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FINANCIAL SECTOR REGULATION: THE LESSONS OF THE ASIAN CRISIS

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1. INTRODUCTION

One consequence of the Asian crisis has been to provoke a critical reassessment of financial market liberalisation orthodoxy. The World Bank's Chief Economist has stated that "theory would predict that financial market liberalisation preceding the development of adequate regulatory capacity is likely to lead to an enhanced likelihood of a financial crisis" (Stiglitz, 1998). Michael Mussa, Director of the IMF's Research Department, commenting on the volume of international capital outflows in the aftermath of the crisis, observes that "no country, no matter how soundly managed its economic policies, no matter how solid its banking system, can maintain an open attitude toward international capital flows in the face of that type of system disturbance" (IMF, 1998). Suddenly, economists and policy analysts have been required to reconsider the role of the financial system in the development process and to develop a better understanding of the role of government in regulating domestic and international financial markets.

The lessons of the East Asian crisis for financial sector regulation, particularly in the context of developing economies, provide the focus of this paper. It falls into six parts. Part 2 reviews briefly what we know about the role of the financial system in the development process, the functions which it performs in facilitating efficient resource use and economic growth, and the causes of financial distress. The third section provides a brief anatomy of the Asian financial crisis, while the fourth section discusses competing explanations of the crisis, and draws attention to failures in financial regulatory and supervisory systems as a contributory factor. The fifth section looks in more detail at failures in prudential regulation and supervision in East Asia. The sixth concluding section looks beyond the Asian countries directly affected by the current crisis and points out that banking crises and financial instability have been a regular occurrence throughout the developing (and developed) countries. This section also brings together the lessons and conclusions of the East Asian financial crises for prudential regulation of the financial sector.

2. THE FINANCIAL SYSTEM AND FINANCIAL DISTRESS

Economists are in agreement that the development of financial markets is a critical part of the economic development process and that an efficient financial system is linked to economic growth. Consequently, a satisfactory understanding of the factors underlying economic growth necessitates an understanding of the functions and workings of financial systems.

Financial systems exist to serve one primary function - to facilitate the allocation of resources across space and time, in an environment of uncertainty and transaction costs (Levine, 1997). The financial system channels resources from savers to investors, and allows savers to retain liquidity for their savings when these savings are used for longer term investment. A well functioning financial system will select the most productive use for savings, and will also monitor their use, ensuring that they continue to be used productively. These selection and monitoring functions of financial markets are basically concerned with providing and processing information. But information is imperfect, hence financial markets are characterised by market failure and imperfections (Stiglitz, 1994). The fact that market failures are pervasive in the financial sector has often been overlooked or ignored in the pursuit of financial sector liberalisation.

Financial regulation can be divided into two distinct categories according to its motive. The first, economic regulation (e.g. controls over interest rates and credit allocation), aims to mitigate market failures in the allocation of resources. This type of regulation has increasingly been dismantled under programmes of financial liberalisation in countries all over the world (Long and Vittas, 1992). Although it is intended to improve efficiency in financial markets, financial liberalisation may make financial systems more vulnerable to financial crises, by for example, allowing banks to hold more risky assets than would be the case in a regulated system, by exposing banks to greater competition, or by exposing banks to a greater degree of market risk, such as interest rate or exchange rate risk. The second category of regulation is prudential regulation which aims to protect the stability of the financial system (i.e. prevent systemic failures or financial crises) and to protect depositors, especially small depositors. In contrast to economic regulation, prudential regulation has not been dismantled as part of liberalisation programmes, but has been strengthened in many countries, often in response to financial crises. For example, many of the East Asian countries enacted strengthened banking regulations after failures of banks and non bank financial institutions (NBFIs) in the 1980s (see section 5 below).

We now examine briefly the theoretical reasons which have been advanced to explain financial crises, looking at three separate paradigms. The first analyses bank runs, the second analyses financial distress in terms of imperfect information and the associated agency costs and moral hazard, and the third attributes financial distress primarily to macroeconomic factors. All three paradigms have some relevance to the East Asian financial crisis.

In the bank runs paradigm, financial distress is primarily a problem of bank illiquidity, although illiquidity may also lead to bank insolvency if illiquid banks are forced to sell assets at "fire sale" prices in order to meet demands for withdrawals from depositors. The seminal analysis of bank runs is that of Diamond and Dybvig (1983). The nature of the deposit contract, under which depositors' claims are met at a fixed value on a first come, first served basis, provides incentives for bank runs if depositors fear that their bank may be unable to honour all of its liabilities. Depositors have incentives to withdraw their own deposits before the bank is closed because of insolvency. One view of bank runs is that they are random events, while another is that they are related to events which change depositors' perceptions of the risk of bank liabilities, such as failure of a large financial institution or severe recession (Gorton, 1988: 754-55).

The second paradigm locates financial distress within a microeconomic analysis of financial markets. Market failure is intrinsic to financial markets because of informational imperfections and the attendant agency conflicts and moral hazard. Agency problems arise between creditors and debtors because of asymmetric information and the fixed value nature of loan contracts: debtors have a concave return function while that of creditors is convex (Ncube and Senbet, 1997). The consequence of these agency conflicts is that banks and other financial institutions could face adverse incentives to undertake investment strategies which might jeopardise their solvency and therefore the safety of their deposits (or that of their other liabilities). Problems of asymmetric information, adverse selection and moral hazard are far more common in developing countries than in industrialised countries because of, inter alia, the high costs of collecting information about borrowers, the difficulties in enforcing contracts, and macroeconomic instability (Long and Vittas, 1992: 54; Villanueva and Mirakhor, 1990: 521).

