THE ASIAN FINANCIAL CRISIS

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1 Introduction

The relentless trend towards ever increasing sophistication in national and international financial markets has received a great deal of attention in recent times. Although many impressive developments in products, services and markets have greatly facilitated the measurement and management of risk, there have also been many substantial mishaps that have threatened systemic stability. At the *national* level, more than a dozen countries have experienced systemic financial shocks that cost more than 10 per cent of GDP to fix. Even amongst the developed OECD economies which have the most sophisticated financial systems with well developed supervisory and regulatory processes in place, France, Finland, Japan, Norway, Spain, Sweden and the United States have all experienced major financial problems during the past decade which have had to be resolved by governments at substantial budgetary cost. At the *international* level, the world has witnessed four financial crises of varying degrees of seriousness in the past two decades; the Latin American “Southern Cone” crisis of 1981-82, the European ERM crisis of 1992, the Mexican “tequila” crisis of 1994 and the more recent Asian crisis of 1997-98.

While the ERM crisis was relatively short-lived without much contagion to the real sectors of the affected economies, the “Southern Cone” and “tequila” crises were more serious, and the recent Asian crisis has had catastrophic effects on some economies while also threatening the stability of the global financial system. The scale of the Asian crisis can be measured by the change in net private capital flows to the affected countries. These flows to Indonesia, Malaysia, the Philippines, South Korea and Thailand swung from plus US$ 93 billion in 1996 to minus US$12 billion in 1997. This withdrawal of US$105 billion in net private capital flows occurred mostly in the last quarter of 1997 and amounted to 11 per cent of the affected countries’ combined GDP. This is larger than the “Southern Cone” crisis in Latin America when net private capital flows swung by 8 per cent of the combined GDPs of Argentina, Brazil and Mexico from 1981 to 1982.

The world’s national and international financial systems seem to be exhibiting an increasing degree of fragility. It is consequently important for analysts and policymakers to understand the causes of these crises, how their occurrence can be minimised, and how they can be most appropriately managed when they occur. This paper reviews the recent Asian financial crisis. It proceeds in Section 2 by describing the worst affected economies and how the crisis unfolded throughout the region and beyond. Section 3 reviews the main explanations that have been advanced. It addresses the question of whether the crisis resulted primarily from weaknesses in the affected Asian economies that eventually led to a capital strike by international investors and lenders, or whether it resulted mainly from international financial market failures. It deals with the issues of crony capitalism, financial regulation and corporate governance, exchange rate policies, informational asymmetries and moral hazard. Section 4 discusses the role played by the IMF during the crisis and suggests a review of its operations in order to reassert and sustain its pre-eminent position as the guardian of global financial stability. Section 5 suggests some lessons for Ireland. The final Section presents a brief summary with some recommendations for consideration.

2 The Asian Economies and the Onset of the Crisis

Asia is the world's largest and most populous continent. It exhibits wide variety in the cultural, economic, institutional, social and political make-up of its many countries. The economies which have been most affected by the Asian financial crisis differ markedly in their size, in their stage of development and in their wealth. Table 1 shows this using averages from 1990-1995 to draw the comparisons. Their populations range from the largest in the world (China) with a population well over 1 billion people, to the fourth most populous country in the world (Indonesia), to the small city state of Singapore with a population of just over 3 millions. The biggest Asian economy is Japan, followed by, in order, China, South Korea, Indonesia and Thailand. The Japanese economy dominates the region spanned by the countries in the Table, with over 70 per cent of its total GNP. The right hand column shows that GNP per head varies from a high of US$31,638 in Japan to a low of US$497 in China. It is interesting to compare these figures with their Irish counterparts. Using the same measures as in Table 1, the Irish economy is the smallest with the second smallest population of 3.6 millions, and the fourth highest GNP per head of $US12,720.

TABLE 1: Relative Size of Asian Economies

Country	Population Millions	GNP/Head US$
China	1170	497
Hong Kong SAR	6	17,683
Indonesia	186	785
Japan	124	31,638
Korea	44	7,588
Malaysia	19	3,015
Philippines	65	852
Singapore	3	18,902
Thailand	57	2,068

Source: International Financial Statistics
The figures are averages for 1990-1995.
US dollars are used throughout as the unit of measurement for economic aggregates

Many of Asia's economies have progressed markedly over the past three decades. China, Indonesia, Japan, Malaysia and Thailand have grown at annual average rates of between 3 and 5 per cent, while Hong Kong SAR, Singapore, South Korea and Taiwan have each achieved growth rates in excess of 6 per cent. This remarkable growth performance over such a long period without significant interruption has attracted a great deal of attention from economists and policymakers. The fastest growing countries in the region became known as the "Asian tigers". They delivered unprecedented rises in income per head with virtually continual full employment. They spawned a renewed interest in growth economics throughout the world as analysts endeavoured to understand the underlying principles behind "the Asian growth model" with a view to emulating it in their own economies. It is not our purpose here to summarise the latest thinking on "the Asian growth model" (interested readers could usefully begin by consulting, amongst others, the World Bank (1993), Krugman (1994) and Sarel (1996)). Suffice it to say that with the benefit of hindsight gained from witnessing the collapse in performance of these economies during the past two years, the jury is very much out on the issue.

When it came, the Asian financial crisis commenced and spread throughout the region with alarming speed. Table 2 presents a time profile of its onset and initial contagion. It commenced in May 1997 with the first speculative attack on the Thai baht. The Philippine peso was attacked in June and the Indonesian rupiah along with the Hong Kong SAR dollar and the Malaysian ringgitt were attacked in July. The foreign exchange market turmoil spread to the stock markets in these countries and continued throughout the following three months. By October 1997, the IMF had been called in by Indonesia, the Philippines and Thailand and the contagion reached Hong Kong SAR where the Hang Seng stock index lost a third of its value in 7 days. In November, Japan and South Korea's currency and stock markets came under attack, and the IMF was called in by South Korea in December.

The devastating impact of the crisis on the US dollar exchange rates of the worst affected countries is presented in Figure 1. Having maintained a relatively stable exchange rate over most of the 1990s (of which only the early part of 1997 is depicted) the values of the Indonesian rupiah, Malaysian ringgitt, Philippine peso, South Korean won and the Thai baht all plummeted during the latter part of 1997. Table 3 provides the details of the currencies' extraordinary movements against both the US dollar and the Japanese yen during 1997 and 1998. Looking first at the top part of the Table, the countries can be grouped into four sets. The Indonesian rupiah stands alone as having depreciated against the US dollar by over 330 per cent by the end of 1998. The Malaysian ringgitt, the Philippine peso, the South Korean won and the Thai baht depreciated by an average of 65 per cent; the Japanese yen, the Singapore dollar and the Taiwan dollar depreciated by an average of 20 per cent; and the Chinese yuan along with the Hong Kong SAR dollar remained steady. The bottom part of the Table shows, as expected, that the depreciations against the Japanese yen were less than against the dollar. As before, the Indonesian rupiah stands alone as having depreciated against the Japanese yen by over 260 per cent by the end of 1998. The Malaysian ringgitt, the Philippine peso, the South Korean won and the Thai baht depreciated by an average of 38 per cent, the Singapore dollar and the Taiwan dollar remained steady on average, and the Chinese yuan along with the Hong Kong SAR dollar appreciated by an average of 17 per cent.

TABLE 2: Time Profile of the Asian Financial Crisis

<u>1997</u>

May 14th – 15th: The Thai baht is hit by a massive speculative attack based on poor economic performance and political instability. The central bank raises interest rates and intervenes to support the baht. The Singapore central bank assists. Speculators move on to the Filipino peso.

