Regional Financial Arrangements in East Asia

edited by
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KIEP

Conference Proceedings 01-01

Regional Financial Arrangements in East Asia: Issues and Prospects

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Conference Proceedings 01-01
Seminar held August 10-11, 2000 at Hilton Hawaiian Village in Honolulu, Hawaii
Published 15 August 2001 in Korea by KIEP

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Preface

Before the Asian financial crisis broke out in 1997, few people would have argued for the creation of any type of regional financial arrangement in East Asia. However, the financial crisis of 1997 was a major breakdown. Many East Asians became aware of the need for regional financial arrangements that could forestall future crises. In September 1997, Japan proposed an "Asian Monetary Fund" (AMF) to prevent the recurrence of an Asian financial crisis and to institutionalize financial cooperation among the countries in the region. The advocates of the AMF declared the need for a regional lender of last resort, referring to the fact that global emergency resources for East Asia—including the IMF and the World Bank—are insufficient, considering the size of the East Asian economies in the face of volatile capital flows in and out of the region. The United States and the IMF, on the other hand, strongly objected to the idea of the AMF, asserting that it would threaten the stability and order of the global financial system by weakening the effectiveness of the Bretton Woods Institutions in promoting structural adjustments in recipient countries and by aggravating the problem of moral hazard.

Despite heated debate on how to prevent and manage future crises in the context of regional financial cooperation, no tangible progress has yet been made. However, the search for regional financial arrangements gained momentum in May 2000, when East Asia's big three—China, Japan, and South Korea—along with the ten members of ASEAN, at the Asian Development Bank's annual meeting in Chiang Mai, Thailand, agreed to expand the existing network of swap arrangements designed to ward off future financial crises. The plan, called the Chiang Mai Initiative, is now widely perceived as a major step toward strengthening financial cooperation among the East Asian countries.

Many misgivings have been voiced in recent years about the role of regional arrangements for mutual assistance in East Asia, but all East Asian countries have strongly felt the necessity for closer financial cooperation. A structured regional financial arrangement is envisioned to contribute to the stability and upgrading of financial markets in East Asia. In the long run, these arrangements will provide a basis for regional monetary integration.

In what follows, this edited book identifies major issues related to regional financial cooperation and provides comprehensive analyses, policy implications, and recommendations. The volume comprises the papers presented at the conference on "Regional Financial Arrangements in East Asia: Issues and Prospects," jointly organized by the Korea Institute for International Economic Policy (KIEP) and the Northeast Asian Economic

Forum (NEAEF) on August 10–11, 2000, in Honolulu, Hawaii, with generous support from the Ford Foundation.

We would like to thank Dr. Yoon Hyung Kim, Professor of Economics at Hankuk University of Foreign Studies and Senior Fellow at the East-West Center, and Dr. Yunjong Wang, Director of International Macroeconomics and Finance Department at KIEP, for coordinating the conference and preparing this volume for publication. We also thank the paper writers, discussants, and other participants who contributed to the conference. Our gratitude goes to Dr. Kennon Breazeale for production coordination and the Northeast Asia Economic Forum's graphics and production services, which prepared the cover and book design and brought the book to a camera-ready state.

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Introduction and Overview

Yoon Hyung Kim and Yunjong Wang

Introduction

The financial crisis that broke out in Thailand in July 1997 and then spread to other parts of East Asia has had devastating effects on the economies involved. It brought about a deep recession, causing a sharp decline in living standards, rising unemployment, industrial breakdown, and social dislocation. The economic meltdown in East Asia has led to the widespread use of terms such as the *Asian flu*—with the implication that this was a real case of contagion, where one country's crisis spread to other vulnerable countries. Many academic researchers and pundits have argued that this domino effect among the East Asian countries can be mainly attributed to a deep-seated regional structural weakness. In retrospect, the East Asian financial crisis sends a clear message that a country's strong macroeconomic fundamentals—such as a high savings rate, a low inflation rate, and small fiscal deficits—are not sufficient to prevent a financial crisis. It highlights the importance of institutional factors such as good governance and the rule of law and its prompt enforcement, in addition to strong macroeconomic fundamentals that must be put in place to forestall such a crisis. More specifically, it stresses the crucial importance of prudential regulations and appropriate supervision of financial institutions as well as good corporate governance.

Strong financial infrastructure and good corporate governance are even more important when there are government policies or attitudes that create a moral hazard on the part of financial institutions and business enterprises. When financial institutions somehow believe that the government will bail them out whenever they run into financial trouble, they can easily end up borrowing excessively and exposing themselves to greater risks without proper hedging. It is equally possible for corporations to borrow heavily from financial institutions, both domestic and foreign, if they are led to believe that a "too-big-to-fail" policy exists implicitly or explicitly. It is to be noted that the East Asian financial crisis was not caused by government profligacy, but by the private sectors' overborrowing and overinvestment that rendered economies in the region highly vulnerable to a sudden reversal in foreign investors' sentiments.

The lesson that market freedom requires regulatory vigilance has been driven home recently by the experience in East Asia. In East Asia, even partial but premature and mismanaged capital account liberalization led to a surge in borrowing by the private sector with unwarranted exuberance until the bubble burst in 1997. In this regard, at the national level the East Asian countries had to undertake reform measures to strengthen the regulatory institutions and their supervisory capacity with or without an

IMF program. Although results of their restructuring efforts are mixed, East Asians think that reforms of the domestic financial and corporate sectors alone are not sufficient to safeguard financial stability. Current arrangements for integrating emerging market economies into the global financial system are still defective. In the eyes of many East Asians, few of the structural deficiencies of the international financial system that also contributed to crisis have been sufficiently rectified. Along with consistent and lasting structural reforms in East Asia, more efforts at the regional and global level should be simultaneously made to reform the regional and international financial architecture.

At the regional level, several calls for financial cooperation were made by various quarters immediately after the East Asian financial crisis struck. However, before the crisis, few would have argued for the creation of any type of regional financial arrangement in East Asia. In fact, East Asian countries did not have any formal incentives to encourage regional economic integration. Because of their successful economic performance vis-à-vis other developing economies in the world, a market-led process of economic integration was already taking place in East Asia. Given their history of enmity, rivalry, and the uneven distribution of economic power, many neighboring countries in East Asia were not even dreaming of creating a regional economic bloc. East Asian countries were not afraid of being excluded from any regional arrangements. They were also unprepared to make the structural adjustments and policy coordination strictly required for successful implementation of such a regional arrangement.

The financial crisis of 1997 was indeed a major watershed for the region. Many East Asians have become aware of the need for regional financial arrangements that can effectively prevent and better manage future crises. In September 1997, Japan proposed an Asian Monetary Fund (AMF) to prevent the recurrence of currency crises in East Asia and to institutionalize financial cooperation among the countries within the region. The advocates of the AMF saw the need for a regional lender of last resort. It stems from the impression that the IMF allocation of funds for Asia is inadequate, considering the size of the Asian economies vis-à-vis speculative international capital. The United States and the IMF, on the other hand, strongly objected to the idea of establishing an AMF, asserting that it would threaten the stability of the global financial order by weakening the IMF's voice in promoting structural adjustments in recipient countries and by aggravating the moral hazard problem.

In May 2000, Asia's three economic powerhouses—China, Japan, and South Korea—and ASEAN agreed to expand an existing set of currency swap arrangements to fend off a crisis similar to the one that rocked the region in 1997. The plan, dubbed the Chiang Mai Initiative (CMI), calls for a network of bilateral currency swap-and-repurchase arrangements, which implicitly requires the establishment of a system of pooled foreign reserves

that participating central banks could draw upon when their currencies are subjected to heavy speculative attack. As exemplified by the successful launching of the euro, the discussion on regional financial cooperation may extend to more sophisticated topics such as monetary cooperation. However, more realistic and workable agendas are likely to produce more tangible results. In other words, the task of regional financial cooperation is to be approached from a long-term perspective and in a gradual manner. As was the case with the euro, the differences in the levels of economic development among East Asian countries must be considerably narrowed to meet the economic requirements for monetary integration. This is not to say that the discussion of monetary integration or currency union itself is futile at this point. A consensus on and binding commitment to monetary integration will emerge when more specific agendas are attained that could increase the likelihood of a common currency in the region.

At the global level, various issues for building a new international financial architecture are being discussed in numerous arenas. However, inputs from developing economies are not satisfactorily recognized and incorporated in the discussions. In order to obtain legitimacy and broad support from the global community, emerging market economies must actively participate in the discussions on reforming the international financial architecture. Only then can their views be more adequately incorporated in the continuing process of reshaping a new international financial architecture. As was the case after the Mexican crisis of 1994–95, however, the appetite for radical reform of the international financial system has receded considerably in the wake of global recovery. From the viewpoint of the emerging market economies, relatively little has been accomplished in lowering the degree of instability in the international financial system and in improving its capacity to manage crises. Thus, additional reforms of the international financial system are needed both to prevent such crises in the future and to respond more effectively to the painful disruption that will inevitably occur.

There is nothing wrong with incremental changes as long as they yield decisively positive outcomes. However, the reality is that slow progress would not safeguard financial stability in the emerging market economies, even if they faithfully carry out the kinds of reform recommended by the international financial institutions. As long as the structural problems on the supply side of international capital are not effectively addressed, emerging market economies will remain vulnerable to future financial crises.

This volume attempts to diagnose the latent problems in East Asia's financial system and to identify feasible options for building regional financial arrangements in East Asia. The papers in this volume were commissioned by the Korea Institute for International Economic Policy (KIEP) and the Northeast Asia Economic Forum (NEAEF), with the sponsorship of the Ford Foundation. This volume is divided into four parts. Part I—

Financial Systems in East Asia: Challenges and Opportunities—provides an overview of the current status of financial systems in East Asia at the national and regional levels. Part II—New International Financial Architecture: Its Regional Implications—discusses current issues regarding a new international financial architecture. Part III—Regional Financial Arrangements: Issues and Prospects—highlights the necessity and role of regional financial arrangements in East Asia. Part IV—Major Findings and Policy Implications—presents major findings and discusses some policy implications. Parts I–III include three to four papers each written by prominent foreign experts and Korean scholars, followed by commentaries by leading experts in the field. World-renowned experts present their own creative views on the significance of the issue and major points of contention and provide meaningful recommendations for future policy reforms in the East Asian region.

Part I: Financial Systems in East Asia: Challenges and Opportunities

The papers of Gordon John de Brouwer (Paper 1), Eiji Ogawa (Paper 2), and Yoon Shik Park (Paper 3) provide an overview of the current status of financial systems in East Asia at the national and regional levels. As vividly shown in the recent crises, building a sound domestic financial system is one of the important tasks for preventing a future crisis. Although there has been remarkable progress in financial sector restructuring in crisis-affected countries, challenges still remain. Based on the overview of the current status of East Asian financial markets and systems, two specific issues are discussed in Part I: costs and benefits of internationalization and development of Asian bond markets as a source of long-term financing.