An interesting literature has examined how the incentives on banks (or borrowers in general) for risk taking are affected by different factors. For example, adverse incentives may be worsened by increased interest rates (Stiglitz and Weiss, 1981) or macroeconomic instability (McKinnon, 1988). Bank capital serves to reduce adverse incentives on bank owners, because they have more of their own funds to lose from adopting higher risk investment strategies. Financial distress worsens adverse incentives if it erodes the value of bank capital: as the value of bank equity falls, owners have incentives to "gamble for resurrection" (Berger, Herring and Szego, 1995: 398-99; Dewatripont and Tirole, 1993). Finally, as is widely recognised, major contributors to moral hazard in banks are explicit and implicit deposit insurance and regulatory forbearance (Garcia, 1996).

The third paradigm focuses on macroeconomic factors as causes of financial distress. Macroeconomic explanations are not incompatible with the liquidity and moral hazard explanations discussed above. Macroeconomic changes may expose weaknesses in bank balance sheets attributable to microeconomic causes, and macroeconomic shocks could also trigger bank runs (Lindgren, Garcia and Saal, 1996). Banking crises have been attributed to booms and slumps in asset prices. In this explanation, excessive banking lending, supported by rising asset prices, fuels the upswing in the business cycle, but borrowers become over-indebted and vulnerable to any macroeconomic changes which reduce their capacity to service their loans, such as a rise in interest rates. Distress sales of assets by borrowers to service their loans drive down asset prices, thereby rendering borrowers insolvent. This reduces the value of banks' loan portfolios, and potentially jeopardises bank solvency (Davies, 1992: 127-130).

Macroeconomic causes of banking crises can also have an international dimension, particularly in the context of liberalised capital account transactions. Devaluation of the exchange rate undermines bank solvency if banks have large net foreign exchange liabilities, or if banks' borrowers are adversely affected by the devaluation. Currency and bank crises may have common causes, such as an overvalued exchange rate and a widening current account deficit financed by capital inflows (Kaminsky, 1998; Kaminsky and Rheinhart, 1998). If the capital inflows are intermediated through the domestic banking system there will be an expansion of bank borrowing, possibly accompanied by asset price booms of the type discussed above. When the current account deficit is no longer perceived as sustainable there will be a capital outflow, precipitating a banking crises through recession, devaluation or monetary contraction.

3. ANATOMY OF THE EAST ASIAN FINANCIAL CRISIS

The financial crisis in East Asia was characterised by widespread financial distress among banks and non-bank financial institutions (NBFIs). In Korea, Indonesia, Malaysia and Thailand there was a marked deterioration in the quality of banks' and NBFIs' loan portfolios, as borrowers defaulted on loan repayments. By early 1998, non performing loans averaged 30-35% of total outstanding loans in Indonesia, 25-30% in Korea and Thailand, and 15-20% in Malaysia (Rahman, 1998).

All three countries suffered failures of banks and / or NBFIs. In Thailand, the operations of 58 finance companies were suspended in June-August 1997 and 56 of them were closed in December of that year. The authorities in Thailand also intervened to support several distressed banks. The authorities in Indonesia closed 16 banks in November 1997, and in 1998 intervened in 53 banks, placing them under the authority of the Indonesian Bank Restructuring Agency (which was set up in February 1998), and closing down 10 of them. In Korea the operations of 14 merchant banks were suspended in December 1997 and 10 of them were closed in the following month. The Korean Government also made large capital injections into two major commercial banks. In all three countries the Central Banks provided liquidity support to distressed banks.

The macroeconomic shocks – exchange rate devaluation and increased interest rates – clearly adversely affected borrowers' ability to service loans, but the banks and NBFIs themselves were partly responsible for the impairment of their asset portfolios because their imprudent lending and investment policies had exposed them to borrowers whose viability was marginal and highly vulnerable to any change in macroeconomic conditions (Miller and Luangaram, 1998). Evidence of the deterioration of FIs' asset portfolios was already emerging in 1996, at least a year before the currency crises, in Indonesia, Korea and Thailand, although the extent of the impairment of asset portfolios was masked by poor accounting practices. Korean banks also suffered losses on their equity portfolios in 1996 (IMF, 1997A: 150-3). One bank in Thailand was taken over by the authorities in May 1996 after incurring heavy losses through a speculative and fraudulent lending policy, and some finance companies in Thailand had suffered heavy losses in 1995 after lending for stock market speculation (Bank of Thailand, 1997). In Indonesia, signs of distress in the banking system had begun to emerge in 1995, when one bank suffered a run on its deposits, and when the Central Bank intervened to support two distressed banks in the following year.

