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IMF Perspectives and Alternative Views on the Asian Crisis

Iwan J. Azis

Introduction

Let us compare the analyses of East Asian economies prior to the 1997 crisis and those after the crisis broke out. We are likely to find that the two would demonstrate an overwhelmingly sharp contrast. Praises toward the region's economic performance before summer 1997 appeared in many pages of articles, books, and reports, including those published by the International Financial Institutions (IFIs), especially the IMF and the World Bank. The latter's piece on 'East Asian Miracle' was probably the culminating point. As soon as the crisis broke out, these institutions began to propagate a sharply different analysis. The very same countries previously praised for their policies and remarkable performances were swiftly placed into the category of those with misplaced development strategies. All of a sudden, nothing was right with these countries.

When confronted with such an embarrassing contradiction, the international institutions are quick to claim that they actually *saw* the faults, and *already reminded* the governments in East Asia about these flaws (e.g., weak banking system, unsustainable exchange rate system, and widespread corruption). To strengthen their arguments further, institutions such as the IMF quickly moved to bolster its surveillance of national policies and international markets, among others through the establishment of the *Contingent Credit Line* facility (the CCL), designed to enable the Fund to deploy financial resources more effectively to help prevent financial crises, rather than to deal with the problems after the damage has been done. This was part of the increasingly demanded reforms of the institution. Yet, all these efforts were put in place *only after* the crisis broke out. While the debates between those who demand swift reforms in the IFIs and those who are more in favour of moderate and gradual reforms, are very timely and fascinating to follow, this is not what this manuscript is intended to analyse. Rather, the current study attempts to examine the policy perspectives of the IFIs (more particularly of the IMF) and the alternative policies presumably favoured by the crisis-affected countries. When the two differ, efforts are made to explore the possibility of a joint policy acceptable to both parties. It is expected from this approach that we could enhance our knowledge about the background of policy responses to a crisis, and it would help us to understand why in some cases those policies have only a small degree of effectiveness.

This is unmistakably a very broad topic. Any analysis of this type could risk making an erroneous generalisation, unless one uses a specific case study. In this chapter, I use the episode of the Asian crisis as a specific example. It is in this context the

causes of vulnerability that led to the Asian crisis. A specific method known as the *Analytic Hierarchy Process* (AHP) is used to quantify the perceptions of both parties in order to generate the payoff values on certain policies or joint policies. A brief mathematical exposition of the method is presented

Finding the Usual Suspects

The standard framework of analysis often used to examine whether or not a country is prone to a crisis, rests upon certain measures to evaluate a country's vulnerability. When economic indicators point to a high vulnerability in the system, it is more likely that the respected economy will fall into a crisis. Sometimes, it only requires one triggering factor to precipitate the actual crisis. However, other countries may share a similar degree of vulnerability, yet they do not suffer from a crisis. Hence, explaining the causes of vulnerability is not the same as explaining the causes of the crisis, although the two could be closely related.

The terms 'fundamentals' are often used to indicate the state of macroeconomic affairs. There are several ways to measure fundamentals. When high inflation, budget deficit and looming current account deficits are detected, along with a relatively low economic growth, it is said that the (macroeconomic) fundamentals are weak. However, a more refined definition of 'fundamentals' is warranted. In exploring such a definition, the Asian crisis is used as the reference case. Let us first look at some of the background developments in the region prior to the crisis. Up to 1996, countries throughout East Asia produced a strong economic growth (Azis 1999). The region's inflation rate was low, consistently at one-digit level. During the period, there was even a deflation in some countries. One of the important factors behind the low inflation has been the management of the government budget. Practically all countries had a surplus budget, a very different situation than in Latin America during the 1980s. Export performance was also strong until 1995. However, beginning in 1996 the growth of exports declined, and the current account deficit (CAD) widened, i.e., from 8.1 to 8.2 per cent of GDP in Thailand, from 3.6 to 3.9 per cent in Indonesia, and from 2.7 to 4.3 per cent in the Philippines during 1995–1996 (Table 3.1). Korea's CAD also increased from 1.7 to 4.7 per cent in the same period, but it quickly reduced to 2.5 per cent by mid-1997. With the exception of Thailand, these ratios are lower than a typical deficit in most Latin American countries. Thailand was the only country in the region that failed to reverse the increasing trend of CAD. The export growth became slower because there was a downturn in the semiconductor cycle, affecting exports particularly from Korea, Malaysia and Thailand.

Other factors at work include the devaluation of Chinese Yuan in 1994 (more than 40 per cent), a stronger US dollar (practically all countries in the region pegged their currencies to the US dollar), and massive capital inflows that put pressure on the exchange rates to appreciate. Increased competition from other countries, including those from new emerging markets, fuelled more difficulties.

Even with slower export growth, all countries managed to maintain relatively large foreign reserves. Before July 1997, the recorded reserves in terms of months of imports were 5.5 for Indonesia (May), 6.3 for Thailand (April), 3.9 for Malaysia (last quarter of 1996), and 3.1 for the Philippines (May). There was also a suspicion

Table 3.1 Selected indicators of Southeast Asian economies prior to the crisis

| | GDP Gr | Export Gr | Import Gr | FDI Gr | I/GDP | Current account | |
|--------------------|-----------|--------------|--------------|-----------|---------|--------------------|------|
| % | % | % | % | % | US\$Bil | %GDP | |
| Indonesia | | | | | | | |
| 1991 | 7.0 | 13.5 | 18.5 | 35.5 | 35.5 | -4.3 | -3.7 |
| 1992 | 6.5 | 16.6 | 5.5 | 19.9 | 35.9 | -2.8 | -2.2 |
| 1993 | 6.5 | 8.4 | 3.8 | 12.8 | 29.5 | -2.1 | -1.3 |
| 1994 | 7.5 | 8.8 | 12.9 | 5.2 | 31.1 | -2.8 | -1.6 |
| 1995 | 8.2 | 13.4 | 27.0 | 106.2 | 31.9 | -7.0 | -3.6 |
| 1996 | 7.9 | 9.7 | 5.7 | 44.2 | 32.1 | -8.7 | -3.9 |
| Thailand | | | | | | | |
| 1991 | 8.4 | 23.8 | 15.8 | -17.6 | 44.1 | -7.6 | -7.6 |
| 1992 | 7.8 | 13.7 | 6.0 | 4.9 | 40.0 | -6.3 | -5.7 |
| 1993 | 8.3 | 13.4 | 12.2 | -14.6 | 39.9 | -6.4 | -5.1 |
| 1994 | 8.9 | 22.2 | 18.5 | -24.3 | 40.4 | -8.1 | -5.6 |
| 1995 | 8.7 | 24.7 | 31.6 | 51.4 | 42.3 | -13.6 | -8.1 |
| 1996 | 6.7 | -1.9 | 0.8 | 13.0 | 41.0 | -14.7 | -8.2 |
| Malaysia | | | | | | | |
| 1991 | 8.4 | 18.6 | 27.4 | 71.4 | 35.5 | -4.2 | -8.8 |
| 1992 | 7.8 | 9.7 | 0.6 | 29.6 | 35.9 | -2.2 | -3.9 |
| 1993 | 8.3 | 17.0 | 15.8 | -3.4 | 29.5 | -3.0 | -5.0 |
| 1994 | 9.2 | 26.8 | 32.7 | -13.3 | 31.1 | -4.5 | -6.2 |
| 1995 | 9.6 | 20.3 | 24.8 | -4.8 | 31.9 | -7.4 | -8.8 |
| 1996 | 8.2 | 6.5 | 1.4 | 14.6 | 32.1 | -5.2 | -5.3 |
| Philippines | | | | | | | |
| 1991 | -0.5 | 14.5 | 11.1 | 2.6 | 20.0 | -1.0 | -2.2 |
| 1992 | 0.3 | 2.8 | 11.5 | -58.1 | 20.9 | -1.0 | -1.9 |
| 1993 | 2.1 | 22.0 | 29.9 | 443.0 | 23.8 | -3.0 | -5.7 |
| 1994 | 4.4 | 15.5 | 16.7 | 28.5 | 23.6 | -3.0 | -4.3 |
| 1995 | 4.8 | 28.7 | 22.4 | -7.1 | 22.2 | -2.0 | -2.7 |
| 1996 | 5.7 | 18.7 | 24.0 | -6.7 | 23.2 | -7.7 | -4.3 |

*) Exports are f.o.b, imports are c.i.f, except for Thailand, Gr: growth.