In the first paper, de Brouwer provides an overview of recent developments in East Asian financial markets, particularly regarding the role of capital flows in the region. The first half of his paper documents and examines capital flows before, during, and after the East Asian financial crisis. He notes the unprecedented level of net private capital inflows to Asia in the mid-1990s and attributes its causes to the following factors: perceived profit opportunities; diversion of Japanese investment offshore; expansion of institutional investors and country funds; development of regional ratings; and the easing of local capital controls. In addition to the expected rapid expansion of the economy, financial investments offered the potential for very high profits, particularly through the yen carry trade. Further, the East Asian carry trade used short-term instruments .

First de Brouwer examines the volatility of capital flows to emerging markets, bank loans being the most volatile and FDI the most stable. The five most affected countries of East Asia—Indonesia, Malaysia, the Philippines, South Korea, and Thailand—experienced a sudden reversal of

capital flows, from an inflow representing over 6 percent of their combined GDP before the crisis to an outflow amounting to more than 7 percent during the crisis. Shifts in bank lending, especially to other banks, resulted in higher risk premiums, subsequent downgrade of credit ratings, and a sharp drop in cross-border assets in crisis-affected countries. Bank loan maturity has also changed markedly from predominantly short term to long term after the crisis. However, this changing maturity profile does not necessarily reflect the behavioral changes in international capital flows into the region. Most of the short-term bank loans were not renewed and have not yet recovered to the precrisis level. Although there are signs of improved access by East Asian emerging market economies to international capital markets, capital flows into the region are taking place mostly in the form of equity-related investment. Those equity flows are extremely volatile and quickly react to changes in the global financial environment.

In the second half of his paper, de Brouwer explores some of the outstanding policy issues being debated in the international arena. He reviews the reports submitted in March 2000 by the three working groups set up by the Financial Stability Forum (FSF). The FSF Working Group on Capital Flows, while agreeing on the economic benefits of capital inflows, warns of new risks and potential costs to ill-managed economies especially if such inflows are short term in nature. The Working Group on Offshore Centers, noting the recent growth in offshore financial centers (OFCs), points out that some OFCs have figured in recent crises and recommends that they be assessed by the IMF in terms of their supervisory capacity, law enforcement, information disclosure, and adherence to international standards. The Working Group on Highly Leveraged Institutions (HLIs) warns about potential risks HLIs pose to the stability of financial systems and proposes improvement in risk management, regulatory oversight of hedge funds, and reform in foreign exchange markets and trading.

Next de Brouwer turns to the issue of market integrity and hedge funds, the debate over which he says has not produced any significant international policy response. There are, according to the author, seven key issues in the debate, each of which he briefly discusses. First, assumptions about the benefits of unregulated financial markets are not borne out in practice. Second, bank lending, not hedge funds, is the most volatile component of global capital flows. Third, the 1998 IMF study by Eichengreen and Mathieson, which has largely shaped current assessment of hedge funds, is seriously flawed. Fourth, the view held by many countries that hedge funds posed serious risks to market integrity in 1997–98 is rejected by the United States. Fifth, the policy response to HLIs should focus on behavior, not the institutions per se, to secure future stability. Sixth, severely limiting hedge funds' activity may be shortsighted and ultimately self-defeating. And seventh, failure of international policies to reduce vulnerability to financial crisis has led some countries to adopt unilateral actions,

such as limiting access to swap arrangements and holding large reserves.

In Paper 2, Eiji Ogawa opines that the U.S. dollar is fairly well entrenched as the key international currency in the world economy. He says that the East Asian currency crisis might have been avoided had countries in the region targeted exchange rates of their home currencies in terms of a currency basket composed of the U.S. dollar, the Japanese yen, and other international currencies. In light of the optimal exchange rate system in East Asia, he thinks that enhancing the role of the Japanese yen as an international currency can contribute to the stability of real exchange rates in East Asia. However, he asserts that it is difficult to enhance the current status of the Japanese yen as a key currency by itself under the present international monetary system, which he calls a Gulliver-type system, in which inertia works in favor of the U.S. dollar as the key currency.

Ogawa points to the undying faith in the U.S. dollar—loyalty that has allowed the U.S. dollar to become too convenient a currency, and this in spite of the United States being the largest net debtor country in the world. He thinks that it would be better to "share the burden" of financial stability in the international monetary system by utilizing three major currencies: the U.S. dollar, the European euro, and the Japanese yen. A good balance of these currencies in the currency basket would possibly protect East Asian countries from a currency crisis. Enhancing the Japanese yen as an international currency would help establish confidence in the yen, and this in turn would help stabilize the East Asian economies.

Ogawa points out that the world still accepts and uses the U.S. dollar as the key currency in the present international monetary system despite the fact that it has depreciated against the yen and the deutsche mark since 1973. The three functions of an international currency are: a medium of exchange; a store of value; and a measure of value in the international economic market. He thinks that the U.S. dollar's function as a medium of exchange is more significant than as an international currency representing a store of value. In his empirical analysis, Ogawa demonstrates what he describes as the inertia of the U.S. dollar in its position as the key currency, as well as inflation and depreciation rates of the U.S. dollar relative to other major currencies in the world. The bottom line is that the U.S. dollar has maintained its "overwhelming function" as a medium of exchange no matter what happens to it. As a store of value, the Japanese yen can compete with the U.S. dollar, but it must still increase its advantage as a medium of exchange. Since the collapse of the Bretton Woods system, economic agents are not required to use the U.S. dollar as the key currency, and yet they do so because of the U.S. dollar's history of network externalities and economies of scale. Ogawa thinks that it would be preferable to have a multi-international currency system that allows several key currencies to be used as both a medium of exchange and a store of value.

To enhance the role of the Japanese yen as a medium of exchange as

opposed to being a store of value and thus become more competitive, Ogawa suggests financial market deregulation in Japan and the establishment of the Tokyo offshore financial market. But in addition to this, to internationalize the yen, the Japanese government needs to remove obstacles of regulation and taxation for both foreign and domestic private economic agents in using the "yen as a settlement currency in international trade and as a denomination currency in international lending and borrowing." Ogawa notes that the Japanese government and the Japan Ministry of Finance have taken a few steps in this direction. Speaking of the U.S. dollar as the key currency, Ogawa says: "It is necessary to gain momentum in order to change the condition in which the network externalities support the inertia." He suggests beginning with the East Asian region in terms of expanding ties through trade and capital transactions. This would give the Japanese yen a good base for circulation. Establishing a bilateral free trade agreement in the region that includes international cooperation for using the trading partners' currencies can widen the use of the yen.

In his conclusion, Ogawa notes that although the de facto dollar peg system caused the Asian currency crisis, some East Asian countries that have nominally adopted floating exchange rate systems seem to have returned to the same de facto dollar peg system in the postcrisis period. He says a currency basket needs to be utilized, including the Japanese yen, to help prevent future crises and to facilitate the internationalization of the yen. Finally, he asserts that as the European monetary integration into a common currency demonstrates its determination to move away from the existing Gulliver type of international monetary system, East Asia's recent movements toward free trade agreements can contribute to further internationalization of the Japanese yen through strengthening trade and financial relations between Japan and the East Asian countries.

In Paper 3, Park attributes the East Asian financial crisis of 1997 to the lack of a strong bond market and an inefficient banking system. Had the banks performed better their intermediation function and had Asian countries put their savings into the bond market, perhaps these countries would not have resorted to foreign borrowings. Likewise, international investment in the Asian securities market would have made for a "more stable form of foreign capital flows than short-term bank loans." East Asians relied too much on their traditional banking system. This led to many inappropriate decisions on the part of the bankers and kept the Asian market from having a transparent financial system. The existence of a bond market would have given banks a "breathing space" in what otherwise might become "panic behavior." Savings of the Asian region were being invested outside the region. Japan's capital outflows to North America were nearly double those to Asia, and its trade surplus with Asia's newly industrialized economies was 1.5 times greater than that of the United States.

The domestic bond market seems to be the beneficiary of the 1997 eco-

nomic crisis. The East Asian 5 recovered well in 1999, with an average GDP growth of 5.8 percent, albeit per capita income did not increase except in Korea. Outstanding international bond issues by Asian borrowers were slow. By mid-1999, however, the volume of the domestic debt securities was higher than that of the precrisis period, and Korea, which was hardest hit by the crisis, had more than doubled the outstanding debt securities. As governments in the region had to finance budget deficits and recapitalize their banking sector, the domestic bond market had started to emerge. Governments such as Hong Kong and Singapore issued debt in excess of their financial needs to spur development of their bond markets.

Recently, Asian bond prices have rallied, probably due to improvements in the credit fundamentals of East Asia as a result of financial and corporate restructuring. Throughout East Asia, accounting standards, disclosure requirements, transparency, and rules for corporate governance have all improved since the crisis. Japan has decided to guarantee Asian sovereign debt issues, thus providing growth in the regional bond market, which could, in turn, bring some Japanese money back to East Asia. Park then explains Korea's move to do the same. With the overall improvement of prices and risks in the Asian bond market, there has been a surge of foreign exchange reserves and a reduction in foreign debt.

Park continues with a discussion on market infrastructure, carefully describing each country's domestic market system and their efforts to improve it. He describes how East Asia, in an attempt to get rid of paper-based bookkeeping, is developing electronic regional network settlement systems. For some, the goal is to operate the settlement system in real time. This would be an asset for the dragon bond market and for the local currency-denominated bond markets. Hurdles that need to be overcome are: a limited investor base; central banks that are suspicious of a robust bond market; corporations preferring stock market and bank loans; and other impediments to making bond market issues simple. Delivery-versus-payment (DVP) allows for simultaneous transfer of funds and securities for payment and securities settlement systems and facilitates centralized clearing and settlement that will encourage the international investor to come back to Asia. To develop the bond market further, credit rating agencies need to be more fully utilized.

Park then discusses bond yield benchmarks and the role they play in the efficient functioning of primary and secondary bond markets. He observes that Asia lacks a yield curve, which is needed to provide a good reference for the interest rates of bonds with varying maturities. He discusses each Asian country's attempt to establish benchmarks. Park enumerates ways for Asian governments to have a more positive influence in establishing a robust bond market. They need not only to liberalize their capital markets, but also to set up a supervisory base to provide an atmosphere of open competition and fair market practices. He also stresses

the importance of knowing and understanding the investors and of being able to establish strong institutional investors. Understanding the successful market practices of advanced capital markets is equally beneficial to East Asia. Park states that tax analysis of the bond market is still difficult, but he notes that the tax rates have been reduced and regulations simplified since the East Asian crisis. It seems that Korea has done a good job in developing its bond market since 1999. With the help of the Financial Supervisory Commission, Korea is striving to meet international standards. Park goes on to describe other efforts of Asian countries in developing their bond markets.