During the 1990s banks and NBFIs in East Asia expanded lending to the private sector at a very rapid rate. Over the period 1990-97, bank lending in real terms grew at 18% per annum in Indonesia, Philippines and Thailand, 16% in Malaysia, 13% in Taiwan and 12% in Korea and Singapore (BIS, 1998: 119); see also table 1 for nominal growth rates of credit. Rapid growth in bank lending is itself often a source of poor asset quality, as borrowers with more marginally viable projects are granted credit and because FI's capacities to appraise and monitor borrowers fails to keep pace with the expansion of their loan portfolios.

Table 1: Credit Growth in Selected Countries 1990-96
(percent)

				Net domestic credit/GDP	
Country	**Annual growth of nominal GDP**	**Annual growth of loans**	**Loan growth/ GDP growth**	**1990**	**1996**
Indonesia	17	20[a]	122	45	55
Korea, Rep. Of	14	17	123	68	79
Malaysia	13[b]	18[a,b]	134[b]	80	136
Philippines	13	33	264	26	72
Thailand	14[b]	24[b]	176[b]	84	130[c]
Argentina	28	23	82	32	26
Brazil	540	447	83	88	34
Chile	21	20	93	78	73
Colombia	28	34	120	36	46
Mexico	24	14	60	37	22
Germany	6	9	138	123	141
Japan	3	2	80	162	157
United States	6	8	140	109	123

Note: Loans include nonbank financial intermediaries.
a. Does not include nonbank financial intermediaries in 1990 and 1996 for Indonesia and in 1995 for Malaysia.
b. Data are for 1990-95.
c. 1995
World Bank 1997c; IMF *International Financial Statistics*, and Goldman Sachs.
Source: World Bank (1998)

In several of the East Asian countries the risks which this rapid expansion of lending posed to FIs were further exacerbated by the nature of their lending and investment strategies. Banks and NBFIs lent heavily to the property sector in Thailand, Indonesia and Malaysia, with loans to this sector expanding at an even faster rate than total lending, and to excessively geared large commercial and industrial conglomerates (Chaebols) in Korea. Because of over-investment in both the corporate and real estate sectors, returns to investment fell and many of the loans were extended to projects which proved non viable. Average profit margins of the Chaebols fell to negligible levels in the mid 1990s and several went bankrupt (Miller and Luangaram, 1998: 9). Much of the lending was collateralised by real estate, the value of which was dependent upon increasingly inflated, and unsustainable, property prices. Banks and finance companies also lent money for speculation in stock markets, or invested directly in stock markets, on which equity prices had also been inflated to unsustainable levels. Once property and equity prices fell, banks and NBFIs incurred heavy losses.

Many banks and NBFIs had mismatched assets and liabilities in two important respects. First, while much of their liabilities were short term, many of their loans were effectively long term loans, because the projects financed by the loans would only be capable of generating the income to repay the loan in the long run. Second, FIs had borrowed heavily abroad in foreign currencies, mostly on a short term basis, and lent to domestic borrowers in local currency, which exposed the FI to exchange rate losses once the exchange rate of the domestic currency depreciated. Banks in Korea, Indonesia and Thailand had foreign currency liabilities of $68 billion, $12 billion and $26 billion respectively in mid 1997 (Rahman, 1998: 11). In Thailand, 17% of overall domestic credit comprised loans which had been funded by foreign currency borrowing by banks operating on the Bangkok International Banking Facility (Bank of Thailand, 1997). Merchant banks in Korea, which had borrowed heavily in foreign currency and extended domestic currency loans, were hit hard by the corporate defaults and bankruptcies in 1997 (Corsetti, et al., 1998: 7). In some cases banks hedged their foreign currency exposure by lending foreign currency denominated loans to domestic borrowers, but this exacerbated credit risk because the borrowers faced much larger loan servicing requirements once the exchange rate depreciated (BIS, 1998: 123-4). Many of the borrowers who accessed foreign currency loans, such as real estate developers, were not generating income in foreign exchange.

Net capital inflows to the East Asian crisis economies rose massively in the years preceding the crisis (Table 2), as foreign lenders continued to funnel loans to the Asian markets and international financial markets showed no awareness of the increasing vulnerability of the Asian markets. The magnitude and suddenness of the financial reversal are evident from Table 3. The swing of capital flows from a $93 billion inflow in 1996 to a $12 billion outflow in 1997 represents around 11 per cent of the pre-crisis dollar GDP of the five countries (Radelet and Sachs, 1998). In late June, 1997, one of Thailand's largest financial institutions collapsed, and the exchange rate was allowed to depreciate. Foreign creditors reacted by withdrawing capital from countries throughout the region and exchange rates came under pressure. As the currencies fell and capital flows reversed, 'herd' behaviour by foreign creditors led to capital withdrawals and exposed both the vulnerability of the financial system to large external capital movements and the weaknesses of the regulatory and supervising framework.