Source: IMF, *International Financial Statistics*, various volumes, UNCTAD, FDI/TNC database.

that the slower growth of exports was due to currency overvaluation. Was the region currencies really overvalued before the crisis? With low inflation, the proposition is disputable. By using two approaches, a monetary model and a simple *purchasing power parity* (PPP), Chinn (1998) found that even when the resulting overvaluation is detected, the size of the overvaluation in crisis-stricken countries was smaller than that in the crisis-free countries. From the PPP-based approach, the Singapore dollar is found overvalued by 13 per cent, on a par with the Thai baht and Malaysian ringgit. Even when a modified model that incorporates monetary and real sectors is used, the Singapore dollar is found to be overvalued by 45 per cent, whereas in Thailand, Malaysia and Indonesia the size of the currency overvaluation is much smaller, i.e., 3.7, 0.4, and 4.7 per cent, respectively. This is obviously inconsistent with the actual fall of the respected currencies after July 1997. Data suggest that the widening CAD in the region was caused more by increased imports, particularly of the capital and intermediate goods category. Strong investment, domestic and foreign, was the prime reason. The investment-GDP ratio ranged from 23 per cent in the Philippines to a high 43 per cent in Thailand.

In sum, based on standard macroeconomic variables, it is hard to claim that East Asia's economic fundamentals were weak, causing the region to be highly vulnerable. Thailand was perhaps the only exception. Would a more refined definition of 'fundamentals' alter the claim? What other indicators should be included in the measure? One important indicator needs to be added is the quality of the banking sector. This could be evaluated, among others, by examining whether or not there was a credit boom prior to the crisis. If lending increases rapidly, banks will not be able to screen out higher risk loans as easily. This could weaken the bank's portfolios. If banks are weak, the government may be less likely to endure a period of overvaluation and recession due to increased bankruptcies.

By 1980s, most East Asian countries had liberalised their industrial sector, albeit with different degrees of extensiveness (Korea is a latecomer in this respect). Despite the region's high saving rate – over 30 per cent of GDP – huge inflows of capital were still required to finance even higher rates of investment (an indication of over investment). This raises a question about the investment *quality*. It may suggest that the investment surge is a sign of weakness rather than strength. Capital flows could take the form of either increased share in the stock market, surging deposits in home country's banks, and private foreign debts. Whichever the form, when the inflows occur, pressures for the exchange rates to appreciate are built up. This is the reason why monetary authorities throughout the region often conduct the *impossible trinity*, i.e., defending the exchange rates, while simultaneously maintaining the inflation target and keeping the independence of monetary policy. These objectives cannot be met simultaneously. Either the goal to control inflation needs to be moderated, or some degrees of currency appreciation should be allowed.

Like anything else, the 'Asian way' was to opt for a middle ground, i.e., using the exchange rate band. This happened in Indonesia, the Philippines, Malaysia, and Thailand. The Korean won had been gradually adjusted to maintain Korea's competitiveness. At the same time, domestic credit also surged, either to complement or substitute capital inflows. Hence, early indications show that there was a significant increase in the growth of credits prior to the crisis. However, whether or not such an increase represents a credit boom, one must look at it more carefully by comparing the

trend with that in other countries experiencing a crisis. In this manuscript, I make the comparison with the Latin American situation prior to the crisis in Mexico in 1994. In addition to weak banking system, two additional indicators of 'fundamentals' are proposed. The first usual suspect is the appreciation of real exchange rate (RER). The more appreciated the RER, the more depreciation (read: collapsed exchange rate) required to reach an equilibrium, should capital flows reverse. Another additional indicator is the size of foreign reserves, measured in terms of its ratio to M2, in which the latter represents the potential amount of liquid monetary assets that could be converted to foreign exchange in the event of a crisis. The higher the ratio of M2/foreign reserves, the less able the government is to defend the currency against devaluation.

To recapitulate, consider the following,

| | |
|--|-------------------------------|
| Scenario 1) $(e/E_0) f(LB) - 1 < \theta$ | then $D = 0$ |
| Scenario 2) $(e/E_0) f(LB) - 1 > \theta$ and $R > N.k$ | then $D = 0$ |
| Scenario 3) $(e/E_0) f(LB) - 1 > \theta$ and $R < N.k$ | then $D = 0$ or $D = (e/E_0)$ |

where (e/E_0) is a measure of real exchange rate appreciation, $f(LB)$ is a measure of lending boom, 0 is an expected devaluation threshold for investors to move out of the country, R is foreign exchange reserves, $N.k$ is potential capital outflows (number of investors times the amount of capital they will move out), and D is the extent of a devaluation.

In scenario 1, the fundamentals are healthy and there is no devaluation. In scenario 2 the fundamentals are not healthy, but the country has enough foreign exchange to defend the currency. In scenario 3 the fundamentals are unhealthy and the foreign reserves are low. Whether there is a devaluation or not, it would depend on investors' expectations. If investors expect a stability, there will be no devaluation since $k = 0$, but if they expect a devaluation, $N.k > R$ and $D > 0$ (a speculative crisis). By using this framework, Sachs et al. (1996) showed that for Latin America, the 'financial crises occurred only in countries with weak fundamentals and low foreign exchange reserves relative to M2'. The contagion from the 1994/95 Mexico crisis did not spread to countries with strong fundamentals or high reserve ratios. Thus, some countries with weak fundamentals may have escaped from a crisis, but no country with large reserves or strong fundamentals fell victim. At most, countries that were healthy experienced a 'temporary decline in asset prices which would soon be reversed leaving little or no trace behind'.

Let us look at the episode of Asian crisis by using the same approach. In the Indonesian case, there were weak signs of a lending boom prior to the crisis. The recorded growth of credits was only 18 per cent, much lower than 116 per cent in Mexico prior to the 1994/95 crisis (compare Table 3.2 and Table 3.3). The M2/Reserves ratio was highest among the Asian countries; yet, it was considerably smaller than in Mexico (6.3 versus 9.1).

Like Indonesia, Korea's RER also depreciated, not appreciated, before 1997. Korea's lending grew at a modest rate (13 per cent), and the M2/Reserve ratio was comparable to the Indonesian ratio. Being able to weather the financial crisis Malaysia's economy contracted but not at the rate experienced by Indonesia and Thailand. Lending was up by 26 per cent before the crisis, but its M2/reserve ratio

Table 3.2 Indicators of pre-1994 Mexican crisis

| | RER (% change av. 1986-89 to av. 1990-94) | Bank Credits (% change 1990-94) | M2/Reserves (Nov. 1994) |
|---------------|---|------------------------------------|----------------------------|
| Latin America | | | |
| Argentina | -48 | 57.12 | 3.56 |
| Brazil | -9.59 | 68.33 | 3.62 |
| Mexico | -28.51 | 116.24 | 9.06 |
| Asia | | | |
| Indonesia | 11.75 | 0.66 | 4.56 |
| Korea | -10.35 | 8.4 | 6.54 |
| Malaysia | 9.82 | 4.1 | 2.1 |
| Philippines | -0.07 | 50 | 4.1 |
| Thailand | 0.002 | 39.2 | 3.65 |

Source: Summarised from Sachs et al. (1996).

