THE JOURNAL OF THE KOREAN ECONOMY, Vol. 1, No. 1 (Spring 2000), 109-124

The Asian Crisis and the IMF: New Problems, Old Solutions?

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The IMF's policies for dealing with balance of payments disequilibria are based on theoretical models that emphasize the role of government policies that increase spending and lead to a deficit in the current account. The Fund, therefore, recommends reductions in fiscal deficits and a contractionary monetary policy to deal with balance of payments crises. However, the Asian crisis of 1997 took place because of financial speculation and short-term capital outflows, and the IMF was criticized for recommending inappropriate policies. Since the Asian crisis, a number of proposals have been advanced to prevent or mitigate such crises. These include increased regulation of domestic financial markets, controls on international capital flows, new institutional facilities and enhanced lending capabilities for the IMF.

JEL Classification: F33
Keywords: IMF, Asian crisis, capital flows

1. INTRODUCTION

The economic *tsunami* that swept out of Asia in late 1997 brought, in its wake, sharp criticism of the International Monetary Fund (IMF) for its actions in dealing with the crisis.[1)] The IMF was characterized as negligent for not anticipating the crisis, and when it did occur, for imposing policy measures on the countries involved that turned to the Fund for assistance (Indonesia, Korea,

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1) See, for example, the criticisms of Feldstein (1998), Meltzer (1998) and Sachs (1998), and the response to Feldstein by Fischer (1998).

and Thailand) which only worsened the situation. Subsequent events in Russia and Brazil have intensified the criticisms.

While the IMF's policies may have been misguided, it is important to realize that they were not formulated in an intellectual vacuum. The IMF has dealt with a succession of balance of payments crises for over forty years, and its international staff of economists has worked with many different governments to alleviate such emergencies. Rather than simply berate the IMF for its mistakes, it would be more productive to examine what was different about the Asian crisis. If the IMF is simply made the scapegoat for events in Asia, then we learn nothing about why the crisis arose as quickly as it did, nor how it differed from previous crises.

This paper compares the IMF's analysis of balance of payments crises with the situation in Asia to ascertain why the IMF acted as it did, what went wrong and what changes need to be undertaken before new crises take place. The next section presents the analytical foundations of the IMF's policies to deal with balance of payments disequilibria. Section 3 summarizes the background of the Asian financial crisis and the events of 1997. Section 4 reviews the proposals for institutional changes, and the final section summarizes the lessons of the Asian crisis.

2. THE IMF AND ITS PROGRAMS

When the IMF began its operations in 1946, the exchange rates of currencies were set at fixed, or par, values. Central banks were committed to preserving the value of their national currencies in the foreign exchange markets by selling foreign currencies —principally dollars — when the domestic money came under pressure because of excess demand for the foreign currency. The IMF granted credit to governments in these situations while they undertook the necessary adjustment policies to alleviate the pressure on the exchange rate.

The end of the global fixed exchange rate system in the 1970s seemed to eliminate the need for the IMF. However, the debt crisis of the 1980s allowed the IMF to find a new role as developing countries, that sought to renegotiate

the schedule of their debt repayments with the international banks, turned to it for financial support. Since then, the IMF has continued to lend to developing countries, many of which have continued to peg their exchange rates to the dollar, or a basket of other currencies.

The IMF advised governments on appropriate policies for dealing with balance of payments disequilibria, and its economists developed models of the causes of such crises.[2)] In the absorption approach model, which was developed at the IMF, it can be shown that expansionary macroeconomic policies lead to disequilibria in the balance of payments. An increase in government spending increases domestic aggregate demand, or absorption, the sum of private consumption, investment spending and government expenditures. When a government deficit is financed by an extension of credit by the central bank, as often happens in developing countries which lack broad financial markets, then the money supply will grow, which also raises domestic spending.

The expansionary fiscal and monetary policies increase domestic income and prices. The increase in prices appreciates the real exchange rate, and this change in relative prices makes exports to other nations more expensive and imports from abroad cheaper. The decline in competitiveness, combined with the increase in the demand for imported goods, which comes from higher income, leads to a deficit in the current account, which reflects the imbalance between domestic production and absorption.

