THE ASIAN FINANCIAL MELT-DOWN AND THE IMF RESCUE PACKAGE

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Abstract

This paper reviews stylised facts on the Asian growth miracle generated using the growth accounting framework. It reviews rival models that purport to explain an economic crisis in terms of deteriorating macroeconomic fundamentals, time-inconsistent policies and rational self-fulfilling panic models. The versions of the panic models focusing on illiquidity-insolvency and moral-hazard asset price bubbles - are shown to fit the stylised facts in Asia-5 economies better than rival models. These models identify that the sudden loss of confidence amongst foreign creditors was the prime cause of the dramatic reversal of capital flows that ultimately caused the collapse of the Asian growth miracle. The channels that facilitated the regional spillover, namely the crisis-contagion in Thailand are identified. The role of the IMF bailout which rescued member nations from their crisis predicament and prevented systemic risks from threatening the stability of the world financial system is also examined. The failure of the IMF bailout package to restore investor confidence and reverse capital outflows in the first instance are analysed. The need to reform the IMF and establish a robust global financial architecture that could prevent the recurrence of severe financial crises is also highlighted.


JEL Classification Numbers: F31, G11, N25
1. INTRODUCTION
This paper reviews the theories and stylised facts relating to the sudden reversal in the miraculous growth saga of the Asia-5 economies (Indonesia, Malaysia, Philippines, South Korea and Thailand). The growth miracle of the Asia-5 economies were panegyrised and their policies were hailed as a blueprint for emulation by developing economies in quest of rapid sustainable growth (World Bank, 1993). The Asian economic crisis and the accompanying social and economic turmoil has irreparably tarnished the gloss of the Asian economic miracle, and triggered a lively debate about the proximate causes of the crisis. It has also highlighted the need to reform the IMF by making it a part of a more effective global financial architecture that can respond to crises in an effective manner. The currency and economic crisis that engulfed the Asia-5 economies in mid-1997 reversed foreign capital inflows and caused the collapse of the Asian growth miracle.

In this paper the controversy as to whether the Asian crisis was precipitated by weak macroeconomic fundamentals, time-inconsistent policies or self-fulfilling rational panic amongst foreign creditors is reviewed. Also the IMF bailout strategies to extricate countries from financial turmoil and the proposals to establish a new financial architecture to combat the recurrences of crises will be reviewed.

The paper is organised as follows: Section 2 reviews the empirics on whether Asian economic growth was a miracle or a myth borne out of factor accumulation without any significant contribution from total factor productivity. The growth accounting empirics are also revisited in the context of endogenous growth perspectives that highlight the importance of human capital formation and technology transfer through trade. Section 3 reviews the rival models based on deteriorating macroeconomic fundamentals, time-inconsistent policy decisions and rational self-fulfilling panic amongst foreign creditors as explanations of the Asian economic crisis. Section 4 presents stylised facts that support the versions of the rational self-fulfilling panic model based on illiquidity-insolvency and moral-hazard asset bubble dynamics as plausible explanations of the Asian crisis. Section 5 identifies the channels through which the crisis contagion that originated in Thailand was transmitted throughout the region. Section 6 analyses the rationale and conditionality of the IMF bailout package to the crisis ravaged Asian economies. Section 7 enumerates the reasons for the failure of the first phase of the IMF bailout package features of the second-phase revamped package. Section 8 reviews the new financial architecture required to prevent recurrences of severe financial crises and Section 9 concludes the paper.

