One via a merger with another financial institution. As this attempt failed and the company became effectively bankrupt, the FIDF stepped in and officially promised to buy new shares in Finance One. It was only one month later, in June, that the public commitment to support Finance One, or any troubled company, was officially abandoned. What happened in June?

Reportedly, on June 25 (the same day when information was leaked that the government would stop supporting Finance One) the new finance minister

[3]As quoted in the *Financial Times*, 1/12/98, Jan Cherim, Country Manager for ING Bank in Thailand, said: "Every time we saw the Bank of Thailand they would tell us 'Finance One is OK, we're backing it all the way'. When they didn't you had to question just about everything they had ever told you".

'discovered' that the stock of international reserves effectively available was a tiny fraction of that officially stated. During the spring, USD 28bn out of USD 30bn in international reserves had been committed in the course of forward market interventions to defend the value of the baht. The government suddenly realized that the overall costs of defending both the domestic value of the financial firms and the external value of the currency were overwhelming and unsustainable, given the available fiscal and quasi-fiscal resources.[4]

The strong speculative attack on the baht that followed forced Thailand to let the currency float on July 2, a key date in the chronology of the Asian crisis. However, the domestic financial turmoil was just at its beginning. On August 5, when the Thai baht had already depreciated by 20%, Thailand unveiled a plan to revamp the finance sector as part of a more general plan agreed upon with the IMF. At that time, the central bank suspended 48 finance firms that were already effectively bankrupt. Eventually, 56 finance companies went bankrupt and were forced to close. Despite the timing of the bankruptcy, it should be stressed that *a large number of these Thai financial institutions were bankrupt well before the currency crisis*, when the sharp depreciation driven by 'investors' panic' increased the burden of their foreign liabilities.

By the same token, the beginning of the Korean crisis took place well before the speculative attack on the won in late October and the 'financial panic' that developed in November and December. In early 1997, **Korea** was shaken by a series of bankruptcies of its large conglomerates, the aforementioned chaebols, which had heavily borrowed in previous years to finance their grand investment projects. The macroeconomic indicators in early 1997 fully reflected the extent of this crisis: the current account deficit was increasing, export growth was falling, and industrial production growth rates were way below previous levels.[5]

[4] Although the press already reported the intention to suspend operation in support of Finance One on June 25, it was only two days later that this intention translated into an official position of the central bank. On June 27, Finance One and other 15 cash-strapped finance companies were ordered to submit merger or consolidation plans.

[5] The severity of the crisis in early 1997 was already apparent in press accounts of Korea's economic outlook. For example, as early as February 1997, the *New York Times* reported: "South Korea is now gripped by a deep unease about its future. Economic growth is slowing, the stock market is near a four-year low, the Korean won has sunk to its lowest exchange rate against the dollar in a decade, and the trade deficit has more than doubled in the last year. Banks are hobbled by bad debt, businesses strangled in red tape, and wages are soaring, weakening industrial competitiveness. Suddenly, it seems to

During 1997, Korea suffered a bankruptcy crisis shaking the large domestic conglomerate sector.[6] As a general pattern, the chaebols that went bankrupt or had severe financial problems in 1997 had above average debt-equity ratios.[7] The string of bankruptcies and financial distress that affected the Korean corporate sector in 1997 translated into serious financial difficulties for the banking system, hitting especially the merchant banks. These banks had heavily intermediated external funds, borrowing in foreign currency and lending to domestic chaebols in domestic currency.

As opposed to Korea, the heart of financial difficulties in ***Malaysia*** *was the real estate sector.* Facing a booming speculative bubble in real estate and equity lending, Bank Negara waited very long — perhaps too long — before intervening. It was only on March 1997, that BN announced ceilings on lending to the property sector and for purchases of stocks and shares.[8] Yet the Bank added that it would be amenable to delays in the submission of these plans and stressed that it was not asking banks to call in credits. The impact of these measures on the KLCI stock exchange index (which is heavily weighted toward property and financial shares) was immediate, and caused foreign investors, led by US fund managers, to start selling their stocks. Within a week of the announcement, the index had dropped 6.6%, and was 17.2% lower than the peak of February 25. By May 15, as the assault

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Koreans, the era of fast growth is ending, endangering hopes that their country will make the leap from industrialization to a high-technology economy on a par with the United States and Japan. The sense of crisis has been punctuated by two events in the last month — the nationwide strike in reaction to a new labor law that threatens job security, and the stunning collapse of Hanbo Steel, flagship of the nation's 14th largest conglomerate, under nearly $6 billion in debt and a cloud of corruption. 'Most people don't think it's a cycle but that structurally something is wrong,' said Kim Pyung Koo, a professor of economics at Sogang University in Seoul."

[6]The string of bankruptcies started in January 1997 when Hanbo Steel, the 14th largest chaebol, sought court receivership. Hanbo steel was soon followed by Sammi Steel, the main firm of Korea's 26th largest conglomerate, that also sought court receivership in March. In April, the Jinro Group, the 19th largest conglomerate, defaulted on some liabilities to financial institutions. In July, it was the turn of the Kia group, the 8th largest chaebol, that failed to pay USD 370m worth of liabilities and was put under protection.

[7]See section 3.4.

[8]Effective April 1, new lending to these sectors was not to exceed 15% of total lending for commercial banks, and 30% from merchant banks. Also, all banks were required to limit the proportion of their outstanding loans to the property sector to 20% (not including low-cost housing, infrastructure, and industrial buildings and factories). They were given until April 15 to submit detailed plans as to how this would be achieved.

on the Thai baht took hold, the KLCI had fallen to a 16-month low.

In **Indonesia**, despite the structural problems outlined above, signs of overheating did abate in 1996 leading the BI to cut rates by 0.5% in December 1996, and again by 0.5% in March 1997, in the hope to moderate the inflow of capital, to ease the debt burden on struggling Indonesian firms, and to foster exports. In the meantime, however, Indonesian companies kept borrowing very heavily in international capital markets. As late as December 24 a report indicated that total Indonesian debt was likely to be closer to USD 200 billion, almost twice as much as the government's official figure, USD 117 billion. This report estimated that the government data ignored the bulk of short-term off-shore borrowings. International financial markets and institutions suddenly learned that the full extent of total foreign borrowing by the Indonesian corporate sector was underestimated by USD 67billion.

6.3 The policy response to the 1997 currency crises

Reflecting the macroeconomic conditions in the region, national stock markets started to drop and currencies came under speculative pressures in the first months of 1997. *The first currency to come under attack in the spring was the* ***Thai*** *baht, the currency of the country with the shakiest economic fundamentals. Once the baht started to depreciate in July 1997, the currencies that came under speculative pressure were those of countries with economic fundamentals and export structure similar to the ones of Thailand.* These countries were **Malaysia, Indonesia** and the **Philippines**. By the end of July, the baht had fallen by 25% relative to the beginning of the year, the rupiah by 9%, the ringgit by 4%, and the peso by 10%. In August, the baht fell further, depreciating by 34% relative to its January value; by the end of August, relative to the beginning of 1997 the rupiah had fallen by 27% , the ringgit by 17% and the peso by 14%. The scenario of contagious devaluations, with a fall of one currency inducing further plunges of other ones, continued in September. After another round of currency adjustment in this month, the baht was 42% below its January level, the rupiah 37% below, the ringgit 26% below and the peso 29% below.