Park notes that Thailand, Korea, and Malaysia have strengthened their "market infrastructure, broadened benchmark yield curves, and liberalized their markets to foreign participants." Indeed, Asian countries are slowly utilizing the bond and other financial markets instead of relying on the banking system. Investors may gradually move away from the "buy and hold" investment strategy as greater trade activity and more complex bond issues appear in the future. Thailand corporations now issue bonds, as both banks and corporations have better balance sheet positions. Before the crisis, Thai corporations borrowed short term in foreign currency, which led to huge losses after the currency was devalued.

Korea's government has liberalized the bond market. For example, it has actively promoted joint ventures between foreign and domestic credit rating agencies. Private domestic and foreign investors can now establish mutual funds in Korea. It has also introduced asset-backed securities (ABS) to clean up the banks' nonperforming loans. Korea's aggressive reform has contributed to the depth and liquidity of its bond market. However, more needs to be done regarding transparency, asset/liability management, hedging tools, and eliminating the withholding tax. On the other hand, Malaysia has raised more capital through bond issuance than through equity issuance. For many reasons, they have one of the largest domestic bond markets in the region. In conclusion, Park sees the Internet as greatly benefiting the bond market, which is still relatively small compared to its potential. Park offers some suggestions for improving the Asian bond market, citing the history of Europe and the United States and the development in 1963 of the Eurobond market. This market was established in response to chronic balance of payment deficits in the United States, which was forced to close its domestic bond market to European issuers in an attempt to control capital outflows. He thinks that the East Asian financial crisis can be the catalyst for the Asian bond market to develop along the same lines.

In their comments on Paper 1, Kim and Wang note that the first half of de Brouwer's paper features recent developments of East Asian financial markets. Park's paper also points out that despite high savings rates in East Asia, the absence of a wholesome domestic financial system has led to both currency and maturity mismatch compounded by inefficient financial

intermediation. As a lesson, a variety of long-term financial channels should be promoted to foster stable capital flows into East Asia. Having strong and robust domestic financial markets with well-diversified corporate bond markets can reduce excessive reliance on short-term external borrowing through interbank lending, which is more vulnerable to sudden changes in the investors' sentiments. de Brouwer's observations provide valuable insights for understanding latent problems in East Asian financial markets. In the second half of his paper, he discusses some policy issues from an international perspective. Park's paper on the regional bond market is certainly a complementary piece to de Brouwer's paper.

Based on his experience of participating in the Financial Stability Forum Working Group and his own research on hedge funds, de Brouwer has identified seven key issues. One of the interesting points he has made is to counter the study led by Barry Eichengreen and Donald Mathieson. de Brouwer asserts that their analysis of market integrity related to hedge funds' activities contains three serious flaws: it focuses on the size of hedge funds' global capital base vis-à-vis other financial firms, when relevant variables are the size and variability of institutions' positions in a particular market; it makes a hasty and incorrect assessment about the size and timing of hedge funds' positions in East Asia, especially the case of Thailand; and it oversimplifies the similarities and relative importance of hedge funds and proprietary trading desks in East Asian financial markets in 1997 and 1998. de Brouwer's provocative assessment of hedge funds in terms of market integrity provides an empirical evidence to support advocates arguing for stricter regulations over hedge funds.

Foreign portfolio investors including hedge funds have become dominant players in determining the direction of asset price movements in many East Asian countries, especially since these countries further opened their capital markets during the crisis period. The ongoing recovery in East Asia has attracted large capital inflows in the form of portfolio investment. These large inflows could rekindle asset price bubbles and speculation. When a currency appreciates as a result of capital inflows, market forces can create expectations that will induce even greater capital inflows, which can further lead to more appreciation of the currency. As de Brouwer adequately points out, there have been no visible architectural reforms in the regulations over hedge funds and short-term capital movements.

Commenting on Paper 2 (Ogawa's paper), Goldstein agrees with the author, noting how network effects and economies of scale help the U.S. dollar maintain its dominant status and how the creation of the euro can provide significant competition for the yen as an international currency. Goldstein does differ, however, on a few points. He does not see it advisable for emerging market economies to make the internationalization of the Japanese yen their priority if it is not to their own advantage. He does not see the de facto dollar peg as a cause of Asian complacency regarding

the exchange rate risk in the run-up to the crisis. He argues that a fluctuating exchange rate makes people aware of the need for hedging in a way that no long-standing fixed rate does, but the difference is not due to the denomination of the peg. He believes the Asian crisis had origins in other symptoms of financial weakness and that the greater use of the yen as an international currency is not the answer. He says that although crisis countries' trade and debt links with Japan might call for a larger weight for the yen in the Asian currency basket, their financial systems are not stable and resilient enough to declare an exchange rate target at this time.

In his commentary on Ogawa's paper, Lamberte emphasizes three points. One is that the Japanese yen may not have to be fully internationalized before a country adopts a currency basket system that includes the yen. He mentions Singapore as a country that has been pegging its currency to a basket of currencies. The second point is the possibility that a bilateral free trade agreement need not require the yen as a currency for invoicing and settlement. Japan may have to bear the foreign exchange risks to induce trading partners in the region to agree to the use of the yen as invoicing and settlement currency. Thirdly, he gives credit to Japan for starting to deregulate its financial system and also to the Japanese parent companies for enforcing the use of the yen as settlement currency by their subsidiaries. He sums up by saying that since the major world currencies are still volatile and because the memory of the Asian currency crisis is still fresh, the East Asians may opt for a currency basket and increase the weight of the yen in that basket, thereby promoting its international status. This may take some time, however, because conditions that led to the rapid internationalization of the dollar and the euro are not present for the yen.

Goldstein commends Paper 3 (Park's paper) on the Asian bond market but offers three pieces of advice to insure its success. First, the bond market needs to function independently of connected lending and government interference. Secondly, people must be aware of the possible volatility and fluctuation of the bond market in emerging markets. And thirdly, a warning is proffered against put options in medium- and long-term issues. Goldstein points out that auctioning the bonds, preannouncing the issue calendar, and removal of withholding taxes on income from securities produce better results for these bonds.

Lamberte agrees with many of the observations made by Park regarding the necessity and prospects for developing the Asian bond markets. He goes on to discuss the Philippine bond market, which was not given enough attention by Park. He adds a few more reasons—such as the absence of facilities for securities borrowing and lending, financing inventories, and an efficient and cost-effective clearing and settlement system—for the lack of liquidity in the government and private medium- and long-term issues in the Philippines. He also cites some provisions in the Corporation Code that discourage the issuance of long-term securities.

Part II: New International Financial Architecture: Its Regional Implications

Morris Goldstein (Paper 4), Mario B. Lamberte (Paper 5), and Chae Shick Chung and Doo-Yong Yang (Paper 6) discuss current issues on reforming the international financial architecture. They present global initiatives for crises prevention, management, and resolution. While Goldstein provides an overview of the current efforts to reform the international financial architecture (hereafter, IFA), Lamberte addresses current issues related to the international financial architecture from the East Asian perspective. Chung and Yang evaluate competing exchange rate regimes in East Asia and identify the underlying determinants in the exchange rate movements.

In Paper 4, Goldstein starts with an observation that crisis management is now at the forefront of economic policy. With this in mind, Goldstein reviews leading proposals to reform the current international financial system and offers his views as to priorities for reforming the IFA.

Goldstein first considers the recent contentious issue of interest rates and maturity of IMF loans. In comparing IMF and private borrowing costs, he raises a question as to whether the fund loan looks more like a subsidy and a lower fund rate eventually encourages frequent and prolonged use of IMF resources. Goldstein suspects that the extension of the interest rate terms of the Supplemental Reserve Facility (SRF) to all non-concessional IMF lending would be sufficient to have countries repay more quickly and borrow less frequently. Although a new pricing structure for IMF loans is intended to establish more consistent incentives across fund facilities, encourage access to private capital, deter inappropriate large-scale access to, and discourage prolonged use of IMF resources, the increase in the interest rates itself is not without problems.

First, when countries finally decide to ask the IMF for emergency loans, they are already in dire circumstances when private sources of international financing have almost dried up. Thus, the decision to go to the fund is likely to be less price-elastic than the decision to repay the fund loan.

Second, whatever the economic merits, the decision to go to the IMF is politically costly from the viewpoint of the incumbent government since domestic political opponents may take advantage of the relatively powerless authorities. In most cases, the crisis-affected countries tend to request IMF loans late in their survival games. In this regard, a "conditionality-equivalent" interest rate should be high enough to deter moral hazard on the part of the incumbent government. An additional interest premium cum conditionality would be excessive and, in most cases, would make it more difficult for borrowers to service their external debts.

Goldstein turns to the discussion of another important dimension of IMF lending—the size of rescue packages. This issue is related to the debate on the need for an international lender of last resort. Much of the

recent concern about the size of IMF emergency financing has been that large rescue packages may contribute to moral hazard on the part of private creditors to emerging market economies. The Meltzer Commission Report calls for drastically shrinking the scope of IMF intervention, and more specifically, restricting lending to countries that prequalify according to strict free market criteria. However, the commission does not recommend smaller IMF rescue packages as an antidote to that problem. Following the Bagehot guideline that a lender of last resort should "lend freely," the commission proposes that the IMF lend on a substantial scale—indeed, up to one year's tax revenue—to countries that have met certain prequalification criteria. On the other hand, the Council on Foreign Relations Task Force (CFRTF) strongly calls for a return to smaller IMF loans (100–300 percent of quota), unless the crisis is systemic or caused by contagion, in which case systemic lending windows or a newly created "contagion facility" would be made available by a supermajority of creditor countries. Goldstein, who previously served as project director and one of the authors of the CFRTF Report, explains how the IMF could in fact make smaller fund loans and resolve moral hazard problems and other issues as well by following the CFRTF's recommendations.

Goldstein has highlighted three main differences between the CFRTF and the U.S. Treasury's views on the size of IMF lending. First, as regards resource constraints and incentive distortions on large bailout packages, the treasury prefers a price mechanism while the CFRTF prefers a quantity cum governance constraint. Second, the treasury's approach gives more discretion to IMF management and to U.S. authorities in deciding when to activate the disbursement of very large rescue packages. In contrast, the CFRTF's approach requires a supermajority consent to make that decision. Third, the method of financing large rescue packages also differs. Under existing IMF policy, the large access afforded under the SRF and CCLis financed out of the fund's quota pool of resources. In contrast, the CFRTF approach provides new money for systemic contagion cases by financing large access with a special SDR allocation. Goldstein thinks that the CFRTF's approach is preferable to the U.S. Treasury's interest-rate-premium approach but hopes that the U.S. Treasury and the G-7 will explore the issue further.

