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## Development of the Financial System in Post-Crisis Asia

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# Development of the Financial System in Post-Crisis Asia

John Williamson

March 2000

*What is the feasibility and advisability of capital account controls in various sub-regions of Asia?*

*What are the lessons of the Asian crisis for policymakers?*

*How may banking systems be strengthened?*

This paper addresses these and other key questions on financial system development in a clear style accessible to lay readers and specialists alike.



**ADB Institute  
Working Paper Series  
No. 8**

March 2000



**Development of the Financial System  
in Post-Crisis Asia**



**John Williamson**

## ABOUT THE AUTHOR

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**This paper is part of the Institute's research project on development paradigms.** Additional copies of the paper are available free from the Asian Development Bank Institute, 8<sup>th</sup> Floor, Kasumigaseki Building, 3-2-5 Kasumigaseki, Chiyoda-ku, Tokyo 100-6008, Japan. Attention: Publications.

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## PREFACE

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The ADB Institute aims to explore the most appropriate development paradigms for Asia composed of well-balanced combinations of the roles of markets, institutions, and governments in the post-crisis period.

Under this broad research project on development paradigms, the ADB Institute Working Paper Series will contribute to disseminating works-in-progress as a building block of the project and will invite comments and questions.

I trust that this series will provoke constructive discussions among policymakers as well as researchers about where Asian economies should go from the latest crisis and current recovery.

The conference version of this paper was presented on 10 December 1999 at the High-Level Dialogue on Development Paradigms, on the occasion of the second anniversary of the establishment of the ADB Institute.

Masaru Yoshitomi  
Dean  
ADB Institute

## ABSTRACT

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The evidence of the East Asian crisis is now in, and does indeed point to the conclusion that weaknesses in the financial systems and free capital mobility played a central role in propagating and deepening the crisis. All the crisis countries had essentially opened themselves to uncontrolled inflows of short-term funds, and allowed foreign borrowing of their domestic currency. It is well known that the abolition of capital controls has often been followed by a large inflow of capital. Moreover, this inflow has typically been disproportionately in the form of short-term capital. As the crisis developed, domestic financial institutions found themselves unable to borrow, or even to roll over maturing loans on any terms at all.

A major factor behind the financial crisis was the unbalanced currency exposure resulting from a large level of dollar borrowing. As illustrated by the case of Thailand, this meant that depreciation of the *baht* produced illiquidity/insolvency of the banks either directly (if the currency exposure was taken by them) or indirectly (if the currency exposure was taken by their customers, whose loans then turned bad). The banks' financial problems then forced them to cut back lending, which aggravated, and may have been the principal cause, of the recession that followed.

In terms of recommendations, the author suggested that while current account convertibility is certainly desirable, countries that still have capital controls should not be expected to make a sudden rush for convertibility. Such controls may be aimed at controlling the sudden withdrawal of short-term loans, by banks and other financial institutions, which led to earlier crises.

While the author expressed a belief that people and governments can learn from the experience accrued from the financial crisis, he was actually less optimistic as to whether market participants will learn things that will head-off future crises. He also expressed doubts as to whether personal incentive structures in markets are calibrated in a way that makes it individually advantageous to take actions that reduce the likelihood of crisis. This will change only when governments decide to do something to change the parameters within which the markets operate.

The primary lesson that the author drew for crisis-affected countries is to be cautious about liberalizing the capital account. This does not mean that they should freeze all activity in that direction, but it does mean avoiding getting carried away by euphoria when growth trends return, as now appears the case.

A second lesson was that even if bankruptcy laws, good supervision, reformed corporate governance are of marginal relevance to the avoidance of crises, they are important to prepare developing countries for the next stage of development. In East Asia, the main needs are for strengthened bank supervision, better bank management, and, once that is in place, bank recapitalization. The final step would be to reprivatize those banks that were saved by the injection of public funds and are now owned by the government. He also mentioned that despite images to the contrary, equity markets are already rather well developed in Asia in comparison to world norms.

In terms of banking reform, Dr. Williamson suggested an orderly approach that starts with building up supervisory and managerial capacity, followed by raising interest rates to something close to market-clearing levels. Only then should interest rates be freed and all controls on the flow of credit be abolished. As already argued, capital account liberalization should be left to the end.

## TABLE OF CONTENTS

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<i>Preface</i>	iii
<i>Abstract</i>	iv
<i>Table of Contents</i>	v
I. Capital Control: What is the feasibility and advisability of capital account controls in various sub-regions of Asia? What recommendations of any particular approach may be appropriate?	1
II. Learning: Will there be any significant learning, on the part of Asian governments as well as market participants, from the Asian crisis? If so, will that possibly imply reduced likelihood of future crises?	5
III. Lessons: What are the lessons of the Asian crisis for policymakers of other sub-regions in Asia?	6
IV. Banks: What are the most important steps that need to be taken in strengthening banking systems in various sub-regions of Asia? Will this be predicated on the existence of capital controls?	6
V. Capital Markets: What are the most important conditions for rapid development of capital markets in various sub-regions of Asia? Do those conditions exist or are they likely to emerge soon? What are the major policy recommendations for the region?	8
VI. Conclusion	11
References	12
Tables	13

# Development of the Financial System in Post-Crisis Asia

John Williamson<sup>†</sup>

While economists still differ significantly in their interpretation of the causes of the East Asian crisis of 1997-98, there seems to be very general agreement that weaknesses of the financial system were a central part of the problem. This lends great importance to the topic of my paper. I propose to organize my discussion around the five questions posed to me by the organizers of the High-Level Dialogue on Development Paradigms to commemorate the second anniversary of the ADB Institute on December 10, 1999 in Tokyo.