Table 2: Net Private Capital Flows to East Asia 1994-96
(percentage of GDP)

Country	**1994**	**1995**	**1996**
Indonesia	0.3	3.5	6.1
Korea, Rep. Of	1.2	2.0	4.9
Malaysia	1.2	6.2	8.4
Philippines	7.9	8.4	12.7
Thailand	14.3	17.3	14.5

Source: World Bank (1998)

Table 3: External Financing of Five Asian Countries 1994-98[a] *Billions of dollars*					
Item	**1994**	**1995**	**1996**	**1997[b]**	**1998[c]**
Current account balance	-24.6	-41.3	-54.9	-26.0	17.6
External financing (net)	47.4	80.9	92.8	15.2	15.2
Private inflows (net)	40.5	77.4	93.0	-12.1	-9.4
Equity investment	12.2	15.5	19.1	-4.5	7.9
Direct	4.7	4.9	7.0	7.2	9.8
Portfolio	7.6	10.6	12.1	-11.6	-1.9
Private creditors	28.2	61.8	74.0	-7.6	-17.3
Commercial banks	24.0	49.5	55.5	-21.3	-14.1
Nonbank	4.2	12.4	18.4	13.7	-3.2
Official inflows (net)	7.0	3.6	-0.2	27.2	24.6
International institutions	-o.4	-0.6	-1.0	23.0	18.5
Bilateral creditors	7.4	4.2	0.7	4.3	6.1
Resident lending and other (net)[d]	-17.5	-25.9	-19.6	-11.9	-5.7
Reserves change, excluding gold[e]	5.4	-13.7	-18.3	22.7	-27.1

Source: Institute of International Finance, "Capital Flows to Emerging Market Economies", January 29, 1998.
a. Table entries are sums over data for Korea, Indonesia, Malaysia, Thailand, and the Philippines.
b. Estimate. c. Forecast. d. Includes resident net lending, monetary gold, and errors and omissions.
e. A negative value indicates and increase.

Source: Radelet and Sachs (1998)

In regard to the theoretical explanations for financial distress outlined in section 2 above, the East Asian financial crises combined elements of both the microeconomic paradigm, in which mismanagement and imprudent lending arise from agency conflicts, and macroeconomic causes - in particular the boom-bust lending and asset price cycle exacerbated by external capital flows. There were also bank runs, as in Indonesia which were triggered by the closure of 16 banks in late 1997. It is clear that there were multiple underlying causes to the financial distress in East Asia which helps to explain why the financial crisis has been so severe.

4. EXPLANATIONS OF THE FINANCIAL CRISIS

There is no shortage of explanations of the economic crisis in East Asia that emerged in mid 1997. At the risk of oversimplification, we can divide the debate into two camps. On the one hand are those who see the origins of the crisis as endogenous to the region, either in bad policy management or in the nature of the economies themselves. The other school blames inherent weaknesses and instabilities in financial markets, domestic and international.

Macroeconomic Mismanagement

Those observers who see the origins of the crisis as essentially "home grown" have argued that macro imbalances were the most important cause of the crisis. But this is to ignore the fact that all the affected countries had for a long time enjoyed strong macro 'fundamentals', and indeed had been repeatedly commended for their prudent macro management policies. All of them recorded strong economic growth, inflation rates were low, and their fiscal positions compared very favourably with those of other countries. Significantly, domestic savings rates were much higher than the rest of the world. Given their export orientation, they had the ability to service external debt in the long term.

Nevertheless, as noted in the previous section, there were macroeconomic weaknesses such as overvalued exchange rates, widening current account deficits and a build up of short-term external debt which led to a rapid expansion of bank lending and to increasing vulnerability to a reversal of capital flows (Radelet and Sachs, 1998). It should be emphasised, however, that these imbalances were centred on the private sector rather than the government. Equally important, they were made possible by financial market liberalisation in the region which opened up new channels for the entry of foreign capital.

'Asian Model' Structural Weaknesses

A widely held view is that the crisis had its roots in the Asian capitalist model of development. Several important characteristics of the East Asian model are singled out for criticism. The first of these arguments, referred to as 'crony-capitalism', suggests that the long-term links between the corporations and the main banks led to poor investment decisions and over-lending on unproductive projects. The nature of the Asian corporations, involving extensive cross-subsidisation of subsidiaries, and their close relationships with the banks, meant that the financial markets did not have sufficient information about the true financial position of the corporations and banks. This lack of 'transparency' is regarded as being an important reason for the collapse of market confidence. The close relationship between government and business in the formulation and implementation of industrial strategy is also seen as contributing to the crisis, since it led to various market distortions including directed credit, regulations and subsidies, all of which contributed to the problems of unproductive or excessive investment.

It is ironic that the very features of the Asian model which were identified previously as the basis for their economic success - strong government and competent bureaucracy equipped with the right policies - are now seen as root causes of the crisis (Singh, 1988). To attribute the current crisis largely to structural weaknesses in the Asian model does not seem plausible. First, as Stiglitz (1998) notes, there have been banking crises in the 1990s in countries that are fully transparent, for example, the USA and Sweden, so the availability, or lack thereof, of reliable information is not sufficient by itself to explain the collapse of market confidence. Second, as Ha-Joon Chang (1998) observes, it is misleading to overstress the argument that government guarantees of corporate bail-out encouraged excessive investment in unproductive projects. In Korea, for example, inefficient enterprises were often punished, either by being required to undertake managerial or financial restructuring, or by allowing them to go into bankruptcy. Also, the cross-country evidence to support the view that patterns of lending deteriorated sharply in the 1990s is weak. Radelet and Sachs (1998) review the evidence on sectoral investment, on land prices, on nonperforming loans and on incremental capital-output ratios, and conclude:

