

## The Financial Crisis in Asia

*How has the Asian financial crisis developed over the last 12 months? What caused the crisis? Did it result from basic structural weaknesses in the affected countries or was it merely the result of investors panicking? Did the policy response by the International Monetary Fund (IMF) ameliorate or exacerbate the situation? This chapter closely analyzes these important questions. It concludes by showing that whatever the answers, a fundamental need is to strengthen the international financial architecture and proposes a necessary, minimum set of reforms within the existing institutional setting.*

The collapse of the Thai baht in July 1997 marked the beginning of Asia's financial crisis. It began modestly enough. After a series of speculative attacks, Thailand was forced to let its currency float on 2 July, but within weeks what had been a local financial crisis became a regional problem. Equity markets and currencies throughout Southeast Asia were under pressure as contagion raged and foreign capital fled. Within months Indonesia, the 4th most populous country in the world, and the Republic of Korea (henceforth referred to as Korea), the world's 11th largest economy, were engulfed in crisis.

Financial turmoil spread with a ferocity that none foresaw. Asia's once vibrant economies, used to decades of rapid growth, were plunged into deep recession. For many countries the economic hardship has been similar to that suffered during the Great Depression of the 1930s. In many Asian economies, this economic collapse has forced an unprecedented reappraisal of policies ranging from corporate governance to exchange rate management. In addition, the crisis managers, particularly the IMF, have come under

criticism. Intense debate continues about whether IMF policies helped or hindered economic recovery. Finally, Asia's crisis has spawned wide-ranging discussion about the basic design of today's international financial system. Suggestions for reform and blueprints for improving the international financial architecture abound.

These debates are far from settled. This chapter reviews the progress achieved so far in a number of areas. Given that Indonesia, Korea, Malaysia, Philippines, and Thailand suffered the most severe adverse impacts as a result of the crisis, the analysis in this chapter largely focuses on these countries, collectively referred to as the crisis-affected countries. While other countries in the region also suffered in varying degrees because of the spillover effects of the crisis, terms such as Asian crisis and Asian policies refer to this former group of countries. After an account of the crisis in 1998, the chapter critically examines competing explanations of what caused Asia's turmoil, and points out that no simple interpretation suffices. The causes of Asia's problems were complex, and understanding them fully will require a new

generation of academic models. It then reviews some of the priorities that Asia's governments now face and analyzes the debate about policy responses to date. Here too the truth is more complex than many commentators allow. Finally, it addresses the global architecture debate. It analyzes the various proposals for international financial reform and discusses what is likely to emerge from what could be the biggest reappraisal of international finance since the Bretton Woods Conference of 1944.

#### THE EVOLUTION OF THE CRISIS IN 1998

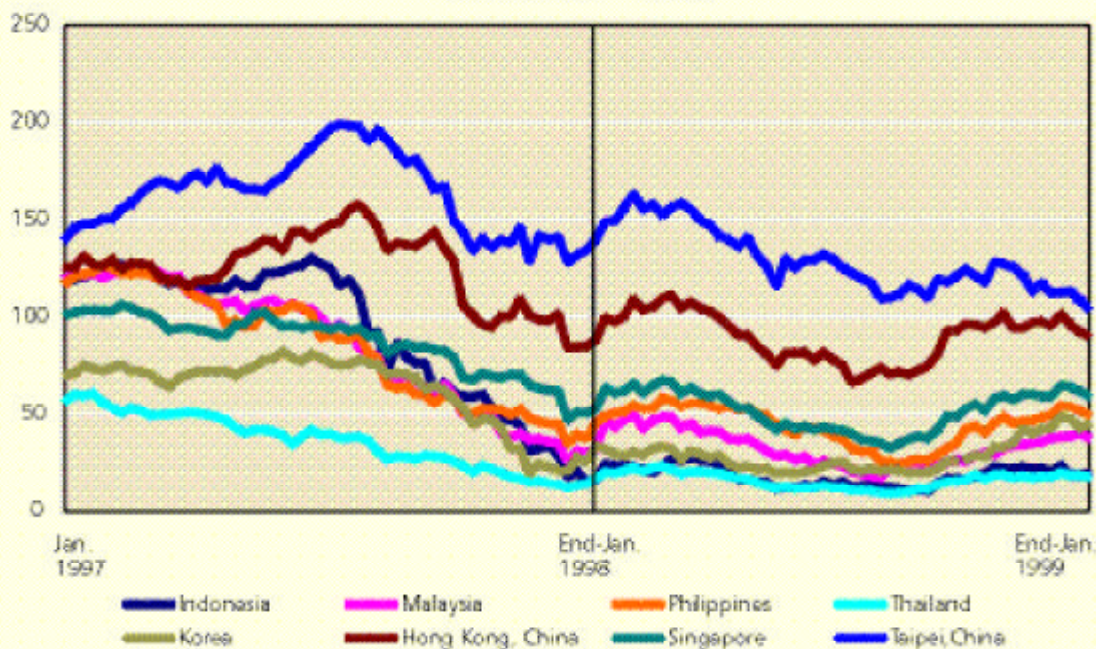
Asian financial markets began 1998 on a pessimistic note. With confidence eroded by Korea's near default in December 1997, the region's financial markets reached record lows in January 1998 (see figure 1.6). However, by early February markets had bounced back, largely on the hope that foreign confidence in the region was returning. On 2 February, for instance, Hong Kong's Hang Seng Index rose 14 percent, its second

largest one-day point gain ever, while other regional exchanges saw strong rallies. But this optimism did not last long, partly because of turmoil in Indonesia, and partly because of increasingly poor economic performance in Japan.

Indonesia's economic crisis began to worsen sharply in February. Mixed policy signals, galloping inflation, and a vast debt overhang scared investors and sent the rupiah plummeting. That same month the Suharto government proposed establishing a currency board, but eventually abandoned the idea under strong pressure from various quarters. Political uncertainties and civil unrest compounded the country's difficulties. Eventually, the combination of soaring prices, civil protests, sharply rising unemployment rates, and widespread corporate defaults precipitated a major political crisis. On 21 May President Suharto resigned; however, this did little to rally the markets.

Japan's woes compounded the region's troubles. In early February 1998, the Japanese government

**Figure 1.6 Weekly Composite Stock Price Indexes, Selected Asian Economies, January 1997-January 1999**  
(January 1996 = 100; \$)



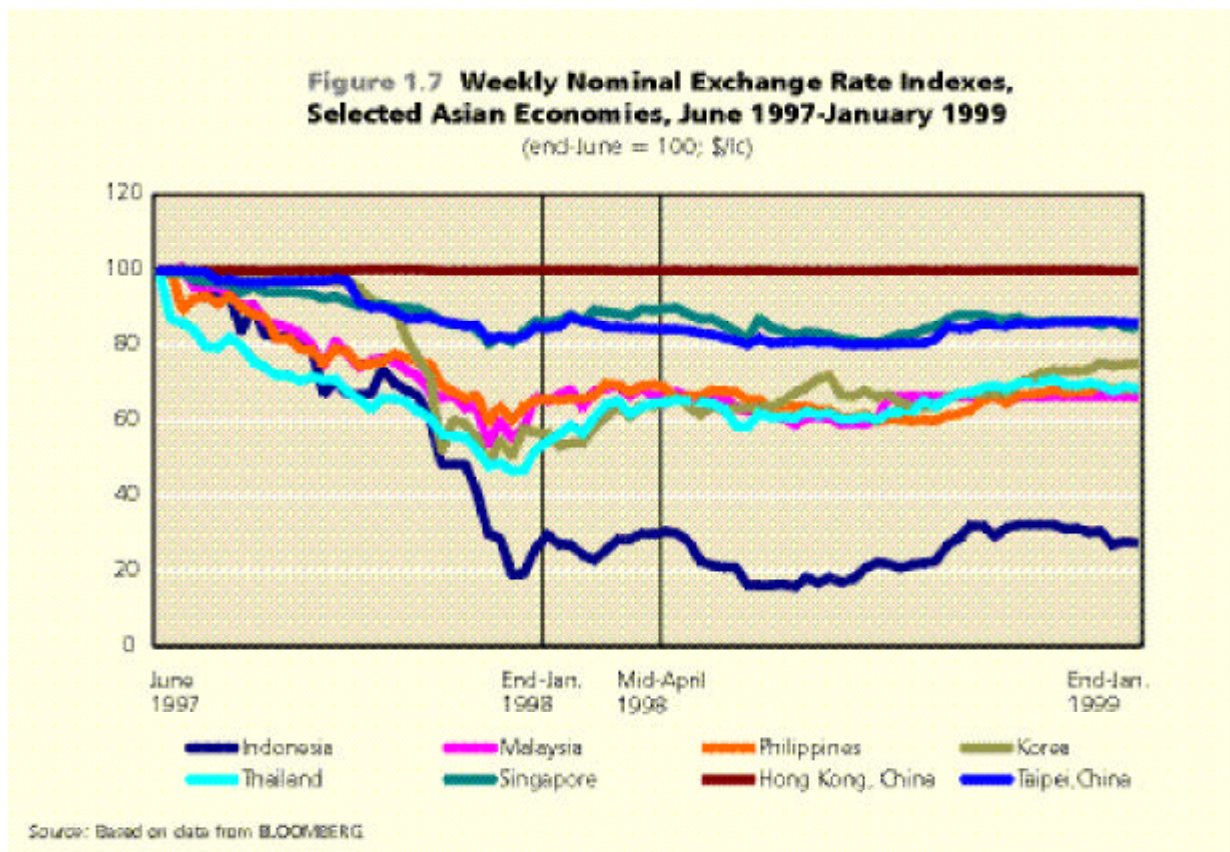
Source: Based on data from BLOOMBERG

declared the economy “stagnant” in a monthly report that offered the bleakest assessment of the country’s business climate in more than 20 years. Responding to the turmoil in Asian markets in mid-February, the government unveiled a long-awaited package of stimulus measures designed to support the stock market and boost the economy. It proved insufficient. The economy continued to contract, despite an increase in the fiscal stimulus measures in April. Moody’s rating agency revised Japan’s sovereign debt rating downward, and by 12 June the yen had declined to an eight-year low of ¥145 to the US dollar.

The tumbling yen triggered declines in other Asian currencies in June (see figure 1.7), including the Malaysian ringgit, the Thai baht, the Korean won, and the New Taiwan dollar (which hit an 11-year low). Stocks throughout the Pacific Rim fell sharply as investors worried that falling currencies would worsen the region’s economic difficulties. Hong Kong’s Hang Seng Index and Seoul’s composite index tumbled to their lowest levels since February 1995 and June 1987, respectively.

Worried by the regional impact of a plummeting yen, Japan and the United States turned to official intervention. On 17 June, in coordination with the Bank of Japan, the United States spent an estimated \$2 billion to bolster the value of the yen. News of the intervention—which represented a marked change of American policy toward the yen—had the desired effect. It soared to ¥138 to the US dollar, and Asian markets rallied.