## **I. Capital Control: What is the feasibility and advisability of capital account controls in various sub-regions of Asia? What recommendations of any particular approach may be appropriate?**

The first issue is whether capital controls are feasible, since, if not, there is no point in discussing whether they are desirable. Despite many assertions to the contrary, it seems clear that they can still be made to work well enough to provoke protests in the financial markets, and to lead to quite significant premia in parallel markets, when they are imposed. Richard Cooper (1999) recently provided a survey of the evidence, which indicates that they are by no means as impotent as the financial folklore would have one believe. This is not to claim that it is impossible to evade capital controls, but rather that evasion is sufficiently costly to enable controls to bite. I suspect that many of the stratagems that market operators regard as forms of evasion are in fact ways in which obligations are shifted around within the private sector, and do not in fact undermine the ability of controls to limit net flows over the exchanges.

One potent reason for avoiding capital controls is that they are an invitation to corruption. Because of this, one should support their use only when there is evidence that uncontrolled flows of capital are seriously destabilizing. Unfortunately the evidence of the East Asian crisis does indeed point to the conclusion that free capital mobility played a central role in propagating and deepening the crisis. Let me lay out this evidence as I see it.

In a proximate sense, the East Asian crisis was precipitated by the massive reversal of capital flows to the region, a reversal documented in Table 1. This shows that it was the banks that accounted for virtually all of this reversal of some \$100 billion between 1996 and 1998, although this was supplemented by a decline of some \$10 billion in inflows of portfolio equity. It is a major question for policy as to whether it might be possible to reform the financial institutions of the source countries so as to avoid this type of instability in the future, since that might avoid the danger of encouraging corruption that is posed by capital controls. However, consideration of that is not the task assigned to me here. Rather, my aim is to examine the role of the financial system in the host countries in generating the crisis.

The crisis started in Thailand, which one can explain as a traditional enough currency crisis. It was initiated by a run on the currency: the current account deficit looked obstinately

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large, while external debt had already built up to a high level and was imprudently structured with a large volume of short-term dollar-denominated liabilities. Thailand's exchange rate was rigidly pegged to a basket of currencies that was dominated (85% odd) by the dollar, so that, when the dollar started to recover from its weakness of early 1995, Thailand found the *baht* dragged up with it (in effective terms). This reinforced the softness of the market for semiconductors and the secular deterioration of Thailand's competitiveness caused by its inflation being somewhat higher than that in the United States<sup>1</sup> to puncture the export boom of 1995, thus leading to the export decline of 1996. Speculators had often before witnessed such a scenario of modest overvaluation, and, coupled with the emergence of difficulties in the domestic financial system, knew that they had opportunities for making capital gains when the inevitable devaluation occurred. They therefore did as one should expect speculators to do, and engaged in massive sales of the *baht*, including *baht* they did not have but, because of the absence of capital controls, were able to borrow or sell forward. The Bank of Thailand resisted practically to its last dollar, whereupon it bowed to the inevitable and let the *baht* float down. All that is terribly familiar, much like any other old-fashioned exchange rate crisis that resulted from attempting to defend a pegged exchange rate that had become modestly overvalued. The core problem was an exchange-rate policy of defending a peg without any mechanism for preventing it becoming overvalued and with a dollar anchor that was capable of magnifying any overvaluation, and with insufficient margins to give stabilizing market forces a chance to come into play.

Free capital mobility played a role in enabling the speculation against the *baht* that started the crisis, and it was equally relevant in explaining the contagion that converted a national crisis into a regional or even global crisis. "Contagion" developed when enough lenders who were in a position to shift out of a currency identified weaknesses that worried them as potentially similar to those in Thailand.

The key question is, therefore, why the financial sector developed the weaknesses that were evident in Thailand, where many financial institutions ran into problems of illiquidity, or even insolvency. Although there were some financial institutions in crisis before the devaluation of the *baht*, this was not the primary problem. The volume of bad loans on the books before the crisis started was not especially large: the Bank for International Settlements' (BIS) estimate for 1996 was that bad loans in Thailand amounted to 7.7% of total loans, far less than, for example, in most of the South Asian countries, which escaped contagion. Perhaps the volume of bad loans was understated, because of weak supervision. However, the main factor behind the financial crisis was the unbalanced currency exposure resulting from a large level of dollar borrowing. This meant that depreciation of the *baht* produced illiquidity/insolvency of the banks either directly (if the currency exposure was taken by them) or indirectly (if the currency exposure was taken by their customers, whose loans then turned bad). The banks' financial problems then forced them to cut back lending, which aggravated, and may have been the principal cause, of the recession that followed.