Table 3.3 Indicators prior to the 1997 Asian crisis

| | RER (% change av. 1989-93 to av. 1994-96) | Bank Credits (% change 1992-96) (1997) | M2/Reserves |
|-------------|---|---|-------------|
| Indonesia | 2.46 | 17.8 | 6.28 |
| Korea | 8.75 | 12.7 | 6.35 |
| Malaysia | 8.97 | 25.9 | 3.82 |
| Philippines | -6.89 | 212 | 4.93 |
| Singapore | 6.88 | 6.2 | 1.03 |
| Thailand | 7.58 | 36.7 | 4.95 |

Source: Author's calculation.

was much smaller than in Indonesia and Korea. The Philippines was the only country with appreciating RER before the crisis.

Bank's lending increased substantially (212 per cent), and the M2/reserve ratio reached close to 5 (Table 3.3). Although the Philippines' fundamentals before 1997 were actually worse than before the Latin American crisis, the country was considered among the least affected by the Asian crisis. As expected, Singapore exhibited the strongest position among the countries observed. It had the M2/reserve ratio close to one, implying that it had the ability to defend its currency in the event of capital outflows. At the same time, the RER depreciated, and no signs of credit boom was detected. It is no surprise that Singapore was able to weather the crisis. Although Thailand's growth of credit was higher than in other crisis countries, except the

Philippines, the other two indicators did not suggest strongly that the country was heading for a crisis.

Hence, even when additional measures of 'fundamentals' are considered, one still could not claim that East Asia's macroeconomic fundamentals were *raison d'être* for the region's vulnerability. When the fundamentals in Thailand, Indonesia and Korea, are compared with those of the three countries heavily affected by the Latin American crisis, i.e., Mexico, Argentina and Brazil, the results are highly inconsistent. While the three Latin American countries had large appreciations in their RER, nearly 30 per cent and above, such a level of appreciation did not happen in Asia before summer 1997. None of the Asian countries approached 30 to 60 per cent rate of appreciation. Furthermore, Thailand, Indonesia and Korea did not have a lending boom on the scale that Latin American countries had. Yet, capital inflows in East Asia were higher than in Latin America. In the Asian case, private foreign debts are much more serious than domestic credits. The size of total private debts, especially those of the short-term category, was quite alarming.

These debts alone can explain why pressures on the local currencies had been so persistent (Yoshitomi and Ohno 1999). During 1995-1996, in all countries private foreign borrowing increased dramatically. By the end of 1996, it was recorded more than US\$70 billion in Thailand, US\$50 billion in Indonesia, and US\$22 and US\$13 billion in Malaysia and the Philippines, respectively. Unlike in Korea, most of these private debts were made by the corporate (non-bank) sector, making the negotiation of debt restructuring more difficult to conduct (Table 3.4). With the exception of the Philippines, the Japanese banks had the largest exposures in the region. The fact that by June 1997 the US banks had 'only' US\$4.6, US\$4, US\$2.8, US\$2.4, and US\$10 billion exposures in, respectively, Indonesia, Thailand, the Philippines, Malaysia and Korea, may suggest why the U.S government did not put its fullest capacity in helping the region, despite the prevailing robust state of its economy.

More seriously, the proportion of short-term debts (STD) was high. In all countries, STD was larger than the long-term borrowings. By June 1997, the size of STD was US\$46 and US\$35 billion in Thailand and Indonesia, respectively. When contrasted with the size of foreign reserves, countries hit hardest by the crisis were precisely those that had their STD greater than foreign reserves (Forex), i.e., Korea (more than 2.0), Indonesia (1.7) and Thailand (1.5).

Thanks to a widespread optimism about the region's future growth and the celebrated label of 'East Asian Miracle', many private investors - local and foreign alike - were poised to expand their activities in the region. This was the second wave of foreign capital flows to ASEAN, coming mostly from the US, Europe and Japan (the first wave occurred during the second half of 1980s, when the Japanese investment in the region surged, following the *Yendaka* phenomenon). The high domestic interest rate did not dampen their enthusiasm, largely because foreign loans were obtained easily at a relatively low rate, and stable pegged exchange rates were perceived as a guarantee for earning stability. The label 'miracle' swayed lenders and the international financial community, making them lend recklessly.

The fast growing number of banks and multi-finance corporations, following deregulation in the banking sector, also produced considerable effects. Many big companies (conglomerates) set up new banks primarily to serve their own often-risky projects. Despite regulatory measures formally imposed by the monetary

Table 3.4 Foreign debts (US\$ billion, except for the last row)

| | Indonesia | | | Korea | | | Malaysia | | | Philippines | | | Thailand | | |
|--------------------------|-----------|----------|--------|----------|----------|--------|----------|----------|--------|-------------|----------|--------|----------|----------|--------|
| | End 1995 | End 1996 | Joo-97 | End 1995 | End 1996 | Joo-97 | End 1995 | End 1996 | Joo-97 | End 1995 | End 1996 | Joo-97 | End 1995 | End 1996 | Joo-97 |
| <i>Borrowers</i> | | | | | | | | | | | | | | | |
| Banks | 8.9 | 11.7 | 12.4 | 50 | 65.9 | 67.3 | 4.4 | 6.5 | 10.5 | 2.2 | 5.2 | 5.5 | 25.8 | 25.9 | 26.1 |
| Public sector | 6.7 | 6.9 | 6.5 | 6.2 | 5.7 | 4.4 | 2.1 | 2 | 1.9 | 2.7 | 2.7 | 1.9 | 2.3 | 2.3 | 2 |
| Non-bank | 28.8 | 36.8 | 39.7 | 21.4 | 28.3 | 31.7 | 10.1 | 13.7 | 16.5 | 3.4 | 5.3 | 6.8 | 34.7 | 41.9 | 41.3 |
| Total | 44.4 | 55.4 | 58.6 | 77.6 | 99.9 | 103.4 | 16.6 | 22.2 | 28.9 | 8.3 | 13.2 | 14.2 | 62.8 | 70.1 | 69.4 |
| <i>Lending banks</i> | | | | | | | | | | | | | | | |
| Japan | 21 | 22 | 23.2 | 21.5 | 24.3 | 23.7 | 7.3 | 8.2 | 10.5 | 1 | 1.6 | 2.1 | 36.9 | 37.5 | 37.7 |
| USA | 2.8 | 5.3 | 4.6 | 7.6 | 9.4 | 10 | 1.5 | 2.3 | 2.4 | 2.9 | 3.9 | 2.8 | 4.1 | 5 | 4 |
| Germany | 3.9 | 5.5 | 5.6 | 7.3 | 10 | 10.8 | 2.2 | 3.9 | 5.7 | 0.7 | 1.8 | 2 | 5 | 6.9 | 7.6 |
| Others | 16.8 | 22.7 | 25.3 | 41.1 | 56.3 | 58.9 | 5.8 | 7.8 | 10.2 | 3.7 | 6 | 7.2 | 16.8 | 20.8 | 20.1 |
| <i>Maturity</i> | | | | | | | | | | | | | | | |
| Short-term debt (SID) | 27.6 | 34.2 | 34.7 | 54.3 | 67.5 | 70.2 | 7.9 | 11.2 | 16.3 | 4.1 | 7.7 | 8.3 | 43.6 | 45.7 | 45.6 |
| Long-term debt (LID) | 16.8 | 21.2 | 23.9 | 23.3 | 32.4 | 33.2 | 8.7 | 11 | 12.6 | 4.2 | 5.5 | 5.9 | 19.2 | 24.4 | 23.8 |
| <i>SID and Forex</i> | | | | | | | | | | | | | | | |
| Foreign reserves (Forex) | 14.7 | 19.3 | 20.3 | 32.7 | 34.1 | 34.1 | 23.9 | 27.1 | 26.6 | 7.8 | 11.7 | 9.8 | 37 | 38.7 | 31.4 |
| SID/Forex | 1.88 | 1.77 | 1.71 | 1.66 | 1.98 | 2.06 | 0.33 | 0.41 | 0.61 | .53 | 0.66 | 0.85 | 1.18 | 1.18 | 1.45 |