Goldstein then provides an extensive discussion on IMF's policy conditionality, which has become the target of intense criticism. He focuses on four dimensions; namely: (1) ex post versus ex ante policy conditionality; (2) the scope of conditionality; (3) currency regime and private sector burden sharing aspects of conditionality; and (4) implementation of international financial standards.

On the issue of ex post policy conditionality versus ex ante preconditions, Goldstein notes that the Meltzer Commission Report was extremely critical of the existing approach to IMF conditionality. The commission recommended that the fund lend only to countries that prequalify for

assistance by building impeccably strong financial systems. Under the commission's plan, the IMF's regular surveillance, including its Article IV consultations with member countries, will be a critical element in judging the eligibility for fund lending. Goldstein offers criticisms of the commission's preconditions on four grounds. The CFRTF Report, Stanley Fischer (first deputy managing director of the IMF), and the U.S. Treasury seem to go along with Goldstein's ideas that the IMF's current criteria for loan qualification are preferable to the commission's proposal. Goldstein would, however, like to reduce the scope and invasiveness of the fund's structural policy conditionality.

Regarding the scope of conditionality of the IMF, Goldstein notes that the complaint has been that it became overextended during the Asian crisis, and he attributes the fund's "mission creep" to the following four factors: (1) Recent fund programs with transition economies contained many performance criteria related to structural transformation of the economy; (2) the political demand for structural performance criteria; (3) concessional lending activities to poor countries; and (4) the fund's own need to be a source of additional structural policy conditionality. He then expresses concerns regarding the increasing intrusiveness of the fund's structural policy conditionality. Asking the two questions—if reform is necessary for a country to have restored access to international capital markets and if the measures required by the fund would also be required of a developed country if it were the subject of a fund program—would give a clearer idea as to whether the fund's structural policy conditionality should be used in the fund program. The bias against developing countries undermines the legitimacy of the fund's policy conditionality. In addition to these concerns, Goldstein discusses the "core competence" of the fund and what this should entail. He says that the most sensible definition of the IMF's core competence is monetary, fiscal, exchange rate, and financial sector policies. He emphasizes that there should be serious efforts in pushing the fund "back to basics." In a similar vein, Goldstein also supports the view that the institutional specifics of IFI lending facilities need to give way to a sensible and consistent division of labor—not the other way around. Unlike the U.S. Treasury, he thinks that the Meltzer Commission Report has a point in recommending that the IMF cease lending to countries for long-term structural transformation and for long-term development assistance. Thus, he supports the commission's recommendation that the Poverty Reduction and Growth Fund (PRGF) be eliminated or transferred to the World Bank.

Regarding the currency regime, Goldstein asserts that emerging economies will be tempted to maintain overvalued "soft pegs"if they can count on large-scale IMF or G-7 financial support in a crisis. He cites the Brazilian crisis as a case in point. He believes that the world of high capital mobility is not appropriate for these adjustable peg regimes, and countries should choose between a regime of managed floating or a "hard peg" (i.e.,

a currency board or dollarization). Going even further, he says "dollarization" is a second-best choice, given the currency mismatch of emerging economies and insolvency of their financial system. His first choice, however, is managed floating with inflation targeting as an anchor.

In his review of various proposals for private sector involvement (PSI), he notes that the Meltzer Commission Report took a decidedly hands-off approach to the PSI issue, while the CFRTF Report took a more active position on PSI. Unlike the Meltzer Report, Goldstein asserts that the PSI problem will not solve itself in the marketplace. He stresses the point, as in the CFRTF Report, that the G-7 countries will need to be more active in facilitating wider use of collective action clauses (CACs) in sovereign bond contracts, as well as in endorsing selective use of temporary standstills. On PSI, he believes that the top priority should be to put in place a sensible system of deposit insurance for banks in emerging market economies. Next, there should be efforts to cut back on the size of IMF rescue packages for country crises (crises that do not threaten the functioning of the international financial system) and to move toward a more rules-based approach for defining systemic crises and for activating larger resources.

In Paper 5, Lamberte starts by discussing the recent economic performance and the future prospects of the East Asian economies. He points out that the economic recovery taking place in crisis-hit countries is still fragile. He has observed that the financial markets in East Asia are again undergoing some turmoil, which suggests the need for reforming not only the domestic financial sector of these countries but also the international financial architecture. Lamberte proceeds to examine the major issues on reforming the IFA being debated with special emphasis on the views of developing countries in general and the East Asian countries in particular.

Lamberte tackles first the issue on the structure of governance for reforming the IFA. Although the Bretton Woods Institutions (BWIs)—the World Bank and the International Monetary Fund (IMF)—had done their jobs well before the 1990s, the current globalization and the nature of the crises recently experienced by emerging market economies have posed new challenges. The G-7 took note of these new developments and put forward some recommendations to reform the international financial system. Later, an informal ad hoc group, the G-22, which represented both the highly industrialized and developing countries, was organized to provide a forum for discussing global financial problems. Unfortunately, however, its agenda for reforms was very narrow, focusing mainly on what developing countries should do to reduce vulnerability to a crisis.

In 1999, the G-7 created two permanent virtual institutions, namely the Financial Stability Forum (FSF) and the G-20, which replaced the U.S.–led ad hoc G-22. The FSF was designed to deal with highly technical issues of the international financial architecture, while the G-20 was created to lead an informal dialogue among systematically important countries

within the framework of the Bretton Woods system. The G-20 represents 85 percent of the world's population and 65 percent of its gross domestic product. However, many developing countries still questioned the lack of representation and the way of selecting the representatives to the two institutions. Again, Lamberte asserts that the adequate representation of emerging market economies in said institutions is important in determining the agenda and ensuring broad support for the needed reforms.

Turning to the issue on capital account liberalization and capital controls, Lamberte says that while all countries will eventually have to embark into full current account and capital account convertibility, there is virtually no unique way to achieve it. Each country must appropriately sequence and set the pace of capital account liberalization, taking into account the degree of development of its domestic financial sector and supervisory regime. The same is true with the use of capital controls. Although it has been widely recognized that excessive short-term inflows can be a source of potential vulnerabilities, there is as yet no international consensus on how they should be moderated or restrained. Developing countries are of the view that they retain the right to impose disincentives or controls on capital inflows. There is also no consensus yet on whether controls should be imposed on capital outflows. He cites as an example the Malaysian case of controls on capital outflows that seemed to have succeeded in giving the country a breathing space while it tried to address weaknesses in its banking and corporate sectors. He says that the effectiveness of the Malaysian type of capital controls hinged on the administrative capacity of regulatory institutions to strictly enforce the regulations and on a disciplined banking system.

"One size does not fit all" when a country searches for the most appropriate exchange rate regime. For emerging East Asian economies with open capital accounts, Lamberte agrees with the policy recommendations proposed by the Asian Policy Forum (APF) that neither a freely floating exchange rate regime nor a currency board regime is appropriate. He points out the Subcouncil on the Revitalization of the Asian Economy and Financial Markets' recommendation that East Asian countries adopt a "managed float exchange rate regime," using a trade-weighted currency basket. However, countries in the region desiring this exchange rate regime should proceed together in a coordinated manner. For countries with a closed capital account, the APF recommends an adjustable peg exchange rate regime.

Lamberte moves on to the issue of international standards. There is a general agreement on the need to develop the codes/standards and adopt best practices to strengthen the international financial system. Although much progress has already been made in this area, still greater participation by emerging market economies in the decision-making process can significantly enhance the quality, credibility, and effectiveness of international standards. While the G-7 would like to see rapid progress in the full

compliance of international standards, developing countries, on the other hand, would require more time to fully implement and enforce them since they still have to develop their regulatory capacity and other supporting institutional infrastructures, which can happen only gradually. Regarding capital adequacy requirements, Lamberte discusses some issues on the new capital adequacy framework proposed by the Basel Committee on Banking Supervision that will replace the 1988 Accord. While the 1988 Accord focuses on the minimum capital standards to cover credit risks, the proposed new accord will be anchored on three pillars—minimum capital requirements, supervisory review process, and effective use of market discipline—and will be directed at all banks in all jurisdictions. Developing countries have raised some concerns about the proposed capital adequacy framework because it might result in more stringent conditions that would seriously undermine their access to the international capital markets.

Regarding highly leveraged institutions (HLIs), Lamberte cites the general sentiments of developing economies on the need to regulate them. He notes that the indirect measures proposed by the FSF to regulate HLIs will still allow HLIs to exert their destabilizing effects on the international financial system. In this regard, he supports the view that direct regulation of HLIs should be pursued.

Lamberte points out that there is now a widespread international agreement to involve the private sector in crisis prevention and management, albeit the recommendations made by various international forums have yet to be implemented. Like Goldstein, Lamberte also stresses the adoption of collective action clauses in sovereign bond contracts and IMF's sanctioning of a temporary standstill to facilitate orderly debt restructuring.

Lamberte notes that while some people call for the abolition of the IMF, most developed and developing countries merely want to reform it so that it can carry out more effectively its mandate to oversee the international financial system. For better governance and accountability, Lamberte cites the need for developing countries to have greater participation and more effective voice in the decision-making process at the fund. He expresses a concern that voting rights of emerging market economies have not kept pace with their growing economic power. The United States, with only 17 percent of the total voting shares, maintains a veto power over major decisions of the fund.

Turning to the issue of transparency, Lamberte cites the need for the fund to be more transparent in its operations and decision-making process, including the selection of the head of the fund as well as that of the World Bank. Finally, Lamberte discusses circumstances such as the contagious nature of the crisis, the ability of countries in the region to raise the needed resources, the slowness of IMF to respond to the crisis, among others, that have prompted East Asians to establish a self-help regional financial arrangement (RFA). In the end, he concludes that both regional and international financial institutions are necessary in view of globalization and growing complexity of the

international financial markets. The next challenge for East Asia, Lamberte points out, is how to work out the details of the proposed regional financial arrangement so that it can meet its objectives.

In Paper 6, Chung and Yang cast some doubts on a recent argument that a fully flexible exchange rate system is the best way to avoid financial crises. Concisely put, they ask whether the flexible exchange rate system is a viable or appropriate option for Korea. Korea used to have a market average rate system, which is a variant of the managed floating regime. With Korea's adoption of a flexible exchange rate regime, the authors raise some concerns regarding short-term volatility and mid- or long-term misalignments in the exchange rate.