That account suggests that the main factors that speculators looked for in "peer" countries were unbalanced currency exposure and vulnerability to a speculative run, plus poor banking supervision that meant that the level of bad loans might be understated by the

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<sup>1</sup> Countries with particularly fast rates of growth are often able to afford some secular appreciation of their real exchange rate on account of Balassa-Samuelson productivity bias. However, Thailand probably had less scope for this than other East Asian countries because it had failed to upgrade its secondary education in the way that is necessary for a country to move up the ladder of dynamic comparative advantage.

official estimate. Since developing countries almost invariably borrow in foreign currency, unbalanced currency exposure depends simply on the level of foreign debt (deflated by GDP). Vulnerability to a speculative run is probably best measured by the level of short-term debt to reserves, which is shown in Table 2 for 12 of the more important regional members of the ADB. It can be seen that 4 of the 11 other countries had higher levels of short-term debt relative to reserves than Thailand, of which two (Indonesia and Korea) were among the four other crisis countries. The Philippines was close to Thailand, leaving only Malaysia among the crisis countries that was not obviously vulnerable. (But note that Malaysia, like all other crisis countries and only one non-crisis country, was among the six with the highest level of short-term debt relative to GNP.) Two countries with high short-term debt relative to reserves, namely Myanmar and Pakistan, escaped despite a high level of short-term debt. Perhaps this was because they had a different set of creditors than Thailand, perhaps it was because they were not classified in Thailand's peer group by investors, or perhaps it was because they did not have such open capital accounts as to allow ostensibly short-term money to flee.

All the East Asian five were operating with rather liberal capital accounts at the time of the crisis, unlike Myanmar and Pakistan. An examination of which Asian countries fell victim to the crisis suggests that open capital accounts were in fact the source of the contagion. Table 3 classifies the 12 countries in Table 2, plus Hong Kong, China; Taipei, China; and Singapore, into those which fell victim to the crisis and those which rode it out, according to whether per capita income grew or declined in 1998, as given in the 1999 issue of the ADB's *Asian Development Outlook*.

Consider the plausibility of open capital accounts as against the various other factors that have been mentioned as possible reasons why some countries succumbed to contagion: a lack of transparency, the receipt of explicit or implicit guarantees by financial intermediaries, weak macroeconomic fundamentals, non-floating exchange rate regimes, and a history of recent financial liberalization. It is certainly not true that transparency was better in the non-crisis (positive growth) countries; on the contrary, it was somewhat less problematic in the crisis countries. And it is surely not the quality of bank supervision, which is notoriously bad in several of the non-crisis countries, like Bangladesh, and is again probably somewhat better on average in the crisis countries. Indeed, one of the crisis countries, namely Hong Kong, China is famous for the excellence of its bank supervision. Nor is it the extent to which banks enjoy implicit guarantees, which is at least as strong in South Asia as elsewhere. And it is most assuredly not the strength of the traditional macroeconomic fundamentals (the fiscal position, the level of saving, the rate of inflation, growth, etc.). Neither is it the exchange-rate regime, which involved a loose form of dollar pegging in most of the countries in the table, and was certainly not noticeably more flexible in the non-crisis countries. Nor have most observers detected much evidence of overvaluation in the crisis countries, with the exception of Thailand. The extent of financial liberalization is a more promising candidate, although Singapore is highly liberal domestically, and the South Asian countries have also undertaken a significant measure of domestic liberalization in the 1990s.

Far better discrimination between the two groups is provided by whether or not they had liberalized the capital account of the balance of payments. All the crisis countries had essentially opened themselves to uncontrolled inflows of short-term funds, and allowed foreign borrowing of their domestic currency such as occurred in Thailand.

The closest to an exception is Malaysia, which had made some effort to limit short-term capital inflows in the past, but its regime was still more liberal than that which prevailed in most of the non-crisis countries (prior to its imposition of comprehensive capital outflow

controls in August 1998.) Among the positive-growth countries, Singapore is the closest to having a free capital account, but non-residents can borrow loans above a low threshold (\$5 million) only with the approval of the Monetary Authority of Singapore, which impedes foreign speculation against the currency. Pakistan is probably the next closest to having had an open capital account among the non-crisis countries, since foreign inflows were largely liberal (foreign banks were eligible to open foreign currency accounts or to purchase rupee securities) and domestic residents could in practice take limited sums out of the country at close to the official exchange rate. But the ability of this one criterion to discriminate correctly between those countries that did versus those that did not fall victim to contagion is striking.

It is well known that the abolition of capital controls has often been followed by a large inflow of capital. Moreover, this inflow has typically been disproportionately in the form of short-term capital, which is the form that foreign lenders often seem most willing to supply, presumably believing that it gives them the opportunity of liquidating their position if things begin to go wrong (a belief that cannot be simultaneously right for the majority of them, at least without a bailout from the international community). As Table 2 showed, it is indeed true that most of the East Asian countries had built up a large stock of short-term debts. Moreover, an open capital account facilitates foreign speculation against the currency by making it possible to borrow or sell forward the domestic currency. Furthermore, an abrupt reversal of capital flows usually involves an outflow of capital owned by residents (“capital flight”) as well as that owned by foreigners, a flow that is facilitated by an absence of capital controls. Hence it seems all too easy to believe that the observed association between the absence of capital controls and the occurrence of financial crisis was causal and not merely coincidental.