2. ASIAN GROWTH A MIRACLE OR A MIRAGE?

The high growth performance of the Asia-5 economies led the World Bank (1993) to baptize them as miracle growth economies and recommend that developing economies aiming to take-off to self-sustained growth should adopt the export-oriented policies practiced by Asia-5. The per capita incomes of Asia-5 had virtually quadrupled over the period (1970-95) with growth rates averaging nearly 7% more than double that of the OECD growth rates for the same period. Furthermore, the benefits of growth in Asia-5 during this period had trickled down to the vast majority of the populace, raising the average life expectancy by nearly 20% and adult literacy by more than 25%, whilst simultaneously reducing the poverty amongst the bottom 20% of the population by an average of more than 200% (See Table 1).
Table 1: The Asia-5 Growth Miracle and its Trickle Down (1970-95)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>4280</td>
<td>6.8</td>
<td>33</td>
<td>55</td>
<td>232</td>
</tr>
<tr>
<td>Malaysia</td>
<td>9703</td>
<td>7.4</td>
<td>16</td>
<td>42</td>
<td>248</td>
</tr>
<tr>
<td>Philippines</td>
<td>3060</td>
<td>3.6</td>
<td>9</td>
<td>14</td>
<td>200</td>
</tr>
<tr>
<td>Thailand</td>
<td>8370</td>
<td>7.5</td>
<td>19</td>
<td>6</td>
<td>201</td>
</tr>
<tr>
<td>S. Korea</td>
<td>12410</td>
<td>8.4</td>
<td>20</td>
<td>11</td>
<td>122</td>
</tr>
<tr>
<td>Average</td>
<td>7565</td>
<td>6.7</td>
<td>19</td>
<td>26</td>
<td>201</td>
</tr>
</tbody>
</table>

Sources: World Bank and OECD. Col. (1) GDP per capita; Col. (2) Growth rates of GDP per annum; Col. (3) to (5).

Despite the high growth performance and accompanying benefits, analysis of Asian economic growth using the standard growth accounting framework (Solow, 1956) and productivity regressions revealed that the Asian growth miracle had been fuelled by an increase in factor accumulation with negligible contributions from the Solow residual measuring total factor productivity (TFP) (Young, 1994; Kim and Lau, 1994).

It was conjectured that the growth miracle in the Asia-5 economies was therefore destined to fizzle out due to the operation of the law of diminishing returns as had occurred in the Soviet model of planned economic growth based on factor accumulation. Critics of the much touted World Bank vision of the Asian miracle argued that it was a myth based on “perspiration” or factor accumulation rather than “inspiration” or technological innovation and bound to run out of steam (Krugman, 1994). Although these views were regarded as heretical during the halcyon days of high growth in Asia-5, post the 1977 Asian crisis they appear prophetic and sobering.

Nonetheless, the claims that the Asian growth miracle was predominantly the upshot of physical capital accumulation or perspiration has been challenged by new or endogenous growth theorists. Endogenous growth theories reason that human capital formation through education and technology transfer through open door trade policies can play a pivotal role in increasing total factor productivity and accelerating growth (Barro, 1991; Romer, 1994; Grossman and Helpman, 1991). The revision of growth accounting empirics incorporating proxies to capture the nuances of endogenous growth confirm that human capital (education), openness (technology transfer through trade flows) made substantive contributions to TFP in Asia-5. The average output growth per worker in Asia-5 economies during 1960-94 was 4.3% per annum. In this growth rate the contribution from capital exceeded 50%, from education the contribution was over 6% and the contribution from technology transfer and innovation as manifest in TFP was nearly 36% and was far from negligible (see Table 2 ).
Table 2: Sources of Growth in Asia-5 (1960-94) (Averages)

<table>
<thead>
<tr>
<th>Country</th>
<th>%Growth of Output/worker</th>
<th>Contribution Capital %</th>
<th>Contribution Education %</th>
<th>Contribution TFP %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>3.5</td>
<td>58.4</td>
<td>15.0</td>
<td>26.6</td>
</tr>
<tr>
<td>Malaysia</td>
<td>3.8</td>
<td>60.8</td>
<td>13.2</td>
<td>24.2</td>
</tr>
<tr>
<td>Philippines</td>
<td>3.4</td>
<td>30.7</td>
<td>-19.8</td>
<td>73.2</td>
</tr>
<tr>
<td>Thailand</td>
<td>5.1</td>
<td>46.0</td>
<td>9.2</td>
<td>30.1</td>
</tr>
<tr>
<td>S. Korea</td>
<td>5.7</td>
<td>58.2</td>
<td>13.6</td>
<td>24.1</td>
</tr>
<tr>
<td>Asia-5</td>
<td>4.3</td>
<td>50.8</td>
<td>6.2</td>
<td>35.7</td>
</tr>
</tbody>
</table>

Source: Collins and Bosworth (1996)

A recent review of the growth accounting empirics contends that the disparate measures of TFP in Asian economies could be reconciled if allowance is made for differences in assumptions and estimation techniques. This study supports the endogenous growth perspective that TFP contributions to the Asian growth via human capital formation and openness to trade have been substantial. The study also credits foreign direct investment for playing a crucial role in the transfer of disembodied technology and boosting TFP in these economies in the initial growth phase (Dowling and Summers, 1998).

