

## **CHAPTER 2**

# **BACKGROUND TO THE EAST ASIAN FINANCIAL CRISIS**

### **Introduction**

The essence of the East Asian crisis was a huge sudden reversal of capital flows. Large amounts of private capital had flowed to East Asia in the 90's although the scale and phasing differed significantly among countries. Between 1994 and 1996 net private capital inflows as a share of GDP increased considerably in several East Asian countries, for example, by 7 percentage points in Malaysia, 6 percentage points in Indonesia, and 4 percentage points in Korea (Table 1). Only in Thailand did net private capital flows as a share of GDP remain stable, though averaging more than 15 percent over the three years. The surge in flows reflected these countries' strong economic performance, including rapid growth, sustained improvements in macroeconomic balances (public sector balances, inflation), and structural changes that have fostered a market-led, outward orientation since the late 1980s. The cyclical downturn in international interest rates in the early 1990s provided the initial impetus for the surge in flows (particularly portfolio flows); continued increases reflected structural changes that have increased the responsiveness of capital to cross-border

Investment opportunities (World Bank 1997c).

**Table 1 - Net Private Capital Outflows, 1994-1996**  
(% of GDP)

	1994	1995	1996	1997	Change 1996-97
<b>Indonesia</b>	0.3	3.5	6.1	0.0	-6.1
<b>Korea</b>	1.2	0.2	4.9	-6.0	-10.9
<b>Malaysia</b>	1.2	6.2	8.4	-3.0	-11.4
<b>Thailand</b>	14.3	17.3	14.5	-2.0	-16.5

Source: World Bank, Global Development Finance 1998.

But in the last half of 1997 these inflows suddenly reversed whereby estimates showed that the net private capital flows to Indonesia, Korea, Malaysia, the Philippines and Thailand which had increased from US\$38 billion in 1994 to US\$97 billion in 1996, collapsed to an estimated negative US\$12 billion in 1997 i.e. a reversal of US\$109 billion or more than 10 percent of the pre-shock GDP of these four countries. Among the countries, Thailand suffered the highest percentage outflow of capital in 1997, which was quite expected since it also had the highest capital inflow from 1994 to 1996.

## **Policies Affecting Capital Reversals**

In this section we will try to analyse some of the policies and factors that brought about the immense capital reversals and other related issues which led to the financial crisis.

### ***Financial Liberalisation Policies***

Growing problems in the East Asian economies had their origins in financial liberalisation policies introduced in each of these economies in the late 1980's and early 1990s that led to a very rapid expansion of the financial sector and enthusiastic lending by foreign creditors (Radelet and Sach, 1999a). Entry requirements into financial services were loosened, allowing new private banks to open. Banks were given much greater leeway in their lending decisions, and stock and bond markets began to grow and develop. Importantly, banks and financial institutions had new freedoms to raise funds offshore. New institutions were developed, such as the Bangkok International Banking Facility (BIBF) that were designed to offer new financial services and attract investment, and were actively encouraged to borrow offshore to finance their activities. This combination led to a rapid expansion in both offshore borrowing and domestic lending, with a resulting investment boom. Bank claims on the private sector increased by more than 50% relative to GDP in just seven years in Thailand, Korea, and Malaysia (Radelet and Sach, 1999a).

The financial liberalisation directly contributed to the build-up in foreign capital flows, since much of the domestic credit expansion was financed by domestic banks and other financial institutions borrowing offshore. In Thailand, for example, the foreign liabilities of banks and financial institutions rose from 5% of GDP in 1990 to 28% of GDP in 1995. Korean merchant banks borrowed heavily offshore, and then lent the funds to large corporations (chaebols), which became very heavily leveraged by 1997 (Borensztein and Lee, 1998). However in Indonesia, credit growth in the financial sector was more modest, as Indonesian corporations borrowed directly offshore. Nonetheless, the Indonesian corporate sector itself became vulnerable to offshore panic, a point that was painfully proved in late 1997 when the corporate debts were suddenly called in by foreign creditors.