The key to understand the sharp devaluations of these currencies during the summer is the conduct of monetary policies before the crisis and after the first round of depreciations. The first reaction by monetary authorities to speculative pressures in the foreign exchange market was to avoid a significant monetary contraction and a significant increase in domestic interest rates.

So, in response to speculative pressures in the spring, **Thailand** and the other countries in the region at first sterilized their intervention in the spot and forward markets. Once such a strategy turned out to be ineffective, Thailand tried to discourage capital outflows with the introduction of limited capital controls aimed at segmenting the onshore and offshore markets,[9] while leaving the domestic monetary stance untouched. Needless to say, under such circumstances, controls could do very little to stop the speculative flows.

The stance of monetary policy in the region remained quite loose well into the crisis. Despite the initial round of sharp depreciations, for many weeks national monetary authorities were determined not to let domestic interest rates increase. It is only when the fall of the currencies accelerated after the end of the summer that a serious monetary tightening started to be implemented. Notably, **Malaysia** waited until early December, when the ringgit had already fallen by over 40%, to change its official monetary stance and renounce its policy of low interest rates.

*A policy of low rates in the presence of strong speculative attacks on the currency in **Thailand, Malaysia, Indonesia** and the **Philippines**, can only be understood in the light of the fragile financial conditions that we discussed in the previous sections.* Central banks were held back by the concern that high interest rates would worsen and compromise the financial conditions of highly indebted banks, financial institutions and corporations. An interest rate increase would have led to a further slowdown in output growth. Given the fragility of both the banking system and the corporate sector, a monetary tightening would have led to a credit squeeze, corporate and banking bankruptcies, and further negative effects on the level of economic activity. Well before the onset of the crisis, several governments were engaged in an extensive policy of bailing out financial institutions. Such a policy was by itself a source of monetary creation,[10] and in any case a bail-out strategy was hardly consistent with a contractionary monetary stance that would have only pushed more firms into financial difficulties, and increased the fiscal bill of the government.

A relatively loose monetary policy with the goal of preventing further financial problems for firms and banks was of course a very risky strategy. As it turned out, it eventually induced a continuous spiral of currency depre-

[9]Later in the spring, Malaysia introduced limits on swaps by nonresidents not related to commercial transactions. see IMF (1997).

[10]For instance, in Thailand, liquidity injections surpassed USD 8bn in the first quarter of 1997.

ciations that dramatically increased the real burden of the foreign-currency liabilities. *The depreciation jeopardized the very financial viability of financial and non-financial firms which a loose monetary policy was meant to preserve, while increasing the cost of bail-out well beyond the fiscal means of these countries.*

Only after the currencies had fallen considerably — and after the increase in real external liabilities had pushed a significant fraction of firms into financial difficulties — did monetary authorities switch to tight monetary and credit conditions. However, the impact of such a late tightening turned out to be negative. Instead of restoring market confidence, the monetary contraction induced a credit squeeze that increased the amount of bad loans, exacerbated the financial problems of banks and firms, and had a sharp deflationary effect on the level of real economic activity.

6.4 Policy spillovers and contagion effects

By the end of the summer, the combined effective devaluation of about 30% in three months for the currencies of **Thailand**, **Indonesia**, the **Philippines** and **Malaysia** had a strong negative impact on the other currencies in the region. For instance, the **Singaporean** currency that was formally on a float started to depreciate on the wheel of the sharp deterioration of the ringgit — the currency of its close neighbor and trading partner Malaysia. By the end of September, the Singaporean currency had lost 8% of its value relative to the beginning of 1997.

The speculative pressure in October first affected **Taiwan**, then **Hong Kong**, but not the **Korean** won. Since during the 1990s the won had depreciated by about 15% in real terms (relative to its 1990 level), Korea had suffered less from the devaluations in the region, in comparison to Singapore and Taiwan. Most importantly, the won had been on a gently declining path in 1996 and had lost another 8% of its value between the beginning of 1997 and the end of September.

Things were different for **Taiwan**. Initially, the Taiwanese currency seemed to be unaffected by the crisis for three reasons: first, relative to the Asean-4 countries, the composition of its exports was more oriented towards high value-added high-tech goods; second, the country was running a current account surplus and had large foreign exchange reserves; third, the Taiwanese dollar had been allowed to depreciate in real terms during the 1990s. However, the markets mood changed in October. Concerns about the

loss of competitiveness in Taiwan had already grown stronger as the magnitude of the depreciation of the other currencies in the region kept increasing through September. The key factor was however the decision by **Singapore** to allow a depreciation of its currency. Since the composition of Singaporean exports is very close to that of Taiwan — the two countries producing similar high-tech commodities[11] — the Singaporean move was perceived as an important threat to the competitive position of Taiwan. By early October, the Taiwanese currency was subject to severe speculative pressures.

In principle, Taiwan had enough reserves to engage in an extensive defense of its exchange rate parity — its stock of foreign reserves was over USD 100bn. Nonetheless, in mid-October, the Taiwanese authorities preferred to let the currency float, as they saw no point in defending a parity that in the previous months had significantly appreciated in real terms relative to the currencies of five regional competitors. After the switch to a float, the Taiwanese currency lost 5% of its value (by October 20).

The devaluation of the Taiwanese dollar generated expectations that **Hong Kong** would follow the example of Taiwan, changing its fixed peg to the US dollar. Several considerations could justify a depreciation of the Hong Kong dollar. First, during the 1990s the Hong Kong dollar had appreciated by over 30% in real terms, and the trade balance had exhibited a large structural deficit since 1995. Second, by late October the average depreciation of Thailand, Malaysia, Indonesia and Philippines had approached 40%. Despite the differences in the export mix of these countries relative to Hong Kong, such a large change in relative prices was indeed applying further competitive pressures on Hong Kong. Third, both Singapore and Taiwan had depreciated their currencies, and the export mix of these countries *was* very close to that of Hong Kong.[12] Finally, the reunification with **China** over the summer had introduced an element of political risk. On the basis of the above considerations, *the contagious speculative attack against*

[11] In 1997, the percentage shares of semiconductors and some related capital goods (industries 200 to 216) in total exports of Asian countries to the US were: 19 (Greater China), 54 (Korea), 83 (Singapore), 57 (Taiwan), 10 (Indonesia), 61 (Malaysia), 54 (Philippines), 37 (Thailand). During the same year, the percentage shares of apparel, footwear and household goods (industries 400 to 420) were: 69 (Greater China), 19 (Korea), 5 (Singapore), 27 (Taiwan), 53 (Indonesia), 28 (Malaysia), 32 (Philippines), 39 (Thailand). See Fernald, Edison and Loungani (1998) for an analysis of these data.

[12] Market comments at the time expressed clearly how the fall of the Taiwan dollar would have had contagious repercussions. As put by John Bender, vice president at HSBC James Capel, "the biggest thing to scare Hong Kong was the devaluation in Taiwan."

the Hong Kong dollar in late October should not be interpreted as a form of irrational speculation. The currency of Hong Kong was overvalued, and there were several fundamental reasons to expect a correction.

Another serious misperception of the Hong Kong experience is the idea that the successful defense of the parity was due to the presence of a currency board. *The Hong Kong success in avoiding a collapse of its currency under the strong speculative attack of October had less to do with the fact that the country had a currency board, and more to do with the fact that the monetary authorities were willing to drastically increase short-term interest rates.* Because of a very severe monetary tightening, these rates reached extremely high peaks in both nominal and real terms, preventing an escalation of the capital outflow, and eventually convincing international markets about the credibility of the Hong Kong commitment to keep its exchange rate parity fixed.