Nonetheless, the growth accounting analytics and cross-section productivity econometrics on the Asian growth miracle by and large failed to forewarn of an impending crisis that would cause the collapse of the Asian growth miracle. In the next section we examine more eclectic models of rational self-fulfilling panic amongst foreign creditors to provide answers to the question of what caused the Asian economic crisis.

3. RIVAL PARADIGMS ON SPECULATIVE CURRENCY CRISES

First-generation models explain currency crises in terms of weakening macroeconomic fundamentals caused by the pursuit of policies that are incompatible with a fixed exchange rate regime. For example, expansionary fiscal policies (or recurrent budget deficits) leading to monetisation of the deficit can cause foreign exchange reserves to fall to critical levels. Speculators who want to make a profit can buy foreign exchange reserves causing its exhaustion and forcing the country to devalue or abandon the exchange rate peg. The process of collapse of fixed exchange rate regimes due to weakening macroeconomic fundamentals in Latin American economies incurring high levels of foreign debt in the 1970s, have been stylised in the first-generation models (Salant and Henderson, 1978; Krugman, 1979; Flood and Garber 1984).

Second-generation models differ from first-generation models by recognising the existence of nonlinear behaviour resulting in multiple equilibria. For instance, if an economy is not subject to shocks then the optimal equilibrium solution is the pursuit of a fixed exchange rate policy.
However, if the economy is subject to a severe shock (due to high unemployment) then the
government can engage in discretionary policy (devalue under sticky wages) and thereby renege
on its commitment to a fixed exchange rate regime to achieve short-run welfare gains (Obstfeld,
1996). Such time-inconsistent behaviour in exchange rate policy whilst delivering short-term
welfare gains would be outweighed by the long-run deadweight loss of social welfare due to the
undermining of reputation and loss of policy credibility (Kydland and Prescott, 1977; Barro and
Gordon, 1983). Second generation models have several noteworthy features. First, they are
nonlinear, meaning that they allow policy makers to react to state of the economy unlike the first
generation that are state-invariant (Flood and Marion, 1998). Second, these models allow for
multiple equilibria where maintaining the exchange rate peg in the absence of shocks is the
optimal outcome and devaluing or abandoning the peg in the face of severe shocks can also be an
equilibrium outcome. These second-generation models capture the time-inconsistent policy
behaviour that caused the crisis in the European Exchange Rate Mechanism (ERM) in 1992 and
the financial melt down in Mexico - the Tequila crisis of 1994.

The pre-crisis fundamentals for 1996 reported for Asia-5 (Table 3) reveal that these economies
were experiencing strong growth rates, budget surplus to GDP ratios, moderate inflation rates of
about 6%, high saving rates of over 32%, trade openness indicators of nearly 39% and credit
ratings that were higher than investment grade. These stylised facts fail to support the first-
generation models that attribute economic crises to bad macroeconomic fundamentals nor do
they lend support to the second generation models that attribute crises to the pursuit of time-
inconsistent macroeconomic policies. Hence, the causes of Asian economic crisis cannot be
explained by these canonical models and newer explanations have to be found.

### Table 3: Pre-crisis macroeconomic fundamentals in Asia-5 (1996)

<table>
<thead>
<tr>
<th>Country</th>
<th>BD/GDP (%)</th>
<th>Inflation (%ΔCPI)</th>
<th>Saving/GDP (%)</th>
<th>Openness (X+M)/GDP</th>
<th>Credit rating 1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>-1.0</td>
<td>8.0</td>
<td>31.2</td>
<td>20.4</td>
<td>B</td>
</tr>
<tr>
<td>Malaysia</td>
<td>0.7</td>
<td>3.5</td>
<td>42.6</td>
<td>78.9</td>
<td>AA-</td>
</tr>
<tr>
<td>Philippines</td>
<td>0.3</td>
<td>8.4</td>
<td>15.6</td>
<td>31.2</td>
<td>BB-</td>
</tr>
<tr>
<td>Thailand</td>
<td>0.7</td>
<td>5.8</td>
<td>35.9</td>
<td>34.9</td>
<td>A-</td>
</tr>
<tr>
<td>S. Korea</td>
<td>0.0</td>
<td>4.9</td>
<td>35.2</td>
<td>28.9</td>
<td>BB+</td>
</tr>
<tr>
<td>Average</td>
<td>0.1</td>
<td>6.1</td>
<td>32.1</td>
<td>38.7</td>
<td>&gt;BBB</td>
</tr>
</tbody>
</table>