> "While we have shown that bank lending was increasing rapidly, and lending activities almost certainly exceeded prudential limits in some cases, it is much too easy with hindsight to overstate the extent of bad loans. Clearly there were many profitable ongoing investments in manufacturing activities that were earning a solid rate of return. A substantial share of lending supported labour-intensive manufactured exports, which one does not normally associate with irrational boom-bust cycles or gambling" (1998 :41)

If the Asian industrialisation model does not explain the crisis, could it be that changes were made to the model which contributed to the emergence of the financial crisis? One area in which the Asian model did change in the 1990s was financial market policy. Although financial liberalisation had begun in the 1980s in several Asian countries, the pace of liberalisation accelerated in the 1990s. Financial liberalisation was pursued in a variety of forms, including liberalising constraints on the permissible activities of domestic banks and NBFIs, liberalising controls on foreign banking, and allowing capital account convertibility. Deregulation of the Korean financial sector, introduced in 1993 (partly under pressure from the international community) eliminated many interest rate controls, removed restrictions on corporate debt financing and cross-border flows, and allowed increased competition in financial services (World Bank, 1998). Korea permitted local companies and banks to raise money abroad without the traditional supervision and control. In the late 1980s and early 1990s the Thai government abolished interest rate ceilings, relaxed foreign exchange controls, granted offshore banking licenses, eased the rules governing NBFIs, and expanded the scope of permissible capital market activities (allowing finance companies to fund equity purchases on the margin, for example). Financial liberalisation therefore, represented a departure from the Asian 'model' in two crucial areas: control over external borrowing and state guidance of investment. It would seem that the departure from the model, rather than its pursuit, may have been a major cause of the East Asian crisis.

Financial Market Behaviour and Incentives for Imprudent Lending

The move towards financial liberalisation, without ensuring that an effective regime of prudential regulation was in place, increased the vulnerability of the financial system. The prediction that financial market liberalisation preceding the development of adequate regulatory capacity increases the likelihood of a financial crisis has been borne out in a large number of countries and is confirmed by cross-country research (Demirguc-Kunt and Detragiache, 1998). The same is true of the opening up of the capital account, which in the absence of effective prudential regulation increases the risk of instability in the financial system (Eichengreen and Mussa, 1998). Opening up banking systems to new entrants lowered the franchise value (expectation of future profits) of existing banks. In Thailand, the entry of foreign banks with the establishment of the Bangkok International Banking Facility (BIBF) increased competition for prime customers, such as multi-national corporations, who were attracted by the lower cost of funds on the BIBF. The increased competition squeezed the lending margins of the domestic banks, inducing them to move into more lucrative, but more risky, activities. This shift in activities by the domestic banks was facilitated by a relaxation of the regulations governing permissible activities of banks. Across East Asia, increased access to offshore funding through the liberalisation of financial and foreign exchange control regulations made it easier for banks and NBFIs to take on excessive foreign exchange risk and encouraged a surge in foreign borrowing. This in turn fuelled domestic credit growth as funds raised abroad were intermediated through the domestic financial systems (Table 1 above).

In a liberalised financial system, the maintenance of sound FIs depends upon those institutions having appropriate incentives to pursue prudent management and not taking excessive risks that will jeopardise the safety of their deposits and other liabilities. In a number of the East Asian countries, the incentives for FIs to pursue prudent lending policies, and prudent management in general, were undermined for several reasons. Political pressure was exerted on FIs in Korea to lend to specific corporate borrowers, including Chaebols, and to extend further credit after the borrowers had run into financial difficulties (IMF, 1997B: 12-13). Regulatory requirements were imposed on banks to allocate a minimum share of their loan portfolio to preferred sectors such as small and medium scale businesses in Korea and Indonesia, the Bumiputera community in Malaysia, and agricultural and rural industries in Thailand. These loans were often re-financed at preferential rates by the Central Banks or by special government funding schemes, which reduced the incentive on the lending bank to evaluate the creditworthiness of the borrower and monitor the performance of the loan (Folkerts-Landau et al, 1995: 38 & 52).

Insider transactions were extensive because many of the large corporations in East Asia had affiliated FIs from which credit could be obtained on preferential terms, especially in Korea and Indonesia. These loans could be rescheduled and further credit extended even when existing loans were not serviced (Rahman, 1998: 7). The high levels of insider transactions and imprudent lending strategies pursued by FIs reflected severe agency problems in financial markets. FIs had adverse incentives to take excessive risks with borrowed money because outsiders, such as regulators and creditors, had weak incentives to monitor and control the management and lending strategies pursued by FIs.

The weaknesses in regulation and supervision are discussed below. For the FIs' creditors, including the foreign financial institutions which provided large volumes of loans to many East Asian FIs, the ability to exercise effective monitoring was impeded because of a lack of transparency in the published accounts of the East Asian FIs. Banks and NBFIs in Korea, Thailand and Indonesia did not apply international accounting standards (IASs) in compiling audited accounts. As a result there were deficiencies in the disclosure of, inter alia, insider transactions, off balance sheet items, loan portfolio concentration and net foreign currency exposures in published accounts (Rahman, 1998).