We observed above that while the currency crisis was spreading throughout the region,[13] the **Korean** won had been spared from speculative pressures. By the end of October, a policy of gradual adjustment in the parity had led the won to a very contained depreciation of 14% relative to December 1996 (only 8.4% since July). This implied that, relative to the currencies of Thailand, Indonesia, Malaysia and the Philippines, the won had appreciated by 37%, 36%, 20% and 15%, respectively. Moreover, Singapore and Taiwan (which competed directly with Korea in a wide range of export products) had allowed their currencies to depreciate more substantially than the won; this had put Korea — a country in a serious economic crisis since the middle of 1996, as discussed in the previous sections — at a rather severe competitive loss.

In November the won plunged, depreciating by 25% during the month (corresponding to a 39% depreciation over the year). This rapid fall did not only worsen the domestic financial crisis, but eventually led to the arrangement of a USD 60b IMF-led rescue package in early December. As Korea was the largest economy in the region, it negatively affected the external position of all the other countries in the region. Another round of depreciations followed: the collapse of the Korean currency in November and December was matched by a continuous decline of the Taiwanese and Singaporean dol-

[13] By the end of October 1997, the Thai baht had depreciated relative to the US dollar by 55%, the Indonesian rupiah by 54%, the Malaysian ringgit by 34%, the Philippines peso by 33%. Relative to the beginning of the year, also, the Taiwan dollar had depreciated by 11.8% (10.4% since July) and the Singapore dollar by 12.5% (10% since July).

lar, and a further drop in the value of the currencies of Thailand, Malaysia, Indonesia and the Philippines.

Once the real burden of the gross borrowing by banks and non-banks was worsened by the depreciation of the currency, and some financial institutions went bankrupt, foreign banks that had heavily lent to Korean banks started to refuse to roll-over their loans, loans that would have been automatically renewed in normal times. The unwillingness of foreign banks to roll-over normal lines of credit in the face of a high perceived risk of bankruptcy made the prospect of loan default more likely, according to a well-known pattern of self-fulfilling expectations.[14] The financial panic that ensued in December led to a 40% currency collapse in just a week. The situation calmed down only at the end of December 1997 when the American, European and Japanese banks jointly agreed to negotiate an orderly renewal of short-term loans and the major creditor countries decided to anticipate the disbursement of a fraction of the bail-out package approved by the IMF in early December.

A case in part similar to the Korean one was that of **Indonesia** in January 1998. In this month, the continued plunge of the Indonesian currency together with the refusal by foreign lenders to roll over short-term debts rendered domestic borrowers unable to service their foreign debt. Indonesia then imposed an effective *moratorium* on the service of the liabilities of its corporate sector. The problem of arranging an orderly roll-over of liabilities was much more complicated in Indonesia than in South Korea. In Korea, most of the short-term BIS loans were concentrated to a limited number of domestic financial institutions. Thus, the small number of concerned parties made the difficult problem of negotiating the roll-over of loans (and/or their transformation into medium term loans) relatively manageable. In Indonesia, instead, the negotiation represented a much more daunting task, as it involved a very large number of domestic firms that had borrowed directly from BIS banks and/or in international debt markets.

6.5 The role of Japan

What was the role of Japan, the leading regional economy, in the crisis? At the beginning of 1996 it appeared that the economy was recovering after five years of near zero growth, but with the increase in the consumption tax in

[14] See *e.g.* Chang and Velasco (1998 a, b), in which the classic Diamond and Dybvig (1983) framework is applied to the study of financial crises in emerging economies.

April 1997 Japan fell into another economic recession: the level of activity actually declined in the second and third quarters. Clearly, the economic weakness in Japan contributed to the crisis in terms of a reduced demand for imports from the region. As Japanese authorities kept monetary policy loose and interest rates extremely low, the continued depreciation of the yen relative to the US dollar since the middle of 1995 exacerbated the exchange rate tensions in the region, and in 1997 caused a steep real appreciation of the Asian currencies that were pegged to the dollar. The crisis finally exploded in the summer, when the dollar went through what seemed an unstoppable rise and the yen continued its decline.

It is important to stress that Japanese banks, already in fragile conditions after the burst of the 1980s asset bubble and weakened by a stagnant economy in the 1990s, had heavily lent to other Asian economies; given the very low interest rates in Japan, large scale lending to the fast-growing East Asian countries was stimulated by the higher returns available outside Japan. As the Japanese crisis deepened in 1997, many of these banks suffered capital losses and were required to re-balance their loan portfolio in adherence to capital adequacy standards. Since the capital adequacy requirement is higher for international than for national lending, many banks chose to recall foreign loans and contain the magnitude of the domestic lending squeeze. At the same time, however, banks and firms in South East Asia that had borrowed from Japan were hit by the currency shocks: the financial outlook of Japanese banks and securities firms correspondingly deteriorated.

Compared to the role of the US in Mexican crisis of 1994-95 (when the US, the major regional economic power, was in a strong cyclical upswing), *undoubtedly the weakness of Japan in 1997 exacerbated poor economic fundamentals in Asia and worsened the unfolding of the currency crises. At the same time, the Asian crisis hit the vulnerable economy of Japan hard, imposing the conditions for a scenario of systemic deterioration of the macroeconomic conditions in the region that, by September 1998, has not yet shown signs of recomposing.*

7 Strategies to recover from the crisis: an overview of the recent debate

Before delving into the analysis of the most recent developments in the region, we devote two sections of our study to a brief assessment of the current debate on the policy strategies to recover from the crisis.[15] This section focuses on the divergent views of the role played by the IMF in dampening — or exacerbating — the impact of the crisis. The following section discusses the case for limiting international capital mobility as a crisis management strategy.

The philosophy of IMF involvement in Asia has been synthesized as follows by the Managing Director of the IMF, Michel Camdessus:

> *"As soon as it was called upon, the IMF moved quickly to help Thailand, then Indonesia, and then Korea formulate reform programs aimed at tackling the roots of their problems and restoring investor confidence. In view of the nature of the crisis, these programs had to go far beyond addressing the major fiscal, monetary, or external balances. Their aim is to strengthen financial systems, improve governance and transparency, restore economic competitiveness, and modernize the legal and regulatory environment."*[16]

As a condition for the loans, the recipes of the IMF hinged substantially upon two key postulates: the need to reform the economies, with particular emphasis on fiscal discipline and banking sector restructuring, and the requirement to maintain high interest rates to avoid capital outflows and currency attacks. Table 39 reports the chronology of the agreements between the IMF and the Asian countries between July 1997 and August 1998. The chronology makes it clear that the targets and the tactics of the Fund did not remain unchanged over time: as the situation in Asia progressively deteriorated, the requests of the IMF became less and less restrictive over time. The Indonesian case provides a striking example of such modifications. The first aid package of October 1997 encompassed strict fiscal discipline, while

[15] Needless to say, our survey is only meant to provide a synthetic introduction to the multifaceted issues under discussion since the summer of 1997. For a wider window on the debate, the reader is referred to the aforementioned Asian Crisis Homepage.

[16] Camdessus (1998).

the agreement of June 1998 allowed the country to limit the budget *deficit* — as opposed to target a budgetary surplus — below 8.5% of GDP.[17] To some observers, such evolution represents an unequivocal sign of flexibility and open-mindedness. To other observers, these changes occurred too late.