If the current account deficit is not offset in the balance of payments by a surplus in the capital account, then the current account deficit is not sustainable at the current exchange rate. A country is spending more than it is selling, and consequently demanding more foreign currency than foreigners want to supply. There are a limited number of options available to policymakers: they can either abandon their exchange rate commitment and allow the nominal exchange rate to depreciate, or the central bank must use its foreign reserves to stabilize the value of the domestic currency by supplying foreign exchange to the market.

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2) See IMF (1987), Fischer (1997), Polak (1998) and Mussa and Savastano (1999) for descriptions of the IMF's analytical models.

Either choice carries disadvantages. A depreciation of the exchange rate raises the prices of imported goods and may lead to demands by workers for higher wages. It also raises the cost of servicing debt denominated in foreign currency. However, a country's ability to support its currency in the foreign exchange markets is limited since it can only obtain dollars from an outside source. In a crisis situation, private international banks are reluctant to lend, and the IMF serves the role of lender of last resort.

The IMF will provide assistance in such situations only on the condition that a country undertakes specific policies to end the crisis. In order to reduce or eliminate the current account deficit, absorption must be decreased. The government must contract its fiscal deficit through cuts in expenditures and increased taxes. It must also lower the growth rate of the money supply and raise interest rates, which both depresses domestic spending and attracts foreign capital. Models of the balance of payments as a monetary phenomenon, known as financial programming models, are used to set limits on the growth of domestic credit. A decline in the exchange rate is often encouraged, however, by itself this is only a short-term solution.

In the 1980s, the IMF also began to recommend policies, collectively called "structural adjustment policies," that were designed to increase the supply of output over time. These measures included domestic deregulation and the removal of barriers to trade and investment with other countries. Demand-based policies, however, continue to play the key role in addressing balance of payments crises.

Is the IMF's economic analysis valid, and do its policies work? These are empirical questions and a number of studies have been conducted by economists, both inside and outside the IMF, to answer them. Studies of the effectiveness of IMF programs generally conclude that countries that complete IMF programs show improvements in their current account, thus easing the crisis in the balance of payments.[3] However, not all countries successfully fulfill the conditions of an IMF program and receive all the credit specified in the initial agreement. Moreover, some have characterized the IMF's policies as overly restrictive and inappropriate when the deterioration

3) Bird (1995), Killick (1995) and Haque and Khan (1998) summarize the research that has been conducted on IMF programs.

in the balance of payments is due to exogenous factors beyond a country's control, such as a decline in its terms of trade or foreign interest rates.

3. THE ASIAN CRISIS

Coming into the Asian crisis, the IMF had a reasonable model of the determinants of balance of payments crises, and it could recommend specific policies to address such a crisis. However, the events in Asia in 1997 did not fit the patterns of the past.

Table 1 shows selected macroeconomic indicators for Indonesia, Korea and Thailand averaged over the three years prior to the crisis, 1994-1996. All three countries recorded small surpluses in their fiscal budgets. The growth rates of the broad money supply, M2, while high by U.S. standards, were considered acceptable for rapidly growing economies, and the moderate rates of inflation (as measured by the Consumer Price Index) were consistent with this evaluation. All three countries had current account deficits, yet only Thailand's consistently exceeded the limit of 5% of GDP that was sometimes utilized as a rule of thumb for judging whether a deficit was excessive (although Korea's had risen to this level in 1996). There is little evidence of real exchange rate appreciation of the three countries' currencies against the dollar, although the rise of the dollar vis-à-vis the yen did affect their value against that currency.[4)]

Table 1 Selected Macroeconomic Indicators: Three-year (1994-1996) Averages

	Budget/ GDP	Δ M2	Δ CPI	Current Account/ GDP
Indonesia	1.5%	24.8%	8.7%	-2.7%
Korea	0.2%	16.7%	5.2%	-2.4%
Thailand	2.3%	14.1%	5.5%	-7.2%

Source: IMF, *International Financial Statistics*.