Chung and Yang try to find some clues regarding the issue of an appropriate exchange rate system in emerging markets by examining how the financial market in Korea has interacted with international financial markets before and after the crisis. They find that the slightest sign of either weakness of domestic economy or fragility of international financial markets can cause foreign investors to flee the Korean financial markets, possibly resulting in another financial turmoil in Korea. Their empirical findings indeed suggest that Korean financial markets have become more integrated with international financial markets, which could be attributed to the Korean government's various liberalization measures. The close relationship between the Korean and international financial markets could mean that either the liberalization of the capital market or the flexible exchange rate system is working well for the Korean financial market in terms of market efficiency. However, the other side of the coin should be given close attention; that is, the Korean economy has become vulnerable to volatile movements of short-term capital and shaky international economic environment. Chung and Yang assert that choosing a free-floating exchange regime would make the Korean economy even more susceptible to external financial factors that can possibly lead to a currency crisis.

To show the channel through which the international financial markets affect the real side of the Korean economy, Chung and Yang provide survey results showing that Korean firms' losses due to foreign exchange risks continued to increase even after the East Asian crisis. More specifically, 30 percent of large and 75 percent of small and medium-sized export/import Korean firms have not been managing exchange risks well. It is to be noted that hedging instruments are not well developed in Korea for a number of reasons. Chung and Yang point out that this behavioral and institutional backwardness undermines the adjustment to a flexible exchange rate system, which the Korean government has already officially adopted. These findings do not directly indicate that the free-floating regime is not viable or appropriate for Korea. However, Chung and Yang conclude by remarking that fear of floating persists among both market participants and policy makers in Korea at this time.

Commenting on the new international financial architecture (Papers 4–6), Djisman summarizes the current situation of the international financial system by stating that after the collapse of the gold standard, the world has an ad hoc cooperation type system for dealing with financial issues. The anchor currency countries basically leave exchange rates to market forces, while the rest of the world chooses anything from a floating to a fixed rate. Europe has the euro, which floats against the other two major currencies, but for the rest of the world the criterion is not clear as to why one system is picked over another.

For the major financial centers of the world, there has been no restraint on capital flows. Deregulation of capital markets also seems to contribute to high growth performance of emerging market economies. Demand for portfolio investment increased as capital markets in emerging market economies were deregulated to attract new share flotation. Djisman notes that this seemingly ad hoc process, without benefit of regulatory safety nets, has proved disastrous for the investors lured by lucrative capital gain. Likewise, in the 1980s, banking systems were substantially deregulated. In the case of Indonesia, the deregulation culminated in 1988 with entry to the bank business being reopened. After a terrific growth rate in financial services, the profitability was seriously eroded and buried under the capitalization of unpaid interest and arrears. Although a continued piecemeal approach to the international financial architecture will not get the job done, it appears it will be difficult to construct a new architecture because of dissenting or divided opinion among the world's policy makers.

Djisman agrees with Lamberte's point that all the discussions regarding the new international financial architecture have so far concentrated on the structural weaknesses found in the crisis-affected countries. These countries, albeit probably willing to restructure their corporate and banking sectors, are not necessarily immune from further crises. He calls attention to the push-and-pull factors that affect the progress of global economic integration. He refers to the advent of information and communication technology and economic liberalization that have created a heyday of enthusiasm for opening the countries' economies. Because of the rapid growth, the size and speed, and the new complexity of the world's financial markets, Djisman stresses the point that it is necessary to take a look first at the emerging financial environment before making an assessment of a new financial architecture and its adequacy. He warns that as the memory of the past crises fades, policy makers and participants in the financial market will begin again to get less cautious in weighing the risk-return relationship.

He disagrees with Goldstein on a few points. First, regarding interest rate and maturity of IMF loans, he thinks that a more balanced view is to consider how a recipient country can sustain its growth and repay the loans borrowed from the IMF. If the IMF sticks to quick repayment of the loan, and thus the program is designed to serve that purpose, he expects

that the balance of payments adjustments will result in a hardship that goes along with the generation of a current account surplus in a relatively short period of time.

Second, regarding the issue on the size of the rescue packages, Djisman points to the quality of the debtor nations' policies as being an important factor to the outcome of crisis management. Emergency liquidity will be of major importance in the new financial architecture. He cites China, Taiwan, and Hong Kong as having maintained a healthy increase in reserves, and with more countries following suit, the need for international emergency liquidity would be greatly reduced. The need for balance of payments equilibrium to be established in crisis-affected countries is part of the conditionality so that they can repay the loan with interest within a specified period. Although nations are begrudging about this, no other alternative has been established, and this conditionality seems to work. He points out that in the case of Indonesia, the attainment of balance of payments equilibrium was delayed due to some factors other than the IMF conditionality. On this point, he agrees with Goldstein that the preconditions are not preferable to conditionality. Djisman feels that without the lever of an international organization as a partner in policy change, the outlook is still bleak for developing countries to have open debate on sensitive issues. Djisman doubts if IMF's conditionality can be streamlined to focus on its core competencies since the fund does not only serve as a lender but also as a coordinator of a consortium of lenders to a country.

With respect to Lamberte's proposals for private sector initiative, Djisman mentions the reason for the lack of utilization of the Jakarta Initiative, which is a clearinghouse for debtors and creditors. He, however, saw some progress in recent months. Next, he cites tables in the Chung and Yang paper that show factors to be considered in choosing an exchange rate regime and mentions Goldstein's siding with the CFRTF in choosing managed floating with inflation targeting. But in the end, he notes that "what is crucial is not the choice but the credibility in supporting whatever choice is made." This is also Lamberte's belief. He continues with this theme, explaining how difficult it was for Indonesia when the value of the rupiah vis-à-vis the U.S. dollar started to fall. Djisman suggests that what may be more important than capital controls, as Lamberte had discussed, would be dealing with the problem of illiquidity of investment financed by capital inflows. He then discusses the need for reform of the IFIs, including a change in lending policy and a reallocation of resources to human capital formation. He is not, however, optimistic with regard to Lamberte's proposal to change the quota system in order to give developing countries more say in IFI leadership in the foreseeable future.

Regarding Goldstein's point on smaller rescue packages from the IMF to prevent moral hazard problem on the part of lenders, Ogawa asks if a regional financial arrangement would cause the same problem. As regards the issue

on ex post policy conditionality versus preconditions, he prefers to provide well-performing countries with incentives in the form of lower interest rates, but he goes on to suggest that they should meet the preconditions for qualifying for financing. He wants to maintain the Contingency Credit Line, but suggests doing away with the features that make it unpopular.

Ogawa supports an intermediate exchange rate system for East Asian countries with good macroeconomic policies. He, like Goldstein, is against the two corner solutions—hard fix or free float. He sees the need to have international or regional coordination among East Asian countries when they adopt an optimal exchange rate system. Ogawa agrees with Chung and Yang that a policy maker's objective should be the welfare of the country, whether by minimizing macroeconomic fluctuations or trade balance fluctuations. In reality, however, it appears that policy makers' real concern is to minimize foreign exchange risk against the U.S. dollar. He stresses the point that the East Asian currency crisis occurred under the de facto dollar peg system and queries Chung and Yang as to whether Korea actually has a floating exchange rate when the Korean won still seems linked to the U.S. dollar. He suggests that the authors analyze the interrelationship among the won, yen, and dollar by using the three exchange rates against another currency.

SaKong begins by noting the long-standing need for reform of the existing international financial architecture. He proceeds to identify what he views as five critical issues for reform: (1) short-term capital flows and highly leveraged institutions; (2) exchange rate regimes; (3) private sector involvement or burden sharing in the crisis prevention and resolution processes; (4) reform of the Bretton Woods Institutions and the establishment of regional financial institutions, such as a regional financial fund; and (5) global standards. Only on the last has there been substantial progress, although more efforts are still needed for emerging economies to upgrade their standards. On short-term capital flows, SaKong suggests that capital controls might be utilized by emerging market economies especially in times of emergencies as speed bumps for both capital inflows and outflows. Appropriate financial infrastructure should be in place before capital markets are opened. On the exchange rate regime, he also notes that fluctuations of major currencies—dollar, euro, and yen—are sources of external shocks to emerging market economies, and hence there should be some coordination among these three currencies. On private sector burden sharing, SaKong recommends early involvement of the IMF in mediating financial crises. On reform of the Bretton Woods system, he agrees with Lamberte that adjustments should be made to bring the quotas and voting rights of developing countries more in line with the changing economic realities. With regard to a regional monetary fund, SaKong supports the proposal to establish an AMF that will supplement the role of the IMF and fill the gap in the provision of regional-level public goods.

Part III: Regional Financial Arrangements: Issues and Prospects

This part includes four papers that stress the necessity and role of financial arrangements in East Asia. While Vichyanond (Paper 7) revisits the issue of the AMF or East Asian Monetary Fund (EAMF) and then critically assesses the necessity and feasibility of a regional lender of last resort as a vehicle for regional financial cooperation, Kim, Ryou, and Wang (Paper 8) address the issue of misallocation of international capital, which can be vividly exemplified in the huge volume of foreign reserves in East Asia vis-à-vis other regions. Then they explore the possibility of a contractual arrangement to borrow for contingencies. Yu (Paper 9) provides China's perspective on regional financial arrangements and other possible areas for regional financial cooperation, and Khee Giap Tan and Kang Chen (Paper 10) discuss the ASEAN perspective on regional financial cooperation.

In Paper 7, Vichyanond distinguishes two distinct camps: one holding the view that the IMF was quite helpful in restoring investor confidence and credibility of crisis-hit countries during the 1997–98 Asian financial crisis and the other claiming that the IMF was partly to blame for exacerbating the problems. The latter belief led some countries to propose an Asian Monetary Fund—Vichyanond's "regional lender of last resort"—a move opposed by the pro–IMF camp as redundant and counterproductive. In his analysis of the need for an Asian regional lender of last resort, the author first examines the role of the international lender of last resort. In order to effect both crisis prevention and management, the lender must have sufficient financial resources, allocate them wisely, and monitor and supervise its member countries. Limited resources dictate selective support to countries meeting certain conditions. Indeed, there is a need to keep a delicate balance between the optimal number of rescues, excessive stability, and the rescue of large nations whose insolvency can disrupt the global economy.

Vichyanond next assesses the IMF's strengths and weaknesses, beginning with its founding principles in 1945 and its expanded role in the 1990s. He points out that the IMF was criticized by many for various shortcomings, including: (1) the quota rule, which limited ailing countries' access to emergency funds; (2) adverse voting biases that shifted the basis of fund allocation to major members with more voting power; (3) national interests that led to asymmetric policy prescriptions and payment disequilibrium; (4) the IMF's demand that member countries open domestic markets, which led to destabilization of the economies of recipient countries and the charge that IMF is a "rich men's club"; (5) the IMF staff lacking experience with ailing economies, giving rise to inefficient surveillance; (6) orthodox policy prescriptions resulting in economic and social degradation and loss of investor confidence; (7) imposition of too abrupt an approach to corrective reforms, which was painful and time-consuming;

(8) inefficiency that caused slow credit approvals and disbursements; (9) denouncement of both corrective and preventive roles; and (10) IMF's insistence on confidentiality that triggered widespread suspicion about the IMF staff and its understanding of prevailing problems.