I conclude that the fact that the crisis spread beyond Thailand was a result of the East Asian countries having engaged in premature liberalization of the capital account.<sup>2</sup>

But it is not just the evidence of the role of capital account convertibility in having got these countries into trouble that deserves attention. Perhaps even more important was the fact that, as the crisis developed, they found themselves unable to borrow, or even to roll over maturing loans, on any terms at all. This phenomenon of “redlining” deserves far more attention than it has so far received. Any country that is subject to it is inevitably plunged into a deep macroeconomic crisis. And the fact that the non-OECD countries that were the favorites of the market (and even one that had recently joined the OECD) suffered this fate suggests just how hard it is going to be for countries to join that select club (currently limited to the industrial countries, possibly plus Singapore) where redlining does not happen. It also suggests that countries are foolhardy to risk full exposure to the market until they have joined that select club, for which even membership of the OECD is evidently not a sufficient condition.

Unfortunately it also seems to be true that newly-liberalized economies are prone to generate a euphoria that attracts too much capital, which gives them either an attack of Dutch disease, or a buildup of short-term foreign debt that makes them vulnerable to crisis, or both in turn. When confronted with an adverse shock, capital flows out if it is able to, and thus intensifies the impact of the shock, and there is no way they can again borrow until they have

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<sup>2</sup> There is a literature on the order of economic liberalization (especially McKinnon 1973, 1991) that concludes that capital account liberalization should come last, after the macroeconomy has been stabilized and the real economy and the domestic financial system have been liberalized. For years Indonesia was cited as a standing refutation of this conclusion. The catastrophe that eventually befell it serves to reinforce the view that on this topic the conventional wisdom is right.

been through a crisis. In this situation, capital account controls have a legitimate place in the arsenal of policy weapons.

Countries that still have capital controls should accordingly not be expected to make a sudden rush for capital account convertibility. This is not to say that they should not liberalize anything at all. Current account convertibility is certainly desirable. The evidence that FDI is worth welcoming now seems fairly conclusive. Long-term (“patient”) capital can also be worth having, in financing investment in excess of domestic savings without exposing the borrowing country to undue risk. There is now also solid empirical evidence that inflows of equity portfolio capital have important positive effects. An expectation of pending liberalization causes a stock market boom that reduces the cost of equity capital (Henry 1999a), while the lower cost of equity capital following actual liberalization is typically followed by an important though temporary (three-year) investment boom (Henry 1999b). FDI outflows can also allow national firms to exploit their company-specific assets (patents or technology or whatever) on a world stage. A swap of portfolio equity capital can be strongly welfare enhancing by allowing both parties to diversify risk. And a country has to be in a desperate situation to justify the infringement of personal freedom involved in prohibiting small personal transactions.

None of these threaten to produce sudden surges of fleeing capital such as overwhelmed the East Asian countries in 1997 (though outflows of portfolio equity did play some role, see Table 1). That problem stemmed primarily from withdrawal of short-term loans, by banks and other financial institutions, so this is what policy should aim at controlling. If such flows have not yet been liberalized, as in the People’s Republic of China (PRC) and South Asia, there should be no hurry in liberalizing them. But even countries that have already liberalized, such as those in East Asia, can adopt some measures to ease the situation.

Since it is easier to prevent capital entering in the first place than it is to prevent it leaving once it is in and scared, their policy should focus on deterring excessive inflows of short-term loans from financial institutions. The most promising way of doing this appears to be that pioneered by Chile and Colombia, of imposing an unremunerated reserve requirement against all loans from abroad (perhaps complemented by a minimum holding period on equity capital). If this reserve has to be deposited for a set period, such as one year, irrespective of the maturity of the loan, then this provides not only an overall deterrent to capital inflows but also an incentive to increase the maturity of the debt. There has been controversy about whether the Chilean *encaje* served to reduce the size of the unwanted capital inflow to Chile, but no one has denied that it induced a significant lengthening in the maturity of the debt, which also helps make the country less vulnerable to crisis. And although there were leakages and the authorities had to make a series of modifications in the regulations in order to maintain the effectiveness of the restriction, Chilean experience demonstrates that it is administratively feasible. Such a policy could advantageously be combined with adoption of the sort of restriction on foreign borrowing of the national currency imposed by Singapore.

## **II. Learning: Will there be any significant learning, on the part of Asian governments as well as market participants, from the Asian crisis? If so, will that possibly imply reduced likelihood of future crises?**

I do believe that people, and governments, learn from experience: how else can one explain the spread of liberal, market-oriented policies around the world over the last two or three

decades? Similarly, everyone is watching Malaysia at the moment, to see whether there is any evidence that it has benefited by its imposition of capital outflow controls in September 1998. (There is already ample evidence that these did not have the dire effect predicted by many on Wall Street, but I am not aware of any evidence that they actually had a net beneficial effect, except perhaps in avoiding a financial crisis when Anwar Ibrahim was arrested the next day.) The climate of informed economic opinion has become vastly less hostile to Chilean-style capital controls in the wake of the crisis, even if it is not yet as positively supportive as some of us would like it to be. The crisis has spawned an international debate about a New International Financial Architecture, and, even if the phrase is hyperbole, many of the reforms proposed by the Bank for International Settlements regarding bank regulation will help to make banks more cautious next time round. So I do expect governments to learn from the crisis, and some of the things they are learning will make crises less likely in the future.