June 19th: The Thai finance minister resigns and contagion spreads to the Philippines where short-term interest rates are increased to 15 per cent.

June 27th: The Thai central bank suspends operations of 16 illiquid finance companies and orders them to consolidate or merge.

July 2nd: The Thai central bank introduces a managed float and seeks IMF assistance. This amounts to a 15-20 per cent devaluation of the baht to a record low of almost 29 to the US dollar.

July 3rd: Speculators attack the Filipino peso and the central bank defends it by intervention and by raising interest rates from 15 to 24 per cent.

July 8th: Speculators attack the Malaysian ringgit and the central bank successfully defends the currency through intervention.

July 11th: Speculators attack the Indonesian rupiah. The authorities respond by intervention and by widening the trading band of the rupiah *vis-à-vis* the US dollar from 8 to 12 per cent. The Philippine central bank also widens its trading range for the peso against the US dollar.

July 14th: The Philippines obtains a US$1.1 billion rescue package from the IMF.

July 24th: Speculators drive the ringgit to a three-year low of 2.653 ringgits to the US dollar. Prime Minister Mahathir criticises the role of speculators. Speculators also attack the Hong Kong SAR dollar which is defended by US$1billion intervention during a two-hour period.

July 26th: Malaysian Prime Minister Mahathir Mohammed accuses fund manager George Soros of being responsible for the demise of the ringgit and calls him a "moron."

August 5th: The Thai central bank suspends 48 finance firms and announces a revamping of its finance sector in line with the IMF rescue package.

August 11th: Thailand obtains a rescue package of US$16 billion from the IMF.

August 14th: The Indonesian central bank abandons the managed exchange rate and the rupiah falls to an historic low of 2,755 rupiah to the US dollar.

August 20th: Thailand obtains a further US$3.9 billion rescue package from the IMF. Its total rescue package now amounts to US$17.2 billion.

September 4th: Selling pressure on the Philippine peso and the Malaysian ringgit continues, driving both currencies to new lows against the US dollar – the peso to 32.43 and the ringgit above 3.

September 16th: The Indonesian government postpones 39 trillion rupiah worth of projects in order to reduce its budget deficit.

September 20th– 21st : Malaysian Prime Minister Mahathir Mohammed states that currency trading is immoral and ought to be stopped. Fund manager George Soros states publicly that "Dr Mahathir is a menace to his own country."

October 1st: Dr Mahathir repeats his criticism of currency speculation and suggests a total ban on currency trading. The ringgit declines to an historic low of 3.4 per US dollar.

October 6th: The rupiah hits an historic low of 3,845 to the US dollar.

October 20th – 23rd: Hong Kong SAR's Hang Seng index declines by 25 per cent in 4 days due to expectations of exchange rate depreciation and escalating interest rates.

October 27th: After a slight recovery the Hang Seng declines by another 6 per cent. Contagion becomes worldwide. The Dow Jones declines by over 7 per cent and trading is suspended.

October 31st: The IMF grants Indonesia a $23 billion financial support package.

November 7th and 8th: Contagion spreads to South Korea where the stock market falls 11 per cent.

November 17th: The South Korean won falls through the psychologically important 1000 to the dollar level; the stock market falls another 4 per cent.

TABLE 2 (continued): Time Profile of the Asian Financial Crisis

November 19th: Japan's Nikkei 225 index falls 5.3 per cent – the largest fall of the year.

November 20th: The Korean won falls 10 per cent after the government widens trading band from 2.25 to 10 per cent per day. Other Asian currencies also fall sharply.

November 25th: The yen plunges to its lowest level in 5 years; the Nikkei falls 5 per cent.

December 3rd: Concerns about South Korea's signing of the IMF loan agreement send markets down. The rupiah, baht and ringgit follow the won to all-time lows against the US dollar.

December 11th: As the South Korean crisis deepens with the won falling to an all-time low, contagion affects all regional stock markets; Hong Kong SAR's falls 5.5 per cent, Indonesia's 4.8 per cent, Malaysia 7.4 per cent, the Philippines 4.9 per cent, Thailand 4.9 per cent.

1998

January 7th: Regional currencies again hit record lows, as Indonesia's budget fails to convince investors that countries in the region are committed to reforming their economies.

January 8th: The ringgit and Indonesian stocks hit record lows, raising the spectre of civil unrest. Reports surface that the IMF has written a sharply-worded letter to Indonesia in response to the recent budget that was widely condemned as insufficiently austere.

29th January: South Korea announces a debt deal with global creditors involving the exchange of short-term debt with government-guaranteed loans with maturities of 1, 2 and 3 years.

16th February: The rupiah plunges after reports that the IMF has threatened to withdraw support if Indonesia adopts a currency board.

March 2nd: Indonesian inflation hits 32 per cent. Escalating food price rises cause civil unrest.

March 6th: Continuing signs that Indonesian President Suharto is unwilling to implement reforms worries currency markets, with the rupiah down 25 per cent in the last 3 days. This devaluation exacerbates unemployment and the huge private debt overhang. Riots in the towns continue.

16th March: Confidence seems to have been restored in South Korea. Foreign creditor banks have rolled over $22 billion of short-term debt into 2- and 3-year maturity loans.

9th April: Japan announces that as part of an economic stimulus package the government will cut income taxes by a total of 4 trillion yen (US$30.5 billion).

13th May: The Indonesian stock market slumps 8 per cent and the rupiah sinks below 10,000 to the US dollar after 6 students are killed at a protest rally in Jakarta.

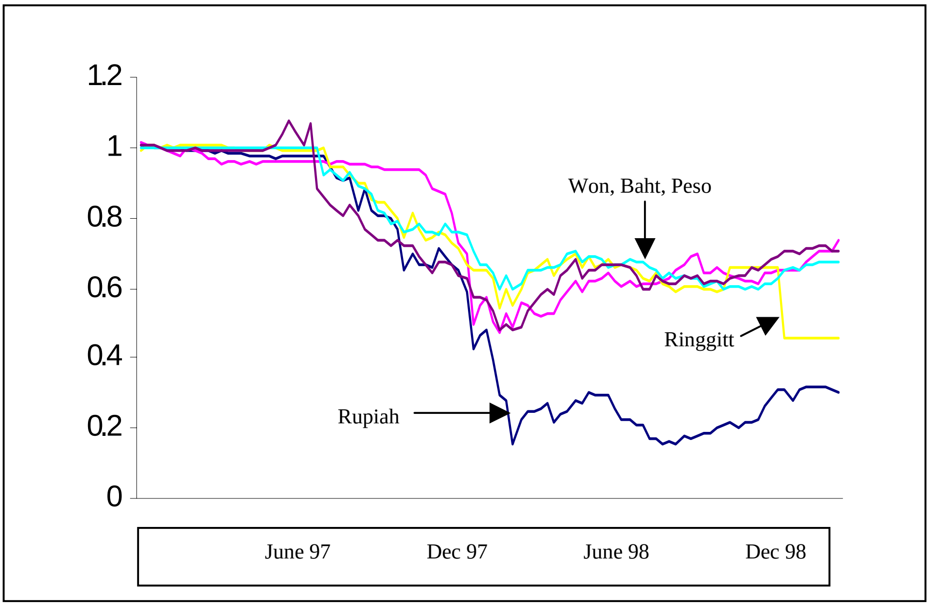
14th May: Rioting and looting in central Jakarta sends the rupiah to 11,700 to the dollar, more than 25 per cent below the level 2 days ago.