Unfortunately, the rally did not last. By mid-August the yen had fallen to a new low of ¥147 to the dollar. Pressure on the Chinese yuan and the Hong Kong dollar mounted as investors feared a new round of regional devaluations. Another major shock hit financial markets on 17 August: the Russian central bank devalued the ruble and the government effectively defaulted on its internal debt. This action had a dramatic and deleterious impact on all financial markets. Investors fled all types of risk, from emerging market bonds to noninvestment-grade corporate bonds in developed markets.



As capital fled policymakers were forced to resort to unorthodox responses. The Hong Kong, China authorities intervened directly in the stock market to counter what they viewed as market manipulation, and spent an estimated \$15 billion of public funds on the Hong Kong Stock Exchange. On 1 September Malaysia's government decided to impose exchange controls to counter speculative attacks on the ringgit.

As investors fled to the safety of cash and treasury bonds, interest rate spreads widened on all debt instruments, and highly leveraged hedge funds that specialized in arbitrating risk hit trouble. The near collapse of the Connecticut-based hedge fund, Long Term Capital Management, and its rescue organized by the Federal Reserve Bank of New York, showed that by the end of September 1998 the crisis had moved well beyond Asia.

By this time financial markets were clamoring for a coordinated G7 interest rate cut to calm the panic. Although no coordinated move took place, the US Federal Reserve cut interest rates three times, by a total of 0.75 percent, between September and December 1998, and European central banks cut their benchmark rates. Markets were also reassured by the decision to enhance the IMF's capital base or "quotas" in October, which had been held up by political opposition in the US Congress.

Since October 1998 conditions in Asia have improved substantially. Japan has made progress on the much needed reform of its banking sector and is implementing the fiscal stimulus package. The yen strengthened dramatically to ¥113 to the US dollar by the end of December. Buoyed by progress in Japan, by interest rate cuts in the industrial countries, and especially by the gradual implementation of their own reform programs, other Asian markets began to recover.

October was a particularly good month: on average, the region's equity markets rose by almost 18 percent. Since then the Korean stock market has been the strongest performer (see figure 1.6), though it is still far from its precrisis levels. As stock markets rebounded, currencies also strengthened. Between the end of September 1998 and January 1999 the Indonesian rupiah rose by just over 20 percent, the Korean won by 18 percent, the Philippine peso by 15 percent, and the Thai baht by 7 percent.

By the beginning of 1999 one could say that the Asian economies seemed to have stabilized. In Korea and Thailand especially, the bitter economic medicine was beginning to work. Attention was shifting from immediate crisis management to accelerating recovery. Debt restructuring, corporate workouts, and banking reform moved to the top of the agenda. In this regard, the announcement of a \$30 billion assistance package from Japan under the Miyazawa Plan improved the region's economic prospects. While emerging markets remained fragile—as evidenced by the collapse of Brazil's currency, the real, in late January 1999—the worst in Asia seemed to be over.

#### INTERPRETING THE CRISIS

As Asia's crisis deepened, so the search for explanations intensified. What exactly caused these once vibrant economies to fall victim to such a financial disaster? The issue is not simply one of academic interest, because the appropriate policy responses depend in large part on an understanding of what caused the crisis.

##### Competing Explanations: Panic versus Fundamentals

Two general interpretations dominate the debate. One blames poor economic fundamentals and policy inconsistencies. The other argues that Asia fell victim to a financial panic, where negative sentiment became self-fulfilling.

According to the "fundamentalist" view, the Asian crisis (along with most other financial crises) was caused by basic economic weaknesses. Proponents of this view argue that Asia's healthy macroeconomic indicators—low inflation, fiscal balance, low stock of government debt, high rates of domestic saving and investment (see table 1.2)—painted a misleading picture. They argue that in reality, Asia's economies suffered from serious structural problems as well as policy inconsistencies. They point out that warning signals existed: for instance, in Thailand the current account deficit was dangerously large and rising fast. Moreover, benign macroeconomic indicators, such as a healthy budget balance, could mask real economic weakness. Many Asian governments provided implicit

guarantees to the banking system, which often engaged in lending practices that favored financially unqualified borrowers. These implicit guarantees led banks to lend recklessly. This, in conjunction with poor corporate governance in many of these economies, created a large stock of nonperforming loans, thereby risking the banks' collapse. This meant that the governments' implicit guarantees created a sizable "contingent fiscal liability."

By contrast, the panic interpretation views the self-fulfilling pessimism of international lenders as the root cause of the crisis. The most sophisticated version of this argument interprets Asia's crisis as a classic bank run. In a bank run, if enough investors are suddenly seized with panic and demand immediate payment, then financial intermediaries are forced to destructively liquidate long-term assets at a great loss. In the classic model of a panic, the central bank can

**Table 1.2** Macroeconomic Indicators, Selected Asian Economies, 1990-1997  
(percent)

Economy	Growth rate			Inflation rate			Fiscal balance/GDP		
	1990-1995	1996	1997	1990-1995	1996	1997	1990-1995	1996	1997
Korea	7.8	7.1	5.5	6.6	5.0	4.5	0.2	0.5	-1.4
Indonesia	8.0	7.8	4.9	8.7	7.9	6.6	0.2	0.2	0.0
Malaysia	8.9	8.6	7.7	3.7	3.5	4.0	-0.4	0.7	1.8
Philippines	2.3	5.8	5.2	10.6	9.1	6.0	-1.1	0.3	0.1
Singapore	8.6	6.9	7.8	2.7	1.4	2.0	9.4	6.8	3.3
Thailand	9.0	5.5	-0.4	5.0	5.9	5.6	3.2	2.4	-0.9
Hong Kong, China	5.0	4.5	5.3	9.3	6.3	5.9	1.6	2.2	6.5
PRC	10.7	9.6	8.8	11.3	8.3	2.8	-1.0	-0.8	-0.7
Taipei,China	6.4	5.7	6.8	3.8	3.1	0.9	-5.0	-6.6	-6.3

Economy	Savings/GDP			Investment/GDP			Current Account/GDP		
	1990-1995	1996	1997	1990-1995	1996	1997	1990-1995	1996	1997
Korea	35.6	33.7	33.1	36.8	38.4	35.0	-1.2	-4.7	-1.8
Indonesia	31.0	27.3	29.9	31.3	30.7	31.3	-2.5	-3.4	-1.4
Malaysia	36.6	42.6	43.8	37.5	41.5	42.0	-5.8	-5.0	-5.3
Philippines	16.6	18.5	20.3	22.4	23.1	23.8	-3.7	-4.7	-5.3
Singapore	47.0	51.2	51.8	34.9	35.3	37.4	0.6	15.4	15.4
Thailand	34.4	33.7	32.9	41.0	41.7	35.0	-3.9	-7.9	-2.0
Hong Kong, China	33.6	30.7	31.8	29.6	32.1	35.4	—	—	—
PRC	40.8	40.5	41.5	38.8	39.6	38.2	1.2	0.9	3.2
Taipei,China	26.9	25.1	24.8	24.0	21.2	22.0	4.2	4.0	2.7

— Not available.

GDP Gross domestic product.

PRC People's Republic of China.

Sources: Statistical Appendix Table Nos. A1, A7, A8, A9, A16, and A23.

prevent such a destructive bank run by acting as lender of last resort and providing liquidity to the market. However, in the international version of a bank run, if a country's exchange rate is fixed and foreign exchange reserves are limited in relation to short-term external debt, as was the case in some Asian crisis-affected countries, no mechanism for stemming panic is available. In Indonesia, Korea, and Thailand short-term external debt exceeded international reserves immediately before the crisis (see table 1.3), and indeed, for more than two years prior to the crisis.

Economic fundamentals, such as inflation, unemployment, and the budget deficit, are unimportant in this interpretation, although fears about economic weaknesses might cause the initial investor shift from optimism to pessimism. What matters is the maturity structure and currency denomination of external and internal debt. If, for instance, a large proportion of a country's debt is denominated in foreign currency and is of a short maturity, as it was in much of Asia, the risks of a crisis arise.

#### Which Explanation Fits Asia Best?

At first sight, the past stellar economic record of the Asian economies does not support the fundamentalist interpretation. However, closer inspection clearly shows that these countries' economic success was built on a particular kind of economic strategy that emphasized export orientation, centralized coordination of production activities, and implicit (or even explicit) government guarantees of private investment projects, as well as a close operational relationship and interlinked ownership between banks and firms. Widely referred to as Asian industrial policy, this strategy allowed firms to rely heavily on bank credit. By international standards, firms in crisis-affected countries were extraordinarily highly leveraged. In Korea and Thailand, for instance, the average debt-to-equity ratios in 1996 were above 200 percent. In Hong Kong, China; Indonesia; and the Philippines debt-to-equity ratios were lower, but nevertheless high by international standards (see table 1.4).

The financial sector was also exhibiting significant problems. Weak prudential regulation, lax and inexperienced supervision, low capital adequacy ra-

**Table 1.3 Short-Term External Debt and International Reserves Prior to the Crisis, Selected Asian Economies, Second Quarter of 1997**

<i>Economy</i>	<i>Short-term debt (\$ billions)</i>	<i>International reserves (\$ billions)</i>	<i>Debt-reserve ratio</i>
<i>Korea</i>	70.18	34.07	2.06
<i>Indonesia</i>	34.66	20.34	1.70
<i>Malaysia</i>	16.27	26.59	0.61
<i>Philippines</i>	8.29	9.78	0.85
<i>Singapore</i>	196.60	80.66	2.44
<i>Thailand</i>	45.57	31.36	1.45
<i>Taipei, China</i>	21.97	90.02	0.24

*Sources: Short-term debt: Bank for International Settlements data; reserves: IMF (1998a); staff estimates.*

tios, lack of adequate deposit insurance schemes, distorted incentives for project selection, and sometimes outright corruption all rendered the region's financial systems weaker than they appeared.

For many years, most Asian economies kept their financial systems relatively closed. Foreign borrowing was limited and capital inflows were controlled. These controls ensured that the region's financial sectors remained immune from external shocks despite their domestic fragility. Most important, controls prevented domestic fragility from being translated into external vulnerability in the form of short-term, unhedged foreign debt. This changed during the 1990s. As international capital markets were gradually opened and domestic markets were deregulated, supervision and regulatory oversight did not improve in tandem. For example, Thailand's now infamous finance companies grew rapidly during the 1990s with virtually no regulatory oversight.

The 1990s also saw a dramatic increase in foreign borrowing. While Asian companies maintained their strong bias in favor of debt financing, foreign debt financing became increasingly important (see table 1.5 for corporate debt composition in selected Asian economies in 1996). The pegged exchange rate elimi-

**Table 1.4 Selected Indicators  
of Corporate Financing,  
Selected Asian Economies, 1996**

Economy	Debt-to-equity ratio		Ratio of short-term debt to total debt	
	Mean	Median	Mean	Median
Hong Kong, China	1.56	1.42	0.60	0.64
Indonesia	1.88	1.83	0.54	0.57
Japan	2.21	1.92	0.58	0.59
Korea	3.55	3.25	0.57	0.59
Malaysia	1.18	0.90	0.64	0.70
Philippines	1.29	0.93	0.48	0.49
Singapore	1.05	0.81	0.58	0.59
Taipei, China	0.80	0.74	0.59	0.61
Thailand	2.36	1.85	0.63	0.67

Note: Data are derived from a sample of 5,550 Asian firms.