It is almost sacrilegious for an economist to say so, but I am actually less optimistic as to whether market participants will learn things that will head off future crises. This is partly because I have so often been disappointed on this score in the past: for example, floating exchange rates continue to lose touch with the fundamentals with monotonous frequency. Similarly, there are already signs of an excessive flood of short-term funds back into Korea. It is also because it is not at all clear that personal incentive structures in the markets are calibrated in a way that makes it individually advantageous to take actions that reduce the likelihood of crisis. The classic example is a fund manager who knows that a stock market bubble is unsustainable. If he pulls out and the market continues to go up for more than a quarter, he will jeopardize his quarterly bonus. If it goes up for another two or three quarters, his job will be in jeopardy, and he will not get it back a year later even if the market crashes and his decision is proved *ex post* to have been wise. Personal incentives are to stick close to the crowd, which means that it is hardly surprising that we observe herd behaviour in the markets. That will change only when governments decide to do something to change the parameters within which the markets operate.

### **III. Lessons: What are the lessons of the Asian crisis for policymakers of other sub-regions in Asia?**

The two other important sub-regions are PRC and South Asia. Both of these sub-regions still have capital account controls, so the primary lesson that I would draw for them is to be cautious about liberalizing the capital account. This does not mean that they should freeze all activity in that direction, as discussed above, but it does mean avoiding getting carried away by euphoria when the good times return.

They can also learn many valuable lessons about the sort of reforms that are needed in the next stage of modernization from the reforms currently being implemented in East Asia. Even if bankruptcy laws, good supervision, reformed corporate governance, and so on are of marginal relevance to the avoidance of crises, they are important and worthwhile in their own right.

### **IV. Banks: What are the most important steps that need to be taken in strengthening banking systems in various sub-regions of Asia? Will this be predicated on the existence of capital controls?**

In East Asia, the main needs are for strengthened bank supervision; better bank management, and, once that is in place, bank recapitalization; and the reprivatization of banks that were

saved by the injection of public funds and are now owned by the government. Better bank supervision is a motherhood-and-apple-pie reform. It is important that banks not be recapitalized in a way that allows poor bank managers to have another go at wasting money, but at some stage recapitalization will be necessary, where it has not already occurred. Penalizing bad managers, as well as ensuring that bank owners suffer before recapitalization occurs, is also desirable as a way of reducing moral hazard. Subject to those conditions, the sooner recapitalization occurs, the better. There is a perennial debate as to whether the non-performing assets that make recapitalization necessary are best dealt with by leaving the banks responsible for collecting, or by hiving them off to a separate asset reconstruction corporation. Since the banks that made the loans will normally have deeper institutional knowledge of their clients than a separate corporation could be expected to have, my own inclination is to leave them with the banks. If a bank is judged too weak to do a decent job of collection, it should be turned into a narrow bank. If recapitalization means the state taking a temporary equity stake, this is no great tragedy; banks can be reprivatized as normality returns. Provided the management is performing adequately, privatization can be accomplished by selling shares on the stock market to diversified owners: there is no need to seek a controlling shareholder.

Once again, however, it would be a mistake to imagine that these highly desirable steps to strengthen banking systems will ensure an absence of future crises. Unless supervisors insist on currency matching for all short-term loans, which would require foreigners to take the local-currency exposure except to the surely-limited extent that local non-banks with the financial strength to issue guarantees can be found, the banks may again be tempted by competitive pressures into borrowing short-term when the good times return. And even if the banks were restrained from such borrowing by the supervisors, corporates would be subject to the same temptation, which could again cause a crisis as it did in Indonesia. Thus avoiding these dangers probably does require some restraint on the freedom of capital flows, but I would not conclude from this that the banking reforms “are predicated on the adoption of capital controls”. The reforms are necessary with or without capital controls; the danger is that recapitalization will have to be repeated at some stage in the future if capital flows are completely liberalized prematurely.

Liberalization requires, *inter alia*, that the economy be so thoroughly integrated into the global economy that it can rely on being able to borrow more by offering more attractive terms, rather than be redlined in the event of crisis conditions.

PRC’s problems in the banking sector are even bigger than those of East Asia. There is a large stock of bad loans already, despite the absence of any macroeconomic crisis such as normally produces a sudden increase in the volume of loans recognized to be bad. Many, perhaps most, bankers were trained to operate in a repressed financial system, funneling funds to the state enterprises they are told to finance. The main process of liberalization is still ahead. PRC is in a position to profit from the experience of other countries in deciding how to sequence financial liberalization. Current conventional wisdom, which I endorse, is that one should start by building up supervisory and managerial capacity, and then raise interest rates to something close to market-clearing levels. Only then should interest rates be freed and all controls on the flow of credit be abolished. As already argued, capital account liberalization should be left to the end.

South Asia also faces intractable problems in the banking sector, especially in Bangladesh and Nepal, even though liberalization is much further advanced than in PRC. In several countries the first step needs to be a change in the legal system to facilitate loan recovery, making it easier and above all faster to foreclose on collateral. Supervision

certainly needs to be strengthened. The other desirable reform is bank privatization, which in most cases will be dependent on finding controlling private owners with the necessary financial resources and technical expertise to be able to compete, and should be undertaken as soon as these can be identified. The desirability of privatizing the banks is perhaps clearest in India, where most bank credit is currently going to the government. This is not just because of the large fiscal deficit that needs financing, but also because bankers have grown afraid of being harried by the Central Bureau of Investigation if their loans turn bad, making it personally less risky for them to buy government debt than to lend to the private sector. In the absence of private ownership there is no party with a strong interest in the additional profitability that would come from lending to the private sector.