7.1 Did tight monetary policies and high interest rates worsen the crisis?

Several analysts have argued that the high interest rates prescribed by the IMF to limit currency depreciation had severe repercussions on the economies of the Asian countries. According to the critics of the IMF recipes, interest rates hikes were not effective in slowing down currency depreciation, but rather worsened the extent of the crisis by leading to widespread banking and corporate bankruptcies. The effects of these policies have been described in terms of a vicious circle: the credit crunch imparted severe financial losses to otherwise solvent companies; the widespread fall in profitability translated into higher levels of non-performing loans and credit risk, exacerbating the crisis-induced recessions and, in turn, causing a further contraction in the supply of credit.

In the light of these considerations, the appropriate policy response to the crisis should have been one of loose money and low interest rates — the same strategy adopted by Japan to deal with its internal crisis. According to an extreme version of this argument, during the crisis there were conditions for a currency/interest rate 'Laffer curve': a *fall* — not a rise — of the interest rates would have strengthened the economy and restored confidence, causing the Asian currencies to appreciate.

The above criticisms, however, have been challenged on a key issue. Loose monetary policies in the early stages of a currency crisis contribute to exacerbate the extent of the depreciation, increasing the burden of foreign currency-denominated liabilities issued by banks and firms. In the presence of large external net liabilities, a monetary expansion could actually produce financial distress and bankruptcies, setting in motion the same vicious circle described above.[18] Consistent with this argument is the view that the severity of the Asian crisis could in part be attributed to the unwillingness of the governments to undertake the appropriate restrictive measures at the right time:

[17] The latest IMF plans also allow for a fiscal deficit of 4% in Korea, and 2% in Thailand.

[18] A loose monetary policy could of course also ignite inflationary expectations.

the aforementioned case of low interest rate policies in Malaysia after the runs on the Thai baht is a fitting example. By the same token, Japan's policy response to its internal crisis could not be considered suitable for other Asian countries. As Japan is a large net foreign creditor with sizable current account surpluses, the effects of a weaker yen on the Japanese economy are qualitatively and quantitatively different from the effects of low interest rates and exchange rate depreciation in countries with a large external debt denominated in foreign currency. As regards the 'Laffer curve' argument, it is — in the words of Paul Krugman — "as silly as it sounds".[19]

While the appropriate interest rate policy at the onset of the crisis is still subject to a widespread debate, at the time of this writing — and in the light of the large recessions experienced by the Asian economies in 1998 — most observers seem to agree that high interest rates maintained beyond an 'emergency scenario' can have destabilizing consequences. Indeed, by the summer of 1998 interest rates in the East Asian region have significantly fallen and, in Korea and Thailand, they are now back to pre-crisis levels. Yet, these countries are currently exhibiting a credit crunch which does not appear to be related to the level of interest rates; rather, it has more to do with the inability of financially distressed banks to lend to a corporate sector laboring under the weight of a severe debt overhang.

7.2 Did the IMF plans require unnecessary fiscal adjustments?

Several commentators have argued that the fiscal policy requirements included in the IMF plans were unnecessarily — and harmfully — strict. At the onset of the crisis, the Asian countries under attack were running low budget deficits or fiscal surpluses, and were characterized by relatively low ratios of public debt to GDP, unlike the typical interlocutors of the IMF in past crisis episodes. Excessively tight fiscal discipline made the crisis-induced recession worse.

In support of the 'discipline' view, it has been contended that loose fiscal policies at the onset of the crisis would have raised doubts about the policymakers' commitment to reduce the outstanding current account imbalances, jeopardizing the credibility of their plans. Also, as pointed out in section 3 above, while fiscal deficits and debt were typically low before the crisis,

[19] Krugman (1998 b).

in several Asian countries the projected fiscal costs of post-crisis financial bail-outs are estimated to be in the range of 20 to 30% of GDP. As these extra public liabilities translate into a permanent increase in the interest bill paid by Asian governments of 2-4% of GDP per year, fiscal balances must be appropriately adjusted. In this respect, the IMF has reiterated that, on a country-by-country basis, fiscal plans were targeted to raise the necessary revenues to meet these extra interest costs. Quoting a speech by Stanley Fischer in January 1998,

> *"the fiscal programs vary from country to country. In each case, the IMF asked for a fiscal adjustment that would cover the carrying costs of financial sector restructuring — the full cost of which is being spread over many years — and to help restore a sustainable balance of payments. In Thailand, this translated into an initial fiscal adjustment of 3 percent of GDP; in Korea, 1 1/2 percent of GDP; and in Indonesia, 1 percent of GDP, much of which will be achieved by reducing public investment in projects with low economic returns."*[20]

One year after the eruption of the Thai crisis, some observers shared the view that the IMF may have been too slow in revising its approach to fiscal policy in the crisis countries. It was only when the recessions rapidly materialized in the course of 1998 that the IMF progressively loosened its fiscal conditions to allow for cyclically-adjusted fiscal deficits. However, it should be acknowledged that over the entire year of 1998, news about the size and depth of the recessionary effects of the crisis came as a shocking surprise not only to the Asian governments and the IMF, but also to a vast majority of country analysts.

7.3 Did the IMF 'stick to its knitting'?

The breadth of the restructuring efforts required by the IMF have raised a concern that the Fund has been playing an excessively intrusive role in domestic affairs. The criticism that, by including in the programs a number of structural elements, the IMF was moving beyond its traditional macro-adjustment related areas of competence (monetary and fiscal tasks) was first

[20] Fischer (1998 a).

made by Martin Feldstein.[21] Similar arguments were echoed by regional commentators, resentful of what they perceived as an imposition of major structural reforms (in areas as heterogeneous as financial and labor markets, competition policy, trade relations) and an interference with the jurisdiction of a sovereign government.

The main counter-arguments were spelled out by Stanley Fischer in his reply to Feldstein.[22] To the extent that the Asian meltdown was attributable to structural problems rather than the traditional macroeconomic imbalances, an effective rescue strategy was bound to address the issues at the very core of the crisis. IMF lending to the Asian region would serve no purpose if the weaknesses of the financial sector (ranging from poor bank supervision and regulation to murky relations among governments, banks and corporations) were not removed by the appropriate structural reforms. Similarly, the insistence on good governance and the avoidance of 'crony capitalism' represented a precondition to avoid future crises, as halfhearted reform efforts would not help to re-establish market confidence. Fischer concluded that

> *"the basic approach of the IMF to these crises has been appropriate — not perfect, to be sure, but far better than if the structural elements had been ignored or the fund had not been involved."*[23]

7.4 Did plans to close insolvent banks lead to runs on solvent banks?

The possibility that IMF plans to close insolvent banks led to runs on financially healthy banks has been pointed out, among others, by Jeffrey Sachs. In his comments on the first IMF plan for Indonesia, which called for the closing of sixteen banks, Sachs stated:

> *"In my view, although it's a minority opinion, the IMF did a lot of confidence-reducing measures. In particular, I blame the IMF for abruptly closing financial institutions throughout Asia, sending a remarkably abrupt, unprepared and dangerous signal [...] that you had better take your money out or you might lose it. "*[24]

[21] Feldstein (1998).
[22] Fischer (1998 c).
[23] Ib., p.106.
[24] "To stop the money panic," interview with Jeffrey Sachs, *Asiaweek*, February 13 1998.