The liberalisation of financial markets at a time of easy global monetary conditions encouraged a surge in borrowing, and domestic credit jumped in these countries (Table 2). For example, in 1996 domestic credit rose to 130 percent of GDP in Thailand (compared with ratios of 22 to 73 percent in Latin America), further increasing the economy's vulnerability to shocks to the banking system (Global Development Finance, 1998).

**Table 2 - Credit Growth, 1990–1996 (%)**

Country	Annual growth of nominal GDP	Annual growth of loans	Loan growth/GDP growth	Net domestic credit/GDP	
				1990	1996
Indonesia	17	20a	122	45	55
Korea	14	17	123	68	79
Malaysia	13b	18a,b	134b	80	136
Philippines	13	33	264	26	72
Thailand	14b	24b	176b	84	130c

*Note:* Loans include non-bank financial intermediaries.

a. Does not include non-bank financial intermediaries in 1990 and 1996 for Indonesia and in 1995 for Malaysia.

b. Data are for 1990–95.

c. 1995.

*Source:* World Bank 1997c; IMF *International Financial Statistics*, and Goldman Sachs.

As is so often the case with rapid financial sector liberalisation, the government's capacity to regulate and supervise these transactions did not keep pace. At the same time, the banking system was unable to allocate the greatly increased flows on an efficient basis. Bank loan quality began to deteriorate, though not catastrophically. Some banks were undercapitalised, non-performing loans were rising gradually, and many basic prudential regulations (such as lending to affiliated companies) were regularly broken, with little penalty. There is little doubt that these weaknesses in the financial sector were a key precondition of the crisis (Radelet and Sach, 1999a).

### ***Exchange Rate Policies***

Exchange rate policies to a great extent exacerbated Asia's problems. Governments in each of the crisis countries kept their exchange rates fixed or changed them at very predictable rates (except Malaysia that had a floating exchange rate) in the early 1990s gave every indication that these policies would remain intact in the future. These policies helped encourage short-term capital inflows, since investors perceived little likelihood of a loss from exchange rate movements. They also kept the prices of tradable goods and services relatively fixed, while the prices of non-tradable goods and services (especially construction and property) rose as a result of the investment boom. As a consequence, the real exchange rate (measured as the ratio of the prices of tradables to non-tradables) began to gradually appreciate (that is, the ratio fell). Several studies have attempted to estimate the extent of the overvaluation of the Asian currencies in early 1997. Although methodologies and data sources differ somewhat, most analyses suggest that currencies became modestly overvalued, especially between 1994 and 1996<sup>1</sup>. Radelet and Sach (1999a) estimates suggest overvaluation of about 20% in Thailand, Indonesia, Malaysia, and the Philippines, and about 10% in Korea.

The pegged exchange rate arrangements posed much greater problems in

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<sup>1</sup> see policies that led to capital reversals - Chinn (1996); Furman and Stiglitz 1998

1997, when governments ran down their foreign exchange reserves to defend pegged currencies that were increasingly judged by the markets to be unsustainable. As the reserves ran down, vulnerability to financial panic increased (a theoretical model to explain this phenomena is shown on page 15-17).

Looking over the course of the 1990s, we can say that Asia's pegged exchange rates posed at least three problems. First, they gave overconfidence to investors, who ignored exchange risks on the belief that nominal exchange rates would be pegged indefinitely, or at least long enough to allow for a graceful exit. Second, they permitted a growing overvaluation in real terms, thereby squeezing exporters, and drawing too much investment spending into non-tradeables sectors. Third, they set the stage for financial panic, since Asian governments were committed by their public promises to use the foreign exchange reserves to defend the currency, even after everybody came to regard the rate as overvalued. This promise forced governments to deplete their foreign reserves in a vain defense of the currency, and then it forced them to "break their word" when they had to abandon the currency defense once the foreign exchange reserves are depleted.