15th May: Indonesian markets are virtually abandoned in the aftermath of 4 days of rioting, arson and looting in Jakarta. Banks are closed and most offices deserted. Overseas corporations start closing down operations and evacuating staff. Demands that President Suharto step down intensify. The death toll stands at more than 500.

19th May: Suharto promises new presidential elections in which he will not run. Jakarta stocks surge 6.4 per cent on this news, and the rupiah recovers to 11,000 after hitting a low of 16,000 to the dollar earlier in the day.

21st May: Suharto announces his resignation, handing over to Vice-President Jusuf Habibie. Regional markets rally on this news.

Figure 1
The Currencies Most Affected by the Asian Financial Crisis
Weekly US Dollar Rates: January 1997 – December 1998



Source: Datastream International. The Figure shows the Indonesian rupiah, the Malaysian ringgitt, the South Korean won, the Philippine peso and the Thai baht. All rates are expressed as an index against the US dollar with January 1997 = 1.

In addition to the devaluation of the foreign exchange value of their currencies, the worst affected former "tigers" also experienced deflation of domestic asset values including equity and property. The financial turmoil that was initially confined to Asia spread across the world's financial markets in late 1997. The United States Dow Jones index suffered a 7 per cent decline on 27 October 1997 that forced the temporary suspension of trading. While the Dow Jones recovered, however, the turmoil spread more seriously to Russia, where the authorities implemented a unilateral default on domestic debt, devalued the rouble and imposed severe capital controls following the refusal of the IMF to provide additional loans. The Malaysian authorities also imposed capital controls following a series of public statements by Prime Minister Mahathir condemning the role of speculators in generating the financial turmoil. These events caused international investors and lenders to become increasingly risk averse. They reassessed other potentially vulnerable emerging markets and turned their attention to Brazil and Latin America more generally. The Russian default along with its spillover to Latin America caused large losses for some western banks and leveraged hedge funds. The highly publicised Long Term Capital Management Ltd episode showed how some Western financial institutions could be vulnerable to the global turmoil, and it also drew attention to

TABLE 3: Currency Movements During the Asian Crisis

Currency	Domestic currency per unit of foreign currency 1996	1996=100	
		1997	1998
	US dollar exchange rates		
Chinese yuan	8.3	99.7	99.6
Hong Kong SAR dollar	7.7	100.1	100.2
Indonesian rupiah	2328	123.6	438.1
Japanese yen	108.9	111.1	120.2
Korean won	805	117.9	173.8
Malaysian ringgitt	2.5	111.8	166.8
Philippine peso	26.2	112.8	156.2
Singapore dollar	1.4	105.4	118.5
Taiwan dollar	27.5	100.2	121.9
Thai baht	25.4	122.4	162.7
	Japanese yen exchange rates		
Chinese yuan	0.076	89.8	83.2
Hong Kong SAR dollar	0.071	90.1	83.6
Indonesian rupiah	21.4	110.7	361.9
Korean won	7.4	105.1	145.2
Malaysian ringgitt	0.023	100.4	140.1
Philippine peso	0.241	101.3	130.3
Singapore dollar	0.013	94.8	98.9
Taiwan dollar	0.252	94.0	101.7
Thai baht	0.233	109.8	135.7

Source: Datastream International. The first column of data gives the raw annual average exchange rates for 1996. The next two columns give the exchange rate indices for 1997 and 1998 with 1996 = 100.

analysts' lack of knowledge about the extent of derivative risk that exists in today's domestic and global financial markets

The Asian financial crisis was transmitted to the real sectors of the worst affected economies with great force. As foreign investors and speculators sold their Asian currency and equity assets, the targeted economies saw their equity values decline along with the foreign exchange value of their currencies in a vicious spiral. Asian corporations tend to have high debt-equity ratios relative to their western counterparts, and many had short term unhedged foreign exchange debts. The cost of servicing these debts became extremely onerous. Firms found themselves with insufficient cash flows, and they acted to reduce their outgoings by delaying payments to their suppliers, by selling off their inventories at reduced prices, by liquidating any assets they could at whatever prices were available, by reducing their wage bills and by laying off their workers. In anticipation of imminent widespread corporate haemorrhaging, both domestic and foreign banks attempted to cut their losses by refusing to roll over their short term loans. Firms that were highly leveraged went bankrupt and those that were not highly leveraged began to face serious liquidity problems. The domestic banks were forced to write off many loans and to mark down their assets, and many became under-capitalised. This led depositors to suspect the viability of the banks in which their money was deposited, and the cycle of mistrust gathered momentum. Liquidity became a crucial issue. Well managed and profitable firms that were not highly leveraged — and which were therefore in a position to buy the assets of bankrupt firms — could not raise the funds to finance the acquisitions because no bank could supply the finance. Neither could they finance other profitable opportunities — including new export opportunities — that emerged as a result of the lower exchange rates. The liquidity crunch, therefore, exacerbated the deflation problem and hindered the economies' inherent ability to regenerate themselves. This situation of asset deflation was accompanied by rising import prices, which in Indonesia sparked off the riots and social disorder that eventually led to the political demise of President Suharto, and which continues to threaten the social and political unity of the country.

The real economies of Hong Kong SAR, Indonesia, Malaysia, the Philippines, Singapore, South Korea and Thailand collectively turned around from an average growth rate of 6.8 per cent in 1996 to 5.1 in 1997 to -4.4 per cent in 1998 (see IMF (1998)). The individual experience was, however, quite disparate. For example, Indonesia went from an average growth rate over the 7 years from 1990-1996 of 8.0 per cent to a projected contraction of 13.5 per cent in 1998 (see IMF (1998)). The corresponding figures for Thailand are from 8.6 to -6.5 per cent, for Korea from 7.7 to -5.0 per cent, and for Malaysia from 8.8 to -4.0 per cent. The relative magnitudes of these real sector shocks can be put in perspective by comparing them with Dow's (1998) recent study of major recessions in Britain and the United States. The worst recessions that have hit the British economy this century are the recession of 1920-21 in which real output declined by 8 per cent and the Great Depression of 1929-32 in which it declined by 6 per cent. The United States has not experienced any recession this century other than the Great Depression which contracted the economy by more than 2 per cent.

Lee (1998) reports on the enormous challenges that the Asian financial crisis has posed for social policy in the worst affected countries. Unemployment rates have multiplied, and with poor or no unemployment benefits or social insurance schemes in most of the affected countries, substantial acute poverty has resulted. The IMF (1998) forecasts that the crisis has increased the number of poor by almost 40 millions in Indonesia, by over 5 millions in Korea and by almost 7 millions in Thailand. At the time of writing this account of the Asian crisis (February 1999), the situation continues to unfold and we cannot yet measure the full scale of its impact. What is clear, however, is that the former Asian "tiger" economies have gone from very successful performers to very bad performers in an alarmingly short period of time. Whatever one's views about the secret of their prior success, it is imperative that we begin to understand how this reversal of such great magnitude occurred so unexpectedly and with such speed.

3 What Caused the Asian Financial Crisis?

A voluminous literature has sprung up which attempts to explain what caused the Asian financial crisis. Broadly speaking, there are two main explanations. The first asserts that it resulted primarily from fundamental weaknesses in the Asian economies, including:

- crony capitalism,
- poor corporate governance and financial regulation, and
- inappropriate exchange rate policies.