4) Chinn (1999) uses a model of real exchange rate equilibrium based on purchasing power parity to evaluate whether East Asian currencies were overvalued in 1997. He finds that the Thai *baht* was overvalued by this measurement but the Indonesian *rupiah* and the Korean *won* were not.

By the standard economic criteria used by the IMF for evaluating economic policies, the three countries were enacting prudent fiscal and monetary measures, with only Thailand exhibiting any signs of strain. Foreign observers and private credit rating agencies, such as Moody's and Standard & Poors, gave the countries high marks for their performance.

If their domestic demand and current account deficits were not excessive, then what led to the emergence of a crisis situation in 1997? Table 2 shows the balance of payments data for the three countries in 1996 and during the separate quarters of 1997. Indonesia, for example, had a current account deficit of approximately $7½billion in 1996, which was more than offset by a capital account surplus of about $11 billion; after accounting for errors in recording transactions, there was an increase in its foreign exchange reserves of $4½billion. Korea and Thailand also had current account deficits, capital account surpluses and increases in reserves that year.

Table 2 Balance of Payments in Indonesia, Korea and Thailand

Indonesia	1996	1997:I	1997:II	1997:III	1997:IV
Current Account:	-7,663	-2,192	-1,103	-1,393	-201
Capital Account:	10,847	3,859	2,226	1,790	-8,478
Net Errors:	1,319	-921	1,119	-1,687	-1,156
Δ Reserves:	4,503	746	2,242	-1,290	-9,835
Korea	1996	1997:I	1997:II	1997:III	1997:IV
Current Account:	-23,006	-7,353	-2,723	-2,053	3,962
Capital Account:	23,326	4,038	6,572	618	-21,030
Net Errors:	1,095	5	144	-1,151	-4,008
Δ Reserves:	1,416	-3,310	3,993	-2,586	-21,076
Thailand	1996	1997:I	1997:II	1997:III	1997:IV
Current Account:	-14,691	-2,098	-3,134	-697	2,906
Capital Account:	19,486	2,415	-3,899	-8,010	-7,384
Net Errors:	-2,627	-417	1,150	1,989	-1,071
Δ Reserves:	2,167	-100	-5,883	-6,717	-5,549

Note: Figures are in millions of U.S. dollars.
Source: IMF, *International Financial Statistics*.

The first sign of trouble in the external accounts appeared in Thailand in the second quarter of 1997. The capital account recorded a deficit that, together with the deficit in the current account, brought on excess demand for dollars in the foreign exchange markets. The central bank sought (unsuccessfully) to preserve the value of the *baht*, by selling dollars, and consequently reserves fell by almost $6 billion. The same phenomenon was repeated in the third quarter, and even though by the fourth quarter cutbacks in spending lead to a surplus in the current account, the outflow of capital was so massive that the country sustained a reserve loss for the year of $18.4 billion. The authorities were forced to abandon their efforts to defend the *baht*, and it fell by 56% from its pre-crisis level in July 1997 to its low in January 1998.

Conditions deteriorated later in the year in Indonesia and Korea. In the fourth quarter, capital account surpluses became capital account deficits, and both countries lost reserves as they tried to prevent their currencies, the *rupiah* and the *won*, from falling in value. Indonesia lost $9.8 billion in the last quarter and Korea $21.1 billion in unsuccessful attempts to defend their currencies. The *won* fell by 55% by the end of the year, while the *rupiah* depreciated by 81%.

What caused the sudden reversal in the capital account?[5] The Bank for International Settlements summarized the vulnerabilities of the Asian financial markets:

> Two weaknesses were common to the countries engulfed in the Asian crisis. The first was that excessive expansion of bank credit fuelled overinvestment, leading to the creation of unprofitable industrial capacity and asset price boom-and-bust cycles ..The second, and in many ways related, weakness was a reliance on potentially volatile forms of external finance, notably short-term bank borrowing, which made domestic economies increasingly vulnerable to swings of sentiment in the international capital markets.[6]

5) See Goldstein (1998), Radelet and Sachs (1998) and Berg (1999) for analyses of the emergence of the crisis.
6) Bank for International Settlements, *68th Annual Report* (1997/1998), p. 117.