The combination of the investment boom and fixed exchange rates led to over-investment in some sectors, and a moderate decline in investment

quality. One indicator of eroding investment quality is the fact that incremental capital-output ratios (ICOR's) rose across the region although it is worth noting that they rose by an amount not much greater than in several non-crisis emerging markets (Javad K. Shirazi, 1998). The ICORs rose from about 3 in the five year period ending in 1991, to over 5 by 1996 in Thailand and Korea. The decline in the efficiency of investment was mirrored by an accumulation of bad assets on the balance sheets of financial institutions.

### ***Moral Hazard***

It was viewed that the collapse of these economies was the inevitable result of over-investment resulting from a widespread belief among creditors that they would be bailed out if their investments went bad. Creditors felt secure that they would be repaid for lending to specific projects that were controlled by companies with close connections to the government. Akerlof and Romer (1996) show that a moral hazard crisis can develop when banks are able to borrow funds on the basis of explicit or implicit public guarantees. When banks are under-regulated, they may use the funds in very risky or even criminal ventures. Krugman (1998) argued that the Asian crisis was a reflection of excess gambling and stealing by banks that gained access to domestic and foreign deposits by virtue of state guarantees.



### **Trade Policies/International Developments**

Perceptions about Asia's growth prospects may have begun to shift after export growth slowed abruptly in 1996 (Table 3). Export growth rates (in value terms, measured in US dollars) dropped sharply in Korea, Malaysia and especially in Thailand (where the value of exports actually fell 1.8% in 1996 after expanding by 25% in 1995). In Indonesia, export growth had slowed less sharply, but the slowdown had started in 1993. In Korea's case, the slowdown was mainly due to a drop in export prices, itself partially due to Korea's over-investment in some sectors, especially semiconductors. For example, world prices for semiconductors fell 20% between 1995 and 1997 after rising sharply in the early 1990s. Malaysia, too, suffered mainly from weak prices. By contrast, Thailand's export prices remained stable, but export volumes dropped sharply. Indonesia's slower growth was also mainly due to sluggish volume performance.

**Table 3 - Export Growth in US dollars (% change)**

	1993	1994	1995	1996	1997
<b>Indonesia</b>	8.4	8.8	13.4	9.7	8.40
<b>Korea</b>	6.8	14.9	23.8	18.9	24.9
<b>Malaysia</b>	15.7	24.7	26.0	9.3	1.3
<b>Thailand</b>	13.2	22.7	25.1	1.8	3.5

Source: World Bank Data

Several factors apparently combined to weaken export performance. First, Asian firms became less competitive during the early 1990s because of the real exchange rate appreciations discussed above. Second, as mentioned, over production led to a glut in some sectors and thereby to falling export prices. Third, competition from China and Mexico put some moderate pressure on Asian exporters, especially in certain activities, such as textiles. The combination of these factors may have raised some concerns as to the long-term competitiveness of Asian exporters. In turn, slower export growth may have created concerns on the part of creditors about future growth prospects and the ability of Asian firms to continue to service their debts.

### ***Financial Panic***

Most of the reasons cited above were what is known as the fundamentalist view most notably advocated by Paul Krugman in his 1998 paper. Another view called the Financial Panic View which was put forward by Radelet and Sachs (1998a), emphasised the role of expectations and panic in explaining the propagation of the crisis. The fundamentalist view does not explain the speed and magnitude of the crisis. While explaining the financial meltdown, it does not explain the successive domino effect on the other countries in the region, which is important, because this was a regional crisis and not an individual country crisis. This is further supported by the fact that the region's economic fundamentals were essentially sound in the period

leading up to the crisis. It was only after the crisis that economists tried rationalising in an attempt to show that the miracle was not what it was supposedly to be.

As it can be seen that this crisis was not predicted by most market participants and analysts, as reflected in optimistic reports on the region by IMF, credit rating agencies in the period before the crisis. Even though there were some signs of vulnerability in these economies<sup>2</sup> such current account deficits, overvalued exchange rates and a slowdown in export growth but all these indicators pointed to a slowdown not a full blown crisis (Bank Negara Malaysia, 1999).

By themselves the reasons given by the so-called fundamentalist probably would not have caused a regional crisis but because there was a triggering factor, that was through speculative attacks on the currencies which initiated the events (*the spark to the fire*).