**V. Capital Markets: What are the most important conditions for rapid development of capital markets in various sub-regions of Asia? Do those conditions exist or are they likely to emerge soon? What are the major policy recommendations for the region?**

Table 4, which is based on a valuable new data set assembled at the World Bank by Asli Demirguc-Kunt and Ross Levine, suggests that equity markets are already rather well developed in Asia in comparison to world norms. All except the low-income countries have stock market capitalizations at least equal to (and in most cases well in excess of) the world average, and India exceeds the average for non-Asian developing countries despite its low income. Indeed, the table suggests that Asia is in general rather well developed financially. The most natural measure of the overall size of the financial sector is given by the sum of the domestic assets of deposit money banks, the domestic assets of other financial institutions, and stock market capitalization, all deflated by GDP, as shown in column 5. Unfortunately data on the assets of other financial institutions are not available for quite a number of countries, including Indonesia; Hong Kong, China; and the South Asian five. Hence the measure of the overall size of the financial sector that is used below is the sum of the domestic assets of the deposit money banks plus stock market capitalization, as shown in column 4. It is immediately evident that four of the East Asian five are well-developed financially, the exception being low-income Indonesia. The city-states of Hong Kong, China; and Singapore are even more financially developed, while South Asia is much less financially developed. Unfortunately the data set does not include PRC, but I would be very surprised if it were not similar to South Asia in this regard.

One of the findings of Demirguc-Kunt and Levine is that there is a fairly strong correlation (0.52) between their measure of the overall size of the financial sector, which is that shown in column 4 of Table 4, and GDP per capita. Richer countries tend to have larger financial sectors. Since Indonesia and the South Asian countries are poor, their state of financial underdevelopment may simply reflect their low incomes. To test this conjecture, Table 5 shows the size of the financial sector (as measured by column 4 in Table 4) in column 1. Column 2 ranks this for the 63 countries in the sample. Column 3 shows a similar ranking of the 63 countries in terms of per capita GDP. Column 4 shows the difference between columns 3 and 2. It can be seen that each of the 12 Asian countries ranks higher in terms of the state of its financial development than in terms of per capita GDP. In a couple of cases (Korea and Nepal) the differences are minor, though even these may be a fluke: Korea because its non-bank financial institutions are particularly large,<sup>3</sup> and Nepal because there are

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<sup>3</sup> Korea's domestic assets of other financial institutions as 59% of GDP was the fourth largest, after the United States (91%), Japan (88%), and Sweden (73%).

very few other really poor countries in the data set to provide space for the difference to be exhibited. But in most cases the differences are either large (Hong Kong, China; Indonesia, Pakistan), very large (India, Philippines), or enormous (Malaysia and Thailand, each with a difference of 31 in the two rankings).

Demirguc-Kunt and Levine also use their data to examine whether countries' financial systems are bank-based (the traditional view of Germany and Japan) or market-based (the traditional view of the United Kingdom and the United States). The simplest measure of this is the ratio of the domestic assets of deposit money banks to stock market capitalization, a ratio shown for our 12 countries in the first column of Table 6. This varies enormously, from 0.41 in Malaysia to 7.76 in Bangladesh. Demirguc-Kunt and Levine also construct a measure of the financial structure that takes account of the activity and efficiency, as well as the size, of banks and stock markets. This is shown in column 2 of Table 6 (a higher value of the index indicates a more market-based system, in contrast to column 1). Column 3 shows their classification of countries' financial systems as either bank-based or market-based, which is determined by whether the value of the structure index is positive (market-based) or negative (bank-based). Notice that this does not give quite the same results as column 1. The dividing line between market-based and bank-based on that basis should presumably be set somewhere between 1.03 (the value for the United Kingdom, whose financial system is generally considered to be market-based) and 1.66 (the value for Japan, bank-based). That would make Korea and Thailand ambiguous, but would still leave two of the East Asian five as unambiguously market-based. Indeed, the Malaysian financial system is the most market-based of any in the world on the measure of Demirguc-Kunt and Levine. Thus this evidence does not support the traditional view that Asian financial systems are predominantly underdeveloped and bank-based.

It is well known that many of the Korean chaebols had very high debt/equity ratios before the crisis. This is not inconsistent with the figures shown in Table 4, inasmuch as the assets of the other financial institutions (column 2) also took the form of loans. High debt/equity ratios are a potential source of weakness, in that a moderate downturn in a borrower's fortunes is sufficient to erode its ability to service all its debts on the contractual terms, which was indeed happening in Korea even before the East Asian crisis broke. Without the contagion from Thailand, and then Hong Kong, China; Korea would probably have managed these difficulties without running into a full-blown crisis, but it nonetheless needs to draw the lesson that (like Indonesia) it should expand the equity base of its corporate sector.

Elsewhere in East Asia the equity markets seem fairly healthy, and the main issue is the development of an active market in corporate bonds. Such a market will require greater transparency and stronger corporate governance, so that the purchasers of bonds will be in a position to know the prospects of the company to which they are lending. It will also require institutional investors, such as pension funds, mutual funds, and insurance companies, that need outlets for their funds. In some cases the main action needed to encourage these institutions may simply be to free them to act, but in most countries the need appears to be for major changes in the way that an important part of the economy operates.