Source: Claessens, Djankov, and Lang (1998).

**Table 1.5 Corporate Debt Composition,  
Selected Asian Economies, 1996  
(percent)**

Economy	Foreign debt		Domestic debt	
	Short-term	Long-term	Short-term	Long-term
Indonesia	20.5	19.6	31.4	28.5
Korea	29.4	17.0	27.7	25.8
Malaysia	32.1	11.0	35.7	21.2
Philippines	19.7	21.3	25.5	33.5
Taipei, China	22.3	19.2	23.9	34.6
Thailand	29.6	12.3	32.0	26.1

Note: Data are derived from a sample of 5,550 Asian firms.

Source: Claessens, Djankov, and Lang (1998).

nated exchange risks in borrowing in dollars. At the same time international investors were falling over themselves to lend: interest rates in the industrial countries were low, prompting a search for higher yields elsewhere, and optimism about Asia's prospects was high. Between 1991 and 1996 overall borrowing doubled in Malaysia and Thailand and grew by one third in Korea (World Bank 1998a). The fundamentalist interpretation of the crisis links this extraordinary optimism among foreign investors to their belief that the borrowing was ultimately guaranteed, either by Asian governments or by international institutions. The panic interpretation regards the optimism as rational, based on the correct judgment that these economies were fundamentally sound.

Although specific characteristics varied, a pattern of increasing vulnerability to external shocks emerged in all the region's economies prior to the crisis. First, short-term borrowing to finance long-term projects became increasingly important, especially in Korea, Malaysia, and Thailand. This created a sizable maturity mismatch in the balance sheets of domestic

financial institutions. Second, domestic banks lent to domestic firms in local currency, while borrowing short term in foreign currencies without hedging. This created a significant currency denomination mismatch. Third, the easy availability of credit fueled investment in increasingly risky assets. In some countries the credit boom was translated into bubbles in real estate and property. In other countries financial resources were directed toward overinvestment in narrowly specialized industries such as electronics or large, prestigious projects with unclear benefits. These poor and risky investments, in turn, worsened the quality of the portfolios of domestic financial institutions, thereby increasing the risk of panics and subsequent crises.

At the same time, several factors combined during the 1990s to worsen the fundamental economic outlook for the region. The rapid appreciation of the US dollar since 1995, to which most of the region's currencies were pegged in some way; the increasing competition from the People's Republic of China (PRC) in export markets; and the prolonged slowdown of the Japanese economy were all reflected in slower export growth, rising current account deficits, depressed stock markets, and widespread corporate difficulties long before the outbreak of the crisis. In 1996,

for instance, 20 of the largest 30 Korean conglomerates had rates of return below the cost of invested capital, and in the first months of 1997, 7 of the 30 largest conglomerates were effectively bankrupt.

As these financial difficulties emerged, some governments played an increasingly active role in reassuring international investors about their willingness to back domestic financial firms. A case in point is the collapse of the large Thai finance company, Finance One. In the months preceding the crisis, the Bank of Thailand repeatedly confirmed to foreign investors its willingness to “back Finance One all the way” (*Financial Times* 12 January 1998).

In the first half of 1997, despite the worsening financial environment, capital inflows did not slow down, but increasingly took the form of short-term, interbank loans that could be readily withdrawn and could count on formal guarantees in the interbank markets. However, once the crisis began, international banks suddenly stopped lending and began to call in their loans. A huge amount of private foreign capital fled the region in the second half of 1997. Between them, Indonesia, Korea, Malaysia, Philippines, and Thailand received a net capital inflow of about \$76 billion in 1996, but suffered a net capital outflow of around \$36 billion in 1997. This implies a difference of approximately \$112 billion, or about 12 percent of the countries’ combined gross domestic product (GDP). Commercial banks withdrew about \$26 billion from the crisis-affected countries in 1997, after lending them about \$63 billion in 1996.

The suddenness and speed with which capital fled the region in the second half of 1997 gives credence to the panic interpretation of the crisis. However, as this section has shown, it was the region’s structural weaknesses that initially created the vulnerability to crisis.

#### **Academic Theories of Currency Crises**

The competing interpretations of Asia’s crisis are mirrored in debates between academic economists. Economists have developed an entire literature that tries to analyze currency crises using formal models. These models of currency crises fall into two broad categories, appropriately called “first generation” and “second generation” models.

First generation models (also known as exogenous policy models) show how fundamentally inconsistent domestic policies lead an economy inexorably toward a currency crisis. In the most popular version of this model, a currency crisis in a country with a fixed exchange rate is caused by an excessively large budget deficit. To finance the budget deficit, the government prints money. At the same time, the central bank is committed to defending the exchange rate; however, it can only do so as long as it has the necessary foreign exchange reserves. As the government continues to print money to finance the budget deficit, reserves will fall because the private sector is willing to hold all the new money the government prints, and therefore exchanges some local currency for foreign currency. At some point a currency crisis occurs. The analysis does not focus on predicting whether or not the currency will collapse—because eventually it certainly will—but on the timing of a speculative attack on the currency. Deteriorating economic fundamentals and inconsistent policies are the cause of the crisis.

By contrast, second generation models (also known as endogenous policy models) stress that a currency crisis can occur even when macroeconomic policies are apparently consistent with a fixed exchange rate policy. These models show how a spontaneous speculative attack on a currency can cause a crisis, even if fiscal and monetary policies are consistent. In these models, rational governments choose their macroeconomic policies and choose whether or not to retain a fixed exchange rate on the basis of a calculus of costs and benefits. The benefits of maintaining a fixed exchange rate include reduced inflationary pressure and a stable environment that facilitates trade and investment. The costs of a fixed exchange rate can include high interest rates and high unemployment (if wages are rigid).

Self-fulfilling expectations play an important role in this model. If the public does not believe that a government will maintain its fixed exchange rate, then domestic bondholders will demand a higher interest rate in anticipation of a currency devaluation. Labor unions might demand higher wages, thereby rendering domestic industries uncompetitive. Such actions would raise the government’s costs of maintaining a fixed exchange rate, encouraging it to abandon the

peg. The public's concern about a devaluation would become a self-fulfilling prophecy.

The second generation models do not imply that every country can be a victim of speculative attacks. Countries are only vulnerable when economic fundamentals—such as foreign exchange reserves, the government's fiscal situation, and the political commitment to defend the peg—are sufficiently weak. When a country's fundamentals are obviously strong, a crisis will not occur. When they are extremely weak, it will certainly occur. In between a currency peg might survive, or it might fall victim to a speculative attack. Box 1.4 explains the logic behind such sudden losses of confidence.

The fundamentalist interpretation of Asia's crisis is closely related to the first generation of currency models. The implicit (and later explicit) government guarantees to failing banks implied a large fiscal burden to Asian governments. To the extent that such a rising fiscal burden raised the likelihood that governments would eventually resort to printing money to finance growing deficits, the currency crisis is exactly what first generation models would predict. The panic interpretation of the crisis is derived from the second generation models. These models underscore the idea that a regime of fixed exchange rates that is not perfectly credible is intrinsically unstable and subject to sudden swings in market sentiment.

**POLICY RESPONSES TO THE CRISIS:  
AN OVERVIEW OF THE DEBATE**

The principal responsibility for dealing with the Asian crisis at an international level was assumed by the IMF, the institution charged with safeguarding the stability of the international financial system. The IMF's goal was to quickly restore confidence in the three hardest hit Asian economies—Indonesia, Korea, and Thailand—through a combination of tough economic conditionalities and substantial financial support. In 1997 the IMF approved \$35 billion of loans for these countries, and in addition, mobilized commitments worth \$77 billion from the Asian Development Bank (ADB), the World Bank, and bilateral sources. In 1998 the IMF arranged further loans worth \$6.3 billion for Indonesia.

The IMF's economic strategy had two key components. The first, in keeping with its usual practice,

concentrated on macroeconomic policy, the main component of which was to be tighter monetary policy. Higher interest rates were designed to defend exchange rates, and so stem (or reverse) the capital outflows. Modestly tighter fiscal policy was designed to support current account adjustment and provide the funds that would be necessary to bail out sick banking systems. The second, complementary, component of the strategy was substantial structural reform. The IMF demanded deep reform of the region's banking systems, the breakup of monopolies, the removal of barriers to trade, and substantial improvements in corporate transparency. This marked a significant departure from past IMF practice, when conditionalities had been more closely confined to macroeconomic policies alone. The IMF saw the structural reforms as essential for a long-term solution to Asia's financial crisis.

Both components of the IMF's strategy have come under heavy fire. Some critics have gone so far as to argue that the policies the IMF initially imposed, far from ameliorating the situation actually made the region's problems worse. Not surprisingly, such accusations have led to a vigorous defense of its actions by the institution and its supporters.

Two difficulties plague any evaluation of the IMF's policies. The first is the insoluble problem of the counterfactual. Knowing precisely what would have happened if the IMF had adopted a different approach is impossible. The second difficulty is that the IMF's targets and tactics changed over time. As the situation in Asia progressively worsened, the IMF eased its approach and required less fiscal contraction. In Indonesia, for instance, it relaxed its initial requirement of a budget surplus in 1997 to allow for a sizable budget deficit. Similar, if less dramatic, relaxation occurred in the cases of Korea and Thailand. The crucial question is whether these changes in policy were an implicit admission of initial misjudgments by the IMF, or whether they simply represented a flexible response to changing conditions.

**Did Tight Monetary Policy and High  
Interest Rates Exacerbate the Crisis?**

In crisis-affected countries, the IMF recommended a sharp increase in interest rates to restore confidence, stem capital outflows, and stabilize the currency. The

**Box 1.4 The Logic behind Confidence Crises**

The logic of self-fulfilling, speculative attacks and bank runs can be illustrated by a simple example. Suppose that a country pursues a fixed exchange rate, but its monetary authorities have only 10 units of international reserves to defend the exchange rate. For simplicity, suppose that before the speculative attack, 1 unit of domestic currency is exchanged for 1 unit of foreign currency. There are two identical agents (or speculators) who can attack the currency. Each can use at most 6 units of domestic currency. Thus no agent alone can deplete the international reserves of the country and force the central bank to abandon the defense of the peg. Nonetheless, the stock of reserves is low enough to make the country vulnerable to a joint speculative attack by both agents.

Attacking the currency involves a fixed cost equal to 1 unit of domestic currency. Clearly, if one of the agents decides to attack, the payoff will depend on the behavior of the other agent in the economy. Alone, and therefore unsuccessful, attack is costly to the agent. Conversely, a joint attack will yield a net payoff equal to the amount of reserves that each agent can buy at the existing exchange rate—say half the central bank's stock of reserves—times the size of the devaluation, minus the fixed cost. For an exchange rate depreciation to take place, there must be a sufficiently large speculative movement in the foreign exchange market. The size of the depreciation, of course, depends on underlying economic fundamentals.