The advocates of the opposite view point out that the IMF was not at fault if measures of prevention of bank runs — such as incentive-compatible deposit insurance schemes — were not in place in Indonesia. Moreover, when the IMF requirement partly backfired and an unexpected run occurred, President Suharto's government bore responsibility for failing to enact promised reforms in exchange for the $40 billion international rescue effort. In support of this view is the fact that the requirements imposed on Indonesia by the IMF, including the closing of insolvent banks, were similar to those demanded of Thailand and Korea; yet, neither country experienced bank runs of the same magnitude as those hitting Indonesia. It has also been argued that, in the Indonesian case, more rather than less should have been done: as early as September 1997, widely circulated documents listed more than 16 Indonesian banks experiencing financial difficulties. Instead, the prompt reopening of a closed bank owned by one of President Suharto's sons contributed to reducing the confidence of the public on the overall rescue plan.

7.5 Did IMF intervention enhance world-wide moral hazard?

Many authors have expressed concern with the possibility that IMF-led rescue packages may risk a moral hazard. This is because expectations of a bail-out can lead investors and creditors to refrain from effectively monitoring their investment and lending strategies. Also, officials in debtor countries may pursue excessively risky courses of action, leaving a country more vulnerable to sudden shocks to fundamentals and shifts in market sentiment. While the residents of the country hit by a crisis suffer because of the crisis-induced recession, to the extent that the creditors are bailed-out they do not bear a fair share of the burden of the crisis.

Unquestionably, the risks of creating moral hazard will be thoroughly assessed within the future debate on international policy design and crisis prevention in emerging markets. Yet, several objections have been voiced against a simplistic reading of the problem. First, there is no direct evidence that the surge in capital flows to Asia after 1995 were related to expectations of international bail-outs in the aftermath of the Mexican rescue package. The second objection regards the issue of who bears the costs of the crisis. The IMF has repeatedly pointed out that a majority of private creditors, especially bond-holders and equity investors, took a huge hit during the crisis.

By the end of 1997, foreign equity investors had nearly lost three quarters of their equity holdings in some Asian markets. Nonetheless, commercial banks were to some extent spared; for instance, foreign banks operating in Korea demanded public guarantees on bank loans as a precondition for rolling over the existing loans, without forgiving any amounts due,[25] a point highlighted by Litan (1998).

The third objection goes against the argument that countries which rely on international support when things go out of control will follow unsound policies. As put by Fischer, "countries try to avoid going to the fund; policy makers whose countries end up in trouble generally do not survive politically. In this regard, attaching conditions to assistance gives policy makers incentives to do the right thing."[26]

A fourth, and more substantial point, is that moral hazard may be the lesser evil, as the alternative response to a crisis — to leave countries and creditors to sort out their debts — may have much more dramatic and distortionary consequences. The lessons from the interwar period and the 1980s point out that such a strategy requires complex negotiations over a long period of time, during which access to international markets is curtailed and long-term growth drastically lowered. Also, the experience of the 1990s suggests that highly interdependent economies can be subject to the rapid transmission and the 'contagious' spread of speculative waves and financial panic across regions. In this scenario, a delay in taming a local crisis through the appropriate program of international assistance — and the failure to promptly restore market confidence — would greatly increase the chances of a systemic chain reaction across countries.

8 The Asian crisis and the debate on capital controls

Vis-à-vis the persistent and pervasive nature of the current crisis, the terms of the current debate have progressively encompassed such items as the reform of multilateral institutions, the future of economic and financial cooperation and, most importantly, the desirability of deregulation and liberalization of

[25] To be sure, some of the banks have added modestly to their loan reserves to account for possible future write-offs, while claiming to be charging interest rates that do not fully reflect the risk of the loans rolled over.

[26] Fischer (1998 c), p.106.

international capital markets. The crucial question in this debate is whether exchange controls and limited capital mobility should become elements of an overall strategy of international crisis management and global restructuring.[27]

In order to discuss this topic, one needs to distinguish among three related issues: a) the case for controls on short-term capital inflows; b) the case for controls on capital outflows in the event of a crisis; and c) the optimal speed and sequencing of capital account liberalization.

Regarding the first issue, it has been argued that *restrictions on short-term inflows* may be part of an appropriate policy strategy to prevent a crisis, as they discourage volatile short-term portfolio investment and therefore insulate the country from the disruptive effects of sudden reversals in market sentiment. The experiences with capital controls on short-term inflows of Chile,[28] Colombia and Slovenia are often mentioned in support of this view.

Restrictions on short-term capital inflows may take the form of cross-border controls on bank lending and borrowing only, or be extended to all short-term flows. The case for *controls on short-term cross-border interbank flows* is less controversial than the alternative. It is usually couched in terms of prudential banking standards, rather than in terms of restrictions on capital flows. The case for regulating interbank lending and borrowing hinges upon the evidence on the disruptive effects of highly volatile flows, such as the case when creditor banks suddenly refused to renew their loans to firms and banks in Korea, Thailand and Indonesia.

In principle, restrictions and controls on interbank flows could be *imposed on either lending banks or borrowing banks.* Regarding the former possibility, it should be stressed that, under the current Basle capital adequacy standards, lending banks have a clear incentive to supply short-term, rather than long-term loans to banks in emerging markets. This is because risk weights are lower on short-term than long term bank loans. After the Asian crisis, there is a growing consensus in favor of changing these standards, so as to penalize short-term bank lending to emerging markets through a revision of risk weights (this is currently undergoing as part of the BIS review of the capital adequacy standards).

As regards restrictions on the borrower side, the consensus view is that effective prudential regulation of banks in emerging economies requires higher

[27] For an overview of the debate since the Halifax Summit of 1995 see Kenen (1996).

[28] For an assessment of the Chilean experience, see Massad (1998).

reserve requirement ratios on liabilities representing cross-border interbank loans and deposits. Note that, as highlighted from our discussion, possible restrictions on short-term cross border banks flows are debated within the context of prudential regulation and supervision of financial institutions.

The case for *broader controls on all short-term capital inflows* (including also portfolio investments and equities) is more controversial. The main argument in its favor is that controls on interbank flows may not be sufficient to shield a country from the high volatility of 'hot money' flows. To the extent that also corporate firms respond to distorted incentives leading them to excessive borrowing, controls on corporate foreign liabilities, especially short-term, may be warranted. In the recent experience of Asia, for example, during the 1990s corporate firms directly undertook risky cross-border borrowing on a large scale. In Indonesia corporate borrowing was massive, over $70 billion, and much larger than foreign borrowing by banks. The scale of corporate borrowing was very large also in the other crisis countries.

The available empirical evidence from Chile and other countries that have imposed controls on a broad range of short-term capital inflows is mixed. Controls do appear to affect the composition of inflows (in favor of long-term loans and FDI) but do not appear to affect the overall volume of inflows. Moreover, controls become less effective over time, because of evasion and leakages (especially via trade credits). Finally, there is some evidence that the Chilean controls have favored large corporations over small and medium ones. It has been argued that the apparent success of Chile in avoiding major currency crises should be attributed to an effective prudential regulation and supervision of the financial system, more than to the presence of controls on short-term inflows. In this respect, it is worth emphasizing that, during the recent financial turmoil, Chile — along with Colombia and Brazil — did actually phase-out controls, with the goal of stimulating much needed capital inflows, and reduce the pressure on the currency.