The second explanation asserts that the crisis resulted mainly from international financial market failures, including:

- informational asymmetries, and
- moral hazard.

In this section, we provide an overview of these explanations and argue the likelihood that both explanations are partly correct.

3.1 Crony Capitalism

The term crony capitalism originated during the activist struggle to unseat President Ferdinand Marcos in the Philippines, and it has received widespread attention in deliberations about the causes of the Asian financial crisis. It has come to mean some combination of bureaucratic favouritism, corruption, nepotism and/or political interference by governments to distort market incentives and outcomes to the advantage of sections of the population at large or smaller favoured groups. The sudden and dramatic withdrawal of international capital from the former Asian "tiger" economies during the second half of 1997 can be interpreted as a capital strike by investors in the west. According to this interpretation, the suppliers of capital became tired of lending to or investing in a region that denied them the full risk-adjusted marginal revenue product of their capital. This impatience built up over time and was expressed emphatically in the second half of 1997.

Since then, commentators on the Asian financial crisis have pointed to many manifestations of cronyism. In Indonesia, for example, the corruption and nepotism of the former Suharto government has been known for many decades and is legendary in the extent to which it succeeded in amassing great fortunes for the former President, his family and his political cronies. In Malaysia, it has also been well known for some time that important aspects of government economic policy have been concerned to redistribute the economy's wealth from the ethnic Chinese and Indians to the indigenous Bumiputera muslims. Although the Malaysian financial system underwent substantial development in the early 1990s with the separation of its stock exchange from Singapore and the rapid growth in securitisation, the banking system remains the dominant provider of corporate finance, and this sector is largely controlled by the Bumiputera. Jomo (1998) documents how systemic malpractice in the Malaysian banking sector during the 1980s, including soft and improperly processed loans, facilitated the growth of Bumiputera-controlled conglomerates which in turn obtained lucrative government contracts and licenses. In South Korea, the Kim Young Sam government's support for the medium-sized Hanbo chaebol with a questionable manufacturing track record to enter the steel industry rather than the biggest Hyundai conglomerate was found to involve corruption at very high levels after Hanbo collapsed in 1997.

The list of examples just mentioned could be considerably elongated and sourced from a wider selection of countries. On balance, however, although there is merit in pointing the finger at obviously inefficient and inequitable allocations wherever they occur, it is not obvious that the crony capitalism argument can explain why the Asian crisis occurred. First, it cannot explain the timing of the crisis, because cronyism was widely recognised to occur in the worst affected countries for many years. Second, it cannot explain the magnitude of the crisis or its contagion to markets that were subsequently affected, including those as far afield as Latin America, Russia and even the United States itself. Third, cronyism is recognised to exist in other Asian economies that have not borne the brunt of the Asian crisis — and even in some western countries! Johnson (1998) argues that the United States is itself cronyistic as evidenced by the military-industrial-political nexus that has fostered the growth of its huge military budget. He characterises the IMF as being the cronyistic server of the economic and political interests of the United States and other western countries where the suppliers of Asian finance are domiciled. The IMF's bail-out packages are widely viewed as typically benefiting the foreign banks that did not properly count the risks involved in lending to the banks and corporations in the economically stricken countries, rather than their citizens who bear a large part of the burden of adjustment.

Even if the crony capitalism argument cannot explain the Asian financial crisis, however, there remains a sense in which the cat has been let out of the bag. Potential suppliers of future capital to Asia have now become more sensitive to the issue of how their capital gets deployed, and they are likely in the future to insist on more rigorous checks to ensure that it earns its appropriate risk-adjusted return. This implies that the worst affected countries will have to confront the issue of cronyism in order to be able to attract the necessary capital at competitive market rates in the future. It also implies that suppliers of capital will be more sensitive to cronyism wherever it occurs. This is not a bad thing, and it should incentivate regulators everywhere to purge such practices whenever and wherever they are found to exist.

3.2 Poor Corporate Governance and Financial Regulation

A related argument to crony capitalism is that the Asian "tiger" economies attempted to deregulate their financial systems and globalise their financing sources without the necessary legal, regulatory and supervisory infrastructures in place. On the corporate governance front, companies in many Asian countries are not required to adhere to a common set of accounting standards, risk management practices are inadequate or totally absent, and bankruptcy laws are poorly developed. On the financial regulation and supervision front, bank and other financial institution regulation is deficient. For example, many

Asian governments have not adopted the Bank for International Settlements' recommendations on capital adequacy and risk management which were established to protect the integrity of both national and international banking systems, and which have widespread acceptance in OECD countries.

Indonesia embarked on substantial financial deregulation in the early 1980s that included freedom of entry to the banking industry, the abolition of most interest rate and credit controls, and the relaxation of reserve requirements. By the early 1990s, its banking system was amongst the most liberal in the world with over 200 institutions, and visitors to Jakarta could not help but notice the awesome collection of high-rise banking establishments that dominate the skyline. Fierce competition in the sector fuelled the growth of credit by over 40 per cent annually from 1988-1996. Unfortunately, however, not only did the government fail to control this growth, but as Wessel, McDermott and Ip (1997) point out, it was not even aware that there was a problem until it was too late. This became increasingly obvious when the number of bank failures began to increase in the 1990s and questions were asked about the system's fragility. Although South Korea did not have a debt problem defined in terms of the quantity of its debt, it shared the problem of its neighbours in having a high proportion (almost 60 per cent) of its total indebtedness in short term debt. Moreover, as Chang, Park and Yoo (1998) point out, most of this was incurred by the relatively new and inexperienced merchant banks — 24 of the country's 30 such banks were licensed by the Kim Young Sam government since 1994. These banks were not properly supervised, as evidenced by the fact that when the crisis hit in 1997, their foreign debts of US$20 billion were 64 per cent short term while their lending portfolios were 85 per cent long term.

As with the crony capitalism argument, it has been well understood for some time by international traders and investors that many Asian economies lack such basic infrastructure. Even students of international finance could read in mainstream American university textbooks about the potential pitfalls of doing business in these economies. On balance, therefore, it seems that poor corporate governance and financial regulation in the affected Asian economies cannot explain why the crisis occurred. These factors can, however, contribute to explaining its severity after the initial adverse capital movements put pressure on the region's financial systems that exposed their weaknesses to greater scrutiny.

It is important to note here that the former Asian "tiger" economies did not have a monopoly on poor corporate governance or financial regulation. The Asian crisis should alert western financial institutions and governments that all is not perfect on the home front. Two issues are particularly noteworthy. First, why did many of the world's most sophisticated lending institutions with access to the world's best practice risk management procedures continue to lend increasingly short term debt after the enhanced riskiness of the region became obvious? This could be explained by excessive exuberance on the part of management in the pursuit of profits without due consideration for their customers or their shareholders, and it could also be explained by moral hazard which we shall deal with separately below. Second, financial regulators are aware of the potential problems that the growth of derivative financial instruments can cause, but as yet there is no serious attempt to deal with these issues. We shall return to this issue under heading 3.4 which deals with informational asymmetries.

3.3 Inappropriate Exchange Rate Policies

It is widely accepted that whatever were the fundamental underlying causes of the Asian financial crisis, it manifested itself in the first instance as a currency crisis. It is also becoming increasingly recognised that the former Asian 'tigers' had unsophisticated and inappropriate exchange rate policies, and that these policies were an important cause of the crisis.