The figure shows the agents' possible payoffs, expressed in units of domestic currency. Each cell reports the payoff from the various combinations of the two actions the agents can take, that is, whether or not to attack the currency. If both

agents decide to attack the currency and the currency is devalued by 60 percent, then the net payoff to each agent (that is, the payoff after paying the transaction cost) is 2 units. If the attack is unsuccessful, the speculating agent ends up with a net payoff of -1 unit. The figure shows that two outcomes are likely as follows:

- If one agent attacks the currency, it also pays the other agent to attack, as both will make net payoffs of 2 units. Thus one possible outcome is a simultaneous speculation leading to a collapse of the currency. (This is shown in the upper left-hand cell of the diagram.)

- By the same logic, if one agent does not attack the currency, then it does not pay the other agent to speculate, as this would merely give the latter a net loss of 1 unit. In other words, the attacking agent would simply incur the fixed cost. (These are the cases shown in the bottom left-hand and the upper right-hand cells.) Thus, the outcome would be no attack on the currency (the bottom right-hand cell).

Consequently, the actual outcome depends on whether or not the agents coordinate their expectations. Note that in both cases discussed above, the fundamentals—the size of the international reserves, the “firepower” available to the agents, and the size of the devaluation when the peg is abandoned—are the same.

**Agent II**

		<b>Agent II</b>	
		<b>Attack</b>	<b>Not attack</b>
<b>Agent I</b>	<b>Attack</b>	<b>Agent I gains 2 Agent II gains 2</b>	<b>Agent I loses 1 Agent II gains 0</b>
	<b>Not attack</b>	<b>Agent I gains 0 Agent II loses 1</b>	<b>Agent I gains 0 Agent II gains 0</b>

This provides a simple example of how an otherwise sustainable currency peg can be vulnerable to self-fulfilling speculative attacks. Note that in this example, no attack would ever take place if the international reserves in the central bank were more than 12 units (so that the firepower of the speculator would be relatively low), while the currency would certainly collapse if international reserves were less than 6 units. However, neither this example nor the more sophisticated economic literature provide any explanation of how agents coordinate their decisions, nor do they explain the factors that swing market confidence.

More important, for a given state of fundamentals, the likelihood of a speculative attack increases if information is incomplete. In this environment, even news events that are unrelated to economic fundamentals can shift agents' expectations and help trigger speculative attacks (the trouble in the province of Chiapas before the 1994 Mexico crisis is a case in point). The theory reaches the important conclusion that more information, or greater transparency, decreases the likelihood of a self-validating crisis, and thus ensures currency and financial stability.

Sources: Morris and Shin (1998); Obstfeld (1996).

IMF maintained that because of the time needed for other (structural) reforms to take hold, the only way to stabilize a crisis situation quickly was to raise interest rates with sufficient resolve.

Critics of the IMF argue that this approach was misconceived and counterproductive. They point out that high interest rates forced highly leveraged corporations into bankruptcy. Widespread bankruptcies in the corporate sector led to bank insolvencies as the banks' corporate customers failed to repay their loans. These bankruptcies weakened the financial system and encouraged capital flight, and thus caused a further decline in the exchange rate. All this had a tremendous negative impact on the real sector of the economy. Given this negative spiral, the critics claim that a more appropriate policy response to the crisis would have been a looser monetary policy, that is, a fall rather than a rise in interest rates. Lower interest rates would have made it easier for firms to maintain production, thereby restoring investors' confidence that the economy would recover quickly, and would thus have caused currencies to appreciate. That would have created a virtuous circle. Many of the critics point out that Japan followed just such a policy when dealing with its domestic crisis.

The IMF, however, feared that a lower interest rate policy would cause a vicious downward spiral. As currencies plummeted, so the real burden of debt denominated in foreign currency would rise. Because the Asian firms had high leverage ratios, a much higher foreign debt burden could have forced insolvencies and caused even larger collapses in production. Unlike Japan, which is a net foreign creditor, the size of foreign debts was a much greater concern in Asia's crisis-affected countries.

Some of the critics who advocated lower interest rates to reflate the domestic economy and relieve the financial situation of heavily indebted firms acknowledge that a lower interest rate might not have strengthened the exchange rate or brought back departed capital. In that case, the only remaining alternative would have been for countries to suspend service on their external debts and impose exchange control measures. Such actions could have had an extremely detrimental and long-lasting effect on the countries' ability to access international capital markets. With the exception of Malaysia, which imposed

selected exchange controls in September 1998, this option was not pursued.

Available empirical evidence does not necessarily support the view that interest rates were persistently high. Indeed, several of the crisis-affected countries pursued low interest rate policies well into the crisis. Despite continued worsening of the foreign exchange market, Korea maintained official ceilings on interest rates through December 1997, and Indonesia reduced its interest rates in September 1997 as the rupiah was declining. The real interest rate in Indonesia remained negative until mid-1998. Malaysia, another country that was affected by the crisis but did not seek IMF assistance, waited until December 1997, when its currency value had fallen by 40 percent, before it tightened its monetary policy. Supporters of the IMF's position further point to Indonesia as an example of the disastrous consequences of loose monetary policy. Indonesia manifestly failed to tighten its monetary policy in late 1997. The result was a collapse in the exchange rate, galloping inflation, and the bankruptcy of much of the corporate sector. Korea and Thailand, which eventually adopted a tight monetary policy—even though it was not extremely tight in degree or duration in relation to that in other countries elsewhere outside Asia in the past that were faced with exchange rate instability—succeeded in stabilizing their economies. In these economies interest rates began to fall during 1998 while exchange rates strengthened. Moreover, a recent IMF analysis (IMF 1999) indicates that the costs of tighter monetary policy may have been lower than many suggest. It estimates that in Korea and Thailand, the effects of the monetary tightening may account for less than a quarter of the expected decline in economic growth rates between 1997 and 1998.

#### **Did the IMF Force Unnecessary Fiscal Adjustment?**

Unlike many other crises that have required IMF intervention, the Asian crisis was not caused by profligate government spending. Thus fiscal imbalances were not a major concern in the initial IMF programs. Nonetheless, the IMF's approach in the crisis-affected countries was to demand a tightening of fiscal policy based on two arguments. First, it argued that in the

presence of rapid capital flight these countries needed to reduce domestic demand in order to reduce their current account deficits. Tightening fiscal policy was an effective way to do this. Second, and more subtle, was the argument that government spending needed to be cut to make room for the expected expenditure necessary to bail out insolvent banks. Some estimates suggest that the cost of bailing out financial institutions in some crisis-affected countries could eventually reach 20 to 30 percent of GDP, which under reasonable assumptions about the interest rate would entail an annual cost of about 3.0 to 3.5 percent of GDP (see table 1.6). Eventually, the Asian economies would need to run budget surpluses high enough to cover this cost. Therefore beginning a modest tightening of fiscal policy early on was prudent.

Critics, however, claim that the fiscal tightening simply exacerbated the enormous economic contraction that was already taking place in the region. In the face of collapsing output, they argue, fiscal expansion, that is, a small budget deficit, would have been more appropriate. Even if the region's economies needed to run surpluses over the long run to pay for their banking bailouts, worsening a severe recession with immediate fiscal tightening was unnecessary. In short, they charge, the IMF failed to gauge the sever-

ity of the crisis and the fiscal conditions it imposed made matters significantly worse.

This is an easy criticism to make with hindsight. Clearly the fact that the IMF relaxed its fiscal targets over time suggests that its priorities changed as the region's economic outlook worsened. However, it is hard to blame the IMF for failing to gauge the depth and likely persistence of the region's problems. Few policymakers or commentators foresaw the depths of the crisis.

Even if running a looser fiscal policy had made more sense for Asia's governments, fiscal flexibility was severely constrained by the lack of access to international credit at reasonable rates. If international institutions and industrial countries made more liquidity available, Asian countries' fiscal flexibility would improve significantly.

#### Did the Closure of Insolvent Banks Precipitate Runs on Solvent Banks?

Given the parlous state of the financial sector in the crisis-affected countries, there is little doubt that many banks in Indonesia, Korea, and Thailand needed to be restructured, merged, or simply closed. The IMF believed that speedy and concerted action in this direction would, by weeding out the bad financial apples, help restore investors' confidence. In all three countries, therefore, the operations of a number of clearly insolvent financial institutions were suspended or the institutions were closed early on. In Thailand 58 finance companies were suspended in July and August 1997, in Korea 14 merchant banks were suspended in December 1997, and in Indonesia 16 banks were closed in November 1997.

The IMF's critics charge that this abrupt closure of insolvent banks panicked the public and precipitated a run on sound banks. Concerned that their banks might be closed next, depositors withdrew their money from healthy banks in a classic banking panic. Although only Korea had a formal deposit insurance scheme prior to the crisis, the general perception in all three countries was that government guarantees covered most of the deposit base. When this perception turned out to be false, panic ensued.

Indonesia is the most dramatic example of this. The closure of 16 banks—which between them con-

**Table 1.6 Cost Estimates by the IMF  
of Bank Restructuring in Asia,  
Selected Asian Economies  
November 1998**

Economy	Debt issues		Interest payments	
	\$ billions <sup>a</sup>	Percentage of GDP	\$ billions <sup>a</sup>	Percentage of GDP
Indonesia	40.0	29.0	5.4	3.5
Korea	60.0	17.5	6.4	2.0
Thailand	43.0	32.0	4.0	3.0
Malaysia	13.0	18.0	0.9	1.3
Philippines	3.0	4.0	0.3	0.5

a. At the exchange rate of 30 November 1998.

Sources: IMF (1998b,e).

tained less than 3 percent of total deposits—led to a near collapse of the entire banking system as investors switched funds from private banks to the state banks, which they considered to be safer. Thus, the critics argue, the IMF's policy made matters much worse.

Clearly in Indonesia the decision to close banks did precipitate a public panic. However, the IMF's supporters argue that the lack of clear government policy caused the panic, not the bank closures themselves. The Indonesian government promised only a small deposit guarantee, did not publicize it widely, and did not explain publicly how depositors in banks that had not yet been closed would be treated. Similarly, the IMF's defendants point out, the closure of banks in Korea and Thailand did not result in such severe runs. That is true, but it is also true that the financial institutions that were closed in these countries were mainly merchant banks that did not take personal deposits.

#### Was the IMF too Intrusive?

Some critics question the IMF's insistence on far-reaching structural reforms in Asia's economies. They have suggested that the IMF went well beyond its mandate of ensuring prudent macroeconomic policies. Instead it was intervening excessively in the domestic affairs of sovereign governments by demanding large-scale restructuring in the corporate and financial sector, as well as improvements in governance, labor markets, and competition policy.

The IMF's proponents argue that this critique does not sit well with the facts of the Asian crisis. If reckless monetary and fiscal expansion was not at the root of the Asian financial crisis, as those who view the IMF as being too intrusive also accept, devising a response focusing on these areas made no sense. However, if, as is widely acknowledged, structural weaknesses in corporate governance and the financial system lay at the core of Asia's problems, then the IMF's loan programs would have had little chance of success if they had not addressed structural reform. Providing large-scale financial assistance to support the region's currencies would have been irresponsible if the root cause of the problem was left unaddressed. Continued financial and corporate weakness would have undermined macroeconomic policy, investors

would have continued to flee, and the IMF's ultimate goal—a quick return to economic growth—would have been impossible. The IMF's demands were intrusive, but necessary.