Consensus Economic Inc. Bloomberg. Standard and Poors long-term foreign currency rating
BBB : Investment grade which is greater than junk-bond status.

Alternative explanations of financial crises in terms of rational self-fulfilling panic may fit the
bill. In these newer panic models an investor in a project could be illiquid in the short-term but
could generate a cash-flow and be solvent in the long-term.
However, the inability of the investor to raise loans to service their short-term debt could plunge the illiquid investor to default and insolvency. This may be caused by creditor panic and collective or herd behaviour. Such an adverse outcome may be consistent with a rational equilibrium. However, it would enable the investor to recoup only the salvage value of the project. Whereas, if there was no creditor panic an investor could be solvent and enjoy a better equilibrium where he repays all his loans through the long-term cash flow generated by the project (Radlet and Sachs, 1998). These illiquidity-insolvency rational equilibrium outcomes are also consistent with bank-run models, wherein panic causes depositors to cause a run on the banks resulting in the collapse of the bank. Banks are maturity providers that borrow short and lend long. A bank run which makes depositors withdraw en masse drives banks to the wall even though the banks may be solvent and have sound long-term fundamentals (Diamond and Dybvig, 1983). Similar panic behaviour can seize fund managers, who can engage in herd behaviour during a bull-run. Following the herd could cause a reversal to a bear market regardless of the soundness of the underlying fundamentals and solvency of the fund.

Another version of the self-fulfilling panic model, known as the moral-hazard asset bubble-model, postulates that financial intermediaries in the Asia-5 economies channelled short-term capital or dollar denominated foreign credit into risky and speculative investments. This was on the one hand due to the lack of prudential financial regulation and on the other hand due to connected lending by banks and financiers that operated hand in glove with vested interests (a la crony capitalism). The crony links offered implicit guarantees against future losses and default (Krugman, 1998). The over guaranteed and under regulated lending to projects on the basis of Pangloss (most optimistic returns) created serious moral hazard problems. Here the investors in these risky projects were assured that any losses would not befall them but rather they would be passed on to the tax-payers. The unregulated inflow of foreign capital also led to an over-borrowing syndrome which fuelled an asset price bubble, as witnessed by sky-rocketing real estate and stock market prices which was destined to burst and unleash panic, and put into a reverse the capital inflow causing a financial crisis (Krugman, 1998; McKinnon and Pill, 1996).

These models of rational self-fulfilling panic provide more plausible explanations for the sudden reversal of capital flows form the Asia-5 economies causing the collapse of the so called growth miracle. The stylised facts clearly fail to support that macroeconomic fundamentals or time-inconsistent policies were the cause of the Asian economic crisis in mid-1977.

4. STYLED FACTS ON THE BUILD-UP TO INVESTORS PANIC

A number of stylised facts did give clear warnings of a looming crisis. The real exchange rate in Asia-5 economies appreciated by over 10% due to the strengthening of the US anchor currency against the Yen (Table 4, Col.1). This undermined competitiveness of exports that were already under pressure from the glut in the world over production of labour intensive exports :textiles, clothing and footwear or TCF; consumer electronics, motor cars and components and semiconductors. The massive influx of foreign capital contributed to the high current account to GDP ratio which averaged 5.5% (Col. 2, Table 4). More than 70% of the foreign capital inflows went to the private sector (Col. 3, Table 4). Much of the capital inflow was inefficiently allocated and this was reflected in the high ratio of non-performing loans to debt (17%) and the high incremental capital output ratios (ICOR) of more than 13 (Col. 4 and 5, Table 4). The defining indicator of the vulnerability of the Asia-5 economies to an imminent crisis was the
high ratio of short-term debt to foreign exchange reserves (STD/R). This ratio exceeded unity (1.4.) implying that the available foreign exchange reserves could not cover the repayment of the short-term foreign debt - a cause for creditor panic. (Col. 6, Table 4).