The countries of Asia have traditionally been slow to seek co-ordination of their macroeconomic and trade policies, and this is reflected in their disparate exchange rate management policies. For example, Hong Kong SAR has a currency board arrangement to maintain a fixed exchange rate *vis-à-vis* the US dollar. Malaysia Singapore and Thailand, have managed floats *vis-à-vis* a basket of currencies which track the US dollar very closely. China, Indonesia, Korea and the Philippines have more flexible basket arrangements, and Japan has a freer managed float. In practice, these countries, with the exception of Japan, have actively managed their exchange rates in order to track the dollar to a greater or lesser extent, and have done this with periodic strategic devaluations *vis-à-vis* the dollar. For example, Indonesia devalued the rupiah by 39 per cent and 45 per cent relative to the US dollar in March 1983 and September 1986 respectively, while Thailand devalued the baht by 10 per cent and 17 per cent relative to the US dollar in July 1981 and November 1984. Table 4 shows how the exchange rates of these countries have evolved over the period from 1980-1998. Their currencies have tended to track the US dollar along a declining linear time path with periodic depreciations until the past few years when the combination of the strong dollar and the Asian crisis has resulted in extraordinary movements.

Has this approach to exchange rate management been suitable for the Asian region? We argue here that the answer is no — it has outlived its usefulness. Its origins lie in the historical trade and investment linkages that were closer between the individual countries and the United States than between themselves intra-regionally. For this reason, the US dollar remains the most internationally used currency in the region and continues to play a pivotal role as the dominant international unit of account, medium of exchange and store of value. Japan itself invoices about one-third of its exports and one-sixth of its imports in dollars because the United States is a major market for Japanese exports and many Japanese firms invoice in foreign currency as a natural hedge against

TABLE 4: Asian Bilateral US Dollar Exchange Rates: 1980-1998

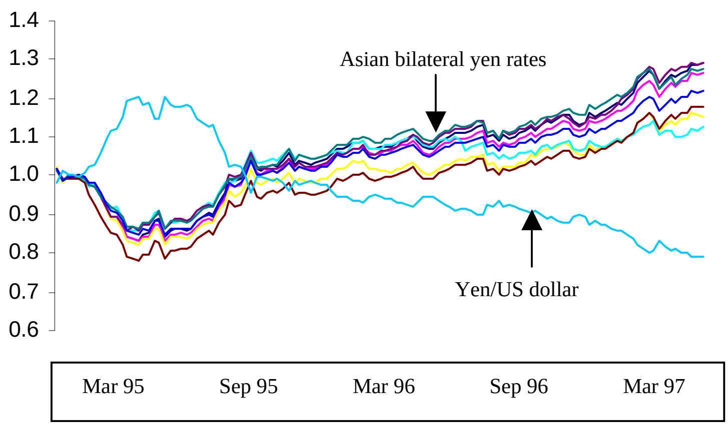
Year	Chinese yuan	HK SAR dollar	Indonesian rupiah	Japanese yen	Korean won	Malaysian ringgitt	Philippine peso	Singapore dollar	Thai baht
1980	1.50	4.98	627	227	607	2.18	7.5	2.14	20.5
1981	1.70	5.59	632	221	681	2.30	7.9	2.11	21.8
1982	1.89	6.07	661	249	731	2.34	8.5	2.14	23.0
1983	1.98	7.27	909	238	776	2.32	11.1	2.11	23.0
1984	2.32	7.82	1026	238	806	2.34	16.7	2.13	23.6
1985	2.94	7.79	1111	239	870	2.48	18.6	2.20	27.2
1986	3.45	7.80	1283	169	881	2.58	20.4	2.18	26.3
1987	3.72	7.80	1644	145	823	2.52	20.6	2.11	25.7
1988	3.72	7.81	1686	128	731	2.62	21.1	2.01	25.3
1989	3.77	7.80	1770	138	671	2.71	21.7	1.95	25.7
1990	4.78	7.79	1843	145	708	2.70	24.3	1.81	25.6
1991	5.32	7.77	1950	135	733	2.75	27.5	1.73	25.5
1992	5.51	7.74	2030	127	781	2.55	25.5	1.63	25.4
1993	5.76	7.74	2087	111	803	2.57	27.1	1.62	25.3
1994	8.62	7.73	2161	102	803	2.62	26.4	1.53	25.1
1995	8.35	7.74	2249	94	771	2.50	25.7	1.42	24.9
1996	8.31	7.73	2328	109	805	2.52	26.2	1.41	25.4
1997	8.29	7.74	2877	121	949	2.81	29.6	1.49	31.0
1998	8.28	7.75	10198	131	1399	4.20	40.9	1.67	41.2

Source: Datastream International. All rates are annual averages of the number of units of domestic currency per US$1.

the historic trend appreciation of their currency. The region's central banks still hold the largest proportion of their official international reserves in dollar denominated assets, and they continue to use the dollar as the chief vehicle of their exchange rate intervention policies. In recent years, however, intra-regional trade, investment and financial linkages have strengthened significantly throughout Asia. Frankel (1991) provides evidence of this trend, and Bowles and MacLean (1996) report that a process of regional integration is now firmly established with Japan as a major source of foreign direct investment to most countries in the region.

In spite of these trends, however, the monetary authorities in Asia have mostly continued to focus the external value of their currencies on the dollar, and the region's banks together with its corporate sectors have continued to borrow most of their foreign funds in dollars. Most of this borrowing has been unhedged, partly because of poor risk management practices and partly because of the belief that the authorities would continue to maintain the dollar value of their currencies. A number of events in the 1990s, however, has undermined this approach to exchange rate management. In 1994, China devalued its yuan vis-à-vis the dollar by 35 per cent in order to enhance its competitiveness in the United States market. It succeeded in doing this at the expense of the former Asian "tiger" economies. Between April 1995 and April 1997 the yen depreciated vis-à-vis the US dollar by 60 per cent. Johnson (1998) argues that the latter was agreed by the US Treasury and the Japanese Ministry of Finance in the summer of 1995 in order to assist both countries. As Figure 2 shows, however, the exchange rates of many of the former "tiger" economies followed the dollar. These developments curtailed the strong export performance of the former Asian "tiger" economies and made it increasingly difficult for them to service their large foreign borrowings. Coupled with the stagnation in Japan since the early 1990s, it created a potent force of economic ill.

Figure 2
Yen-US Dollar and Bilateral Asian Yen Exchange Rates
Weekly Data: January 1995-April 1997



Source: Datastream International. The Figure shows the Chinese yuan, Hong Kong dollar, Indonesian rupiah, the Malaysian ringgitt, the Singapore dollar, the South Korean won, the Philippine peso and the Thai baht against the yen. It also shows the yen against the US dollar. All rates are expressed as an index with January 1995 = 1.

The continued excessive focus on the US dollar in Asia results largely from the historical reluctance of the Japanese authorities to internationalise the yen (see Das (1993)) and by their excessive regulation that has impeded the development of yen-denominated financial instruments and markets. These attitudes, however, are now beginning to change, and it is increasingly appropriate for Asia to develop a more yen-focused exchange rate policy. The persistent stability of the yen together with Japan's low inflation is internationally admired, and the enhanced economic and political uncertainty during the 1990s has not adversely impacted on its regional importance. Using the most recent data available prior to the Euro, the yen is, on most measures, the third most important currency in the world behind the US dollar and the German mark. For example, approximately 50 per cent of international bank assets are denominated in US dollars, with the corresponding figures for the mark and the yen being 14 per cent and 12 per cent respectively. The US dollar accounts for approximately 60 per cent of the world's reserve currencies, with the corresponding figures for the mark and the yen being 19 per cent and 8 per cent respectively. The cities of London, New York and Tokyo account for, respectively, 29 per cent, 20 per cent and 18 per cent of the global net turnover of foreign exchange. The yen is therefore well placed to play a more significant regional role if the Japanese government is willing to allow it to happen.