The case for *controls on capital outflows*, especially in the aftermath of a currency crisis, appears much more controversial in the ongoing academic and policy debate.[29] The logic of the argument in favor of outflow controls is

[29]By the fall of 1998, a number of countries are assessing costs and benefits of the recourse to capital controls as a strategy to mitigate the extent of a crisis. At the beginning of September 1998, the Malaysian central bank announced the introduction of capital controls, requiring official approval for repatriation and withdrawal of ringgits from external accounts, imposing that all settlements of exports and imports be made in foreign currency, limiting the sale and purchase of ringgit-denominated financial assets to trans-

laid out by Krugman (1998 c). The economic recovery in Asia is hampered by high interest rates, but, under perfect capital mobility, a reduction in these rates would further depreciate the exchange rate. For countries with a high stock of liabilities denominated in foreign currency, a depreciation would then be recessionary, via the increasing burden of foreign debt. Controls on capital flows allow domestic policy makers to break the links between interest rates and exchange rates, so that interest rates can be lowered without incurring the cost of a currency devaluation. Krugman stresses the effectiveness of capital controls with the following provocative characterization of the successful performance of the Chinese economy in 1997-98:

> *"think about China right now: a country whose crony capitalism makes Thailand look like Switzerland and whose bankers make Suharto's son look like J.P. Morgan. Why hasn't China been nearly as badly hit as its neighbors? Because it has been able to cut, not raise, interest rates in this crisis, despite maintaining a fixed exchange rate; and the reason it is able to do that is that it has an inconvertible currency, a.k.a. exchange controls. Those controls are often evaded, and they are the source of lots of corruption, but they still give China a degree of policy leeway that the rest of Asia desperately wishes it had."*[30]

Is the short-run relief that capital controls give to policy makers offset by their long-run costs (higher inflation, higher risk-premium, efficiency costs due to a distorted allocation etc.)? Some authors argue that there is no compelling empirical evidence that countries which implement capital account convertibility are systematically associated with better macroeconomic performances in the long run. For instance, Rodrik (1998) has recently shown that, in a large sample of countries, "the data provide no evidence that

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actions through authorized depository institutions, and restricting the export of foreign currency by resident travellers. More drastic controls were introduced in Russia following the August 17 decision to devalue the ruble.

[30] In a subsequent 'open letter to Prime Minister Mahathir', Krugman suggests four 'guiding principles' for an exchange controls policy to succeed: first, the actual implementation of controls should aim to disrupt ordinary business as little as possible; second, the distortions they impose on the economy should not be overlooked; third, currency controls should not be used to defend an over-valued currency; fourth, controls must serve as an aid to reform, not an alternative.

countries without capital controls have grown faster, invested more, or experienced lower inflation. Capital controls are essentially uncorrelated with long-term performance once we control for other determinants".[31]

Advocates of the opposite view highlight several arguments against such controls on capital outflows. First, imposing capital controls and limiting capital mobility — they argue — is no 'solution' to the structural problems underlying the Asian crisis. Rather, policy interventions should aim at making the financial system sound, well regulated and effectively supervised.[32] The second argument is based on the experience with capital controls in Latin America in the aftermath of the 1980s debt crisis, which was quite dismal. Controls tended to be ineffective, a tool of financial repression associated with negative real interest rates. For these reasons, they eventually led to more, rather than less, capital flight.

The third argument stresses the role of 'political risk' in international financial instability. While the implementation of capital controls may help fighting a crisis and buy time to organize a policy response to speculative flows, the anticipation (or the possibility) of controls may actually accelerate the crisis. In this respect, the fact that some countries impose controls may lead to a perverse international contagion on other countries. The news of capital controls imposed by Russia and Malaysia in August 1998 was arguably an important factor in the contagious spread of financial panic to Latin America and other emerging markets.

Finally, capital controls are not implemented and managed by the ideally 'benevolent' policy makers of the economic theory, but by governments that are potential sources of distortions and moral hazard. This implies the possibility of a political use (or misuse) of such controls, the risk of creating incentives to rent-seeking, and the temptation to use controls to avoid and or delay necessary reforms.

While the arguments in favor of capital controls, especially during a crisis, are controversial, the views on the third issue presented above, *the optimal speed and sequencing of capital account liberalization*, reflect a widespread and explicit consensus. This consensus view (even expressed formally within the G-7 group and the IMF[33]) stresses that, while a progressive liberalization of the capital account may be warranted over time, policy makers should be

[31] Rodrik (1998), p.61.

[32] See *e.g.* Dornbusch (1998 b).

[33] See *e.g.* Camdessus (1998).

very careful about doing it in a gradual and orderly way. As long as financial systems are weak, poorly regulated and subject to political distortions, a hasty rush to capital account liberalization may be unwise and produce destabilizing effects. The benefits of free capital flows are numerous and, provided that financial systems are strong, the arguments in favor of free capital mobility are compelling. In the transition to a system with desirable characteristics, however, capital account liberalization will have to be cautious, gradual and carefully managed. The transition process will have to prevent large foreign debt accumulation, excessive borrowing and lending, and a mismatch in the maturities and currency denomination of assets and liabilities of financial institutions and corporate firms, which have proven to be so destabilizing in many recent and less recent episodes of financial and currency crises.

9 East Asia in 1998

9.1 Is East Asia following Mexico's footsteps?

The currency and financial crisis has caused a sharp and severe recession in the East Asian region in 1998. According to the IMF forecasts included in the World Economic Outlook of October 1998, the newly industrialized Asian economies (Hong Kong, Taiwan, Singapore, and Korea) are predicted to contract by 2.9%; the economies of the ASEAN-4 nations (Indonesia, Malaysia, Philippines, and Thailand) are expected to shrink by a staggering 10.4%.

The key question is how long and deep the recession in East Asia will be. In this respect, it has been observed that a contraction in economic activity was also experienced by Mexico after the collapse on the peso in 1994; however, in this country the crisis-induced recession was *V-shaped*: output fell sharply for about 9 months, but the contraction was followed by a rapid recovery in the fall of 1995 and a return to high growth in 1996. There are many reasons to believe that the East Asian cycle will not take the V-shaped form of Mexico, and that the contraction in economic activity in the region will last for much longer.

First, in the eve of the Mexican crisis, the US was in a sharp cyclical upswing, an upswing that has continued uninterrupted until the present; high growth rates in the US. has provided a large demand basin for Mexican goods.

On the contrary, the main economy in the Asian region has been experiencing a severe and continued recession, that aggravated in the summer of 1997. As Japan is a significant market for the crisis countries, the severe economic slump in Japan has exacerbated the economic conditions throughout the Asian region.

Second, in 1994 the contagion or 'Tequila effect' from the depreciation of the peso was, to a large extent, contained. While the Mexican peso collapsed, the other currencies in Latin America were able to sustain their pegs. Conversely, the Thai devaluation led to subsequent waves of 'contagious' and 'competitive' devaluations throughout the region. These devaluations limited the ability of the region's economies to support their reciprocal exports; indeed, trade within the region has sharply contracted, as almost all currencies were devalued while all economies started to contract.

Third, the financial crisis triggered by the Mexican devaluation in 1994 was mainly felt in Latin America. Conversely, over time, the Asian crisis has directly and/or indirectly grown into global financial turmoil and contagion. In the course of 1998, commodities prices have been falling sharply and expectations of worldwide output growth have been revised downward (see next section).