Source: Compiled from BIS.

authority (e.g., legal lending limit, capital adequacy ratio), weak enforcement has discouraged the development of a healthy banking sector. Many governments in the region also played favouritism. A few selected private sectors with high leverage and well-connected groups were given special-non-transparent-facilities. These private businesses could obtain credits from the state banks with a rate that was much lower than the prevailing market rate, and under far more lenient conditions. This obviously spells trouble for the state banks since the probability of default of such loans is very high. Hence, there was an irony: privatisation *increases* – instead of decreases – the public sector's burden.

The combination of corruption, cronyism and nepotism, popularised as CCN, resulted in misdirected credits, many of which went into projects with the best connection rather than those with the best economic or financial prospect. Indeed, returns on capital fell sharply in the region during the 1990s, most dramatically in Korea. Loans were advanced on the basis of inadequate project appraisals, much of which went to the real estate related sectors. When the latter crashed, many banks and finance companies suffered from a serious liquidity problem. The above story may have been told and read in various occasions. Yet, it is a kind of a story with a limited sense of priority. Anything suspected to have caused the system to be vulnerable are thrown in, without assigning any degree of importance to different factors. The main focus of the current study is precisely to assign priorities to those factors mentioned above.

Exploring Sources of Vulnerability and Policy Responses

In the process of assigning priorities, one must first determine whose perspectives a particular set of priorities represent. In this context, there are two sets of perspectives to be considered. First are those of the IMF who has been involved in the policy-design in many countries after the crisis, and the second set reflects the alternative views. In many instances, the latter belong to the crisis-affected countries that eventually succumbed to the IMF rescue programme, hereafter the 'recipient countries'.

Let us examine the perceptions of the two parties in terms of what are the sources of vulnerability that led to the crisis, and what should be the corresponding policy prescriptions. From the IMF perspectives, a weak banking system (labelled WEAKBANK in the first column of Table 3.5 was among the most serious sources of economic vulnerability in the Asian crisis countries. Among others, this was reflected through the high growth of bank credits (yet, as indicated earlier, it was far from what is called a credit boom). Like in most standard analyses of financial crisis, the IMF was also of the opinion that the fixed exchange rate system prior to the crisis, labelled FIXEDER, had put the region in a susceptible position. However, such an opinion only emerged after the crisis broke out. In many instances during the 1990s, the IMF tends to praise the system for its ability to propel a robust economic growth with stability. It is common to concentrate the analysis of a financial crisis on the fixed exchange rate system. When things went wrong, the exchange rate tends to be overvalued. While the nominal rates maybe fixed, under such circumstances the real exchange rate would likely appreciate, hurting exports and the overall balance of payment.

Table 3.5 Sources of vulnerability and policy response: IMF's vis-à-vis alternative perspectives

| X | IMF views | | Unintended outcomes | Alternative views | |
|------------|--|----------|---------------------|-------------------|--------|
| | Y | Z | | Sources | Policy |
| WEAKBANK | CLM | BLENDING | ECCOST | CORPDEBT | LBDH |
| FIXEDER | TMP | CPFLOWS | NOBS | CGION | MPBC |
| GOVANCE | LIQ | RERAF | SAVERS | PRUDEBANK | |
| | | GOVT | SOCCOST | | |
| X: | Source | | | | |
| Y: | Policy | | | | |
| Z: | Expected outcomes | | | | |
| WEAKBANK: | Weak banking system | | | | |
| FIXEDER: | Fixed exchange rate system and exchange rate appreciation | | | | |
| GOVANCE: | Poor governance | | | | |
| CLM: | Budget, bank restructuring and fundamental reforms | | | | |
| TMP: | Tight monetary policy | | | | |
| LIQ: | Liquidity support and open capital | | | | |
| BLENDING: | Resume bank lending | | | | |
| CPFLOWS: | Positive net capital flows | | | | |
| RERAF: | Low inflation to avoid appreciation of currency | | | | |
| GOVT: | Improved governance and BOP | | | | |
| ECCOST: | High cost and ineffective restructuring | | | | |
| NOBS: | No real improvement in the balance sheet | | | | |
| SAVERS: | No capital inflows and big windfall to savers | | | | |
| SOCCOST: | High social cost | | | | |
| CORPDEBT: | Massive inflows and corporate debts | | | | |
| CGION: | Contagion | | | | |
| PRUDEBANK: | Weak prudential enforcement | | | | |
| LBDH: | Debt rescheduling and capital control | | | | |
| MPBC: | Moderately tight financial policy and gradual bank and corporate restructuring | | | | |

The poor governance in the corporate, banking and government sectors (labelled GOVANCE) is another source of vulnerability. The IMF believes that this featured heavily throughout the Asian crisis countries, exacerbating the vulnerability of the country's financial system. It is no surprise that the IMF tend to assign a relatively high degree of importance on this factor. With the above assessments, the prescribed policies were designed to overcome those sources of vulnerability. The weak banking system needs to be resolved by a systematic banking reform. When necessary, it should also include the closure of non-viable banks. At the same time, the problems of poor governance have to be resolved by major reforms that allow drastic and fundamental changes in microeconomic and institutional structures. To the extent that a real appreciation of the exchange rate and the overall market confidence are determined by the inflation rate and government signals to the market (its seriousness to respond to the shock), at the early stage the IMF also requested the recipient countries to tighten its budget. This policy is fairly standard in the IMF conditionality.

A tighter budget would help reduce the inflation rate that could simultaneously assure the market that the government is dealing seriously with the problem.

The bank restructuring, fundamental changes and microeconomic reforms, and the tightening of government budget, are all combined in a policy item labelled CLM. But a more important – yet also most controversial – medicine prescribed by the IMF is the policy to tighten the monetary sector by raising the interest rate (labelled TMP). In addition to curbing the inflation caused by the currency depreciation, such a policy is also expected to prevent further capital outflows and/or to attract new capital inflows, both of which would help strengthen the local currency. Only with CLM and TMP in place the IMF's role as a lender of last resort in providing liquidity supports given a fairly open capital account (labelled LIQ), can be expected to function. Yet, according to the mandate given to the IMF, such a financial help should be directed only for supporting the country's balance of payment. Despite the IMF's frequent requests for budget consolidation and bank restructuring, no IMF resources can be used for these purposes.