Other recent research supports this. For example, Frankel (1991) and Chinn and Frankel (1995) report that Japanese interest rates are gaining influence in the money markets of almost all Asian countries mentioned here, especially Hong Kong SAR, Indonesia, Malaysia, Singapore and South Korea. Engel and Rogers (1994) examine stock price correlations in Asia and Europe find that the Asian country groups experience common shocks to their economies to a greater extent than the European group, which means the region may correspond more closely than Europe does to an optimum currency area, particularly if labour and capital become more internationally mobile throughout the region. More recent research by Ito and Sasaki (1998) demonstrates that the optimal weight of the yen in an Asian currency basket should be much higher than it actually is, while the optimal weight of the US dollar should be much lower. Artis, Kohler and Melitz (1998) concludes that on the basis of trade flows and common disturbances, China, Hong Kong SAR, Indonesia, Malaysia, Singapore, South Korea, the Philippines and Thailand would form an optimum currency area without Japan. A yen-dominated zone could therefore be workable if the region relinquished its monetary policy to Tokyo in a similar manner to how the Euro members have relinquished theirs to Frankfurt.

It is becoming increasingly recognised that the current exchange rate systems in Asia are no longer appropriate. The countries should now co-operate in the search for a more appropriate exchange rate policy for the region. Specifically, they should investigate the adoption of an Asian Monetary System that would construct an Asian Currency Unit (ACU) similar to the ECU which was used in Europe during the process of unification to the Euro. The ACU could be some weighted average of the region's currencies, perhaps with the yen occupying a central role (like the German mark in the pre-Euro Europe). The weights could be derived in order to minimise the expected volatility of the ACU vis-à-vis the US dollar. The participating countries could then agree to maintain their exchange rates within an agreed band around the ACU. This would serve the dual purpose of contributing to intra-Asian exchange rate stability while also contributing to the stability of the Asian currencies vis-à-vis the dollar. The techniques are available to design a system based on the best aspects of the European system, and all that is required is the political will to do it.

3.4 Informational Asymmetries

As with the issue of corporate governance and financial regulation, the Asian crisis has alerted us to the fact that there are important informational asymmetries at play in both the debtor and creditor countries. Although the former has been recognised by many commentators, the latter has not. We have seen how the corporate sector in many of the former Asian "tiger" economies has operated under poorly developed accounting standards and risk management practices, while financial supervision has also been hampered by the failure to implement international capital adequacy standards and to properly monitor developments in the financial institutions' balance sheets. This has constituted an important source of informational asymmetry by impeding foreign investors and lenders to the region with a significant shortfall in information relative to the management of the region's institutions. The IMF and other international agencies were aware of this problem prior to the onset of the crisis, and examples have been encountered where the problem grew into one of disinformation. When the crisis hit, this introduced more uncertainty and contributed to the risk aversion that induced the suppliers of capital to withdraw so emphatically from the region. This sudden withdrawal has been described in terms of herd behaviour, and has been used by some commentators as evidence of market non-rationality. In any event, the existence of informational asymmetries of this type can intuitively explain why herd-like behaviour might follow from the receipt of bad news in the marketplace. It is reasonable to conclude that this issue deserves more attention from both domestic and international regulators in the future than it has hitherto received.

In the creditor countries, most analysts, commentators and forecasters grossly under-estimated the scale and contagion of the crisis. The informational asymmetry that deserves to gain more attention from regulators in the creditor countries is that which arises from the growth of the over-the-counter market in financial derivatives. The Bank for International Settlements (1996) estimates that the total amount of derivatives in the world's over-the-counter (OTC) markets amounted to US$45 trillion at the end of 1995, a tenfold increase on three years earlier, and that transactions in these instruments during 1995 amounted to US$8 trillion. Although it is suspected that a significant amount of derivatives trading was involved in placing capital in the former Asian "tiger" economies, we do not know the approximate extent to which this occurred. Savona and Maccario (1998) make the point that modern intermediaries now use derivatives as the primary instruments to alter their short term investments in response to developments such as the Asian crisis. This is an important concern because the growth of derivatives markets has often been driven partially by the desire on the part of market participants to bypass regulations. In addition, the upshot of many types of derivatives trading is to downplay the riskiness of the investment. This makes it difficult for investors to make well-informed risk-return calculations, and because the recipient of the investment capital is usually unidentified, the use to which the capital is being put is also unknown.

Kregel (1998) is one of the few commentators to analyse the possible effects of derivatives trading on the unfolding of the Asian crisis. He provides an enlightening example of how a United States institutional investor could buy a structured note with guaranteed interest payments in excess of domestic rates but with the principal to be repaid varying by an amount that depends on an exchange rate index such as the Thai baht-US dollar rate. Because all cash flows associated with this instrument are in US dollars, it qualifies as a domestic asset without foreign exchange risk. The above market return, however, is obtained by the sale of a put option on the currency which resembles the buyer of the note having bought the Thai baht. If the baht remains stable the put lapses and the writer uses the proceeds to pay the higher interest rate, but if it declines below the strike price, the buyer exercises and the writer loses, recuperating the loss by reducing the principal. The worrying aspects of this type of derivative product is that it could raise the volatility of the foreign currency's exchange rate, the risk-return calculation to the institutional investor is not immediately clear, and the regulator has been bypassed. Financial regulators need to acknowledge the problems associated with this and take more active steps with the banks to gain better information on the over-the-counter derivatives market.

3.5 Moral Hazard

Moral hazard occurs when the existence of insurance against risk encourages the insured to engage in riskier behaviour. Examples of moral hazard include the availability of "lender of last resort" facilities to banks, and deposit insurance which contributed to the infamous Savings and Loan debacle in the United States during the 1980s. This issue has received much comment in the context of the Asian financial crisis, most notably from Corsetti, Pesenti and Roubini (1998), Fischer (1998), Greenspan (1998), Krugman (1998) and Meltzer (1998). Moral hazard could have occurred in the debtor countries if the governments provided credible implicit or explicit guarantees to its large financial institutions and/or corporate conglomerates. Krugman (1998) has argued that this has been an important factor in the crisis. He cites implicit government guarantees to the South Korean *chaebol* that had the effect of making them over-borrow and over-invest in high-risk initiatives. This is denied by Chang, Park and Yoo (1998), however, who point out that no *chaebol* were bailed out during the 1980s and 1990s while 3 of the biggest 30 went bankrupt. Moral hazard could also have occurred in the creditor countries if the suppliers of capital believed that their governments would bail out a country that threatened to default on its debt. It has been suggested that the large transfer of United States government funds to rescue the Mexican economy in 1995 provided a guarantee to American suppliers of capital to Asia. Again, however, this cannot be taken too seriously because the same did not happen in other capital-supplying countries, and the suddenness of the withdrawal of the funds suggests that their owners did not perceive any guarantees.

The most serious allegation of moral hazard during the Asian crisis is against the IMF's bailout packages. This allegation has a number of strands. Loriaux (1997) and Matthews (1998) describe a process of very rapid expansion of industrial development and export-led growth that is financed largely by foreign capital. Over time, this process will occasionally come unstuck because of domestic overheating or deteriorating external conditions. The existence of an external agency that will come to the rescue by restoring stability and helping to clean out the marginal corporations could act as an effective insurance against excessive damage while preparing the economy for the next period of rapid expansion. To the extent that this insurance is used by governments of rapidly expanding economies, the IMF becomes the unwitting insurer and the process has systemic moral hazard that contributes to the propagation of financial crises.