Vichyanond then turns to a discussion on the possible contributions of a regional lender of last resort to the objective of ensuring financial stability in the region. First, he considers an overhaul of the IMF, including a change in the system of votes and quota, bringing research staff up to familiarize themselves more with the countries in their charge, giving due attention to the Keynesian approach beyond neoclassical economics, and streamlining bureaucratic procedures for more prompt decision making. Since such far-reaching reforms are difficult if not impossible to achieve, the author proposes the establishment of a regional lender of last resort. He asserts that developing countries in the same region, which share a similar culture, similar natural resources and specialties, and a small amount of foreign exchange reserves, can justify the formation of a regional lender of last resort for a number of reasons. These include: sharing foreign exchange reserves to cope with capital mobility; making available more rescue funds and a larger share of borrowing power than the IMF; having better knowledge of the region for monitoring and assessing problems; avoiding crisis contagion by having funds available to prevent liquidity problems; linking of regional economies through trade, investment, and financial transactions; and having improved surveillance and monitoring done by locals instead of outsiders. However, he also notes the argument that a regional lender of last resort might overlap with the operation of the IMF and result in a wasteful use of resources and that the IMF's prescribed policies can claim credit for successful restoration of investor confidence in crisis-hit countries. But Vichyanond counters the pro–IMF arguments and then concludes that "a regional lender of last resort should be set up, while the IMF should be adjusted." The former, he says, should cushion only liquidity and not solvency for reasons related to volatility of capital flows and the need for prompt reaction to crises, among others. The IMF, on the other hand, should handle insolvency problems for reasons of its greater time lag for reacting to a crisis, target-setting experience, and longer period of the maturity of its loans.

Vichyanond next offers guidelines for the organization and operation of the regional lender of last resort. First, it must have an efficient department of monitoring and supervision to detect liquidity or solvency problems and apply timely preventive measures. Second, it must establish definite conditions or prerequisites for lending, such as limiting credits solely to liquidity crises, requiring borrowers to put up sufficient international collateral, limiting both the extent and maturity of credits available, restricting the frequency of borrowing, charging loan interest on a commercial basis slightly above the market rate, and providing advice to mem-

ber countries on managing their liquidity positions as a means to prevent future crises. Third, all conditions must be announced in advance to prevent biases in lending and loss of investor confidence and to encourage borrowers to manage their cash cautiously. These guidelines, Vichyanond asserts, will lead to greater availability of emergency credit for member countries facing liquidity problems, which in turn will maintain financial stability and investor confidence in the region.

The author cites three ways by which the establishment of a regional lender of last resort can complement the IMF: an increase in available resources for international last-resort lending; quick response to liquidity problems to avert crises; and the availability of detailed surveillance over the countries in the region. He, however, emphasizes the need to exercise some caution. The IMF's country quota and voting system should be avoided, political interference resulting from contributions of wealthy nations must be averted, information must be accessible, and monitoring and surveillance must be continually carried out. Finally, Vichyanond discusses how a regional lender of last resort can supplement the IMF, such as facilitating intraregional direct fund recycling, reducing currency exposure, and developing a regional currency index as an option for financial settlements. In his conclusion, Vichyanond notes that a regional development bank paired with, say, the World Bank, "can play a complementary role because it is closer to and more acquainted with the countries that undertake development projects." The same holds true for the regional lender of last resort and the IMF. A regional lender of last resort, if well managed, can play an important role in securing more benefits from global financial integration.

In Paper 8, Kim, Ryou, and Wang begin by pointing out that prior to the 1997 East Asian financial crisis, East Asians had no incentive for forming regional arrangements. A market-led process was already affecting integration. Hence, to purposely implement the necessary structural adjustments and policies was beyond what their intercountry relationships would allow. Immediately after the financial crisis struck in July 1997, Japan proposed an AMF. The leaders of ASEAN + 3 (the three represents China, Japan, and Korea) adopted the "Joint Statement on East Asian Cooperation" at the summit in November 1999 in Manila and agreed to collaborate on the financial, monetary, and fiscal issues of common interest. Recognizing the need for establishing a regional financial arrangement to supplement the existing international facilities, the finance ministers of ASEAN + 3, at their meeting in Chiang Mai, Thailand, in May 2000, agreed to strengthen the existing cooperative frameworks in the region through the Chiang Mai Initiative (CMI). The authors see the initiative as a major step toward strengthening financial cooperation among the thirteen East Asian countries. In this paper, the authors discuss the idea of Asian Arrangements to Borrow (AAB) as a viable means of cooperation beyond the CMI.

The authors review the past and current borrowing arrangements—namely: the General Arrangements to Borrow (supplemental funds to the IMF); the New Arrangements to Borrow (credit arrangements between the IMF and twenty-five members and institutions); various credit arrangements of the European Community; and the ASEAN Swap Arrangement. They enumerate the procedural steps to activate borrowing in each arrangement and evaluate the performance of past and existing facilities.

The authors stress the need for a regional financing arrangement both to cope with instability in the international market and to correct domestic structural weaknesses. Although East Asian countries seem to be recovering well from the crisis, and some progress has been made in reshaping the international financial architecture, the authors argue that as long as the existing international monetary system does not reflect a sense of urgency for curing all of East Asia's woes, countries in the region will remain vulnerable to future crises as before. To the authors, the answer is to create regional self-help cooperative arrangements. They consider four possible forms of regional financial arrangements: a regional borrowing arrangement under the IMF; a regional arrangement under the Asian Development Bank; the Asian Monetary Fund; and contingency credit lines through the central banks. However, the aforementioned regional facilities should be distinguished from the facilities to maintain the par value system among participating countries under the regional monetary system.

The AAB shall be activated as the first line of defense for a country faced with a temporary shortage of foreign exchange before officially requesting emergency loans from the IMF. The authors recommend that the Bagehot rules can be utilized to avoid the moral hazard problem embodied in the automatic lending system of the AAB. In this way, the AAB would not be truly a regional lender of last resort, not freely lending the amount needed for a crisis country since the ceiling of lending could be up to 100 percent of a borrower's credit commitment, and an additional 100 percent with two-thirds approval of membership. The authors think that a total credit commitment of U.S. $30 to 50 billion would be sufficient and propose alternative credit commitments of participants. They discuss ways to prevent abuse of the automatic lending system. For instance, a penalty rate should be applied to borrowing countries as in the facilities of the IMF. In addition, some conditions should be satisfied to make a call on the AAB. Only if there exist clear signs of a currency crisis, such as sharp depreciation of nominal exchange rates or a sharp decline of foreign reserves, could countries be eligible for drawing. However, conditions for drawing should be differentiated from prequalifications of the CCL. As regards maturity of the loan, the authors recommend six months with an automatic six-month extension. It can be further extended for another six months upon approval of two-thirds of the membership. Debtor countries are required to deposit an equivalent amount of their own currency as collateral.

As regards the feasibility, benefits, and action plan for the AAB, the authors conclude that their proposed AAB can avoid potential conflicts with the IMF and between the countries in the region. And, at the same time, it can overcome the shortcomings found in the proposals for the creation of an AMF, the contingent credit line arrangements with private financial institutions, and the repo/swap arrangements between central banks. They think that the AAB will be acceptable to the United States and the IMF as an alternative to the AMF and that China will not resent Japan's participation in it as opposed to the potential influence it might wield under the proposed AMF. Japan's influence will be more limited but its financing ability still appreciated. The authors suggest that the big three—China, Japan, and Korea—gather a consensus for introducing a fully fledged regional financial facility like the AAB under the ASEAN + 3 framework to reach a critical mass, and then later bring in other Asian economies in stages.

In Paper 9, Yu discusses: (1) China's economic performance in the 1990s; (2) the Chinese government's policy responses toward the East Asian financial crisis and China's deflation over the past few years; (3) China's attitude toward the AMF; and (4) China's input on how to proceed with successful regional monetary cooperation. He shares the view that implementation of a regional cooperative plan is necessary but fears that national sovereignty will be lost in a higher level of monetary integration. Prior to the Asian financial crisis, China was enjoying a steady growth rate and low inflation. With a very low inflation rate in 1997, the growth rate began to slow and created a chain of unfortunate events for China. According to Yu, this was not due to contagion but to the tight macroeconomic policy of the Chinese government. He says that "the impact of the Asian financial crisis on China found its manifestation mainly on China's export performance," owing to its relatively isolated financial system and strong export position. He shows that China's export elasticity with respect to its trading partners' income is relatively high, while its export elasticity with respect to exchange rates is low. He cites empirical findings showing that the currency depreciation of the crisis-affected countries played only a minor part in China's worsening export performance. However, the depreciation of the Japanese yen, which culminated in August 1998, exerted tremendous pressure on the RMB. Nevertheless, China succeeded in maintaining a stable RMB and achieving a favorable international balance of payments by pursuing a policy of not devaluing the RMB, capital control, expansionary macroeconomic policy, and financial and corporate restructuring.

With regard to regional financial cooperation, Yu states that monetary and financial cooperation at the regional level would be a good thing, but that each participant must be honest regarding self-interest and common interests. From China's point of view, three important questions have to be answered before an Asian Monetary Fund can be established. First, by

using the analogy of big and small insurance companies, he raises the question of whether an Asian Monetary Fund can perform better than the IMF. Second, he raises the question of institutional duplication between AMF and IMF. If there are no qualitative differences between AMF and IMF functions, he argues that the supplementary role that the former is supposed to play will not be very meaningful. He expresses his concern that the AMF's supplementing the role of the IMF would run the risk of releasing the latter from its primary responsibility. He says that "for many Chinese economists, a better alternative to the mending of the failure of the IMF might be to reform the IMF thoroughly, rather than to establish a regional monetary fund to supplement it." Third, he emphasizes the need to have a fair distribution of the financial burden and benefits of the AMF among its members. Yu finds it uncomfortable to put forward the idea that a would-be member country should commit a large proportion of its foreign exchange reserves to an untested regional bureaucratic organization. He also points out that "to a large extent, to rescue some Asian economies amounts to rescuing Japanese overseas enterprises." Yu notes that the Japanese government is not very firm on its own proposal for establishing the AMF. He asserts that the Japanese government should spell out its proposal in detail. However, he thinks that many high-ranking Japanese government officials already regard the AMF as a lost cause. In conclusion, Yu says that China is very positive about Asian monetary cooperation. For China, however, he says that trade and technological cooperation is more fundamental, and he cites ways to strengthen this area of cooperation. He argues that a more open trade policy would alleviate global recession, and he offers this idea specifically to Japan. For many years, Japan has been running a large trade surplus with her Asian neighbors. Japan should further open its domestic markets to allow more imports from other Asian countries. Japan should also lead Asians in the global competition in high tech and other industries. By increasing its technological transfer to other Asian countries, Japan could make a great contribution to the economic stability and hence financial stability in the region. If Japan seriously pursues the internationalization of the yen, then the yen would be more easily available, which implies that Japan must give up its trade surplus.