Each of the policy described above has its specific rationale and objective. Bank restructuring and fundamental micro economic reforms are meant to clean up the financial and real sector, and to enhance the quality of governance (labelled GOVT)). The corresponding improvements in the banks' balance sheet would allow banks to resume their intermediation function by extending loans (BLENDING). A strict government budget together with tight monetary policy could help remove any inflationary pressure that might be fuelled by the exchange rate depreciation. If successful, the RER could be prevented from appreciating (labelled RERAP). In turn, this would help increase the country's exports, and improve the balance of payment position. As indicated earlier, the tightening of monetary policy by raising the interest rate is also expected to generate positive net capital flows (CPFLOWS). So much is for the IMF's basic arguments. As far as the 1997 Asian crisis is concerned, some of the intended outcomes did not really materialise. Even worse, several unintended outcomes emerged. In some instances, the latter even overwhelmed the positive results coming out from the prescribed policies. The following is a list of such unintended outcomes. In restructuring the banking sector, a huge amount of resources, mostly public money, had to be spent for the main component of the program, i.e., bank recapitalisation. Indeed, as discussed in the preceding section, a most notable sign of vulnerability prior to the crisis was the sheer size of private sector debts, largely short-term and un-hedged. As the exchange rate began to collapse, the local currency value of these debts surged, hurting the balance sheet position of most corporate and banking sectors throughout the region. Hence, a bank recapitalisation programme was inevitable.

However, in practice, the programme often absorbed a resource amount beyond what the country could actually afford, given other programmes that need to be financed during the crisis (the costs of bank recapitalisation could range from 30 to 60 per cent of GDP). Yet, by 1999, almost two years after the programme was implemented, the intended objective of resuming banks' intermediation function has been practically unmet, implying that the programme is cost ineffective (labelled ECCOST in Table 3.5). In all Asian crisis countries, bank recapitalisation had been conducted practically by using public money. While each country has different format and mechanism, they all used some sort of government bonds. The value

of bonds would appear in the asset side of the bank's balance sheet, removing the prevailing bank's negative net worth. However, actually the real financial position of the banks did not improve. With a considerable amount of bonds in their assets, most banks still have liquidity problems, since most of their assets are non-liquid. The only fresh money comes from the payments for the interest of the bonds. As a result, many recapitalised banks are not in a position to lend.

In this sense, the item representing no real improvements in bank's balance sheet (NOBS) listed in Table 3.5 is one of the unintended outcomes. In most Asian crisis countries, the expected capital inflows after the interest rate was raised did not occur. From this point alone, one could have expected that the costs of setting a high interest rate (e.g., credit crunch, exacerbating firms' balance sheet) are likely to exceed the benefits. Yet, there is still another kind of cost for the economy. The high interest rate has provided huge windfalls to savers, who are generally of the medium and high-income category, while a large number of population did not have bank savings. Hence, the high interest rate policy could potentially worsen the income disparity. In Table 3.5, this unintended outcome is labelled SAVERS.

Another unintended outcome is related to the tightening of government budget. It is often the case that this would mean massive expenditure cuts, including in those items related to social overhead capital. In the Thailand and Indonesian case, many subsidies (e.g., fuel, food, etc.) would have to be either slashed drastically or removed completely from the budget, causing prices of some basic necessities to increase. This could potentially deteriorate the general social conditions of the country (SOCCOST). One could always argue that, generally, the IMF did not have a sufficient time to analyse the costs and the benefits of each of the policy choices. Yet, they were expected to produce a policy package after the crisis arrived, or, at the height of the crisis. Hence, it would not be fair to put the blame on the IMF. What I intend to argue in this manuscript is not really to criticise the IMF. Rather, looking back at what happened after evaluating the working and repercussions of the IMF-style policies, I am ready to claim that a number of those policies were ineffective. In some cases, they even aggravated the situation by creating undesirable outcomes. Never mind who initiated the policies, the fact is, the effectiveness of some policies has been low. From various discussions I had with policy makers, analysts, and observers throughout the Asian crisis countries, I found that most had their own opinion – not necessarily in line with the IMF's – with regards to what caused the country's vulnerability and the crisis, and what should be the appropriate policy response. Obviously, the views may not be the same in all countries, and even in one country I also found different opinions among analysts and policy makers. But what is more interesting is that, in most cases the differences are more on the priority (ranking of importance) of the listed sources and policies, rather than on the substance and types of arguments. The list of what I perceived as the recipient countries' alternative views is shown in the last two columns of Table 3.5. In line with the discussions in the preceding section, the recipient countries tend to view massive inflows of private debts to be a major source of vulnerability (CORPDEBT). In some countries, policy makers had already detected the surge of such debts as early as in 1992. But at the time the trend was viewed as normal, as a consequence of the increased role of private sector in the economy.

For right or wrong reasons, many believed that things could have been different (a continuing 'miracle') had Thailand not fallen into a crisis. If there would be a slowdown, they argued, it would not have caused a recession at a proportion that Asian countries outside Thailand had actually suffered. In essence, they believed that a contagion (labelled CGION) played an important role in precipitating the crisis and escalating its depth. On the banking sector, many agreed with the IMF assessments that this sector has been weak. But most people are also of the opinion that financial sector's weaknesses actually began to build up immediately after the financial liberalisation was implemented. The latter, of course, has been persistently promoted, if not insisted, by the international organisations including the IMF since 1980s. The key problem rests on the lack of enforcement of prudential regulations (PRUDBANK), not the lack of regulation itself. With the above assessments, the recipient countries tend to believe that any restructuring policy, be it for the banking or corporate sector, have to be done in a gradual manner, in order for these economic units to be able to adjust with the new environment. A drastic measure would destabilise the system that needs to be rescued in the first place. Since deteriorating market confidence precipitated capital outflows, some control measures in financial policies (monetary and budgetary) are needed. However, unlike that is usually proposed by the IMF, the tightening of the financial policy should be moderate, so that it will not aggravate the already damaged balance sheets of many banks and corporate firms throughout the region. The combination of gradual restructuring and moderate financial policy is denoted by MPBC in Table 3.5.

Similarly, budget retrenchments ought to be done moderately. Some even argued that under the distress situation, the budget should have been made more expansionary, in order to avoid the so-called 'bad' equilibrium (see Krugman 1999a, Azis 2000a). Notwithstanding the question whether a gradual and moderate measure is more effective than drastic one, the above policies alone will not likely help to strengthen the exchange rate. As long as indebted banks and corporate sector could not resolve the mismatch in their foreign debts, it would be difficult to avoid pressures on the exchange rate. Hence, the opinion expressed tends to opt for some sort of a debt haircut. In Table 3.5, this policy measure is labelled LBDR. Although from the perspectives of the IMF and the recipient countries each policy can be considered as a stand-alone proposal, realistically speaking, attempts must be made to find some combined policies that would be acceptable to both parties. A non-zero sum game matrix could be used to identify those joint policies. Yet, like in most conflict situations, there is no guarantee that agreeable joint policies (equilibrium points) do exist. If they don't, a series of compromises ought to be made.

Before proceeding with the standard game theoretic approach, however, the most critical question would be how we can come up with proper payoff values for each party. Unlike most game theoretic exercises, here I would adopt a particular method known as *Analytic Hierarchy Process* (AHP), from which the payoff values are determined based on the perceptions of the two parties involved.

Analytic Hierarchy Process

By combining the theory of scaling and the theory of hierarchy, AHP provides an effective and powerful means to capture and systemise perceptions based on a pre-designed hierarchy. From the hierarchical framework, some sort of payoff values can be generated. The basic essence of AHP is to rank elements according to their importance by comparing them in a *pairwise* manner, such that, ratio scales rather than ordinal scales, are obtained. The original ranking based on 'experts' perceptions does not have to be perfectly consistent (*transitivity* assumption is not strictly required). For clarity purposes, a brief mathematical exposition of AHP is shown below (for more detailed expositions, see Saaty 1994a and Saaty 1994b, and for an explanation of AHP's non-mathematical procedure, see Azis and Isard 1999). The critical early step is to arrange the problem (state of affairs) into a hierarchical framework.