Table 4: Stylised Facts on Vulnerability to Panic 1996/97 (percentages)

<table>
<thead>
<tr>
<th>Country</th>
<th>RER (1990-96)</th>
<th>CAD/GDP% (2)</th>
<th>LPS/GDP% (3)</th>
<th>NPL/D% (4)</th>
<th>ΔICOR 1987-96</th>
<th>STD/R% (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>5.1</td>
<td>-3.8</td>
<td>55.4</td>
<td>17</td>
<td>-</td>
<td>1.6</td>
</tr>
<tr>
<td>Malaysia</td>
<td>11.8</td>
<td>-6.3</td>
<td>90.4</td>
<td>18</td>
<td>13</td>
<td>0.6</td>
</tr>
<tr>
<td>Philippines</td>
<td>16.0</td>
<td>-4.5</td>
<td>48.4</td>
<td>14</td>
<td>-</td>
<td>0.7</td>
</tr>
<tr>
<td>Thailand</td>
<td>7.6</td>
<td>-8.0</td>
<td>97.0</td>
<td>19</td>
<td>15</td>
<td>1.1</td>
</tr>
<tr>
<td>Korea</td>
<td>12.0</td>
<td>-4.8</td>
<td>61.8</td>
<td>16</td>
<td>13</td>
<td>3.0</td>
</tr>
<tr>
<td>Average</td>
<td>10.5</td>
<td>-5.5</td>
<td>70.6</td>
<td>17</td>
<td>14</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Sources: Col(1) %RER: Real Exchange Rate Appreciation 1990 to 1996, Base 1990=100, J.P. Morgan.
Col. (3) %LPS/GDP, Bank Lending to Private Sector/GDP
Col. (4) %NPL/Debt. Non-performing loans /Debt
Col. (5) %ΔICOR : Change in incremental capital output ratio from 1990 to 1996, JP Morgan

The above stylised facts reveal that Asia-5 economies were vulnerable to a crisis due to creditor panic as foreshadowed in the panic models (Radelet and Sachs, 1998; Krugman, 1998; Corsetti et al., 1998).

The devaluation of the Thai baht on 2nd July, 1997 sent shock waves throughout the region causing financial meltdown in the Asia-5 resulting in panic withdrawals of short-term capital by foreign creditors. The rapid regional spillover of the crisis contagion posed the threat of systemic risk to the world financial system. In the next section we identify the channels through which the crisis contagion from Thailand was transmitted throughout the region.

5. CRISIS CONTAGION AND SYSTEMIC RISK

The Asian economic crisis which originated in Thailand with the sudden devaluation of the Thai baht, rapidly spilled over to the neighbouring economies through three channels: geographical proximity and communication; trade and competitive devaluation and through signalling. First, the geographical proximity channel as measured by the physical distance and telecommunication interactions between Thailand and other Asia-5 economies did not appear to be very significant. Second, the trade and competitive devaluation channel did not appear to be important despite the large similarity of export goods, over 40% (See Table 5, Col. 4). Third, the most important channel for the transmission of crisis contagion from Thailand to the other Asia-5 countries
seems to have occurred through the signalling channel. The collapse of the Thai baht warned foreign investors that the fragility of the Thai financial system was replicated in the other Asian economies. This caused the run by foreign creditors to withdraw capital from South Korea, Malaysia and then Indonesia (Goldstein and Hawkin, 1998).