In Paper 10, Tan and Chen present an ASEAN perspective on regional financial cooperation. They begin by saying that although the dissatisfaction with the IMF's performance during the East Asian financial crisis could have triggered the interest in establishing the AMF or RFA, such an endeavor should be placed on its own merit. Thus, the objective of the AMF should be clearly spelled out and modality be concretely specified. Then, they move on to more practical issues. The authors would like to see the CMI as a cohesive force toward a unified RFA. They explore the issue of how a unified RFA—beyond the CMI—could be achieved within the ASEAN + 3 framework. The authors stress that "there is indeed a vacuum

of an integrated regional financial cooperation in East Asia." They view a unified RFA as "club goods," where some countries meet the sufficient conditions of being privileged. Along these lines, they stress that an effective RFA necessarily involves calculation or tradeoff on geopolitical implications and regional economic reality. As regards geopolitical implications, they highlight a concern raised by Deputy Prime Minister Lee of Singapore that no Asian country except Japan is in a position to play the role of a financier. But Japan alone may not be enough to solve the problems. They mention that support from China is vital and significant for the revival of the AMF as it would serve to balance the structure, influence, and interests of any future unified RFA as it evolves. Further, they observe growing support for the AMF from various quarters. For example, IMF's new Managing Director Horst Koehler actually endorsed in September 2000 the idea of the AMF as a positive step if it is being organized parallel to the IMF. Deputy Governor Stephen Grenville of the Reserve Bank of Australia expressed in September 2000 that Australia keeps an open mind about the AMF and the potential of joining it. As the authors have indicated, the political reality seems to suggest that collective leadership, with financial contributions based on some agreed formula reflecting each member country's economic strength, would be a good starting point to get the momentum going for East Asia.

With respect to regional economic reality, they also find a strong rationale for an RFA in terms of: (1) a genuine need for cushioning short-term liquidity difficulties; (2) development of regional financial architecture, including an appropriate exchange rate regime; and (3) promotion of policy dialogue and coordination. Tan and Chen offer the following guiding principles to successfully achieve the intended goals of an RFA: (1) Assure a formal status with highly focused terms of reference for the RFA, under a permanent secretariat; (2) create an institutional approach to alleviate duplication of duties and possibly international tensions; (3) start with the ASEAN + 3, which are already diverse countries, while waiting for the international financial architecture to evolve and, in the process, not to allow financial support to determine the governing power; (4) create an incentive scheme to maintain a genuine commitment on a voluntary basis; (5) keep transparency in place by having a peer group review process, benefiting both the lending members and foreign direct investors; (6) plan for avoidance of problems in members' domestic financial infrastructure; and (7) maintain good relationships with future RFAs and other international agencies, which would enhance regional contributions.

The authors suggest a gradual policy reform to implement a regional financial arrangement. Many countries fear that the required structural adjustments will incur political sacrifice and hence will be opposed by governing authorities. Tan and Chen warn against too many restrictive protectionist actions and advise a strategy to deal with cross-border capital flows

and globally integrated financial markets. They also point out that while countries seize international and regional opportunities, they must also learn how to adapt and restructure themselves when these opportunities prove unfavorable. In these instances, policy makers must act in such a way as to alleviate successful member economies from shouldering the entire burden. They caution that it will be quite an involved process, but hopefully it can be formulated before another major financial crisis develops.

Commenting on the regional financial arrangements (Papers 7–10), Krueger raises the question of whether the AMF or any possible regional financial arrangement could sufficiently convince the international community to be forthcoming in their assistance. She feels that the four papers provide interesting inputs to the international community for further academic and policy discussion of the RFA. After agreeing with Vichyanond's balanced survey of the arguments for and against an AMF, she goes on to make some points of her own. She sees the real problem as making a distinction between liquidity and solvency when it comes to countries. She argues that economic growth cannot be sustained unless the banking system's problems are correctly addressed. She points out that because Mexico and Korea moved quickly to clean up their banking system's nonperforming loans, they had a shorter recession compared to Japan and Thailand, which had done less to restore the health of their banks. Steps must be taken to reduce incentives for banks to repeat imprudent lending behavior. She disagrees with Vichyanond's idea of gradual approach toward structural reforms. She defends the IMF's programs in East Asia, given the fact that the fund's staff had little time to prepare and were initially told that they would not be called upon to assist crisis-hit countries.

Turning to the issue on regional lender of last resort, Krueger doubts if regional funds can be more helpful than global funds in supporting countries in times of crisis, given the magnitude of private international capital flows. She also doubts if it can deal with contagion affecting countries in the region. On the contrary, she fears that the existence of a regional authority may just delay the inevitable reform if there is a policy weakness in a country. Perhaps, she says, the IMF and World Bank can see the bigger picture when they assess a country's economic position relative to the rest of the world.

With respect to Yu's paper, Krueger first expresses her agreement with reservations made by Chinese economists and then makes some comments on three points. First, she points out that the low elasticity of China's exports to exchange rate could be due to the fact that it has not been a market economy in its entirety. Second, she questions the desirability and feasibility of economic policies determining what countries should produce and how trade should be conducted. Third, she has doubts about Yu's plan for crisis prevention and management, which is for the host country to help another that is experiencing capital outflows.

Krueger has noted the Kim-Ryou-Wang paper's good accounting of

the GAB and NAB and raises the following points: (1) that Mexico and Brazil did not default on their debts during the 1982 crisis; (2) that the Asian currency crisis had many determining factors, albeit not equally weighted but multiplicative in their harm; (3) that structural problems on the supply side need to be addressed and the floating exchange rate has to be adopted to reduce the probability of a crisis; and (4) that the Asian Development Bank should not be involved in any regional financial arrangements. Krueger sums up by saying that the Asian financial arrangements may not harm the world economy. However, as is shown by the countries that exhibited strong recovery by addressing their own policy failures and freeing up their exchange rates, such arrangements may not significantly contribute to the strengthening of the international financial system, nor even Asian economies themselves.

Commenting on Paper 10, Kim and Wang start by saying that Tan and Chen present a more pragmatic approach toward a unified East Asian financial arrangement. The authors see geopolitical and regional economic reality tending to support the creation of an RFA. They highlight the importance of laying down the basic framework, guiding principles, and specific tools for the RFA. While China shows reservations and skepticism about the RFA as mentioned in Paper 9, Tan and Chen think that ASEAN countries are more favorable toward a unified RFA. In Paper 8, the Korean authors pursue a middle-ground approach to the establishment of an RFA that is less institutional and bureaucratic. Kim and Wang point out that different views need to be balanced because a nation's interest cannot be sacrificed in the name of a common goal. Through a gradual approach, East Asian countries will find the right track to achieve a balance between self-interest and common goals. The concepts of a regional lender of last resort and club goods discussed by Tan and Chen deserve more attention and further elaboration in the process of forming a regional financial arrangement.

Part IV: Major Findings and Policy Implications

Three commentaries by Morris Goldstein, Kyung-Tae Lee, and Duck Woo Nam summarize the discussions based on the ten papers presented in the previous parts. In particular, they explore policy recommendations for preventing future crisis in East Asia.

Goldstein focuses his discussion on two topics: international reserves and crisis vulnerability; and conditionality in a potential AMF. With respect to the first topic, he notes that private market participants see low reserve ratios as a sign to attack a country's currency. It follows, therefore, that higher international reserves and a pooling arrangement like the CMI can reduce crisis vulnerability. He cautions, however, against the assumption that this will create invulnerability. Even large amounts of reserves can go down fast, which indicates that there are other factors that ought to

be considered to reduce vulnerability to a financial crisis.

Regarding policy conditionality of the proposed AMF, Goldstein presents two hypothetical polar cases. In Case No. 1, the AMF is a second line of defense behind the IMF, with funds disbursed on IMF conditionality. The results may be good or bad, depending on the design and implementation of IMF conditionality, with less control of moral hazard. In Case No. 2, AMF assistance is sizable and the IMF becomes the second line of defense, with AMF conditionality the rule. It may be good or bad based on the quality of the design that goes into AMF conditionality. A bad result in Case 2 can delay adjustment and worsen the problem. If compelled to make a choice, Goldstein prefers Case 1 to Case 2. He then summarizes his views on the East Asian financial crisis, noting that IMF fiscal policy was too tight at first and the fund was too slow in shifting to an expansionary fiscal stance. He considers whether raising or lowering interest rates is better in stabilizing a monetary crisis, settling on the compromise of moving interest rates up first, then bringing them down when there are signs of stabilization. He concludes that the IMF conditionality, while generally helpful to the financial sector, went too far and was too detailed in "noncore" areas.

Lee compares the alleged Korean complacency with monetary issues now that its economy is improving again with the apparent complacency in building the new international financial architecture. He asks whether this complacency is due to the improving world economy. He says that there is also uncertainty about how effective the new architecture will be in maintaining global financial stability, let alone that in emerging market economies. For these and other reasons, it would be in the best interest of East Asia to develop a regional self-help mechanism such as currency swap arrangements. He is encouraged by Krueger's comment that the existing problems, such as lack of trust and political rivalry, are not peculiar to East Asia and that they have been overcome elsewhere—notably in Europe. He feels strongly that there needs to be a tripartite dialogue among China, Japan, and South Korea so that the ASEAN + 3 framework can be more institutionalized. Further, Lee argues that China and Japan need to come closer together if the goal of regional economic cooperation is to be achieved, and together they should lead the rest of East Asia. Finally, he assesses the lessons learned from the East Asian financial crisis, particularly that of Korea, concluding that the old Korean economic model was not entirely to blame and that the system is evolving in the same way that the developed economies once did.

Nam agrees with most of Goldstein's observations, but notes some fundamental questions facing today's international monetary system. He asks if IMF's response to the East Asian financial crisis, particularly in Korea's case, was sufficient in terms of timing or amount of funds to prevent "destructive consequences." Korea's shortage of liquidity demanded an external source of funds to prevent the contagion from developing into

a full-blown financial crisis. The IMF response was prompt and efficient, Nam observes, but disbursement of the funds was too piecemeal and spread out because of loan conditionality. What was needed, he argues, was a larger one-shot infusion for a short period. In his view, the potential of moral hazard has been somewhat overplayed in the case of the East Asian financial crisis.