When there are three elements (policies) in the hierarchy, such as in the earlier cited example, only three input judgements are required. But in general case, the precise value is hardly given, simply because the input judgement is only an estimate. It suggests that there are some perturbations. While the reciprocal property still holds, it is no longer so for the consistency property. When more than two elements are compared, the notion of consistency can be associated with the assumption of *transitivity*. In words, the inputted judgements do not have to reflect a full consistency (in fact, in addition to permitting some degrees of inconsistency, another strong point of AHP is its allowance for a rank reversal to occur (Saaty 1994b)). Yet, as shown earlier, the resulting matrix and the corresponding vector remain consistent. It is the consistent vector w that reflects the priority ranking of the elements in each level of the hierarchy. The resulting priority ranking in each level, are derived from computation.

The Analysis

Let me first discuss the policy evaluation related to whether or not the IMF-inspired policies are effective. Like most policy evaluations, there are always positive and negative consequences of a particular policy. Only after weighing each of these consequences can one better understand the nature and intensity of the overall implications of the policy. Furthermore, in evaluating the effectiveness of a policy, one also needs to consider the time frame used in the analysis. The efficacy question could be approached by either analysing counterfactual policies, or, by evaluating the performance after the policy is implemented. Using a specific country case, I have done some counterfactual scenarios based on an economy-wide model (Azis 2000a, 2000b). Here, I am taking another approach by repeating the perception evaluation after the set of policies have been implemented. For such a purpose, a two-stage analysis was conducted. First, I evaluated the expected outcomes of the policies put forth prior to the actual policy implementation. This was done based on what I perceived as the IMF's arguments for selecting such policies. These expected outcomes were weighed in terms of their importance. On the other hand, the unintended outcomes also need to be considered. The importance of each of them will have to be scrutinised. Subsequently, 'yes' and 'no' types of questions are explored.

Under the expected outcomes of the policies, the relevant question would be: 'Is the IMF policy *effective*?' While the answer may likely lean towards 'yes,' what is more important in this analysis is the intensity of the answer. That could be obtained only after weighing the importance of all the expected outcomes. Only then can the 'yes' and 'no' questions be raised, and they are posed with respect to each of those outcomes. After performing a series of pairwise comparisons and matrix multiplications, the derived weights for 'yes' and 'no' are, respectively, .63 and .37 (as explained in the preceding section, these are the elements of a normalised eigen vector of a pairwise comparison matrix).

A similar approach was taken for the unintended outcomes. The relevant question would be: 'Is the IMF policy *ineffective*?' The question is raised with respect to each of the unintended outcomes. For example, consider the following question: 'Given the possibility that there will be no real improvements in banks' balance sheet, labelled NaBS, can we infer that the IMF policy is ineffective?' The answer may be 'yes'. But as before, it is the intensity of such answers that matters most. After constructing a series of pairwise comparisons, the resulting weights for 'yes' and 'no' are .627 and .373, respectively, suggesting that after considering all the potential unintended outcomes, the intensity of perceptions that the IMF policy is ineffective is roughly 1.7 times more than the perceptions that the policy is effective.

Combining the scale priority of 'yes' from the 'benefit' hierarchy and the scale priority of 'yes' under the 'cost' hierarchy would give the relevant 'benefit/cost' ratio, based upon which the analysis can be made. In the above case, the benefit/cost ratio is $.630/.627 = 1.005$. Hence, the perceptions that the IMF policy is effective are more favoured, albeit by only a very small intensity, than the views that it is ineffective. Notice that the priority ranking in both hierarchies is examined *prior* to the actual policy implementation (the first stage). Hence, all of the listed outcomes, expected and unintended, are only potential in nature. In the second stage, a similar approach is applied to the two hierarchies, but this time the evaluation is done *after* considering the factual outcomes and the repercussions of the policy. With the exception of Korea towards the end of 1998, new capital inflows in the region could hardly be detected. On the contrary, even with a high interest rate policy, capital still fled the countries. The usual adverse repercussions of a high interest rate policy (e.g., credit crunch, output collapse), strongly undermine the merits of the policy. More importantly, it exacerbated the loss of market confidence, fuelling further capital outflows. Having realised these facts, the weight assigned to the expected capital inflows (CPFLOWS) needs to be adjusted downward, e.g., from .526 to .299.

Despite the seemingly improved balance sheets of many banks after the restructuring programme, most of them remain unable to resume their intermediation function. The amount of bank lending (BLENDING) continued to be negligible. Thus, the corresponding priority has to be reduced, i.e., from .107 to .104. Given the fact that these priority weights are derived from a normalised eigen vector, the weights for the remaining two elements, i.e., RER and GOV, are automatically adjusted upward. With the new priority ranking of the expected outcomes, the resulting 'yes' and 'no' pertaining to the question whether the IMF policy is effective, is also changed. This time, the weight for 'yes' is .624 and the weight for 'no' is .376.13 The resulting outcome indicate that, the benefit/cost ratio for 'yes' is $.624/.627 = .995$, reversing the conclusions obtained earlier. This suggests that, after looking at what happened

since the implementation of the IMF policy, *ceteris paribus*, the perceptions are leaning towards a conclusion that the policy is ineffective.

An important conjecture drawn from the analysis is that, perceptions over a particular issue could alter when circumstances change (e.g., after evaluating the actual facts). Yet, the ranking in each hierarchy itself may not necessarily change, although in the above example it does, i.e., the predominant position of CPFLOWS is taken over by RER. In general, whether or not the ranking changes (a rank reversal being one extreme possibility), the resulting benefit/cost ratio may alter, although the overall conclusion could remain the same (e.g., the benefit/cost ratio may decline from 1.005 to 1.001, in which case the conclusion about the efficacy of the IMF policy is unchanged). In our case, both the ranking of elements (expected outcomes of the IMF policy) and the overall conclusions based on the altered benefit/cost ratio, change. By all means, however, this is not a rule.

While useful for understanding the nature and the extent of different, or sometimes conflicting, perceptions about the crisis, the above analysis leaves any potential 'conflict' of opinion (prescriptions) unresolved. To dwell with various elements in order to uncover the intensity of what causes the vulnerability and what would be the proper policies, is my next task.

Recall that a hierarchy for each party has been constructed. To introduce some elements of reality, in which give-and-take elements are usually involved in the process, it is important to take account of each party's understanding on the other's position. This implies that combining the policies at the bottom level of each hierarchy, would be a proper step to take. The new hierarchy that combines the two sets of policies. Note that at the bottom of the hierarchy the listed policies are now joint policies.

Once the new hierarchy is set, a priority ranking of the sources of vulnerability based on each player's perspectives is established. For example, it is perceived that the IMF tends to put the weakness of the banking sector (WEAKBANK) as the most important source of vulnerability (.648), followed by the poor governance (GOVANCE, .23) and the fixed exchange rate system (FIXEDER, .122). Under each of these sources, alternative joint policies are evaluated (there are 6 joint policies, since the IMF and the alternative views came up with, respectively, 3 and 2 prescribed policies, see again Table 3.5). In this way, the IMF is provided with information about what would be the recipient countries' alternative preferences for each of the IMF's proposed policy. Indeed, in practice, before a formal agreement ('letter of intent') is signed, both parties usually shared their views and opinions. Such information has to be disclosed and made known.