During the 1990s there had been a surge in economic and financial activity in Asian countries in response to financial deregulation. Domestic intermediaries financed the construction of new plants and buildings that exceeded the need for industrial or residential capacity. In the financial markets there were "bubbles," as asset prices rose beyond the levels consistent with economic fundamentals —just as they had done in Japan a decade ago.[7)]

At the same time, as shown in Table 3, there was an inflow of foreign private money—the earlier surpluses in the capital account. Capital inflows can boost growth when they represent long-term investments. However, the type of money that flowed into the region was often short-term lending, in many cases by Japanese and European banks looking to take advantage of perceived lending opportunities. Short-term external debt in all three countries exceeded foreign reserves. Once the Thai economy exhibited signs of strain, foreign investors reassessed the safety of all their investments in the Asian area. Financial "contagion" heightened the exposure of each economy to the weaknesses of the others, and money was withdrawn from Asia as domestic and foreign investors searched for a safe haven, such as U.S. Treasury bonds.[8)]

As the situation began to deteriorate in the summer of 1997, the IMF assumed its familiar role of crisis manager. The IMF provided $4 billion to Thailand, $10 billion to Indonesia and $21 billion to Korea, while an additional $13.2 billion for Thailand, $30 billion for Indonesia and $36 billion for Korea came from the World Bank, the Asian Development Bank and

Table 3 Net Private Capital Flows, 1994-1996 (percentage of GDP)

	1994	1995	1996
Indonesia	0.3%	3.5%	6.1%
Korea	1.2%	2.0%	4.9%
Thailand	14.3%	17.3%	14.5%

Source: World Bank, *Global Development Finance (*1998)

7) See Browne, Hellerstein and Little (1999) for a review of developments in the Asian asset markets.
8) See Baig and Goldfajn (1999) for the evidence on contagion.

foreign governments such as Japan and the U.S. In return, the Fund initially called for cutbacks in government spending, increases in interest rates, the closure of failed financial institutions, and the repayment of foreign creditors.

The commitments of financial assistance, however, did not restore confidence in the capital markets, and the IMF's policies came under attack. Critics charged that this was not a crisis based on expansionary aggregate demand, but rather, a financial collapse. The shutdown of weak domestic financial institutions caused panic and the further withdrawal of funds from other fragile institutions. Restrictive macroeconomic policies, moreover, were inappropriate at a time when these countries faced deteriorating economic conditions, and often the people who were most affected by the cutbacks had benefited the least from the previous expansion.

The continuing turmoil in the financial markets as well as domestic political instability, particularly in Indonesia, brought renegotiations between the IMF and the three governments and revised programs in the winter of 1998. While the details varied from country to country, the IMF relaxed its demand for contractionary fiscal policies, as it became clear that output in all three countries was contracting more rapidly than anyone had anticipated. Political instability in Indonesia, which eventually led to the replacement of the Suharto regime, furthered the crisis in that country.

The Fund has estimated that the cumulative output loss over four years, vis-à-vis hypothetical non-crisis output, will be approximately 27% for Korea, 57% for Thailand, and 82% for Indonesia.[9] Output declined, in 1998, by about 6% in Korea, 9% in Thailand and 14% in Indonesia (see Table 4). Un-

Table 4 GDP Growth Rates

	1991-1995	1996	1997	1998	1999 (est)
Indonesia	7.8%	8.0%	4.7%	-13.7%	-0.8%
Korea	7.5%	6.8%	5.0%	-5.8%	6.5%
Thailand	8.5%	5.5%	-1.3%	-9.4%	2.5%

Source: Berg (1999).

9) See the IMF's *World Economic Outlook* (October 1999), p. 64.

employment and bankruptcy rates rose and substantial numbers of people fell below the poverty line. By 1999, however, growth appeared to have resumed in the first two countries, and the decline in output in Indonesia had leveled off. The three countries' exchange rates stabilized, interest rates fell, and by the end of 1999 equity prices in Asia were rising.