The theoretical interpretation of the cause of the crisis can be seen in Figure 1. By May 1997, concerns about the large current account deficit in Thailand and the weakness in the financial system made foreign creditors nervous and caused speculators to suspect that Thailand might be forced to devalue its currency. The result was a rise in the expected return on dollar

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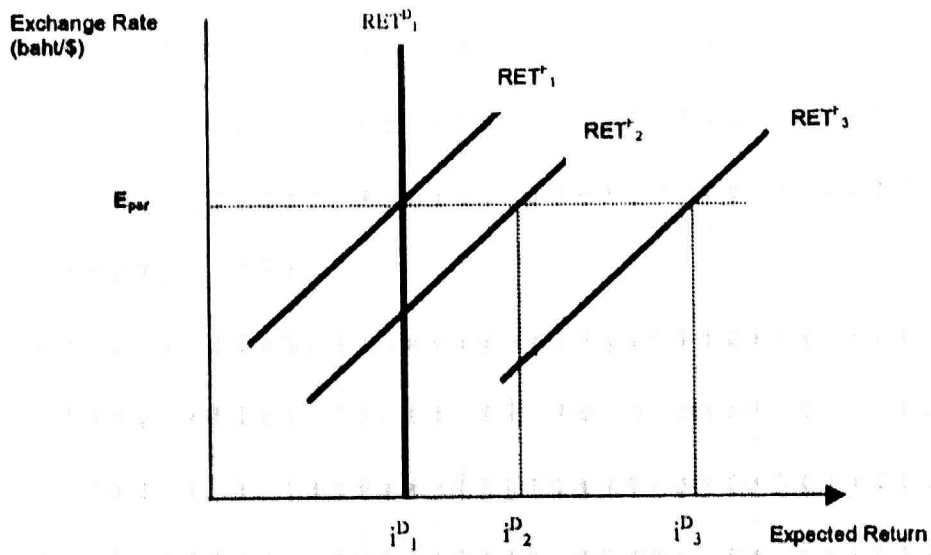
<sup>2</sup> Yung Chul Park (1996) in the *Brookings Papers on Economic Activity*, gave warnings that East Asia could be subject to the same kind of crisis that had hit Mexico in 1994-95, but such warnings were rare and generally unheeded.

deposits, which shifted the  $RET^F$  schedule from  $RET^F_1$  to  $RET^F_2$  so that the intersection of the  $RET^D_1$  and  $RET^F_2$  curves was below the pegged value  $E_{par}$  of around 4 cents per baht. Intervention by the Thai central bank to purchase baht (after spending US\$48.7 billion in reserves to defend the currency and undertaking US\$23 billion in forward contracts maturing over the next 12 months) which raised the interest rates to  $i^D_2$  (from 12 percent in January 1997 to 18 per cent in June 1997) was successful in containing this speculative attack. However the failure of major finance company, Finance One, imposed losses on creditors, causing foreign creditors to begin pulling out of the market in earnest. As speculators became even more confident that the Thais could not continue defending the baht, the expected return on dollar deposits shot up further, and  $RET^F$  moved much further to the right, to  $RET^F_3$ . Given the weakness in the financial sector and the loss of reserves, the Thai monetary authorities could not continue to intervene. On July 2 they were forced to give up and let the baht depreciate.

Concerns that similar problems might be present in other East Asian countries generated speculative attacks against other currencies as well leading to a scenario to that depicted in Figure 1. This was followed by a lost of confidence in the economies among foreign investors who started to withdraw part of their more liquid investments and this in turn compelled international lenders to recall loans that had been given out. Changes in

market sentiment led into a vicious cycle of currency depreciation, insolvency and capital outflows which was then already difficult to stop and was spreading to other emerging markets.

**Figure 1 - Effect of Speculation on Exchange Rates**



$RET^D$  is the expected return on deposits denominated in the Thai currency

$RET^F$  is the expected return on dollar deposits

Source: Mishkin, Frederic S. (1997), page 520