Let me first provide an example that is not necessarily reflecting the real case in terms of what each party actually perceives (the example is only intended to show a particular type of outcome, i.e., non-equilibrium solution). After conducting a series of pairwise comparisons, suppose that the priority ranking points to a joint policy CLM-MPBC being the most preferred from the IMF's point of view (i.e., .232). Note that such a preference is derived after taking into account the predominance of weak banking system as the cause of vulnerability, and the possible reaction from the recipient countries to each of the IMF policies. Suppose that after considering the utmost importance of the corporate debts as a source of vulnerability, the recipient countries are strongly in favour of a joint policy LIQ-MPBC (.439), which is a combination of IMF's provision of liquidity supports providing an open

capital account (LIQ) and the recipient countries' adoption of moderately tight financial policy plus restructuring of the banking and corporate sector that will be done gradually (MPBC). It should not be too difficult to judge why these countries strongly prefer such an option. Putting together all the weights from the combined hierarchy into a non zero-sum matrix in Table 3.6 results in constant shifts (moves) from one joint strategy to another, without the possibility for the system to settle down at a particular solution. A failed negotiation or unreachable agreement could be a situation that such an example represents. Yet, in all cases during the Asian crisis, some sort of agreements have actually been reached. Hence, a more realistic case needs to be developed.

Table 3.6 Non-equilibrium case

| | f- IMF-7 TMP | f- IMF-7 CLM | f- IMF-7 LIQ |
|-----------|-----------------|-----------------|-----------------|
| Recipient | | | |
| LBDH | (.220; .067) | (.179; .108) | (.130; .093) |
| Recipient | | | |
| MPBC | (.165; .259) | (.232; .034) | (.073; .439) |

In a standard game theoretic approach, one could transform the non-equilibrium state in Table 3.6 into an equilibrium case by adopting particular techniques under certain assumptions. Here, I refrain from doing so, primarily because what I intend to emphasise is the transparency of the process, not merely finding the solution. It should be clear that all numbers (payoff values) that appear in Table 3.6 are generated from the perceptions expressed by each party. There was a clear procedure and transparent mechanism involved in the process. Hence, instead of using a mechanical game theoretic approach to arrive at an equilibrium state, I re-simulated the perceptions of both parties. Two attempts were made, i.e., re-simulate the system by imposing an IMF-led adjustment, and re-simulate a scenario in which the recipient countries initiated the move. One could clearly see from Table 3.6 that should the IMF make the adjustment first, the weight of the joint policy CLM-MPBC is reduced to .191, dismissing it as the IMF's most preferred choice. Instead, the newly favoured joint strategy is TMP-MPBC (receiving .256). Indeed, judging from the actual developments, a tight money policy (TMP) appears to be non negotiable from the IMF standpoint. In contrast to CLM-MPBC, under TMP-MPBC the budget retrenchment is no longer too strict, but the tight monetary policy has to be sternly implemented. Judging from the payoff values of the recipient countries, however, the most preferred joint policy is LIQ-MPBC (.439), that is, they will adopt a moderately tight financial policy and a gradual restructuring in the banking and corporate sector, while the IMF extends its liquidity supports to help improve the balance of payment position and strengthen the exchange rate without rendering to a restricted capital account. With these different preferences, an equilibrium state is still achievable, since the recipient countries will have the policy that they actually prefer, i.e., MPBC, although the IMF could not extend financial supports without imposing

conditionality, particularly on the monetary policy. Hence, instead of LIQ-MPBC that would yield .080 for the IMF and for the recipient countries, the agreeable joint policy is TMP-MPBC (yielding .256 and .259 for the IMF and the crisis countries, respectively, see Table 3.7).

Table 3.7 Equilibrium case 1: IMF made the initial move

| | IMF-7 TMP | IMF-7 CLM | IMF-7 LIQ |
|-----------|---------------|---------------|---------------|
| Recipient | | | |
| LBDH | (.180-; .067) | (.169-; .108) | (.125-; .093) |
| Recipient | | | |
| MPBC | (.256+; .259) | (.191-; .034) | (.080+; .439) |

Under some circumstances, the IMF could either be forced or prefer to let the recipient countries to initiate the policy adjustment. In this scenario, in which the recipient countries raise the intensity of their preference towards CLM MPBC (the weight is increased from .034 to .149), but not enough to overtake their preference for LIQ-MPBC (.397) and TMP-MPBC (.246). This is despite the fact that the weights for the latter two have been reduced. This adjustment alone is sufficient to transform the system from a non-equilibrium to an equilibrium state. As shown in the non-zero sum matrix in Table 3.8, such an adjustment could lead to an equilibrium solution, in which the IMF would get its original first-best choice (.232) based on Table 3.6, and the recipient countries would obtain their newly high prioritised choice (.149). As indicated earlier, the joint policy CLM-MPBC implies that the budget is firmly curtailed, but the monetary policy is not too tight.

Table 3.8 Equilibrium case 2: recipient countries initiated the adjustment

| | IMF TMP | IMF CLM | IMF LIQ |
|-----------|---------------|---------------|---------------|
| Recipient | | | |
| LBDH | (.220; .070+) | (.179; .057-) | (.130; .081-) |
| Recipient | | | |
| MPBC | (.165; .246-) | (.232; .149+) | (.073; .397-) |

Based on the three cases described above, the scenario that is closest to the real policy episode during the Asian crisis is the equilibrium case 1, in which the implemented policy was a combination of a tight money policy with the government budget being slightly slashed, and the restructuring of the banking and corporate sector is conducted only in a gradual manner. In reality, however, the IMF often pushed for more drastic restructuring, especially that the progress in improving the governance in practically all crisis countries has been too slow, far from originally expected.

Debates about Conditionality

Many analysts have reviewed critically the role of the IFIs, especially of the IMF, in reducing the risk of financial crises. Their policy response to a crisis is also often criticised. The arrival of the 1997 Asian crisis, followed subsequently by the crises in Brazil and Russia, made the debate on the issue even more intense.

One of the contentious points relates to the question whether or not the IMF should continue intruding with deep structural reforms as part of its programme conditionality. As described earlier, one of the major differences between the IMF perspectives and the alternative views is precisely on the subject of bank/corporate restructuring and other microeconomic reforms. During the Asian crisis, the IMF has been persistently pressing for sweeping and fundamental reforms not only in the financial sector but also in various microeconomic fronts (CLM). The nature and extent of the requested reforms were so wide-ranging (even in Korea, the IMF requested that eight structural problems need to be resolved), that some analysts doubted whether industrial economies of Europe could implement, let alone accept, such a sweeping conditionality, despite their far more developed institutions than what the Asian crisis countries had. The alternative views clearly prefer to undertake reforms in a gradual fashion (MPBC). No less seriously is the question whether the IMF's conditionality has not gone beyond its IMF's basic mandate. Shouldn't the IMF go back to the basic, i.e., dealing only with short-term balance of payment liquidity problems, and let other IFIs such as the World Bank and the Asian Development Bank deal with longer-term issues of structural adjustment and micro economic reforms? On this subject, there has been a series of debates, and several reports have also been produced. One of such debates occurred in the US, the most influential shareholder of the IMF.

Under the legislation authorising US participation in the quota increase of the IMF and the establishment of New Arrangement to Borrow, a congressionally appointed bipartisan group named the *International Financial Institution Advisory Commission* (IFIAC) was established. The group, headed by Carnegie Mellon University Professor Allan Meltzer, a long time IMF foe, was asked to report on the future role and responsibilities of international institutions including the IMF. It needs no further explanation to realise the importance of this Commission's work in determining the IMF role to prevent and respond to a crisis. Among other things, the Commission's proposal is to limit the IMF lending to only short-term credits (four to eight-month maturity) with a very high interest rate, but essentially without conditionality, to only solvent countries. The idea is, the recipient country should be given incentives to repay the debt quickly.