The IMF (1998) has been keen to demonstrate its awareness of the problem of moral hazard and its role in the Asian financial crisis. It points out that the likelihood of moral hazard in creditor countries is greatest for short term lenders and probably zero for equity and bond investors. It further argues that while this issue is being further addressed by the Fund, it will be difficult to completely eliminate it without increasing the economic and social costs of financial crises. It also argues that the size of the potential losses makes it more likely that imprudent lending reflects irrational exuberance that leads investors and lenders to underestimate risks rather than moral hazard, and concludes that better country information would alleviate this. In saying this, however, the IMF is putting all the blame for the exuberance on the former Asian “tiger” economies, and none on the western lenders. This is not getting to the heart of the matter, however, because it assumes that the provision of better country information would eliminate any irrational exuberance. This is not necessarily the case. We have already mentioned that many sophisticated lending institutions continued to lend to the Asian region long after the increased riskiness became obvious. The IMF might usefully adopt a less myopic approach to this issue and look to problems in the capital supplying countries. We have also remarked earlier how the growth in derivatives can distort the risk-return perceptions in foreign lending, and this is an issue that deserves further research. Mathieson, Richards and Sharma (1998) have recently noted that market discipline should make it costly for managers to neglect the health of their institutions, but that transparency is increasingly difficult to achieve when off-balance-sheets are getting larger and data collection mechanisms are insufficient to monitor exposures. In summary, the market information problems arise in the creditor countries as well as in the debtor countries.

In concluding this Section, it is generally accepted that the Asian crisis manifested itself as a “currency crisis” in which international investors (fund managers, institutional investors, hedgers and speculators) and lenders (banks and other financial consortia) rapidly shorted their Asian assets, and while doing so, sharply depreciated the local exchange rates as they converted back to their home currencies. The market rationalist view of what happened is based on the idea that foreign exchange market hedgers and speculators perform an important function in financial markets by providing liquidity which facilitates the price discovery mechanism and contributes to the optimal allocation of the world's resources. This view maintains that the Asian crisis reflects the market mechanism at work to correct fundamental imbalances that were caused by structural weaknesses in the worst affected economies. The non-rationalist view asserts that modern global financial markets are beset by failures such as informational asymmetries and moral hazard, and are excessively dominated by powerful institutions that follow each other in herd-like behaviour that exacerbates price volatility and frustrates government policy.

In its published work on the Asian crisis, the IMF seems to take a view close to the market rationalist position. It argues that the original attacks on the Thai baht were speculative in nature, but that the contagion around Asia was not. An IMF study by Eichengreen et al. (1998) finds that hedge funds have had a limited role in the crisis. The macro hedge funds which typically take positions on a country basis were found to have capital amounting to about US$25 billion during the third quarter of 1997 which they lever by between 4 and 7 times. This is very small relative to the total capital of other institutions such as insurance companies, investment and commercial banks, mutual funds and pension funds which amounts to in excess of US$20 trillion. In addition, this study found inconclusive evidence that the macro hedge funds tend to lead predatory attacks in specific markets.

The non-rationalist view received prominence during the crisis when Malaysia's Prime Minister Mahathir blamed the ringgitt's collapse on the predatory behaviour of hedge funds and speculators. In mid-1997 as the Malaysian ringgitt suffered large selling pressure, Prime Minister Mahathir began to persistently criticise currency dealers and international hedge fund managers, including Mr George Soros whom he called a "moron". He accused them of participating in a plot to destroy the strongly performing Asian economies. His speech at the joint World Bank — IMF seminar in Hong Kong on 20 September 1997 in which he stated that "currency trading is unnecessary, unproductive and immoral" and should be made "illegal" is widely agreed to have been very damaging to Malaysia's economy insofar as it reduced confidence in the country's government and raised the prospect of a complete ban on financial flows. It is interesting to note that the relationship between Prime Minister Mahathir and fund manager Mr Soros goes back at least to 1992 when Bank Negara Malaysia lost tens of billions of ringgitts after sterling devalued under pressure from the hedge funds associated with Mr Soros.

In between both of these positions lies the more reasonable and pragmatic view that financial markets work quite well but imperfectly, and that they have a useful role to play as long as policymakers monitor their possible nuances, supervise important participants and regulate market practices where appropriate. From this perspective, both sides of the ideological divide on the nature and functions of modern global financial markets can benefit from heeding the lessons that can be learned from the crisis. The world's pre-eminent financial institution, the IMF, has articulated its willingness to learn from the crisis, and we now consider some aspects of the role it played as the events unfolded.

4 The Role of the IMF

The Asian financial crisis occurred almost 10 years after the October 1987 stock market crash. Readers will recall that the 1987 crash spread to virtually all world stock markets within a couple of days, and on the same day in many cases. The Asian crisis constitutes a more recent example of how disturbances in one country or region can now be transmitted throughout the world in a very short time. This pattern of contagion is now a fundamental characteristic of the modern global financial system. There is no place to hide in the modern global financial system. This enhances the importance of the roles played by the international financial agencies.

The role played by the IMF during the Asian financial crisis has been the focus of much comment and criticism. When the IMF has provided rescue loans to financially stricken economies in the past, it usually imposed harsh conditions such as the requirement for the recipient government to implement contractionary fiscal and monetary policies. During the Asian financial crisis, however, the IMF significantly broadened its loan conditions to include a broad range of microeconomic restructuring initiatives as well as its usual macroeconomic conditions. The microeconomic restructuring conditions included a very extensive set of financial and real sector reforms, ranging from the closure of banks and other financial institutions to measures in the agriculture, energy and transport sectors, the unwinding of subsidies and the ending of monopolistic practices.

The IMF's insistence on the recipient government's implementation of these reforms during the crisis as a condition of receiving the loans is widely regarded as inappropriate, ill-timed, and beyond the IMF's mandate. The sequencing of economic and financial reforms is notoriously complicated. It is certainly not appropriate to attempt to reform important financial institutions in the middle of a crisis. As Wade (1998) points out, this can reinforce the cronyism image and worsen confidence in the system. For example, the demand for higher capital adequacy standards in the middle of a crisis can cause a squeeze on credit that further flames the liquidity shortage, raises the number of non-performing loans and causes more bankruptcies. The IMF's preferred sequencing and timing of financial and economic reforms was neither well formulated in theory nor sufficiently worked through in practice, and it was consequently ill-placed to justify its attempts to railroad through its preferences.

The IMF's support package to Thailand in August 1997 had conditionality measures including the freezing of a number of finance companies. This caused panic amongst uninsured deposit holders. In Indonesia, its conditionality measures included the closure of some domestic banks which also caused panic amongst the uninsured depositors. Sachs (1988) has referred to these measures as the IMF's "screaming fire in the theatre". Helleiner (1998) has also criticised the pace of the IMF's disbursement of its funds to the Asian economies during the crisis. He makes the point that finance which is supplied in response to negotiated conditions and released in parts in response to perceived compliance is not the way to inject liquidity into a financial system in crisis. The IMF's rescue money should have been dispensed faster with less onerous conditions. Its insistence that Indonesia unwind its food and fuel subsidies in the middle of the crisis is another example of this. Within Indonesia and the region more generally and beyond, this was interpreted as either an arrogance on the part of the IMF insisting on its preferred sequencing of reforms, or as an attempt to bring down the government which it did not believe would deliver on its preferred reforms at all.