#### Did IMF Bailouts Increase

##### Global Moral Hazard?

While much of the criticism directed at the IMF has focused on its strategy in Asia, some criticize the very existence of IMF support. This argument is based on the concept of moral hazard. Moral hazard implies that investors and borrowers behave imprudently because they believe they will be bailed out if their investments go sour. IMF loans, argue some critics, exacerbate moral hazard in two ways: they absolve governments from the consequences of profligate policies, thereby encouraging them to continue the profligacy in the future, and they reward reckless investors. Because the IMF's loans to the crisis-affected Asian countries were unusually large, the critics argue that they set a dangerous precedent that will increase moral hazard worldwide.

Although multibillion dollar support packages clearly run some risk of changing investors' incentives, three reasons support the view that the critics have exaggerated the moral hazard argument. First, most investors in Asia, whether foreign or domestic, suffered substantial losses. Typical investors in Asia have seen the value of their investments reduced to a third or a quarter of their precrisis value. Second, it is hard to believe that governments relish the tough conditions the IMF imposes on them. Many governments that turn to the IMF later lose power, as they are forced to implement politically unpopular changes. Third, the costs of not intervening in Asia's crisis would have been extraordinarily high. Investors would have fled even more quickly, countries would have been forced to default on their debts, and the region (and perhaps the world) could have been plunged into an even more serious crisis.

#### THE NEXT STEPS

As the region's economies began to stabilize during 1998, the full impact of the crisis on corporate and banking sectors gradually became apparent. Large

parts of the corporate and financial sectors in the crisis-affected countries were either insolvent or in deep financial trouble. Statistics provided by private sector analysts paint a considerably gloomier picture than official estimates. Analysts at the Deutsche Bank, for instance, have estimated that the ratio of nonperforming loans to total loans is as high as 60 percent in Indonesia and is above 30 percent in PRC, Korea, Malaysia, and Thailand (Deutsche Bank Research various issues). At these levels, if nonperforming loans were written off against bank capital the net worth of the whole banking system would be negative. To recapitalize these banks in order to reach the minimum 8 percent capital adequacy ratio recommended by the Basle standards would cost between 20 and 30 percent of GDP (World Bank 1998d).

A simulation analysis on the effect of the devaluation and of credit and interest rate shocks undertaken by the World Bank (1998a) shows that on average, firms in the crisis-affected countries lost about half of their equity value. One firm in three had loans that exceeded its equity value. Given these figures, it is clear that improving the health of the financial and corporate sectors must be a top priority across the region.

The need to restore the appropriate conditions for viable financial institutions and firms to operate normally as quickly as possible dominates the short-run agenda. That means drawing a distinction between viable and nonviable firms; restructuring domestic and foreign debt; allocating losses between creditors, debtors, and taxpayers; and reorganizing corporate control, in particular, through mergers and acquisitions.

Exactly how these various steps occur will depend crucially on each country's legal and regulatory framework. Both financial and corporate restructuring involve many complex issues. The World Bank (1998a) lists four principles for bank restructuring. First, only viable institutions should stay in business, and losses should be allocated transparently while minimizing the cost to taxpayers. Second, financial discipline should be strengthened and moral hazard minimized by ensuring that shareholders take losses first, followed by creditors, and only lastly by deposit holders. Third, the restructuring process should maintain credit discipline on existing borrowers and pro-

vide incentives for new investors to provide fresh capital to the bank. Fourth, the restructuring process should be speedy, to restore normal credit flows and confidence in the banking system quickly.

So far, the crisis countries have had varying success in financial restructuring. Most have introduced legislation to strengthen prudential regulation and improve banking supervision. Throughout the region, disclosure requirements, auditing standards, loan classification, and provisioning rules are being improved. All the crisis countries have created financial restructuring institutions, such as the Indonesian Bank Restructuring Agency and the Thai Financial Sector Restructuring Authority. All have provided substantial public money for bank recapitalization, and all have closed down some insolvent institutions. Nonetheless, they still have a long way to go before their financial sectors are fully restructured.

Unfortunately, progress in corporate restructuring has been much slower than in the financial sector. The region's firms are heavily indebted both to local banks, and in some cases to foreign banks. In Indonesia, in particular, corporate foreign debt is huge, though virtually all firms have stopped servicing their debt. Corporate indebtedness is slowing down production and investment dramatically (because insolvent firms cannot borrow), and it is also preventing a speedy solution to the region's financial restructuring (because most banks' loans are to local firms).

However, corporate restructuring in the region is plagued with problems. Most important is the weakness of bankruptcy law and its enforcement. Even though the crisis-affected countries have revamped their bankruptcy laws in the past year, they do not have enough trained people to implement them. Second, the sheer logistics of restructuring hundreds of companies are formidable. Although some of the region's governments have promoted voluntary debt restructuring between firms and banks—by, for instance, removing tax disincentives and legal barriers—few formal institutions to organize corporate restructuring exist.

The sentiment that existing shareholders should lose control of the firms is widespread. However, some argue that such a view skirts two important considerations. First, insiders possess knowledge specific to the firm, and removing them would remove an important

asset of the firm. Second, the crisis-affected countries face a shortage of domestic equity capital. As banks are largely in public hands, surrendering corporate control to creditor banks would be equivalent to nationalization. These concerns may be exaggerated, but experience suggests that reforming corporate governance is a long and difficult process, strongly opposed by those currently in control. Because existing owners have better information, and often strong political ties, dramatic and rapid corporate restructuring is unlikely.

Slow corporate restructuring has negative implications for the cost and sustainability of financial sector restructuring. As most financial sector assets are corporate liabilities, the existence of insolvent firms undermines the rationale for injecting new capital into banks. There is little justification for propping up banks if their debtors are all bankrupt. The result may simply be more fiscal transfers to cover new losses later on. In this respect, unfortunately, the experience of Mexico and Eastern Europe is not particularly encouraging. There bank restructuring took longer and cost the taxpayer more than anyone had envisaged.

#### STRENGTHENING THE INTERNATIONAL FINANCIAL ARCHITECTURE

The severity of Asia's financial crisis, the speed with which it spread, and the shortcomings of the international response have all contributed to a wide-ranging debate on the basic rules and institutions that govern global finance. How can this global financial architecture be improved so that crises can be avoided and can be better managed when they do occur?

#### Background

Recent efforts to improve the global financial architecture began at the Halifax Summit of the G7 leaders in 1995. In the wake of Mexico's financial crisis, policymakers already felt that global institutions and rules needed to be updated to cope with a modern world of integrated capital markets. The existing Bretton Woods architecture had originally been designed for a world where capital mobility was limited (box 1.5). Even though it had evolved over the years, financial markets had changed far more profoundly.

As official discussions on an international financial architecture have proliferated since 1995, so an increasing number of organizations have become involved (box 1.6). In addition, a number of individual academics and other commentators have put forward their own reform proposals. The result is a plethora of ideas. However, few concrete changes have occurred. This is partly because international institutions and policymakers have been preoccupied with the immediate task of crisis management, but mainly because the issue of international financial reform is extraordinarily complex.

US Deputy Secretary of the Treasury Lawrence Summers recently referred to the "integration trilemma" (Summers 1999). He noted that in the years ahead the central task of international political economy will be to reconcile as well as possible the three goals of greater integration, proper public management, and national sovereignty. In effect, policymakers would like the international financial system to fulfill a number of goals. They would like to foster capital market integration, they would like international financial markets to be regulated and supervised just as national markets are regulated and supervised, and they would like to maintain national sovereignty. Unfortunately, these three goals are incompatible: maintaining national sovereignty in a world of free capital means forfeiting market regulation and support. Conversely, to create regulations and a lender of last resort at the international level implies overriding national sovereignty. The only way that a country can regulate and support its financial markets while maintaining national sovereignty is by controlling capital flows.

This incompatibility of goals is particularly striking in the area of exchange rate management. Policymakers want the benefits of capital market integration, they want exchange rate stability, and they want each country to be able to pursue its own macroeconomic policy. Unfortunately, these three goals are at odds. They form what economists Obstfeld and Taylor (1998) have called the "open economy trilemma."

To understand why, consider figure 1.8. Each corner of the triangle represents one of the policymakers' three goals, and each side of the triangle indicates a possible regime. "Adjustment" means

### Box 1.5 The Existing Bretton Woods Financial Architecture

The IMF and the World Bank were set up at the Bretton Woods Conference in 1944 to prevent a repeat of the international financial problems that had occurred during the Great Depression. The IMF was to oversee the Bretton Woods system of fixed exchange rates and the World Bank was to provide capital for postwar reconstruction, and later for projects in developing countries. Plans for a third institution, the International Trade Organization, founded in 1947 when the US Congress refused to accept it. In its place, the “provisional” General Agreement on Tariffs and Trade took on the role of reducing international trade barriers through a series of eight multilateral negotiating rounds. Eventually, on 1 January 1995, the World Trade Organization came into existence.

The World Bank’s goal was to provide foreign exchange and technical assistance for development projects, particularly physical infrastructure such as bridges and dams. During the past 50 years its role has broadened to include virtually all aspects of the

development process. Later a number of regional banks were founded, including the ADB. Their regional proximity and smaller size led them to be more innovative in some respects.

The IMF oversaw the Bretton Woods exchange rate regime. The aim of the Bretton Woods system was to enable countries to achieve full employment and balance-of-payments equilibrium simultaneously. Temporary deficits were to be covered from a country’s own reserves and, if necessary, by loans from the IMF. Only fundamental balance-of-payment problems, that is, ones that could not be corrected without excessive unemployment or inflation, were to be corrected by exchange rate changes. The IMF’s Articles of Agreement called for convertibility of current account transactions only. Article VI, section 3, gives members the right to apply controls on capital flows. In 1997 the Interim Committee—the advisory body that oversees the IMF—recommended that the Articles of Agreement be amended to extend jurisdiction to issues relating to orderly liberalization of capital markets.

The Bretton Woods system depended on countries’ willingness to hold their reserves in US dollars. This, in turn, was conditional on their expectation that they could convert dollars into gold at a fixed price. In the mid-1960s, as US inflation rates rose, partly because of the cost of the Viet Nam War, confidence in the dollar’s convertibility began to erode. The system collapsed after President Nixon abandoned the US dollar’s convertibility in 1971 and the fixed exchange rate regime broke down.

After the breakdown of the Bretton Woods regime, the IMF formally began to oversee the new “system” of floating exchange rates. In practice, its focus moved to the developing world. It played a central role during the debt crisis of the 1980s, coordinating lender banks and providing adjustment finance. In the 1990s it has assisted formerly communist economies in their transition to market economies and has played a central role in combating financial crises.

that a country can pursue independent macroeconomic policies. If the economy is slowing down, for instance, the country can adjust by reducing interest rates. “Confidence” denotes the ability to protect exchange rates from destabilizing speculation. With confidence, trade and investment flows are encouraged. “Liquidity” refers to the ability to borrow money from abroad through the free flow of capital. For countries to have this liquidity, international capital flows must be free. Unfortunately, it is only possible to achieve two of these goals at once.