But the major essence of the Commission's recommendation is to scale back the IMF's roles significantly. This has become a major target of disagreements among several analysts, including, most importantly, those at the US Department of Treasury. In response to the IFIAC's report, more known as the *Meltzer Commission*, the US Treasury issued its own recommendations, in which it basically rejected the main thrust of the Meltzer Commission, arguing that reducing the capacity of the IMF would undermine the promotion of proper macroeconomic policy reforms in many (non eligible) countries. Furthermore, restricting lending to only short-term credits with high interest rate would render the programme ineffective in promoting recovery in the prequalified countries. In turn, it could substantially harm the D.S

economy (e.g., farmers, workers and businesses), hence the broader D.S national strategic interests.

While the issue of conditionality may not appear as critical (at least it has not been the main thrust of the IFIAC report), it has actually taken a centre stage in the more general debate. During the Asian crisis, it has sparked the most critical differences between the IMF and the recipient countries in seeing what kind of policy deemed appropriate in responding to the crisis. Recall from the non-equilibrium case in Table 3.6 that the highest payoff value for the IMF, should it be given an exclusive choice (without confronted with other party's possible reaction), is the implementation of CLM (.232), which is essentially a sweeping micro economic reform in various sectors. This is the kind of conditionality most recipient countries are neither willing to accept nor having the capacity to implement, even if officially they may agree to do so. The unanimous first choice for these countries, as far as restructuring and other micro economic reforms are concerned, is to implement them in a gradual manner (the highest payoff, .439, is MPBC, see again Tables 3.5 and 3.6).

It is interesting to note that Japan, considered to be the last and most important 'defender' of the Asian crisis countries, had also expressed its disagreement with the idea of imposing sweeping structural reforms as part of the IMF's conditionality during the Asian crisis. Indeed, since the publication of the World Bank's 'East Asian Miracle,' Japan has been always taking a cautious stand with respect to the 'Washington Consensus' type of market mechanism. It repeatedly emphasised the importance of each government to decide itself what, how and at what pace to reform (state intervention), instead of forcing the agenda through various means of influence from outside.

The non-equilibrium case in Tables 3.5 and 3.6 reflects a situation whereby the two parties insist on their policy preferences. If the IMF is willing to adjust, i.e., making the payoff value for CLM-MPBC smaller than that under TMP-MPBC (e.g., from .232 versus .165 to .191 versus .256), an equilibrium solution can be reached. Alternatively, if the IMF is firm with its stand, the only other equilibrium alternative is for the recipient countries to accept, reluctantly, or, only formally, the required sweeping reforms. In return, they are neither obliged to implement a tight monetary policy nor compelled to retrench the government budget (CLM-MPBC).

Earlier, I have explained the policy interpretation of CLM-MPBC from the financial standpoint. What does it stand for, in terms of fundamental micro economic reforms? Most policy makers in the recipient countries acknowledged that many sectors still need to be reformed. They agreed with the premise, and accepted the prescription by co-signing (along with the IMF) the official letters of intent (LOI). However, they are also fully aware that, realistically, such comprehensive and fundamental reforms are hard to implement. Not even GECD countries could execute the sweeping programmes with such great details and comprehensiveness. It is more likely that the actual implementation would be gradual. Because of this different opinion, wrangles and disputes between the two parties over the programme implementation are often resulted. It is also worth noting that, increasingly the free market preachers have to face widespread popular discontent. From Seattle, Chiang Mai, Washington, to Prague, the message of those who demonstrated during the IMF's meetings was fairly compelling: a significant number of people represented by progressive citizens, ranging from labour unions, environmental groups, and farmer organisations, in both

developed and developing countries alike, are ready to battle over an alternative framework of development. Clearly, opponents and critical groups are not dead, they are only quiescent. On issues pertaining to financial crises, these groups have come up with specific proposals. For example, in December 1998, *Friends of the Earth*, the *Third World Network* and the *International Forum on Globalisation* jointly asserted through their 'Call to Action: A Citizens Agenda for Reform of Global Economic System', that the rules and institutions of global finance should seek to reduce instability in global financial markets. More interestingly, they specifically pointed out the need to create maximum space for national governments to set policies that could best prevent any financial instability from transforming into a crisis, among others through regulating capital movements. This is essentially in contrast with 'the idea of imposing rules from outside, such as the case with the IMF conditionality. Hence, the discussions about policy choices such as CLM and MPBC are highly relevant for the current development debate.

Conclusion

The episode of Asian crisis revived the debates about the appropriateness of a standard policy response to a crisis. This study attempts to explicate them by comparing the IMF perspectives and the alternative views presumably held by the recipients of the IMF programme over the questions of what caused the vulnerability in the East Asian economies that led to the 1997 crisis. A traditional policy mix of credit tightening and fiscal restraints had been imposed as part of the IMF funding condition. It appears that its fairly successful experiences with the handling of the Latin American crisis convinced the IMF that such a policy mix was appropriate. Nobel laureate James Tobin believes that the IMF's Asian packages are also based on its experiences with Mexico in 1994. But the pre-crisis conditions in East Asia were very different from those in Latin America (on inflation, budget, balance of payment, the nature and borrowers of foreign debts). Beyond that standard policy, the IMF also insisted on rather drastic and fundamental changes in economic and institutional structures (labelled CLM in the text). Their experiences with policy adjustments of this kind in Eastern Europe and the former Soviet Union (to shift from communism to a market economy) had inspired the IMF to do the same thing with the crisis-affected countries in East Asia.

By using a particular method to generate ratio scales to reflect the degree of importance of the intended and unintended outcomes of the IMF-inspired policies, a benefit/costs analysis reveals that the claims on the effectiveness of those policies could be reversed after the actual outcomes are evaluated. The initial analysis supports the claim that the policies are effective, but the post-factual analysis suggests the opposite. This has an extremely important interpretation with respect to the IMF's role. At a relatively short period of time, it was difficult for the IMF to design carefully, and prescribe systematically, a set of policies for the crisis-affected countries. Indeed, when a country approaches the Fund, usually its economy is already in a rather bad shape. Yet, the IMF is expected to act quickly in order to contain the progression of the crisis. Not enough time is available for the IMF to weigh the costs and the benefits – or to predict the effectiveness – of the policies.

Having said that, however, the arguments contained in the critical evaluation of those policies remain valid. This study attempts to distil the unintended outcomes of those policies, with the expectation that it would help us to understand better, why in reality some policies with a fairly strong theoretical ground provide only a small degree of effectiveness.

While the IMF arguments for insisting fairly drastic and fundamental microeconomic adjustments in the recipient countries appear to have strong rationales (who would not agree with ending corruption, curtailing the special business privileges, and imposing the practice of good governance), such adjustments could severely undermine the sources of East Asia's strength and stability. Worse, they are not really needed for the return of capital, nor are they required to restore market confidence. For the crisis-affected countries, to make drastic changes in the midst of a currency crisis would be more disastrous than helpful (poor timing). According to the alternative views, changes would be better conducted in an evolutionary and gradual fashion (labelled MPBC in the main text), such that only few shocks will be created in the system.

From several experiments to capture the IMF perceptions and those of the alternative views, a joint-policy of CLM and MPBC is found to be a possible equilibrium solution (equilibrium case 2). This implies that the monetary policy should be only moderately tight, and, while fundamental changes in the economic and institutional structures are formally accepted, the actual implementation is likely to be gradual. Under such a scenario, one could consequently expect continued wrangles between the IMF and the recipient countries over the issues of programme implementation. If the IMF could be more flexible with its conditionality on structural changes, disputes could be avoided (equilibrium case 1). It is a matter of empirical test to find out whether or not such an equilibrium joint-policy is optimal.

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