The Fund commissioned an internal study of its response to the Asian crisis.[10] Its authors admitted that the determinants of this crisis differed from those of previous crises, and that the situation deteriorated more quickly and deeply than the IMF had thought it would. The report pointed out that the Fund was flexible in its targets for fiscal policy, allowing larger deficits than originally envisioned. The IMF defended its call for monetary tightening, however, as necessary in order to avoid further exchange rate depreciation and ensuing inflation, while its structural policies for the financial sector were necessary to ensure a lasting recovery from the crisis.

4. PROPOSALS FOR CHANGE

The Asian crisis was not the first crisis that was primarily financial in nature. As pointed out above, the IMF has been involved in debt restructuring since the early 1980s. During the Mexican crisis of 1994-1995, there were also massive outflows of capital in response to a loss of market confidence in the Mexican government's ability to repay its debt obligations. However, the Asian situation was unparalleled with respect to its speed, size and origins. The IMF was able to work with debtor countries during the 1980s as payments came due. The outflows in Asia, however, took place in a fairly compressed period of time. Although the Mexican crisis had repercussions for Argentina (the "tequila effect"), most Latin America countries were not severely impacted by the situation in Mexico. On the other hand, while some Asian countries, such as China and India , were able to partially insulate themselves from the direct effects of the financial crisis in neighboring countries, the eventual slowdown in global economic activity affected virtually

10) See Lane, Ghosh, Hamann, Phillips, Schultze-Ghattas and Tsikata (1999).

Table 5 Anatomy of Balance of Payments Crises

	Pre-Asia	Post-Asia
Problem	Current Account Deficits	Capital Account Outflows
Causes	Government Deficit Excessive Money Growth	Financial Speculation Volatile Capital Flows
Solutions	Decrease Spending Raise Interest Rates Devalue Exchange Rate	Financial Market Regulation Capital Controls New Institutional Facilities

all developing nations, particularly those who exported raw materials whose prices had fallen. Finally, while financial flows were significant in the other crises, private borrowings, not government debt, had escalated to unsustainable levels in Asia, and their reversal was the source of the capital flight.

We can compare the pre-Asian view of balance of payments crises with the post-Asian analysis (see Table 5). In the traditional view, a balance of payments crisis came about because of a deficit in the current account, which was due to expansionary fiscal and monetary government policies. There is now a realization that the capital account can be a source of exchange market pressure due to the reversal of short-term international capital flows following speculation in the domestic financial markets.

What is the solution? Before 1997 the standard policy prescription was to reduce government spending and cut back on monetary growth; in the long-run, greater integration with the international economy allowed a more rational allocation of resources and increased growth rates. However, since the Asian crisis there have been numerous proposals for changes, including:

Increased regulation of domestic financial institutions and markets. Financial institutions in many Asian countries were loosely supervised for a variety of reasons, including a lack of trained personnel and also close ties between regulators and bankers. Just as the savings and loan industry in the U.S. was placed under increased regulation in the late 1980s, financial intermediaries in developing countries may also face closer examinations and

tighter rules.[11] Others have advocated the entry of more foreign-based banks into the area. These institutions, with their diversified asset bases, might be better able to deal with sudden capital flight.

Controls on capital flows. While foreign capital flows can increase domestic investment and output by augmenting savings, the Asian experience demonstrated that their volatility could destabilize economies.[12] The regulation of international capital flows takes various forms, ranging from restrictions on certain types of transactions, requirements for foreign investors to keep funds on account in domestic banks for a specified period of time, or limits on the ability of domestic borrowers to enter international markets. The IMF had traditionally allowed countries to maintain such controls even as it called for the lifting of barriers to trade in goods and services, and industrial countries, including the U.S., maintained various forms of capital controls until the 1970s.