Suppose a country wants a stable exchange rate as well as liquidity (that is, free access to international

capital). To achieve these goals it must either establish a currency board or join a monetary union. That, in turn, means giving up the policy independence associated with a flexible exchange rate. In a world of freely mobile capital, fixed, but adjustable, exchange rate pegs are unsustainable, because they would immediately be tested by currency speculators. The only way a country can maintain confidence (currency stability) and adjustment (the ability to run an independent macroeconomic policy) is by restricting capital flows. That was the combination chosen by policymakers under the original Bretton Woods regime. For the first 25 years after the Bretton Woods agreement, the glo-

**Box 1.6 Too Many Architects Spoil the Blueprint?**

At the last major restructuring of the international financial system in 1944—the Bretton Woods Conference—all the major participants were comfortably housed in a single rural hotel in New Hampshire. The views of just two people, John Maynard Keynes representing the United Kingdom and Harry Dexter White for the United States, dominated the conference. A comparable conference today would probably need every hotel room in a medium sized American city. With so many different agendas and vested interests, discussion on any proposals (if, indeed, any agreement could be reached) would take far longer than the deliberations at Bretton Woods.

Today a number of official groups are involved, all of which have their own ideas on how to proceed. The best known of these is the G7, which consists of the seven most influential industrial countries, and whose current membership was determined at a summit meeting in 1976. This group has become the focal point for international cooperative

efforts. Indeed, it was the G7 that coined the term financial architecture in 1995, and the G7 finance ministers have worked regularly on this issue. The most recent initiative of the G7 in this regard is the creation of a financial stability forum.

The G10 is an older group, set up in 1962, and includes 11 industrial countries (Switzerland joined later, but the name was not changed). It consists of central bank governors and finance ministers, and consequently focuses on international financial matters. The group is closely related to the Basle Committee on Banking Supervision, and both groups are based in the offices of the Bank for International Settlements. Europe tends to dominate the group, with 8 of the 11 members being European countries.

The G22 is an ad hoc group of countries set up by the United States in April 1998 and includes a number of emerging market countries. At its first meeting three working groups were set up to examine issues of enhancing transparency and accountability, strengthening financial systems, and managing

international financial crises. These working groups delivered their reports in October 1998. At the request of several small European countries, the G22 was expanded to become the G26; however, it has not met formally again.

Despite their overlapping memberships, the various groups bring a wide range of different views and perspectives to the discussions of the international financial architecture. While these different viewpoints no doubt enrich the discussions, whether this plethora of architects will eventually contribute to a more solid architecture or merely generate too much dissension and divergence about the blueprint remains to be seen.

*Note:* The G7 consists of Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States. The G10 includes the G7 plus Belgium, the Netherlands, Sweden, and Switzerland. The G22 comprises the G7 and 15 emerging market economies (Argentina; Australia; Brazil; PRC; Hong Kong; China; India; Indonesia; Korea; Malaysia; Mexico; Poland; Russia; Singapore; South Africa; and Thailand). The G26 consists of the G22 plus Belgium, Netherlands, Sweden, and Switzerland, that is, the four countries included in the G10 but not in the G7.

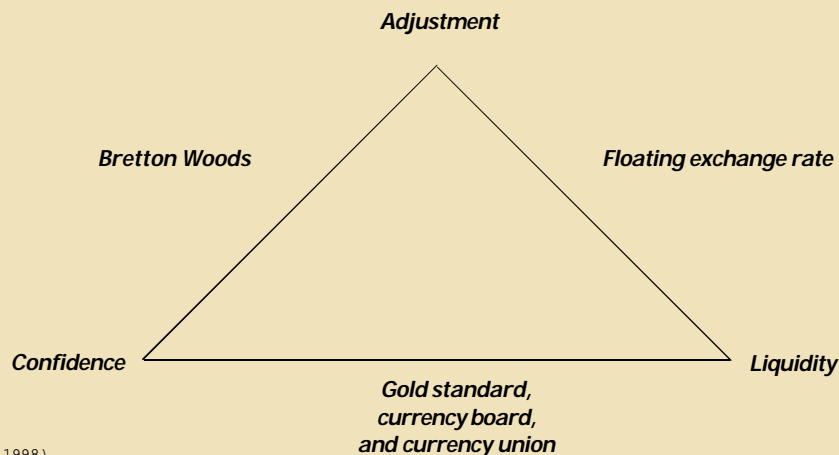
bal financial architecture was based on a system of fixed exchange rates and strict capital controls.

During the 1960s, however, private investors gradually began to evade these capital controls, and international capital movements increased. As capital mobility increased, countries were forced to choose between the ability to maintain macroeconomic policy independence and exchange rate stability. The breakdown of the Bretton Woods system of fixed exchange rates in the early 1970s shows that industrial countries chose to maintain independence by forfeiting fixed exchange rates. Since then, the world's major currencies—the US dollar, the yen, and the European

currencies—have all floated. However, in recent years, some European industrial countries have shifted in the opposite direction. They have solved the open economy trilemma by giving up exchange rate flexibility entirely and creating a single currency, the euro.

In developing countries capital flows remained tightly controlled for much longer. However, in the 1980s, and particularly in the 1990s, the trend toward greater capital mobility has spread worldwide. Thus ever more countries face the choice between exchange rate stability and policy independence. Most have moved toward exchange rate flexibility. In 1976, for instance, 86 percent of developing countries pegged

Figure 1.8 Open Economy Trilemma



their currency to a single currency (such as the US dollar or the French franc) or to a basket of currencies. Twenty years later only 45 percent of developing countries still had pegged exchange rates.

The Asian financial crisis, as well as recent crises in Brazil, Mexico, and Russia, hit countries with pegged exchange rates and heavy inflows of foreign capital. They were a direct result of the open economy trilemma. Thus at the heart of the debate on improving the international financial architecture is the thorny question of which of the three goals to give up.

#### Proposals for Strengthening the Architecture

Proposals for strengthening the international financial architecture abound. These proposals differ significantly in terms of their nature and scope. Some proposals are radical and demand a total overhaul of the existing structure, some are conservative and relatively easy to implement within the existing structure, some suggest more forceful responses to the crisis from the international community, while others would rely more on the market for crisis resolution. The following section reviews a set of salient proposals.

**Controlling Capital Flows.** One group of financial reform proposals hopes to solve the open economy

trilemma by controlling capital mobility. Some commentators question the very goal of free capital flows, arguing that free trade alone should be the main objective of development and growth policies. They often put forward two arguments to support this view. First, countries can reap the benefits of free trade in goods and services without simultaneously opening up their financial markets to foreign competition. According to this view, capital mobility is an optional extra. Second, several commentators argue that the theoretical benefits of free capital flows, such as increased investment and more efficient use of funds, do not occur in reality, because the efficiency gains that a country reaps from opening up to foreign capital are more than offset by increasing uncertainty and greater risk of financial crises. Because financial markets are plagued by imperfect information and a tendency to overshoot, they bring developing countries more risks than rewards. Some economists claim that there is no empirical evidence that countries perform better with capital mobility than without.

As Part III of the *Outlook* shows, these arguments sit uneasily with both economic theory and facts. History shows that countries that try to pursue free trade while maintaining capital controls suffer a number of problems as people try to evade the capital controls. Importers, for instance, often overinvoice their shipments to smuggle capital out of the country. As econo-

mies develop and become more open, capital controls not only foster corruption, but also restrict the growth of trade.

Increasing global integration increases uncertainty. However, this also occurs as trade is liberalized. Terms of trade shocks—the sudden rise or fall in a key export or import price—are potentially as unsettling as the contagious spread of financial crises. Moreover, the claim that there is no empirical evidence of any measurable impact of capital account liberalization on a country's welfare is overstated, although the empirical work in this area is nascent.

Market integration is an ongoing multilateral process. While analyzing the costs and benefits for a single economy is possible, the ultimate benefits of integration will depend on policies followed by all countries and their evolution over time. While one country might not suffer too much by slowing down or reversing its capital mobility, the negative impact of many countries doing this could be much higher. For all these reasons, reforms of the financial architecture that are based on a broad move away from capital mobility make little sense.

However, this does not imply that all capital account liberalization is good. The record of financial crises, especially in Asia, shows that ill-planned liberalization of capital flows—without the appropriate market reforms—can result in financial instability and imply large economic costs. The Asian crisis showed that when countries open up their capital accounts without effective supervision and regulation of financial intermediaries, they become more vulnerable to crisis, because the access to foreign capital magnifies the weaknesses and distortions of the domestic financial system.

This suggests that financial liberalization must be carefully sequenced. A number of architectural reform proposals are designed to assist that process. Some concentrate on improving market regulation, bank supervision, and transparency standards. Others concentrate on minimizing the risks associated with capital flows, focusing on measures to discourage short-term borrowing in foreign currency, which is widely regarded as the most dangerous form of foreign capital.

The goal is not to proscribe international financial transactions, but simply to increase their relative cost. This can be done in a number of ways. The most

widely supported is to tax foreign borrowing. Chile is the most well-known example of this approach. Until 1998, any company that borrowed abroad had to place 30 percent of the proceeds at the central bank for one year. This unremunerated reserve requirement was the equivalent of a hefty tax on short-term borrowing. Over a longer-term horizon it became much less punitive. In addition, only Chilean companies with a credit rating equivalent to that of the sovereign government could borrow abroad. Alternative ways to discourage short-term borrowing include placing limits on open foreign currency positions by domestic banks and instituting high-risk weights in the capital requirements for foreign currency loans to domestic firms.

These proposals raise a number of questions. First, should the rules apply only to banks or also to the broad corporate sector? Banks are clearly the most vulnerable institutions, but a regulation narrowly focused on banks might simply shift the foreign borrowing to firms. Second, how can such rules be effective in a financial system that lacks adequate supervision and regulation? Third, how can such prudential regulations be implemented without jeopardizing a country's broad commitment to liberalization? Finally, and most important, do they work? Evidence from Chile suggests that the main effect of the controls was not on the level of incoming flows, but on their distribution across assets of different maturities. In other words, while overall capital inflows were not affected, short-term inflows were effectively discouraged (Valdes-Prieto and Soto 1997).

While prudential controls on capital inflows may help prevent a crisis, they are not much use once a crisis occurs. However, some commentators suggest that different capital controls—this time, controls on outflows—may be an important component of crisis resolution. Imposing controls on capital outflows allows policymakers to sever the links between domestic interest rates and exchange rates. Thus they can lower interest rates and stimulate the domestic economy without incurring the cost of a currency devaluation. While capital controls themselves do not solve the fundamental economic problems underlying a currency crisis, their proponents argue that they can give policymakers time to address the relevant reform issues. (See Part III for more discussion on this issue.)

Such a strategy carries considerable risks. First, there is the risk of a strongly negative market reaction. Once a country resorts to controls on capital outflows, investors will worry that politicians could introduce them again. They will therefore demand higher returns to invest in that country again. Worse, the introduction of capital outflow controls could unsettle markets more broadly and have negative consequences for the market access of other developing countries.