Table 5: Channels for transmission of Thai crisis contagion
(Bilateral links with Thailand)

<table>
<thead>
<tr>
<th>Country</th>
<th>Distance (km)</th>
<th>Telephone calls</th>
<th>Export market</th>
<th>Export similarity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>2310</td>
<td>1.3</td>
<td>2.2</td>
<td>&lt;0.40</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1180</td>
<td>2.5</td>
<td>4.6</td>
<td>0.40</td>
</tr>
<tr>
<td>Philippines</td>
<td>2210</td>
<td>&lt;2</td>
<td>1.8</td>
<td>0.39</td>
</tr>
<tr>
<td>Thailand</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>S. Korea</td>
<td>1720</td>
<td>n.a.</td>
<td>1.8</td>
<td>0.44</td>
</tr>
</tbody>
</table>

Notes: Col (2) Incoming calls to Thailand as percentage of total international calls.
Col.(3) Export market: percentage share of country’s exports that went to Thailand.
Export similarity: Similarity of product composition of exports with those of Thailand.

The rapid regional spillover of the crisis contagion from Thailand activated the IMF to intervene and bailout the crisis victims and stem the spread of the crisis beyond the region to the global economy. The economic justification for intervention in the financial markets through the offer of a bailout, deposit insurance, or by imposing reserve requirements which aimed at preventing the crisis contagion from snowballing into systemic risk causing the collapse of the whole financial system. There are at least two grounds for intervention or bailouts to contain crisis contagion from becoming a full blown systemic risk. First, the divergence between social and private risk, because private agents fail to internalise the costs of contagion risks. Secondly, market failure to price risks efficiently because of the focus on short-term gains, regardless of the soundness of long-term fundamentals, just as Keynes’ metaphor on the beauty contest explained that a selection in a beauty context is made on the basis of what other judges consider as beauty rather than who fundamentally is true beauty in the contest. Thus, decision making based on herd behaviour unrelated to the true macroeconomic fundamentals, even when they are sound can precipitate a financial crisis.

6. THE IMF RESCUE PACKAGE

The IMF, in collaboration with other multilateral agencies (World Bank and Asian Development Bank) and the bilateral agencies, provided nearly $112 million in foreign reserves to the central banks of the three crisis ravaged Asian economies to meet the debt service and repayment needs of foreign creditors (See Table 6).
Table 6: IMF Bailout Package - US$billions (1997)

<table>
<thead>
<tr>
<th>Country</th>
<th>IMF</th>
<th>Multilateral</th>
<th>Bilateral</th>
<th>Total</th>
<th>% disbursed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>9.9</td>
<td>8.0</td>
<td>18.7</td>
<td>36.6</td>
<td>8</td>
</tr>
<tr>
<td>Korea</td>
<td>20.9</td>
<td>14.0</td>
<td>58.2</td>
<td>58.2</td>
<td>26</td>
</tr>
<tr>
<td>Thailand</td>
<td>3.9</td>
<td>2.7</td>
<td>17.1</td>
<td>17.1</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>34.7</td>
<td>24.7</td>
<td>52.5</td>
<td>111.9</td>
<td>19</td>
</tr>
</tbody>
</table>

Source: IMF website (www.imf.org)

The IMF bailout strategy aimed to restore confidence amongst foreign creditors by replenishing the foreign exchange reserve in the Asian central banks. Thereby it was hoped that exchange rates would be stabilised and the outflow of foreign capital would be reversed. By the end of the first-phase in 1997, it was evident that the IMF bailout package had failed to restore market confidence and halt the exodus of capital from Asia-5 economies. A telling indicator of this failure was the downgrading of Asia-5 credit rating to junk bond status by the international credit rating agencies. Several reasons have been proffered to explain the failure of the first-phase of the IMF bailout package. First, the IMF’s institutional view that Asian crisis was triggered by weak macroeconomic fundamentals rather than by self-fulfilling creditor panic was not conducive to confidence building amongst international investors. Second, the IMF’s attempt to implement radical financial sector and macroeconomic restructuring as a pre-condition for disbursing the bailout to crisis-torn economies exacerbated the panic. There is ample evidence from past manias and panics that any attempt to carry out drastic structural reforms in the midst of a creditor panic would tend to inflame the panic and worsen a crisis (Kindleberger, 1996). Third, the stringent macroeconomic disciplinary targets such as the achievement of surplus budgets or nearly 1% of the GDP per year, interest rate hikes, credit crunches and other restrictive policies accelerated the slide towards recession rather than recovery. Fourth, the closure of unviable banks and financial institutions spawned a liquidity crisis and this prevented export oriented industries from obtaining working capital and opening letters of credit to facilitate trade and make use of the opportunities created by the massive depreciation. Fifth, the tranched (sliced) disbursement of the bailout funds subject to strict conditionality and arduous negotiations emasculated the IMF’s role as a quasi lender of last resort. Sixth, the linking of long-term structural reform with the short-term need to provide finance an unnecessary distraction. The IMF bailout failed to provide the liquidity required to avoid insolvency of financial institutions and thereby calm creditor panic. After a lapse of ten months, only 20% of the bailout commitments had been disbursed (Table 6).