For these reasons, the economic contraction in East Asia has been more severe than the recession in Mexico in 1995 and it is likely to last longer. Several indicators tend to confirm this prediction. For instance, industrial production started to recover in Mexico about 9 months after the crisis. In comparison to Mexico, in the four crisis countries (Korea, Indonesia, Thailand and Malaysia) industrial production has fallen more sharply, and by the end of the summer of 1998 there has been no sign of a turnaround. By the same token, the Mexican unemployment rate peaked 12 months after the crisis, and then fell sharply; in the Asian countries, instead, unemployment rates are still growing 14 months after the eruption of the crisis.

Relative to Mexico, the devaluation of nominal exchange rates has been larger in Indonesia but more modest in Korea, Thailand and Malaysia (where currencies recovered in the first months of 1998 after falling sharply until December 1997). Partially matching the different magnitude of nominal exchange rate deprecation, Korea, Malaysia and Thailand experienced a sharper increase in inflation rates and nominal interest rates than Mexico. Inflation peaked above 50% in Mexico about a year after the crisis, while it has remained below 10% in the three Asian countries; however, inflation has been out of control in Indonesia. Real interest rates have remained high in

all the crisis countries, but with a modest reduction in the summer of 1998.

As for the post-crisis Mexico, the trade balances of the crisis countries have sharply improved after the crisis. Yet, the dollar value of Mexican exports rose sharply right after the collapse of the peso, and after year it exceeded the pre-crisis level by 20%. Conversely, in East Asia the dollar value of exports in the crisis countries has *fallen* between 5% and 15% relative to the pre-crisis level. Thus, the improvement in the trade balance is mainly due to a fall in imports.

While the volume of Asian exports has increased (as the deterioration of their value is in large part due to the sharp fall in prices), it has grown at a strikingly low rate relative to the Mexican case. Demand considerations are certainly an important factor in explaining these differences: the recession in Japan and the entire East Asian region has led to a fall in the demand for exports from the crisis countries. However, supply side effects are also playing a role. In particular, a severe credit crunch has limited the ability of firms to produce and export.

9.2 World financial turmoil and global slowdown

During 1998, forecasts of the economic slowdown in the crisis countries have been steadily revised downward. The economic recession in East Asia is spreading from the crisis countries (Korea, Indonesia, Thailand and Malaysia) to Hong Kong, Singapore, the Philippines and Taiwan. The Indian subcontinent is fragile, Pakistan is having serious external balance and debt problems, and India is facing economic difficulties. More crucially, the economic conditions in Japan, the prominent economy in the region, have deteriorated, and this country is in need of difficult banking and structural reforms, let alone an effective macroeconomic policy to recover from the long period of stagnation.[34] Policy failures leading to a further weakening of the yen could undermine the stability of the currencies of China and Hong Kong, triggering a further round of stagflationary competitive devaluations in the entire Asian region.

[34]In this respect, James Tobin writes: "Considering the damage Japan's disastrous macroeconomic performance has done to the Asian and world economies along with the apparent inability of the Japanese to enjoy spending money on themselves, perhaps the Japanese government should unilaterally transfer bundles of yen to other Asian countries and poor countries everywhere for development projects and relief of poverty, requiring that these yen be spent in Japan" (*The Straits Times*, July 18, 1998).

Economic fundamentals are still strong in the US but the global turmoil may lead to a growth slowdown; the stock market is already reflecting such a possibility. There is clear evidence of a worldwide growth slowdown. The IMF's latest growth forecast for world output, 2.0% (in the October 1998 World Economic Outlook), represents a precipitous drop from the 4.3% growth anticipated one year before in October 1997. Expected growth in the Western Hemisphere is now 2.3%, down from 5.1%. More severely, the estimated 2.0% world growth is comparable to that observed during previous world recessions, such as 1974-75, 1980-83, and 1990-91. Apart from the South-East Asia countries — whose growth forecasts were documented in the previous section — Japan's economy is expected to decline by 2.5%, while Russia is expected to contract by 6% in 1998.

Moreover, commodities prices, which were rising in 1995, have fallen sharply in 1997-1998 per effect of the global economic slowdown. This fall is hurting all commodity exporters. In Latin America, falling oil prices have hit Mexico and Venezuela, falling copper prices are hurting Chile and Peru, while falling agricultural prices are affecting Argentina. Advanced industrial countries have not been spared either. Commodity prices played a crucial role in the depreciations of the currencies of Canada, Australia and New Zealand; given their tight trade links with East Asia, the latter two are already headed towards a recession.

In the summer of 1998, what started as a regional economic and financial crisis in East Asia developed into a global financial turmoil with severe real consequences. The serious economic and political crisis in Russia, along with the fall of the ruble, generated speculative pressures in the region, affecting the currency and financial markets of Eastern and Central European countries. A spread of the crisis to the transition economies in Europe would affect Western Europe, where the current economic recovery is solid but not very rapid. Currency speculation has already hit the Northern European countries which are not members of the EMU.

The crisis in Russia has affected the currencies and stock markets of Latin America, increasing the risk of a continental crisis. The currencies in Colombia, Venezuela and Brazil have been under pressure, while stock markets throughout the region are significantly down. While Latin American economies are structurally stronger than Russia, investors are increasingly averse to risk. In August 1998, emerging market spreads over Treasuries (about 1500 basis points) were close to the peaks reached during the 1995 Mexican peso crisis.

10 Open issues

In the light of the most recent developments in the region, we find it appropriate to conclude our study by briefly highlighting some open issues regarding the implications of the crisis.

Some of the crisis countries, notably Indonesia, Korea and Thailand, are currently experiencing a harsh economic contraction. Many corporations have little access to working capital and are burdened by a massive stock of liabilities. Corporate debt-to-equity ratios that were already high before the crisis have grown higher, up to levels that can hardly be deemed sustainable (400% in Thailand, over 500% in Korea, an even higher ratio for Indonesia).

Banks are under extreme stress. Partly as the result of high interest rates (which increase the rate of non-performing loans), and partly due to the attempt to recapitalize financial intermediaries at a rapid pace, the net worth of the banking system of Korea, Thailand and Indonesia has drastically deteriorated. It should be emphasized that, in terms of actual disbursement, official financial assistance has been significantly lower than announced and reported by newspaper headlines. Financial means from official sources have not alleviated the liquidity squeeze in capital markets.

In such context of financial distress and debt overhang, banks have been severely cutting credit to firms. In some cases, this has been a decisive factor in inducing bankruptcy of corporations that in all likelihood would have been solvent in normal conditions. Contractions in trade credit are particularly painful, as such cuts undermine the firms' ability to import intermediate inputs, and to produce and export domestic goods. An important indicator supporting this statement is the fact that, in spite of massive real depreciations, the exports from the crisis countries have not significantly increased in volume.

Over the summer of 1998, interest rates in Asia have significantly fallen relative to the peaks of the crisis, and in Korea they are back to pre-crisis levels. In spite of this, the credit crunch is still severe in most countries: while the price of credit has been falling, banks that are effectively bankrupt or experience financial distress are unwilling to lend to corporate firms suffering from debt overhang, so that loans are still drastically rationed. In such a situation, capital controls leading to lower interest rates would do little to ease the credit crunch, and it is far from clear whether they would help to remove structural impediments to recovery.