Second, capital outflow controls are not often implemented and managed by benevolent governments, but by partisan policymakers in a distorted environment. They create the incentives for corruption and reduce the pressure for politicians to introduce politically unpopular structural reforms. If "temporary" controls on capital outflows remain in place for long, the negative implications for a country quickly rise. For all these reasons, proposals to sanction the broad use of capital outflow controls are unlikely to find much support among international financial architects.

***Improving Regulatory Standards.*** One of the main causes of the Asian financial crisis was poor regulation and supervision of financial institutions. Hence it is not surprising that much of the effort to improve the international financial architecture has concentrated on finding ways to improve international standards of financial regulation and supervision.

Two of the G22 working group reports were concerned with these issues: one concentrated on transparency and accountability (G22 1998c), the other on strengthening financial systems (G22 1998b). The report on transparency contained a variety of suggestions ranging from the uncontroversial (for instance, that private firms should adhere to national accounting standards) to the ambitious (that wide-ranging data on the international exposure of financial institutions and firms should be compiled and published). The report on strengthening financial systems enumerated major weaknesses in many domestic financial sectors, such as inadequate risk management, faulty deposit insurance schemes, and mismatched assets and liabilities. It found that international consensus existed in many areas of banking supervision and securities regulation, but that in some areas best practices and stan-

dards needed to be defined, and noted that standards should be defined in a collaborative manner so that both industrial and developing countries have a voice.

The Basle Capital Accords are widely regarded as a model for international supervisory standards. Although originally agreed on by the G10, the Basle standards for minimum capital adequacy for banks are now widely accepted. To ensure that banks are adequately capitalized, the Basle standards are specified against banks' risk-adjusted-assets rather than their total assets. The Basle Capital Accords provide a framework for classifying assets according to their risk categories, specifying different risk weights for different risk categories, and calculating risk-adjusted-assets. Since 1997 they have been supplemented by a broader set of core principles of banking supervision.

One way to encourage countries to adopt such standards is through IMF surveillance. The G22 working committees, for instance, recommended that the IMF issue a transparency report along with its regular Article IV economic assessment of member countries. Another approach is to improve coordination between regulatory bodies, or even to introduce a system of peer review, whereby national regulators could supervise each other. Improved regional surveillance would be another option. In this connection, the Asian Development Bank has established a Regional Economic Monitoring Unit to support the recently initiated regional surveillance activities of the ASEAN.

Another set of reform proposals focuses on improving existing regulatory standards. Some suggestions concentrate on tightening the rules on foreign borrowing in developing countries. Others focus on changing the incentives lending banks face, in particular, by updating the Basle capital adequacy accords. Regulating lending banks has two positive effects. The first is realism: regulators of borrowing banks (in developing countries) are generally less sophisticated than those of lending banks (in industrial countries). The second effect is that better regulation might improve the incentives facing lending banks.

The existing Basle capital standards contain several perverse incentives. For instance, risk weightings for short-term loans are considerably lower than for long-term loans, which gives lending banks a clear incentive to supply short-term rather than long-term loans to emerging markets. The ongoing revision of

the Basle capital standards may well contain changes to these risk weightings. The Basle supervisors are also considering the issue of banks' internal risk assessment for regulatory purposes. As the banks themselves should have the strongest incentive to act with prudence, some economists and policymakers have argued that the greater use of banks' own methods of risk assessment (value-at-risk models) can be extremely useful for this purpose. Also under discussion in this regard is the need for regulatory purposes of increased reliance on market discipline through the mandatory issuance of subordinated debt, that is, debt that has a "junior" claim on a firm's assets in the event of bankruptcy.

Compared with banking regulation, the problem of regulatory standards becomes much more severe when it comes to auditing and accounting, insolvency codes, and corporate governance. In these areas, a number of private sector bodies are active. The International Accounting Standards Committee, a committee with members from more than 100 countries, formulates international accounting standards. The International Federation of Accounts and the International Organization of Supreme Audit Institutions formulates auditing standards and issues auditing guidelines. Committee J of the International Bar Association has been concerned with bankruptcy laws and insolvency guides. The International Corporate Governance Network deals with issues of corporate governance. While all these organizations have done much useful work, much remains to be accomplished in improving standards in these areas.

To improve regulatory standards in the financial and corporate sectors internationally, some have suggested that the international financial organizations should work in harmony with these private sector entities. The international financial organizations should recognize these standards, urge adoption by their memberships, and monitor compliance. This decentralized approach to regulatory reform has much to recommend it.

More radical regulatory reform ideas include the creation of global regulatory institutions. Proposals include a world financial authority that would be the equivalent of the World Trade Organization for financial institutions and a board of overseers of international financial markets. In each case, given that the

goal is to create a global supervisor and regulator consistent with global capital markets, countries would have to surrender substantial amounts of national sovereignty. That requirement renders these ideas unrealistic, at least for the moment.

Finally, in this regard, a recent institutional innovation of the G7 has been the creation of the Financial Stability Forum. This forum, which will bring together central bankers, finance ministers, financial regulators, and representatives of multilateral organizations, has an ambitious mission, that is, to assess the issues and vulnerabilities affecting the global financial system and to identify and oversee the actions needed to address them. It is too early to say what role the forum will play in the evolving international financial architecture. However, if it can create a mechanism for improving information sharing, surveillance of and agreements on standards, codes of conduct, and transparency requirements, then it would significantly increase the efficiency of global financial markets and reduce systemic risks. To achieve this objective successfully, the forum will need to expand its membership to emerging economies.

***Rethinking Exchange Rate Regimes.*** The Asian crisis has shown that pegged, but adjustable, exchange rates are difficult to sustain in a world of increasing capital mobility. Sooner or later they are likely to be tested by a speculative attack, forcing—at the very least—high interest rates and budget cuts. The Asian crisis has also reinforced another traditional argument against fixed, but adjustable, exchange rates: by creating an illusion of permanent currency stability, they reinforce the incentive for financial institutions and firms to borrow from abroad without hedging.

Given these problems, the consensus now among economists is that only the extremes of exchange rate management are likely to succeed. Today's conventional wisdom suggests that countries must either rigidly and irrevocably tie their currency to another by adopting a currency board or entering into a currency union, or they must allow their currency to float.

Three related arguments support flexible exchange rate regimes. First, countries with floating currencies are less likely to suffer sudden crises of investor confidence. By definition, they will not waste precious reserves defending an exchange rate peg. Empirical

studies confirm that serious currency crises are generally associated with the collapse of a fixed exchange rate regime. On average, countries that see a sudden depreciation of a floating currency suffer less macroeconomic distress.

Second, a flexible exchange rate regime allows the government more room to act as a lender of last resort to the financial sector. Countries committed to defending a currency peg cannot provide domestic liquidity freely without risking a loss of reserves. Countries with a flexible rate need not worry about losing reserves, because the exchange rate will simply depreciate as more domestic liquidity is created. This flexibility does not mean that countries with a flexible exchange rate can prevent financial crises generated, for instance, by large capital outflows. In fact, if the burden of external debt is high, the scope for increasing liquidity domestically may be limited.

Third, a flexible exchange rate allows a country more autonomy in regard to its macroeconomic policy. This is the classic argument in favor of floating rates (see the earlier discussion of the open economy trilemma). However, exaggerating this benefit, especially for developing countries, is easy. A developing country with significant policy autonomy may have trouble gaining credibility in international financial markets. Too often in the past governments have used their discretion to pursue imprudent, inflationary policies. Countries with floating exchange rates often have to keep interest rates high to maintain investors' confidence. Mexico's experience in mid-1998 makes the point. The peso fell by 20 percent in response to turmoil in Asia and Russia, yet Mexican interest rates were considerably higher than those in Argentina, a country with an extremely tough currency board.

The choice of currency regime will depend on a country's size, history, and geographical location. In Europe, for instance, it is likely that more countries will ultimately adopt the euro. In Latin America, Argentine policymakers are talking seriously of dollarization. In Asia, the future is much more uncertain, and the political and practical hurdles to any regional currency union are high. Yet the costs of excessive volatility and competitive devaluation are an important concern in Asia's highly open economies.

Some economists have recently advocated the need for strong coordination of exchange rates among

Asian currencies. According to this view, recovery from this crisis could be strongly facilitated if the crisis-affected countries could re-adopt a dollar exchange rate target, as they did before mid-1997. While exchange rate policy does have international spillover effects, it does not mean that explicit coordination is required to achieve stability. In addition, the root causes of the current crisis were largely domestic and structural. Therefore any attempt at international exchange rate coordination without first addressing those structural problems will be based on shaky foundations and is likely to be counterproductive.

Finally, the crisis-affected countries differ significantly in terms of their history of exchange rate regimes. Before the crisis hit, exchange rate regimes in Asia were not identical. Indonesia and Korea had adopted a more flexible system (close to a crawling peg) than Malaysia and Thailand. Although the postcrisis period has seen a general movement toward greater exchange rate flexibility, the diversity in exchange rate regimes continues. This suggests that Asian economies are unlikely to see complete uniformity in exchange rate management soon.

#### ***Creating an International Lender of Last Resort.***

A number of reform proposals focus on preventing contagion in international financial markets by creating an international lender of last resort. The argument in favor of an international lender of last resort is based on an analogy with the role central banks play in national economies. When a banking panic hits a domestic financial system, the central bank can limit contagion by providing liquidity to the system. In a world of integrated capital markets, many argue that a similar institution is needed at the international level. By providing limited liquidity in return for policy conditionality, the IMF already plays a similar, if highly circumscribed, role. Most advocates of an international lender of last resort suggest that the IMF should play this role.

However, the proposal to create an international lender of last resort is plagued with conceptual and practical difficulties. Conceptually, scholars do not agree on exactly what a lender of last resort does. The classic definition stems from Bagehot (1873): the lender of last resort should lend freely, at a penalty rate, on good collateral in a time of financial panic.

Thus the lender of last resort must be able to distinguish between healthy and insolvent institutions, intervening only to stop unwarranted panics and leaving insolvent institutions to fail.

Extending these conditions from banks to countries and from national authorities to international institutions is extremely difficult. The first problem is that of distinguishing between illiquidity and insolvency. An international lender of last resort should provide limitless liquidity in the case of the former, and demand restructuring and adjustment in the case of the latter, but as the Asian crisis highlighted, distinguishing between the two is extremely difficult.

The second problem is that of moral hazard. National central banks put in place prudential regulations on domestic financial institutions to limit reckless behavior. They also retain the power to close or merge insolvent or weak financial institutions. Neither capacity exists at the international level. As yet, no binding global rules of financial behavior exist, and the IMF certainly cannot close down a recalcitrant country.

The final issue is that of resources. If necessary, a domestic central bank can provide limitless liquidity simply by printing money (unless it is constrained by a fixed exchange rate regime). The IMF has no capacity to issue fiat money. Its resources are limited, and despite the recent capital increase and introduction of the New Arrangements to Borrow (an emergency credit line from donor countries to the IMF), they are insufficient to make it a credible lender of last resort. To fulfill this role the IMF would need a substantial increase in its resources. Whether this would be politically feasible is unclear.