In particular, if one wants private pension funds to play the sort of role in building capital markets that they have done in many developed countries, or in Chile, then a country with a pay-as-you-go pension system needs to make the difficult transition to a funded system. A country with a funded public system also needs to make the (less difficult) switch to a (largely) private system, if for no other reason because allowing a public system a dominant



role in the stock market would be likely to deter most foreign investment. Establishing a funded system raises the difficult issue of how the transition – the period when the old system is still paying out pensions that are no longer financed by new contributions – should be funded, whether by “taxes” (or cutting government expenditures) or by “bonds” (i.e., running an increased government deficit). The former is preferable if one believes that the current generation is already imposing an excessive burden on future generations via undesirably large fiscal deficits.

In South Asia the problems are very different in India versus the other countries of the sub-region. India has already undertaken major reforms to improve its stock market in recent years (see Ahluwalia 1999, pp.46-49, for a good account). Since the Indian reforms provide something of a model, it may be worth recounting them briefly. The Bombay Stock Exchange has functioned for over a hundred years, but it languished in the period between independence and about 1980. Transactions and capitalization began to expand rapidly in the 1980s, but practices remained antiquated and permitted a stock market scam in 1992. Reform was initiated that year. Direct government controls (such as the requirement to obtain government permission to issue new equity, as well as government agreement to the issue price) were scrapped. Instead there was created an independent regulator, the Securities and Exchange Board of India (SEBI), with statutory powers to issue rules and regulations governing the behaviour of market participants with regard to activities such as takeovers and insider trading, intended to ensure disclosure and transparency. Another important step was the founding of a new exchange, the National Stock Exchange, with electronic trading that linked brokers in some 220 cities all over the country. The old Bombay Stock Exchange was forced to respond to the upstart competition by introducing electronic trading itself. A third step was modernization of the settlement system by establishment of a National Securities Depository that allowed “dematerialization” of share certificates and electronic transfer of shares from one account to another.

These reforms were initially judged highly successful, with a large volume of capital raised from the market by many new issues that reached a peak in 1995-96. However, this was followed by a period of disillusionment on the part of many small investors, as stock prices fell. In part this was due to the industrial slowdown in India, and in part to the East Asian crisis, but there was also a widespread perception that unscrupulous companies had taken advantage of the withdrawal of government control and the inexperience of many investors to raise capital at inflated prices. Such problems are to be expected in an environment of weak corporate governance, which illustrates the importance of advancing on that front in parallel with financial reform.

Bond markets are another matter. In India the bond market is relatively small, is dominated by government bonds, and has very little secondary market activity, i.e. most bonds are held to maturity, often by captive holders. One easy step to increase demand for bonds would be to legalize the operation of private insurance companies, a step that at last looks imminent. Other steps would be similar to those already discussed for East Asia, namely measures to improve transparency and corporate governance on the one hand, and to increase demand by developing private institutional investors like pension funds, on the other hand.

The other South Asian countries, as well as PRC, need to develop both equity and bond markets. India provides a model of what needs doing to establish a thriving equity market, while the previous discussion on the development of a bond market is again relevant.

## **VI. Conclusion**

Crises often provide an occasion to initiate important reforms. The East Asian crisis has certainly led to a bumper crop of reforms being introduced, although some economists question how committed the governments of the region are to making a reality of the changed practices. Even though I do not believe the absence of these reforms was a critical cause of the crisis, I have argued that many of them are highly desirable in their own right.

But crises are not an essential condition for the successful introduction of economic reforms (Williamson 1993). Indeed, gradual reform is best accomplished in a more tranquil atmosphere, and deep institutional changes are probably best undertaken gradually, rather than under the pressure of a deadline. It would therefore be a tragedy if a recurrence of crisis were treated as inevitable or even desirable.

The costs of the East Asian crisis have not yet been tallied in full, but they are assuredly horrendous. Policy needs to treat the avoidance of a new crisis as a major priority. I have argued that, at least until redlining has become inconceivable, this is going to require the retention of some government ability to limit short-term capital flows.

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## Tables

**Table 1. Five Asian Economies<sup>1</sup>: External Financing**

(billions of US dollars)

	1995	1996	1997	1998 <sub>e</sub>	1999 <sub>f</sub>
Current account balance	-40.6	-54.8	-26.1	69.2	44.6
External financing, net	83.0	99.0	28.3	-4.2	7.8
Private flows, net	80.4	102.3	0.2	-27.6	0.3
Equity investment, net	15.3	18.6	4.4	13.7	18.5
Direct equity, net	4.2	4.7	5.9	9.5	12.5
Portfolio equity, net	11.0	13.9	-1.5	4.3	6.0
Private creditors, net	65.1	83.7	-4.2	-41.3	-18.2
Commercial banks, net	53.2	62.7	-21.2	-36.1	-16.0
Nonbanks, net	12.0	21.0	17.1	-5.3	-2.3
Official flows, net	2.6	-3.3	28.1	23.4	7.6
Int'l financial institutions	-0.3	-2.0	22.4	19.3	-1.7
Bilateral creditors	3.0	-1.3	5.7	4.1	9.3
Resident lending/other <sup>2</sup> , net	-28.3	-27.3	-33.7	-22.9	-21.0
Reserves excl. gold (- = increase)	-14.1	-16.9	31.5	-42.1	-31.4

e = estimate, f = IIF forecast

<sup>1</sup> Indonesia, Korea, Malaysia, Philippines, Thailand

<sup>2</sup> Including resident net lending, monetary gold, and errors and omissions

Source: "Capital Flows to Emerging Markets," The Institute of International Finance, 1999.