Capital controls, however, were lifted in many countries during the 1980s and 1990s, and ironically the IMF called for further liberalization of capital movements on the eve of the Asian crisis in April 1997. Since that time, the Fund has called for liberalization to take place in an "orderly manner." Outside the Fund, the experiences of countries such as Chile and Malaysia, which have maintained various forms of controls on capital flows, have drawn attention. However, such controls can produce their own distortions and inefficiencies in the allocation of capital, and advances in information technologies make it difficult to isolate countries from the international capital markets.[13]

New lending facilities and institutions. There have been numerous calls for a "new financial architecture" to forestall, or at least mitigate, new international financial crises.[14] For example, there have been proposals from both the IMF and others (including international financier George Soros) to expand the IMF's powers so that it can better serve its role as international lender of last resort.[15] On the other hand, some U.S. conservative business

11) Caprio and Honohan (1999) evaluate proposals for banking reform in developing countries.
12) See Bird (1998) for a review of the arguments for and against capital account liberalization.
13) Edwards (1999) summarizes the evidence on the efficacy of capital controls.
14) See Eichengreen (1999) and Rogoff (1999) for a review of these proposals.
15) See Fischer (1999).

and political leaders (such as former Secretary of State George Schultze) as well as some economists (such as Anna Schwartz) have called for the abolition of the IMF, claiming it interferes with the efficient operation of markets.

Others have proposed an international bankruptcy board, which can deal with the claims of foreign creditors of illiquid sovereign countries in an orderly fashion. Others' suggestions include the creation of global financial regulatory and rating agencies, or a true global central bank. Finally, there have been calls for imposing more of the cost of financial failures on the international lenders. If banks and other institutions paid a heavier price, then the problem of "moral hazard," i.e., the lending that takes place when creditors believe themselves to be immune from the consequences of making faulty loans, may be mitigated.

5. THE LESSONS OF THE ASIA CRISIS

The IMF has paid a high price for its handling of the Asian crisis. Criticism has come from both sides of the political spectrum, with conservatives opposing the bailout of governments and banks, and liberals pointing to the human cost of contractionary macroeconomic policies.

Ironically, the crises that have taken place since the events in Asia have in many ways been consistent with the IMF's analytical framework. Both Russia and Brazil had significant fiscal imbalances. After the Russian budget deficit declined in the first half of 1998, the IMF and the Russian authorities agreed on a new lending arrangement that included policies designed to further reduce the deficit. The Russian parliament's failure to approve some of these measures led to a collapse of confidence in the government's ability to pay its debt obligations. International lenders withdrew their money, and the government was forced to devalue the *ruble* in August. Political opposition in Brazil to government budget cuts also led to capital flight and the collapse of the Brazilian *real* in January 1999. Paradoxically, the IMF's prior approval of a program for Brazil the previous Fall may have sent a misleading signal to local politicians that they could ignore demands for significant changes in the

budget.

The IMF is now more aware that financial flows can impose a serious cost on countries. Countries are vulnerable to financial panics, with money suddenly flowing out on a massive basis, disrupting the ability of governments to affect the national economy. Indeed, such crises are inevitable in a world of increased capital flows if countries attempt to both fix the value of their exchange rates and use their monetary policies to achieve domestic goals. In the Spring of 1999 the IMF announced the creation of "contingency credit lines," which would allow qualifying countries to receive credit at the first sign of a crisis.

Financial crises, therefore, will occur as long as governments try to achieve both domestic and foreign objectives. The IMF will be called on again to provide assistance, in part because there is no politically acceptable alternative. While the international financial environment has changed radically in the last fifty years, the need to provide assistance to nations facing economic disruption remains. However, the IMF must distinguish among the different types of crises and devise appropriate models and policies, which include financial relationships, to deal with them, otherwise, it will not be able to deal with the next wave of crises.

REFERENCES

Bank for International Settlements, *68th Annual Report* (1997/1998), Basle: Bank for International Settlements, 1998.

Baig, Taimur and Ilan Goldfajn, "Financial Market Contagion in the Asian Crisis," *IMF Staff Papers*, 46(2), June 1999, pp. 167-195.