Some observers suggest that only countries that meet a stringent set of requirements, especially as concerns their banking systems, should have access to IMF funds (Calomiris 1998a). To those countries that fulfill the requirements, the IMF should lend without policy conditionality, but should demand collateral in the form of government bonds. One academic suggests that only countries that have complied with an agreed risk control strategy should qualify for IMF funds (Dornbusch 1998). These suggestions suffer from the problem that few countries would fulfill the requirements. Given the contagious nature of financial crises, it is unlikely that large countries would be left unaided even if they failed to meet the criteria. More-

over, by announcing that a country no longer fulfilled the criteria for assistance, the IMF might actually precipitate a crisis. More modest proposals suggest that this risk can be reduced by charging countries with lower financial standards higher interest rates for assistance (Fischer 1999).

A proposal put forward by the United States in September 1998, and subsequently endorsed by the G7, moves the IMF cautiously in the direction of being a lender of last resort. The goal is to set up a contingency financing facility, where countries in good economic health can set up a precautionary credit line with the IMF to reduce the chances of being hit by financial contagion. Although the idea is still under discussion, the difficulty of distinguishing between unwarranted panic and fundamental economic problems will make this facility extremely difficult to implement.

Finally, Japan has recently proposed the creation of regional currency support mechanisms to complement the role and function of the IMF. The mechanisms are institutions that would provide liquidity in times of financial crisis. These mechanisms, which could be established in Asia, the Western Hemisphere, and Eastern Europe, could be regionally funded by countries that are economically interlinked with each other by trade, investment, and so on, and are engaged in policy dialogue with each other. Nonregional countries with political and economic interests in the region could also participate. This idea of regional currency support mechanisms, which found an earlier articulation in the proposal for establishing an Asian Monetary Fund (box 1.7), is in the initial stage of discussion and development.

**“Bailing In” the Private Sector.** Another popular goal among the architects of international financial reform is that of bailing in the private sector. The idea is to minimize moral hazard and spread the burden of financial crisis by ensuring that private investors and banks bear some of the cost.

One approach that Argentina and Mexico have successfully pioneered is to set up private sector credit lines before a crisis. Argentina has negotiated \$6.7 billion worth of repurchase arrangements with international banks. Against the collateral of domestic bonds, these arrangements give Argentina access to capital

### Box 1.7 Is There a Case for an Asian Monetary Fund?

In September 1997, before the full international implications of the Asian crisis had become apparent, Japan proposed the establishment of a new Asian Monetary Fund (AMF). Far from undermining the role of the IMF, the AMF could act as a regional complement to the IMF in the way that, for example, the ADB complements the work of the World Bank. The sources of this complementarity are essentially fourfold:

- The Asian crisis has demonstrated the need for an early warning system. While the problems of one or two of the Asian countries were anticipated before July 1997, the extent of the meltdown and contagion took international institutions by surprise. Thus ways to provide forewarning of impending problems are needed, and could be most effectively undertaken at the regional level, through the AMF, as the participating countries would have detailed knowledge of problems in their area.

- Once a problem has been identified in a country, the government of that country needs to address it speedily. Given the damage that contagion can produce, regional peer pressure through the AMF could be an effective method of ensuring that this is done.

- Given its informational advantage and regional location, an AMF would likely be more receptive—hence geared to early action—to a regional crisis than a global institution.

- The resources the IMF initially made available were insufficient to head off the Asian crisis and additional packages had to be hastily assembled as the crisis unfolded. The AMF could provide such a line of defense on a permanent basis.

The initial proposal for the AMF suggested funding of \$100 billion, half of which was to come from Japan and the remainder from PRC; Hong Kong, China; Singapore; and Taipei, China. The argument was that such a sum would provide sufficient liquidity to forestall speculative attacks on the region's currencies. Unlike the IMF's loans, the AMF's assistance would not come with economic conditions attached.

Despite strong support from Malaysia, the proposal did not get far. Only two months after it had first been suggested, it was turned down at the fifth Asia-Pacific Economic Cooperation meeting in Manila. One objection was the fear that financial support without any conditions attached would raise the risk of moral hazard. Another risk was lack of coordination and of potential conflict with the IMF.

Nevertheless, during the IMF/World Bank Annual Meeting in 1998, Japan returned with a more modest revised proposal, the Miyazawa Plan. This proposed a \$30 billion package for the region. Half of the money was to facilitate short-term trade financing, the other half was to promote economic recovery through

medium and long-term projects. Japan suggested that the Japan Export-Import Bank, the World Bank, and the ADB could all participate in the undertaking. In addition to the \$30 billion assistance plan, at the October 1998 Asia-Pacific Economic Cooperation meeting, Japan and the United States, with the support of the ADB and the World Bank, launched the Asian Growth and Recovery Initiative that envisages a package of \$10 billion for the crisis-affected countries.

In the face of increasing instability of global financial markets, the need for regional institutions to dampen financial contagion is being increasingly acknowledged. Western Europe has a comprehensive regional financial infrastructure in the form of the Economic and Monetary Union. However, no such institutions exist in Asia, in the Western Hemisphere, and in Eastern Europe. Along with similar institutions for the Western Hemisphere and Eastern Europe, the AMF could play a potentially important role as a complement to the IMF in providing funds to crisis-affected countries and developing an early warning system. The implementation of such regional institutions as the AMF as part of the newly emerging financial architecture will help both to enhance the efficiency of global financial markets and to minimize their systemic risk.

in the event of a financial crisis. They are, in effect, a limited form of private lender of last resort. Such arrangements have considerable potential, particularly if multilateral development banks guaranteed some portion of the risk involved, and thereby encouraged more private banks to participate in such schemes.

More controversial are proposals to forcibly bail in private investors once a crisis has struck. One proposal, advocated by the G22, is to encourage "lending into arrears" by the IMF. Since the 1980s the IMF has been able, in certain circumstances, to lend to a country that was in arrears on its commercial bank

debt. Now this idea has been extended to countries that are in default to other private creditors, including bondholders. Provided that the country is willing to undertake strong policy adjustment and is making good-faith efforts to work with creditors to solve its financial problems, the IMF can lend to the country. This effectively sanctions a default. The goal behind this approach is to encourage recalcitrant creditors to negotiate, and thereby to promote orderly and responsible debt restructuring rather than chaotic default.

The G22 working group also recommended that bond contracts be modified to facilitate restructuring. By including so-called collective action clauses, such as the collective representation of creditors, designating a trustee to speak for creditors, binding majority decisions, and formulas for sharing the costs of workouts in all sovereign bond offerings, involving the private sector in the resolution of financial crises would be easier. While an orderly workout is clearly superior to a disorderly one, the risk involved in changing bond contracts is that the market for such bonds will shrink and the cost of funds will rise.

More radical proposals along similar lines include imposing “haircuts” (mandatory losses) on investors if they flee during a financial crisis. One proposal suggests a mandatory debt rollover option with a penalty on all foreign currency lending (Buiter and Sibert 1998). This option would entitle the borrower to extend or roll over the debt at maturity for a specified period, say three or six months, at a penalty rate. The penalty would have to be big enough to ensure that the borrower would not want to exercise the rollover option under orderly market conditions. If crisis conditions still prevailed when the rollover period expired, the option could be exercised again at an even higher penalty. This proposal would only be useful when otherwise solvent borrowers are unable to roll over their foreign currency debt because of a liquidity crisis or credit crunch. It only helps when a country is solvent, willing to pay, but prevented from doing so because international financial and credit markets are temporarily closed to it. Given the difficulty of distinguishing between insolvency and illiquidity, it is not clear that a market for such options would emerge. This proposal, too, might simply raise the cost of capital for borrowing countries.

The most radical ideas for bailing in the private sector focus on creating an international bankruptcy court. Just as domestic bankruptcy courts can prevent creditor grab-races; decide on a hierarchy of claimants; and allow an insolvent, but viable, firm access to new financing, so some commentators suggest there should be an international bankruptcy court to restructure countries’ debts. This idea stands little chance of being implemented. First, it would demand a huge surrender of national sovereignty. Second, national bankruptcy codes differ enormously, and reaching international agreement on a single code is highly unlikely.

#### **Toward an Agenda of Minimum Necessary Reforms**

Massachusetts Institute of Technology economist Rudiger Dornbusch has noted that in the aftermath of every crisis, whether a war or a currency collapse, a soul-searching effort to build a better world ensues. This is a great occasion for bad ideas or impractical ones (Dornbusch 1998). The Asian financial crisis is just such an occasion: it has prompted scores of proposals for a new international financial architecture.

Many of these ideas are interesting, yet impractical. Many are innovative, but often inconsistent with each other. The reason is that different reformers choose different combinations of national sovereignty, financial market regulation and support, and capital mobility. Given these incompatible goals, international policymakers are unlikely to agree on radical changes to today’s financial architecture. Nonetheless, effective reforms can take place within the existing institutional system. These include the following:

- *Negotiating minimum international standards of financial practice.* Despite considerable progress at creating international norms, auditing and accounting practices still vary considerably across countries. This makes it difficult for lenders to gauge the financial conditions of borrower banks and corporations. Differences in corporate governance practices, investor protection laws, and laws relating to insider trading in securities markets also make international capital markets less transparent and more dangerous than they need be. While individual countries should implement reforms in these areas as they deem appropri-

ate, minimum international standards would help prevent national problems spilling over to the international level.

■ *Introducing prudent regulation of capital accounts.* While developing countries should aim for integration into the international financial system, this should not imply a reckless rush to capital account convertibility. The gradual and cautious removal of capital controls may be appropriate for countries whose domestic capital markets are underdeveloped and whose capacity to regulate excessive risk taking by domestic institutions is limited. For many developing countries, Chilean-style taxes on capital flows may be helpful.

■ *Reforming exchange rate regimes.* Large unexpected swings in the exchange rate can bring serious financial distress to domestic banks and corporations with unhedged debt exposure. This problem can be minimized in two ways. First, a floating exchange rate will induce banks and corporations to hedge their foreign currency debt. Second, a currency board or currency union will permanently eliminate unexpected currency fluctuations. International financial institutions, particularly the IMF, can push the agenda of an appropriate exchange rate regime without any fundamental institutional change.

■ *Creating the framework for an orderly restructuring of problem debts.* Debt restructuring today is a difficult, protracted process. Modest changes—including clauses for majority voting and the provision of a trustee to represent and coordinate creditors—could easily be introduced. If industrial countries included such provisions in their bond contracts, they could become standard practice, then developing countries would not incur a price penalty when they introduced them.

■ *Encouraging private sector credit lines.* Given the IMF's limited resources and the conceptual difficulties surrounding the notion of an official international lender of last resort, limited credit lines with the private sector appear promising. Argentina's contingency finance arrangements with private banks seem to have served it well. With multilateral guarantees this approach might prove useful for more countries.

These modest proposals do not constitute a new Bretton Woods. They do not call for a massive new bureaucracy nor a huge investment of public funds. However, they could help to reduce the risk of financial crises and reduce their severity should they occur. That alone would bolster, rather than hinder, the process of financial integration from which both industrial and developing countries have so much to gain.