Although implicit deposit insurance schemes were not in place in Korea, Malaysia, Indonesia or Thailand, the incentives for creditors to monitor the FIs to which they lent was undermined by implicit bail out guarantees for banks and NBFIs provided by governments and Central Banks. Support for failed FIs in Thailand was provided by the Financial Institutions Development Fund, which in 1996 had provided funds to rehabilitate the failed Bangkok Bank of Commerce. Because of the problems of overcapacity in the property market, the Thai Government also established the Property Loan Management Organisation (PLMO) to purchase non performing property loans from FIs and to arrange for property loans to be restructured. The objective of the PLMO was to reduce the non performing loans of FIs and thereby improve their financial condition (Bank of Thailand, 1997). The moral hazard which implicit guarantees of this sort created would have affected the FIs directly, as they would have had fewer incentives to ensure that loan policies were prudent because they could have expected the authorities to provide financial support in the event that their loans were not serviced. The moral hazard created by implicit government guarantees would also have affected foreign institutional lenders who provided funds to the domestic FIs in East Asia. In Thailand, for example, an international bank organising a syndicated loan for a finance company was assured that the Central Bank would support the finance company if it got into difficulties (Corsetti et al, 1998: 5).

5. FAILURES OF PRUDENTIAL REGULATION AND SUPERVISION IN EAST ASIA

Prudential systems cannot prevent all bank failures, but a strong prudential system should provide restraints against widespread mismanagement of banks and NBFIs which lead to systemic failures. The imprudent lending, maturity and foreign currency mismatches and insider abuses that underlay the systemic financial fragility in Korea, Indonesia and Thailand indicate serious deficiencies in prudential systems in these countries. In contrast Hong Kong and Singapore, which have strong and politically independent prudential systems, avoided systemic financial fragility. The distress afflicting most of the FIs in East Asia was not caused by esoteric financial instruments, such as derivatives, for which effectively regulatory methodologies have yet to be developed or of which regulators in these countries had no experience. It was mainly attributable to more traditional sources of distress such as credit risk and maturity and foreign currency mismatches, against which there are relatively robust safeguards available to regulators and which most of the Asian countries already had some experience in the 1980s and early 1990s.

Several countries, notably Hong Kong, Malaysia, Indonesia, Philippines and Thailand, had experienced failures of banks and NBFIs during the 1980s. These failures were mostly attributable to bad loans arising from mismanagement, poor lending policies and in some cases insider abuse and fraud. These failures had helped to stimulate reforms to banking legislation and supervisory systems in the 1980s and in the first half of the 1990s (Bank Negara, 1994: 51-52; Dodsworth and Mihaljek, 1997: 41; Estanislao, 1993: 252 Stiglitz and Uy, 1996: 258). Korea, Indonesia, Malaysia, and Thailand all raised capital adequacy requirements and imposed the Basel capital adequacy ratio of 8% of risk adjusted assets in the 1990s. In liberalising their financial systems in the 1980s and 1990s, East Asian countries therefore did not ignore the need for prudential regulation and supervision, but the manner in which regulation and supervision was implemented was found wanting in many of the countries. In the mid 1990s there were substantial differences in the strength of the legislative framework for bank regulation and the quality of bank supervision among different East Asian countries. Hong Kong and Singapore were rated as very good on both counts, but the regulatory framework was rated as weak in Korea and Thailand. Bank supervision was rated as weak in Indonesia, Malaysia and Thailand (Claessens and Glaessner, 1998: 49) - see also table 4 below.

Table 4

Indicators of the Strength and Quality of Bank Regulation and Supervision in Selected East Asian Countries

Country	Bank Regulatory Framework	Enforcement of Regulations	Quality of Bank Supervision
Hong Kong	Very Good	Good	Good
Indonesia	Satisfactory	Weak	Weak
Korea	Weak	Weak	Fair
Malaysia	Satisfactory	Weak	Weak
Singapore	Very Good	Strong	Very Good
Thailand	Weak	Weak	Weak

Source: for Bank regulatory framework and quality of bank supervision; Claessens and Glaessner (1998: 49).

For enforcement of regulations; Reisen (1998: 23), Dodsworth and Mihaljek (1997), Far Eastern Economic Review, 1998.

While it is widely recognised that there were regulatory failures in the East Asian countries in the mid 1990s, the precise nature of these failures is less well understood. The failures were mainly due to weaknesses in certain aspects of the prudential regulations in force in these countries, especially loan classification and provisioning rules, and a failure to strictly enforce existing prudential regulations. The latter undermined incentives for prudent management by allowing banks and NBFIs to flout the prudential regulations. These issues are discussed in more detail below.