In the second-phase (1998) of the bailout, the IMF drastically revamped its strategy in an attempt to re-instil market confidence. The IMF relaxed its insistence on achieving tight fiscal and monetary policy targets to qualify for the bailout. The IMF also spearheaded the negotiations for the rollover of the Korean short-term debts by international creditors by securing an extension of the maturity periods. In the case of Thailand, the IMF negotiated the issuance of government guarantees on both liabilities owing to foreign and domestic creditors by Thai
financial institutions. In the case of Indonesia, after much foot-dragging, the Indonesian government was persuaded by the IMF to sign up orderly workouts for the repayment of its massive stockpile of non-government or corporate debt. These rollovers, government guarantees and orderly workout arrangements on debt repayments avoiding outright default restored a modicum of calm to the highly volatile financial markets of Asia-5 during the middle of 1998. But overall, after one year of financial turmoil resulting from the pursuit of misaligned exchange rate pegs and reckless short-term borrowing, the Asian economies had taken a severe economic battering as shown by an array of economic indicators (Table 7).

During the year ending in mid-1998 the exchange rates of Asia-5 domestic currency per US dollar had depreciated on average by more than 215%, with the exchange rate in Indonesia plummeting nearly five-fold in just one year. Stock-market prices during this period nose-dived by 72% and short-term interest rates sky-rocketed by more than 167%. The credit ratings of the Asia –5 economies were also downgraded to junk bond status or less than investment grade. With exchange rates depreciating, asset prices falling, rising interest rates, the miracle growth in Asia-5 economies which had a track record of rapid growth for nearly three decades were reporting recessions. In the year ending in the first quarter of 1998 GDP on average for Asia-5 fell by 2.2% and the recessionary trends are expected to continue into the next year (Table 7).

The challenge facing the turmoil-ridden Asian economies is how to get on to the pre-crisis potential growth trajectory. The implementation of appropriate policies both on the domestic front and in the international arena will determine the speed at which the Asia-5 economies will recover from its present crisis.

Table 7: Crisis Economic Indicators for Asia-5

<table>
<thead>
<tr>
<th>Country</th>
<th>%∆ Ex-rate</th>
<th>%∆ Stock Pr</th>
<th>% ∆ i-rate</th>
<th>Credit rating</th>
<th>%∆ Real GDP 1998</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td></td>
<td>(5)</td>
</tr>
<tr>
<td>Indonesia</td>
<td>499</td>
<td>-89</td>
<td>400</td>
<td>B3</td>
<td>-6.8</td>
</tr>
<tr>
<td>Malaysia</td>
<td>157</td>
<td>-73</td>
<td>154</td>
<td>A2</td>
<td>-1.8</td>
</tr>
<tr>
<td>Philippines</td>
<td>147</td>
<td>-57</td>
<td>127</td>
<td>Ba1</td>
<td>1.7</td>
</tr>
<tr>
<td>Thailand</td>
<td>132</td>
<td>-68</td>
<td>0</td>
<td>Ba1</td>
<td>-0.4</td>
</tr>
<tr>
<td>S. Korea</td>
<td>141</td>
<td>-74</td>
<td>153</td>
<td>Ba1</td>
<td>-3.8</td>
</tr>
<tr>
<td>Average</td>
<td>215</td>
<td>-72</td>
<td>167</td>
<td>Baa</td>
<td>-2.2</td>
</tr>
</tbody>
</table>