Berg, Andrew, "The Asia Crisis: Causes, Policy Responses, and Outcomes," IMF Working Paper No. 99/138, Washington, DC: IMF, October 1999.

Bird, Graham, *IMF Lending to Developing Countries*, London: Routledge, 1995.

Bird, Graham, "Convertibility and Volatility: the Pros and Cons of Liberalizing the Capital Account," *Economic Notes*, 27(2), 1998, pp. 141-156.

Browne, Lynn Elaine, Rebecca Hellerstein, and Jane Sneddon Little, "Inflation, Asset Markets, and Economic Stabilization: Lessons from Asia," *New England Economic Review*, September/October 1999, pp. 3-32.

Caprio, Gerard and Patrick Honohan, "Restoring Banking Stability: Beyond Supervised Capital Requirements," *Journal of Economic Perspectives*, 13(4), Fall 1999, pp. 43-64.

Chinn, Menzie, "Measuring Misalignment: Purchasing Power Parity and East Asian Currencies in the 1990s," IMF Working Paper No. 99/120, Washington, D.C.: IMF, September 1999.

Edwards, Sebastian, "How Effective are Capital Controls?," *Journal of Economic Perspectives*, 13(4), Fall 1999, pp. 65-84.

Eichengreen, Barry, *Toward a New International Financial Architecture*, Washington, D.C.: Institute for International Economics, 1999.

Feldstein, Martin, "Refocusing the IMF," *Foreign Affairs*, 77(2), March/April 1998, pp. 20-33.

Fischer, Stanley, "On the Need for an International Lender of Last Resort," *Journal of Economic Perspectives*, 13(4), Fall 1999, pp. 85-104.

_____, "Applied Economics in Action: IMF Programs," *American Economic Review*, 87(2), May 1997, pp. 23-27.

_____, "In Defense of the IMF," *Foreign Affairs*, 77(4), July/August 1998, pp. 102-106.

Goldstein, Morris, *The Asian Financial Crisis: Causes, Cures and Systemic Implications*, Washington, D.C.: Institute for International Economics, 1998.

Haque, Nadeem Ul and Mohsin S. Khan, "Do IMF-Supported Programs Work? A Survey of the Cross-Country Empirical Evidence," IMF Working Paper No. 98/169, Washington, D.C.: IMF, December 1998.

International Monetary Fund, *Theoretical Aspects of the Design of Fund-Supported Adjustment Programs*, IMF Occasional Paper No. 55, Washington, DC: IMF, September 1987.

_____, *World Economic Outlook*, Washington, D.C.: IMF, October 1999.

Killick, Tony, *IMF Programmes in Developing Countries*, London: Routledge, 1995.

Lane, Timothy, Atish R. Ghosh, Javier Hamann, Steven Phillips, Marianne Schultze-Ghattas, and Tsidi Tsikata, *IMF-Supported Programs in Indonesia, Korea, and Thailand: A Preliminary Assessment*, IMF Occasional Paper No. 178, Washington, D.C.: IMF, June 1999.

Meltzer, Allan H., "Asian Problems and the IMF," *Cato Journal*, 17(3), Winter 1998, pp. 267-274.

Mussa, Michael and Miguel Savastano, "The IMF Approach to Economic Stabilization," IMF Working Paper No. 99/104, Washington, DC: IMF, July 1999.

Polak, Jacques J., "The IMF Monetary Model at 40," *Economic Modelling*, 15(3), July 1998, pp. 395-410.

Radelet, Steven and Jeffrey Sachs, "The East Asian Financial Crisis: Diagnosis, Remedies, Prospects," *Brookings Papers on Economic Activity*, No. 1, 1998, pp. 1-90.

Rogoff, Kenneth, "International Institutions for Reducing Global Financial Instability," *Journal of Economic Perspectives*, 13(4), Fall 1999, pp. 21-42.

Sachs, Jeffrey, "The IMF and the Asian Flu," *The American Prospect*, No. 37, March/April 1998, pp. 16-21.