While the need for a more decisive expansionary policy has been widely

recognized, several observers have emphasized that an effective way to help the Asian countries to start producing and exporting again may consist of an accelerated debt restructuring process that will recapitalize banks, reduce corporate debt overhang, and provide firms with debt moratoria and new priority financing of working capital and trade. In this regard, it can be argued that a gradual, voluntary and market-based work-out of foreign and domestic debts is not the most effective strategy to address this issue, since a market-based process of debt restructuring may be too slow. The longer the process takes, the larger the number of otherwise solvent firms that become insolvent, and the worse the collapse of economic activity. Suggestions for a comprehensive approach to bank and corporate restructuring with a more active role of governments may have to be considered.

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Table 39. Chronology of IMF Intervention in Asia

7/2/97—Thailand announces a managed float of the baht and IMF negotiations begin.
7/14/97—The **Philippines** extends and augments its existing IMF-supported program of 1997, and arranges a stand-by facility in 1998. IMF offers Philippines USD 1.1b loan package.
8/20/97 - IMF approves a USD 3.9b credit for **Thailand**. The plan assumes a positive growth of 2.5 percent in 1997 and 3.5 percent in 1998; and calls for maintaining gross official reserves at the equivalent of 4.2 months of imports in 1997 and 4.4 months in 1998; limiting the end-period rate of inflation to 9.5 percent in 1997 and 5 percent in 1998; targeting a small overall fiscal surplus by 1998 through an increase in the rate of the value-added-tax (VAT), and selective expenditure cuts; initiating a credible and up-front restructuring of the financial sector, focused on the identification and closure of unviable financial institution (56 finance companies).
10/8/97—Indonesian government agrees to request help from IMF.
10/31/98—The International Monetary Fund announces a $23 billion multilateral financial package involving the World Bank and Asian Development Bank to help **Indonesia** stabilize its financial system.
11/5/97—The IMF approves a USD 10b stand-by credit for **Indonesia** and releases a disbursement of USD 3b. Measures include financial sector restructuring, with the closure of 16 insolvent banks; structural reforms to enhance economic efficiency and transparency, with the liberalization of foreign trade and investment, the dismantling of monopolies, and privatization; stabilizing the rupiah through a tight monetary policy; implementing fiscal measures equivalent to 1% of GDP in 1997/1998, and 2% in 1998/99, to yield a 1% of GDP surplus in both years.
11/21/97—Korea requests IMF assistance.
11/25/97—In light of a larger-than-expected depreciation of the baht, a second IMF package for **Thailand** is approved. The new plan includes additional measures to maintain the targeted fiscal surplus of 1% of GDP, the establishment of a timetable for financial sector restructuring, and plans to protect the weaker sectors of society.
12/4/97—IMF approves a USD 21b stand-by credit for **Korea,** and releases a disbursement of USD 5.6b. The initial program assumes GDP growth in 1998 of 2.5% and features comprehensive financial sector restructuring, including central bank independence, strong market and supervisory discipline, and the suspension of 9 insolvent merchant banks. Fiscal measures equivalent to 2% of GDP make room for the cost of financial restructuring, consistently with a balanced budget target. The plan calls for efforts to dismantle the non-transparent and inefficient ties among government banks and business; for the implementation of trade and capital account liberalization measures, as well as of labor market reforms; for the publication and dissemination of key economic and financial data.
12/8/97—Disbursement of USD 810m to **Thailand.**
12/16/97—Korean government allows won to float.
12/18/97—Disbursement of USD 3.5b to **Korea.**
12/24/97—Korea issues a letter of intent pointing at the need for an acceleration of the program as the situation deteriorates. The plan includes further monetary tightening, the abolition of the daily exchange rate band, the lifting of all capital account restrictions. Financial sector reform and market liberalization, as well as trade liberalization, are expedited. The IMF also announces that a debt rescheduling by international commercial banks is critical to Korea's recovery.
12/30/97—Disbursement of USD 2b to **Korea.**
1/15/98— Disbursement of US 2b to **Korea.**
1/15/98—A second package for **Indonesia** is agreed upon. The plan allows for a relaxation of the previous fiscal targets, that is now a budget deficit equal to 1% of GDP. Previous IMF conditions not fulfilled but reiterated in the second package include: dismantling of government monopolies, postponing infrastructure projects, and closing insolvent banks.
1/16/98—International lenders agree on plan to officially roll over **Korea's** short-term debt.
2/7/98—Korea agrees to third IMF program. GDP growth projections are lowered to 1%. The letter of intent includes additional measures to target fiscal deficit to 1% of GDP, increasing the amount of financial instruments available to foreign investors, and broadening the financial sector reform strategy to accommodate stabilization of short-term debt payments.
2/17/98—Disbursement of US 2b to **Korea.**
2/24/98—The **Thai** plan is further modified. The fiscal policy target is adjusted from a surplus of 1% of GDP to a deficit of 2% of GDP.
3/4/98—Disbursement of US 270m to **Thailand.**
4/10/98—Indonesia issues a Supplementary Memorandum of Economic and Financial Policies on additional measures. These include a strong monetary policies, accelerated bank restructuring, a comprehensive agenda of structural reforms. The IMF allows **Indonesia** to continue its fuel and power subsidies. In the light of the failure of the first two packages, the IMF will resort to a stricter enforcement of provisions.
5/2/98— **Korean** authorities update the program of economic reforms. Growth forecasts for 1998 are further revised downward to –2%. The letter of intent includes the accommodation of a larger fiscal deficit of about 2% of GDP in 1998, measures to strengthen and expand the social safety net, the loosening of restrictions on foreign exchange transactions, and the formation of an appraisal committee to evaluate recapitalization plans by undercapitalized banks.
5/4/98—Disbursement of USD 1b to **Indonesia.**
5/26/98—Fourth IMF program agreed to by **Thailand.** The main priority is to prevent any further slow-down of the economy and foster an early recovery. The modified program calls for cautious and gradual reductions of interest rates, higher monetary growth rates, a looser fiscal deficit target at 3% of GDP, and accelerated corporate debt restructuring with financial sector reforms.
5/29/98—Disbursement of USD 2b to **Korea**
6/10/98—Disbursement of USD 135m to **Thailand.**
6/24/98—Additional IMF reforms agreed to by **Indonesia** in light of changing political climate and worsening economic situation. Provisions include an increase in social expenditures (7.5% of GDP), a budget deficit target at 8.5% of GDP, the closure, merging or recapitalization of weak banks, and the establishment of a bankruptcy system.

7/15/98—Disbursement of USD 1b to **Indonesia.** The IMF increases financing by USD 1.4b.
7/15/98—A new letter of intent by **Korea** announces a further easing of macroeconomic policies. The letter includes the accommodation of a larger fiscal deficit for 1998 (5% of GDP), and measures to bolster the social expenditure program.
7/29/98—The **Indonesian** government requests the cancellation of the existing arrangement with the IMF and its replacement with a new extended arrangement, including new measures on bank and corporate restructuring and improvements in the distribution system.
8/25/98—Disbursement of USD 1b to **Indonesia.** The IMF approves an extended facility with a longer repayment period.
8/25/98—The **Thai** program is modified to incorporate a more comprehensive approach to bank and corporate restructuring. The fiscal deficit target is still at 3% of GDP, for both 1998 and 1999, but this target excludes the costs of financial sector restructuring.
8/25/98—IMF disburses USD 1b to **Korea**.