Following the failure of the IMF's Indonesian support package to stabilise the rupiah, the government proposed the establishment of a currency board to achieve the same result which was seen locally as necessary to contain the damage and buy time to consider the real sector reforms. The IMF interpreted this as an attempt to postpone the real reforms. On 8 January 1998 a strongly worded letter from the IMF to the Indonesian government was leaked to the press that threatened to withhold disbursements of the package if the currency board proposal was pursued. On 14 February 1998, the IMF's First Deputy Managing Director Fischer was reported in *The Jakarta Post* as having criticised the currency board proposal and used uncharacteristically blunt language about political issues when he remarked that the rupiah had been hit by suggestions that the country could select a Vice President whose "devotion to new ways of doing things is limited". These events were widely interpreted as attempts to exert political pressure on the Indonesian government to sequence its reforms according to the IMF's preferences. They certainly did not help to stabilise the rupiah (see Table 2, 8 January and 16 February 1998), and as such were in conflict with part (iii) of Article 1 of the Fund's Articles of Agreement which gives it the role of promoting exchange rate stability (see http://www.imf.org/external/index.htm). Also, the threat of withholding the loan package did nothing to assist the government in its task of stabilising the economy with minimum destruction to national and international prosperity, and as such its outcome sits uncomfortably with the intent of part (v) of Article 1 of the Fund's Articles of Agreement.

The upshot of these developments was to raise a considerable amount of mistrust within Asia about the motives and behaviour of the IMF. It was interpreted as having stepped beyond its brief in a manner that constituted political interference. This ill-feeling and mistrust continues today as the former Asian "tigers" struggle to get back on their feet. The Asian financial crisis has indicated the need for a review of the role of the IMF in today's globally integrated markets. There is merit in reviewing its Articles of Agreement and changing them to better focus the Fund on its essential role of maintaining stability in the international financial markets.

5
Lessons for Ireland

The collapse in the performance of the former Asian "tiger" economies has occurred at a time when the Irish economy has continued to perform spectacularly well. The Irish economy has attracted a great deal of international interest — and it has been referred to as the "Celtic tiger". The recent experience of the former Asian "tigers", however, serves as a reminder that economic success can quickly turn to failure in today's globally integrated markets. It is interesting, therefore, to ponder what lessons can be learned by the Celtic "tiger" from the recent Asian financial crisis. Three lessons are suggested here.

First, in our analysis of the Asian problems, we stressed the prominent role of currency volatility and misalignment, and we suggested the formation of a new Asian monetary system as a solution. Ireland is fortunate in having such a remedy already in place. Our membership of the EU together with its new currency, the Euro, ensures that we will never face a currency crisis caused by a collapse of international confidence in our currency like what happened to the former Asian "tigers". If a currency crisis ever hits Ireland in the future, it will hit us as part of the overall Euro, and the relative purchasing power of our currency *vis-à-vis* our major trading partners will not be affected. This does not mean, however, that we no longer have to worry about our international competitiveness. It is now increasingly important that our real wage inflation relative to our productivity growth is kept in line with our international competitors. Failure to do this will result in an adjustment process which will take place through lost employment opportunities rather than through the previous, but no longer available, mechanism of exchange rate devaluation.

Second, the government agreed in principle last October to the establishment of a single financial regulatory authority to supervise and regulate the Irish financial system. This is a good idea, but there is concern that the decision may have been made somewhat abruptly in response to recent occurrences within the banking sector that might have been better handled by the Central Bank of Ireland. If so, this represents a misunderstanding of the appropriate and proper function of the Central Bank. The Central Bank has done an excellent job in overseeing the Irish financial system, and it would be very risky to seek to change this situation without just cause. It is crucially important that Irish regulators understand the complexities involved in financial supervision and regulation, and that they do not take hasty ill-thought-through decisions.

Third, the Irish government should review its corporate governance with the aim of making its planning processes and infrastructure investment decision-making more efficient. The need for timely provision of infrastructure is becoming increasingly acute, and the evidence of poor planning and decision-making is growing. A good example of these shortcomings is clearly visible in our transport congestion. The government should compile an inventory of backlogs in infrastructure provision across all its expenditure programmes. It should then analyse the causes of these backlogs, understand the weaknesses in its procedures that lead to them, and take corrective action to improve its performance. Failure to do this will eventually deter business activity and curtail the economy's continued progress.

6 Summary and Recommendations

The recent Asian financial crisis is the worst of a number of financial crises to have occurred in the past two decades, and it has caused great economic and social harm in the worst affected countries. It manifested itself as a currency crisis in which international investors (fund managers, institutional investors, hedgers and speculators) and lenders (banks and other financial consortia) rapidly shorted their Asian assets, and while doing so, sharply depreciated the local exchange rates as they converted back to their home currencies. It occurred very suddenly and unexpectedly, it spread throughout the former "Asian tiger" economies with great force and speed, and it quickly spread beyond the region to threaten the stability of the global financial system.

Two main explanations have been advanced for the cause of the crisis. The first is that it resulted primarily from weaknesses in the affected Asian economies including crony capitalism, poor financial regulation and corporate governance, and inappropriate exchange rate policies. The second is that it resulted primarily from international financial market failures such as informational asymmetries and moral hazard. In assessing these explanations, it seems that none of them in isolation can explain what happened. More specifically, crony capitalism and poor financial regulation and corporate governance can explain the severity of the crisis, informational asymmetries can explain the speed with which events unfolded, but none of these can explain its underlying causes. Moral hazard was probably a minor factor. The operation of an inappropriate exchange rate management regime is a more potent explanation. The role played by the IMF during the crisis was reviewed. It was argued that the Fund has considerably broadened its range of interventions in financially stricken economies, and it has done this in a way that alienated many in the region and beyond. Finally, the lessons for Ireland were discussed, amongst them being the need to control our wage growth, exercise caution in financial regulatory change, and improve our planning processes and infrastructure investment decision-making.

The following recommendations are suggested for consideration. *First*, the countries that have been worst affected by the Asian crisis should proceed as fast as possible to end political interference in their economies aimed at advantaging favoured groups, they should enact more effective corporate governance legislation, and they should promote best practice risk management. *Second*, the international financial agencies should develop more hands-on educational programmes to assist willing governments to establish up-to-date financial monitoring and supervision processes and to enact effective co-ordinated financial regulation legislation. *Third*, the governments of East and Southeast Asia should agree to put in place a more appropriate exchange rate regime for their region. The success of the Euro could usefully be replicated in Asia with the yen playing a dominant role, just as the German mark did during the process of monetary unification in Europe. The IMF should assist this process. *Fourth*, the BIS should build on its recent research into the use of derivative products with a view to assessing the potential for more effective monitoring of the over-the-counter market. *Finally*, the IMF should organise a wide-ranging review of its current and future roles in the global financial system, including experts external to the Fund and from all the important regions of the world.

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The Asian crisis is the first major economic event of world significance to be commented upon continuously on the internet. Interested readers might visit the *IMF* web site or search under the "Asian crisis" to obtain a wealth of information and discourse. A particularly informative and useful website is at www.stern.nyu.edu/~nroubini/asia/Asiahomepage.html. In addition, numerous articles and books have been, and continue to be written on the issue. A useful starting point is the *Cambridge Journal of Economics*, Volume 22, 1998 which is devoted entirely to the Asian financial crisis, and which is referenced below.

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