Loan classification and provisioning

The standards applied to the classification of non performing loans in most of the East Asian countries were much less stringent than international standards: hence the non performing loans reported by FIs were only a fraction of their real level. Moreover FIs were able to accrue unpaid interest as income or could capitalise unpaid interest. In addition, provisioning requirements were not stringent, especially for secured loans, and allowed banks considerable discretion in judging whether the loans were recoverable. For example, in Thailand, secured loans were only classified as substandard if they were 12 months in arrears, and only required provisions of 7.5% of the value of the loan. In Malaysia, loans overdue for up to one year required no provisions. In Korea, loans covered by collateral which were overdue for more than six months required only a 20% provision. Several of the emerging markets in Latin America had much stricter provisioning rules than the East Asian countries (IMF, 1997A, table 35). Consequently loan loss provisions in East Asia were inadequate to provide cover against likely losses, which meant that earnings and capital levels were overstated. Had loans been properly classified as non performing, unpaid interest suspended and adequate loan loss provisions made, earnings would have been lower and FIs' true capital position much weaker. Although banks were legally required to meet the Basel capital adequacy ratio of 8% of risk assets, the requirement was largely meaningless given that reported capital levels were overstated because of poor accounting practices. (Rahman, 1998) If capital levels had been accurately computed, taking account of the real value of assets, banks would have had to restrain the rapid growth of their lending, or raise new capital, in order to maintain compliance with the capital adequacy requirements, and as such would not have been so vulnerable to financial distress when the crisis erupted in 1997.

Weak Enforcement of Regulations and Regulatory Forbearance

Prudential regulations in Indonesia, Korea, Malaysia and Thailand were reasonably strong by international standards in many respects. For example, Basel capital adequacy requirements were imposed, and there were restrictions on large loan exposures, insider lending and even foreign exchange exposures, which were generally stronger by comparison with other developing countries (Folkerts-Landau et al, 1995: 51-55). However enforcement in all four countries was weak (Reisen, 1998: 23). In Korea and Indonesia several banks did not comply with capital adequacy ratios and other regulations (UNCTAD, 1998: 64). The insider lending restrictions appear to have been difficult to supervise and enforce because of a lack of transparency in accounts and political pressure on regulators (Folkerts-Landau et al. 1998).

When FIs suffered financial distress supervisors sometimes engaged in regulatory forbearance, instead of intervening to force the distressed FIs to promptly instigate remedial measures, which would have imposed greater incentives on the banking and financial services industry for more prudent management. In Korea, the Central Bank relaxed provisioning rules in 1996 in response to losses suffered by banks due to falls in equity prices (IMF, 1997A: 151). In Thailand, the Central Bank extended US$25 million to support politically connected finance companies in 1997 (Far Eastern Economic Review, 1998).

Regulatory forbearance in East Asia was attributable to several factors. First, supervision entailed large elements of discretion and dialogue between regulators and regulated. Instead of imposing detailed formal rules and regulations as in the U.S. model of regulation which is increasingly being adopted around the world, supervisors relied more on informal pressure to regulate the financial system (Stiglitz and Uy, 1996: 258). Second, supervisors faced strong political pressure not to enforce regulations against politically connected FIs or against FIs which had lent in an imprudent manner to politically connected borrowers. Political interference was pervasive in Indonesia where the Central Bank had little effective independence to impose discipline on the banking industry (Far Eastern Economic Review, 1998: 15-16). Third, there was an inherent conflict of interest between the role of Central Banks in enforcing economic regulations, such as the requirements to lend a minimum share of the loan portfolio to priority sectors, which often involved lending to the more risky borrowers, and their role in enforcing prudential regulations.

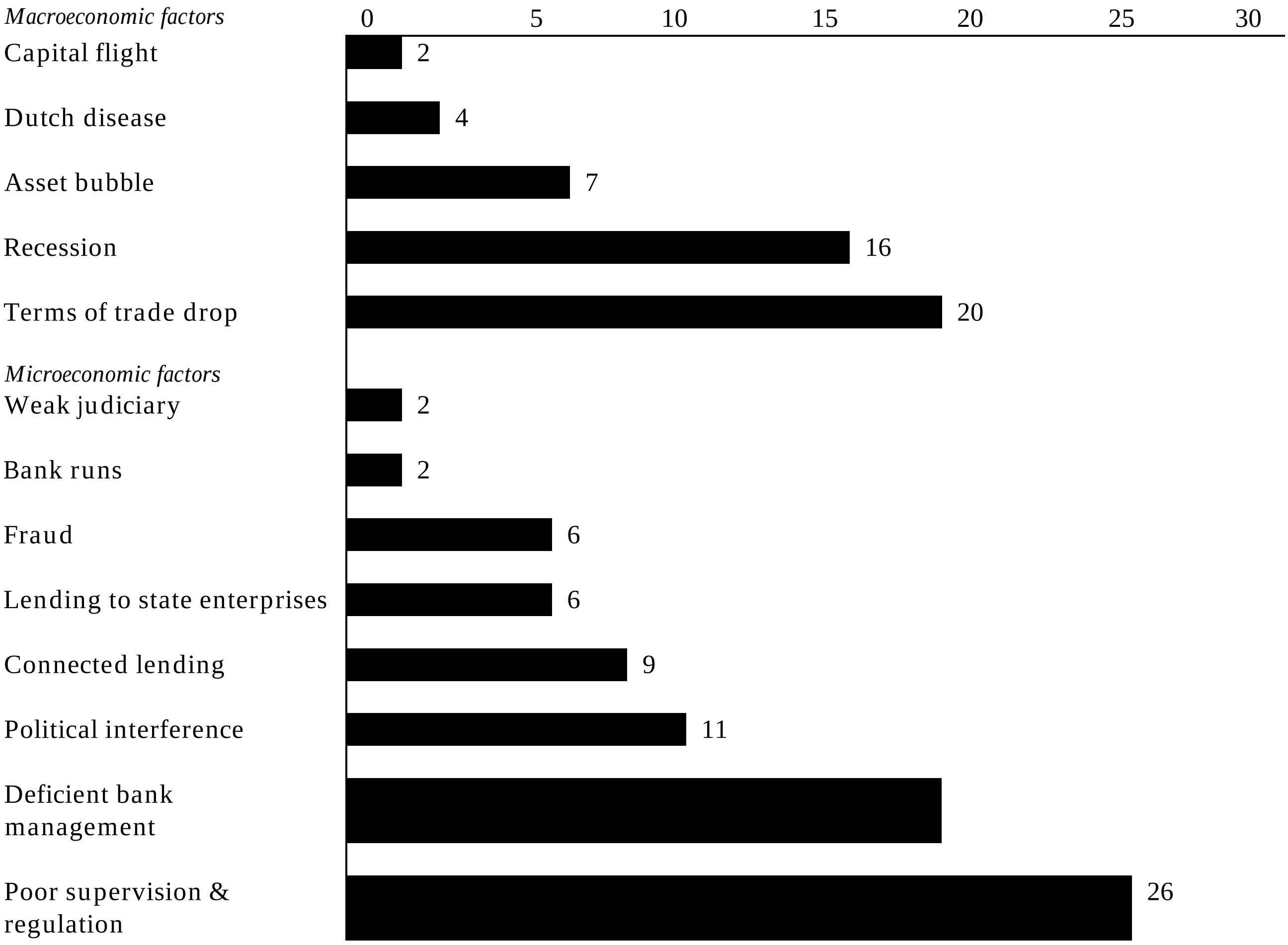
In contrast to Indonesia, Korea and Thailand, regulation in Hong Kong and Singapore was largely free of political interference, and regulators adopted a much stricter approach to checking and enforcing compliance with the banking laws. Singapore imposed higher capital adequacy ratios (12%) than those of the Basel standards and Hong Kong enacted strong banking regulations covering areas such as insider lending, investment in equities and disclosure requirements (Dodsworth and Mihaljek, 1997: 40-42).