Notes: Col(1) Depreciation of the exchange rate per USD for the year ending Aug 5th. Source: The Economist 8/8/98.
Col(2) Fall in stock market prices over the year ending on 4/7/98. Source: Data Stream International.
Col (3) Rise in short-term money market interest rate for the year ending 4/7/98. Source: Data Stream International.
Col.(4) Credit rating on 20/7/98. Sources: Standard & Poor’s & Data Stream International. (Lower alpha implies higher risks. Cut-off for the investment grade is Baa or triple B).
Col.(5) GDP growth.
6. THE NEED FOR NEW GLOBAL FINANCIAL ARCHITECTURE

The Asian economic crisis has highlighted the need to reform the IMF by establishing a new global financial architecture that will countermand the casino economies that have emerged in a global economy governed by massive capital inflows and outflows as market sentiments fluctuate. Seven pillars for establishing a more stable world economy and a new global financial architecture have been identified (Camdessus, 1998a). They relate to the:

1. Harnessing of the dynamics the global information economy for development.
2. Integration of developing economies with the global economy.
3. The steadfast pursuit of trade liberalisation and open door investment policies.
4. The adoption of transparent world best practice management techniques.
5. The pursuit of excellence in corporate governance and elimination of corruption.
6. The adoption of international accounting and codes of prudential regulation.
7. The use of the accumulated expertise of the IMF to solve global problems.

The establishment of the new financial architecture will ensure that developing economies will, first, establish an environment to harness cross-border capital flows that now exceed US$ 1.3 trillion per day to lubricate trade without at the same time infusing instability by channelling it to speculative short-term investments. Second, the need for policies that will direct capital flows to long-term productive investments is underscored. This would require the restructuring of fragile domestic financial systems so that they ensure prudential supervision and corporate governance will avoid the pitfalls of investing in unviable projects. Third, macroeconomic restructuring to improve the absorptive capacity of long-term foreign investment needs to be addressed. Fourth, in view of the lack of financial, technical and legal expertise in developing Asia, these countries should harness the expertise in the IMF to carry out the complex sequential financial reforms required to revitalise their fragile financial systems. These reforms in developing Asia will contribute to the establishment of a more robust global financial architecture.

The new financial architecture will also require a reformed IMF that will engage in more effective use of its policy instruments of surveillance and conditionality. First, the IMF should be required to monitor information and engage in surveillance that will issue timely warnings to countries that are lunging towards a crisis. Second, the IMF should use its conditionality provisions in giving out loans to ensure more effective implementation of the reform of fragile financial systems and restructuring of the economies thereby ensuring that foreign borrowings pass the tests of prudential supervision and can be effectively absorbed by the recipient economy implementing these reforms. Third, the IMF should play a more effective role in regulating capital flows either through proper advocacy (Stiglitz, 1998) or through the amendment of Article 6 of the Charter giving the IMF a jurisdictional role credibly regulating capital flows (Guitian, 1998). In a world of hyper capital mobility a global financial architecture in which the IMF will play a more active role in crisis monitoring and capital flow regulation the sudden eruption of the Asian type of crises can be averted.
8. CONCLUDING OBSERVATIONS

Asian economies are engaged in a process of economic restructuring and financial sector reform under the surveillance of the IMF and subject to its bailout conditions. The implementation of the IMF bailout package involves severe austerity measures that inflict hardships on the segments of the most marginalised and poverty stricken populations in the Asia-5 economies. How the domestic political leadership can rise to the occasion and implement the IMF bitter policies without unleashing massive social unrest and political turmoil is a challenge that confronts Asia-5 policy makers today.

Whilst achieving the internal balance needed to bounce back to the pre-crisis growth locus remains a question of domestic political leadership and astuteness, the external balance of Asia-5 economies are inextricably interwoven with the performance of the global economy. The ominous rumbling that the world economy is heading for a recession does not augur well for speeding up the Asia-5 recovery from the crisis that has engulfed it over the past year. The performance of the global economy over the short-term will depend crucially on first, how the Japanese economy reforms its financial system and extricates itself from the current slump; second, on how the political and financial turmoil in the Russian economy is quarantined without its crisis contagion spilling over to the developing economies of Latin America and Asia. On the positive side, the imminent establishment of single currency (Euro) and its stimulus to the European economy and the continued strong economic performance of the US economy bodes well for world economic growth and trade. The strong performance in growth and trade in the world economy will determine the speed at which the Asia-5 economies can regain its pre-crisis growth momentum.
REFERENCES