**Table 2. Short-term Debt, End 1996**

	Short-term debt (millions of \$US)	Short-term debt/exports	Short-term debt/GNP	Short-term debt/reserves <sup>a</sup>
Bangladesh	163	0.03	0.00	0.09
PRC	25407	0.14	0.03	0.24
India	6726	0.13	0.02	0.33
Indonesia	32230	0.55	0.15	1.77
Korea, Rep. of	65680	0.42	0.14	1.93
Malaysia	11068	0.12	0.12	0.41
Myanmar	381	0.29	n.a.	1.66
Pakistan	2816	0.24	0.04	5.14
Philippines	7969	0.20	0.09	0.79
Sri Lanka	566	0.10	0.04	0.29
Thailand	37613	0.50	0.21	1.00
Viet Nam	3754	0.37	0.16	n.a.

Source: *Global Development Finance*, The World Bank, 1999.

<sup>a</sup> Reserves data from *International Financial Statistics*, International Monetary Fund, September 1999.

**Table 3. Identifying the Victims of the Crisis**

Negative growth in 1998		Positive growth in 1998	
Hong Kong, China	-5.1	Bangladesh	5.7
Indonesia	-13.7	PRC	7.8
Korea	-5.5	India	5.8
Malaysia	-6.2	Myanmar	4.0
Philippines	-0.5	Pakistan	5.4
Thailand	-8.0	Singapore	1.5
		Sri Lanka	5.3
		Taipei, China	4.8
		Viet Nam	4.0

Note: Figures are 1998 growth rates.

Source: *Asian Development Outlook*, ADB 1999.

**Table 4. Size of the Financial Sector in Asia**

	Domestic Assets of Deposit Money Banks/GDP (1)	Domestic Assets of Other Financial Institutions/GDP (2)	Stock Market Capitalization/GDP (3)	(1)+(3)	(1)+(2)+(3)
Indonesia	0.46	<i>n.a.</i>	0.18	0.64	<i>n.a.</i>
Korea	0.65	0.59	0.37	1.02	1.61
Malaysia	0.97	0.28	2.01	2.98	3.26
Philippines	0.28	0.05	0.52	0.80	0.85
Thailand	0.78	0.30	0.57	1.35	1.65
Hong Kong, China	1.42	<i>n.a.</i>	1.96	3.38	<i>n.a.</i>
Singapore	0.83	0.17	1.37	2.20	2.37
Bangladesh	0.22	<i>n.a.</i>	0.04	0.26	<i>n.a.</i>
India	0.24	<i>n.a.</i>	0.28	0.52	<i>n.a.</i>
Nepal	0.16	<i>n.a.</i>	0.05	0.21	<i>n.a.</i>
Pakistan	0.23	<i>n.a.</i>	0.16	0.39	<i>n.a.</i>
Sri Lanka	0.21	<i>n.a.</i>	0.16	0.37	<i>n.a.</i>
World average	0.48	0.21	0.39	0.87	1.08
Average of non-Asian developing countries	0.29	0.10	0.24	0.53	0.63

Note: Data are 1990-95 averages.

Source: Demirguc-Kunt and Levine (1999, Table 1)

**Table 5. Comparison of Financial Development with GDP per capita**

	Size of Financial Sector/GDP (1)	Financial Sector Ranking (2)	GDP per capita Ranking (3)	Difference (3)-(2) (4)
Hong Kong, China	3.45	1	20	19
Malaysia	2.83	2	33	31
Singapore	2.32	4	17	13
Thailand	1.39	13	44	31
Korea	0.92	26	28	2
Philippines	0.88	29	53	24
Indonesia	0.68	35	54	19
India	0.62	39	61	22
Pakistan	0.52	43	60	17
Sri Lanka	0.43	48	59	11
Bangladesh	0.35	50	63	13
Nepal	0.27	58	62	4

Source: Demirguc-Kunt and Levine (1999, Table 1)

**Table 6. The Structure of Asian Financial Systems**

	Domestic assets of deposit money banks/stock market capitalization	Demirguc- Kunt/Levine index of financial structure <sup>a</sup>	Bank or market- based
Indonesia	2.67	-0.50	<i>B</i>
Korea	1.48	0.89	<i>M</i>
Malaysia	0.41	2.93	<i>M</i>
Philippines	0.71	0.71	<i>M</i>
Thailand	1.44	0.39	<i>M</i>
Hong Kong, China	0.76	2.10	<i>M</i>
Singapore	0.70	1.18	<i>M</i>
Bangladesh	7.76	-0.90	<i>B</i>
India	1.24	-0.14	<i>B</i>
Nepal	4.30	-0.87	<i>B</i>
Pakistan	2.17	-0.38	<i>B</i>
Sri Lanka	1.69	-0.54	<i>B</i>
<u>Memorandum items</u>			
World average	2.53	0.03	
Average of non- Asian developing countries	2.45	-0.24	
Germany	5.01	-0.10	<i>B</i>
Japan	1.66	-0.19	<i>B</i>
United Kingdom	1.03	0.92	<i>M</i>
United States	0.91	1.96	<i>M</i>

<sup>a</sup> A higher value of the structure index indicates more market-based

Source: Demirguc-Kunt and Levine (1999, Tables 5 and 11)



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