6. LOOKING BEYOND THE ASIAN FINANCIAL CRISIS: CONCLUSIONS AND LESSONS

The Asian financial crisis is not unique, except perhaps in its magnitude. The last two decades have witnessed a succession of financial crises that have affected both developed and developing countries. In the developing countries the crises have been primarily banking crises, a consequence of the fact that banks play a much greater role in financial intermediation in these countries than in developed countries.

Recent empirical research on the causes of banking crises in developing countries has identified a number of common characteristics (Caprio and Klingebiel, 1997). For a sample of twenty-nine bank insolvencies that occurred prior to the Asian crisis in twenty-one developing countries, the primary causes were considered to be poor supervision and regulation, deficient bank management, government intervention, or some degree of insider or politically motivated lending. Although macro factors, such as output or terms of trade decline also figured in the sample, microeconomic factors are the more prevalent (Table 5).

Table 5: Factors behind Twenty-Nine Bank Insolvencies



Source: Caprio and Klingebiel (1997)

Consideration of the causes of bank distress in developing countries in general, and in East Asia in particular, has important implications for policies both to avoid crises and to deal with them when they occur. In particular, it directs our attention to the importance of strengthening domestic financial sector supervision and institutions, and of ensuring that the pace of financial liberalisation is sequenced so as to remain within the capacity and capability of the regulatory system. In the remainder of this concluding section we discuss the lessons that can be drawn for the design of prudential systems in developing countries.

The first lesson is that in a world of liberalised capital flows, regulators must enforce effective restrictions on financial institutions' foreign currency exposures. Financial institutions’ net open positions in foreign currency should be restricted to a maximum percentage of their core capital. There should also be restrictions on the extent to which banks can reduce their net open positions by passing on the foreign exchange risk to their lenders, as this will often translate into increased credit risk. Regulators must also put into place an effective system for monitoring financial institutions’ foreign currency exposures.

Second, regulators must strictly enforce prudential regulations, in particular those pertaining to credit risk such as insider lending. One of the reasons why prudential regulation failed in many of the East Asian was not that the regulations themselves were particularly weak or lacking key components, but that the existing regulations were not properly enforced.

Third, regulators should enforce the use by FIs of international standards of loan classification and provisioning. If loan classification standards are weak, as they were in many of the East Asian countries, the true financial status of FIs will be hidden. In particular its capital adequacy computation on which many of the prudential restrictions are based will be rendered meaningless.

Fourth, regulators must avoid giving any guarantees, implicit or explicit, to bail out financial institutions or to assume their liabilities to all but small depositors. The moral hazard consequences of providing guarantees to financial institutions’ creditors are well known: such guarantees reduce the constraints on imprudent management by financial institutions which might otherwise be provided through the market.

Finally, regulators must react promptly to impose remedial measures, including closure where this is appropriate, on distressed FIs. Once they become distressed, incentives for prudent management on the part of their owners are quickly eroded, as they have little or none of their own capital left to lose. They incentives they face are to “gamble for resurrection” with their depositors’ money. Hence prompt intervention by the regulators is essential. The prompt corrective action rules, which were introduced in the U.S. following the savings and loan debacle, and have just been introduced in Japan, provide a model which is no less relevant for developing countries.

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