Turning to AAB, Nam supports the proposal outlined by Kim, Ryou, and Wang. He believes that an AAB, acting as a "first line of defense" prior to IMF involvement, would make financial resources more immediately available to countries facing a potential financial crisis. He notes that effective operation would require optimal financial commitment by participating countries, including those such as Japan and Singapore that are not likely to need AAB assistance. As a bridge to later action by the IMF, he proposes a shorter period—two or three months—for the loan maturity of AAB than what the authors suggest. Nam goes on to discuss the creation of a lender of last resort in the Asian region and the internationalization of the yen, which he relates to the idea of an AMF. Within Asia, he suggests that the sacrifices necessary for the common interest of a single currency are unlikely to be made in the near future. Japan needs to improve the yen's role in Asian trade and make it more attractive to foreigners. In conclusion, Nam expresses his personal conviction that East Asia needs something like the AAB proposed by Kim, Ryou, and Wang, and that its optimal design should be pursued.

Conclusions

For over three years, the crisis-hit East Asian countries, except Malaysia, have dutifully followed the IMF structural programs to make their corporate and financial sectors more transparent, efficient, and resilient to financial market instability. The reform processes in these countries are far from over, yet there is already a growing concern that they will remain vulnerable to future financial crises even with faithful execution of the required reforms. Domestic economic reforms alone may not safeguard them against future crises, so long as the reform of the international financial system is deferred without due consideration of the institutional and structural characteristics of the emerging market economies.

The reform led by the G-7 countries has been losing steam, and from the viewpoint of emerging market economies it does not adequately address the supply-side problems such as volatility of capital flows and severe fluctuations of major anchor currencies. In particular, the small and medium-sized open economies in East Asia, on their own, may not be able to fend off speculative attacks on their currencies. For these reasons, there has been increasing support in East Asia for developing regional financial cooperative arrangements. Conference participants generally share this view.

As was the case of the AMF, the idea of a regional monetary fund or

regional lender of last resort still faces strong opposition from the United States, European countries and, of course, the IMF for a number of reasons. Many Western scholars dismiss the contention that an East Asian regional fund may have a comparative advantage in diagnosing regional economic problems and prescribing appropriate solutions on the grounds that it will increase competition in the market for ideas. A more serious argument is that East Asians are not ready or capable of creating and managing an effective regional monetary fund. Compared to European countries, East Asia lacks the tradition of integrationist thinking and the web of interlocking agreements that encourage monetary and financial cooperation.

Nevertheless, a regional financial arrangement could be structured and implemented in a way that it can play a complementary role to the IMF. For example, a regional financial arrangement could provide additional resources to the IMF while joining forces to work on matters related to the prevention and management of financial crises. Furthermore, the East Asian countries' joint efforts to monitor economic and financial market developments in the region will support the IMF's global surveillance activities. In this regard, an East Asian regional financial arrangement, along with a regional surveillance process, can be explored while avoiding institutional duplication and reducing operational costs as well.

Many emerging market economies in East Asia are taking measures to build up their foreign currency reserves above the level that has been regarded as adequate in terms of their import requirements. For instance, Korea is currently building a level of reserves (U.S. $96.20 billion as of the end of December 2000) equivalent to 20 percent of its GDP, largely because of the increased volume of its capital account transactions. By any measure, this level is excessive, costly, and represents a clear case of resource misallocation. To reduce the amount of reserve holdings, at least some of the emerging market economies could enter into an arrangement for precautionary lines of credit with private financial institutions. They could also rely on the IMF as a quasi lender of last resort, which could provide an additional issuance of SDRs.

There are other schemes for reducing the holdings of foreign currency reserves. For example, a group of countries, not necessarily from the same region, may decide to pool a certain percentage of their reserves to create new credit facilities for themselves. An individual country belonging to the arrangement would not have to hold as much in reserve as it would otherwise, if it can borrow from the credit facility. The group of thirteen East Asian countries (ASEAN + 3) has command over a large amount of foreign currency reserves, estimated at more than U.S. $800 billion. Depending on how these reserves are pooled together and managed, a mere 10 percent of the total amount will be sufficient to provide a first and second line of defense against any speculative attack.

To outsiders, these economic rationales may not be convincing enough

to justify a regional financial arrangement in East Asia. However, it is evidently true that there is a rising sense of East Asian identity today. In 1990, Malaysian Premier Dr. Mahathir Mohammed proposed the establishment of an East Asia Economic Group (EAEG) as a way of coordinating the East Asian position in the wavering Uruguay Round of multilateral trade negotiations. At that time, no matter how outsiders viewed the projected grouping, insiders including Japan also gave no support to it. Although the proposal for an AMF was once again shot down, the idea of East Asian cooperation and the political will to materialize it did not die at this time. When Japan proposed an ASEAN–Japan summit in 1997, ASEAN responded by proposing a summit not only with Japan but with China and South Korea as well. In 1999, the idea of an ASEAN + 3 arrangement began to take hold and to gather momentum in Manila.

The ASEAN + 3 summit declared a "Joint Statement on East Asian Cooperation" in 1999 that covers a wide range of possible regional cooperation areas. Following the Chiang Mai Initiative (CMI) that was agreed upon among the ASEAN + 3 finance ministers in May 2000, significant progress has been made in implementing the CMI to further strengthen the self-help and support mechanism in East Asia. The ASEAN Swap Arrangement (ASA), one of the main components of CMI, has been enlarged to U.S. $1 billion effective November 17, 2000, and has as its participants all ASEAN member countries. Regarding the network of bilateral swap arrangements (BSA) and repurchase agreements under the CMI, substantial agreements on the BSA have been reached between Korea-Japan, Malaysia-Japan, and Thailand-Japan. Government officials in ASEAN + 3 will continue to work toward establishing a network of bilateral swap and repurchase agreement facilities among ASEAN countries, China, Japan, and Korea.

The bilateral swap arrangements under the CMI have been linked with the IMF, thereby contributing to both regional and global financial stability. In fact, the bilateral arrangements between Japan and the respective Asian countries are premised on the fact that 90 percent of the committed currency swap would be activated along with the financial support of the IMF. The provision of financial support under the swap arrangements is supposed to be under IMF conditionality. As a result of nesting regional facilities within the existing global facilities, the IMF and outsiders have reconsidered their outright objections to an East Asian financial arrangement.

Beyond the CMI, the ASA and the network of BSA could be merged into a regionwide borrowing arrangement. The AAB, proposed by Kim, Ryou, and Wang in Paper 8, would be a model for building a strong foundation for financial cooperation in East Asia. The AAB would be activated as the first line of defense for a country facing a temporary shortage of foreign exchange before officially requesting emergency loans from the IMF.

The AAB would not require the establishment of a formal institution. It would be based on the credit arrangements among participants, as in the case of the credit mechanism under the European EMS. However, the AAB should be distinguished from the facilities to maintain the par value system among participating countries under the regional monetary system.

As the East Asian countries become more regionally integrated, the next agenda for regional financial cooperation would be to search for a means to stabilize exchange rates among regional currencies. An even higher level of concerted cooperation would be required to establish appropriate monetary arrangements at the national and regional levels. Meanwhile, the establishment of a regional monetary system does not mean forming a yen bloc in East Asia. The adoption of the common currency basket centered on the Asian currency unit may be a realistic alternative for East Asian countries. As seen in the ERM crisis of 1992–93, however, even this EMS institutional framework would not be sufficient to ward off speculative attacks. An Asian currency unit or a single currency could be further explored over a longer term, if regional political consensus emerges along with deeper regional economic integration.

East Asia still has a long way to go before formalizing and putting into effect the CMI and launching other cooperative initiatives. This means that East Asian financial cooperation is still at an early stage, and it is not altogether clear at this stage whether East Asians will be able to successfully negotiate the creation of such formal financial arrangements, given the different interests of diverse countries. In this respect, China and Japan should be able to provide leadership in leveling out differences among East Asian countries that are likely to surface during the negotiation process.

Finally but most importantly, Asian regional initiative should contribute to the stability of the international financial system, as the Asian Development Bank has done for global development finance for over thirty years. A first requirement for achieving cooperative evolution with the rest of the world is for East Asians and outsiders to consult actively and candidly, perhaps with the United States in APEC and with Europe in ASEM (the Asia-Europe Meetings). East Asians need to tell the international community clearly what they are motivated to do, how they will develop an action plan, and how they believe it fits in the existing global financial system. Outsiders also need to listen carefully and support them, if possible, in an outward-looking direction.

Acknowledgment

The editors are grateful to Professor Chung H. Lee, Dr. Mario B. Lamberte, and Professor Yung Chul Park for their insightful suggestions and comments on the drafts of this introductory chapter.

Part I

Financial Systems in East Asia: Challenges and Opportunities

1. East Asian Financial Markets: Current Status and Future Development

Gordon J. de Brouwer

Introduction

While the financial crisis in East Asia in 1997 and 1998 had many dimensions, one of them was the extraordinary volatility of capital flows into and then out of the region. This paper explores some related issues. It provides an overview of recent developments in East Asian financial markets, changing patterns in cross-border flows, and the vulnerabilities that exist in the system. It also examines some core issues related to financial stability: short-term capital flows, offshore financial centers, and the role of highly leveraged institutions.

The paper is in two parts. Using a range of different data sets, the first half of the paper documents and examines capital flows before, during, and after the crisis in some detail, to provide a solid understanding of the events in financial markets in recent years. It shows that the recovery in capital flows to the region is mixed, both in terms of the types of capital flowing in and in terms of the recipient countries.[1] It notes that a crucial vulnerability to capital flows in the region—and emerging market economies more generally—is the state of asset markets in the United States, notably the dollar, stock prices, and U.S. Treasury bond yields.

The second half of the paper explores some of the outstanding issues in the international policy debate. In particular, it reviews the work of the Financial Stability Forum in its reports on Capital Flows, Offshore Financial Centers, and Highly Leveraged Institutions (HLIs). It examines seven key issues that have emerged in the debate about hedge funds and destabilizing speculation.[2] The international debate on hedge funds has not been balanced, and the paper tries to find some middle ground.

Capital Flows before, during, and after the Crisis

Measured either in current or constant U.S. dollars, net private capital inflows to Asia in the mid-1990s were unprecedented in the postwar period in terms of the size of the flow to emerging markets (Figure 1.1 and Table 1.1).[3] In particular, the mid-1990s inflows to Asia were larger, in both nominal and real terms, than the recycled petrodollar inflows to Latin America in the late 1970s and early 1980s.

The inflows to East Asia were driven by a mix of push-pull factors, including the pursuit of perceived large profit opportunities, the diversion of Japanese investment offshore, the expansion of institutional investors

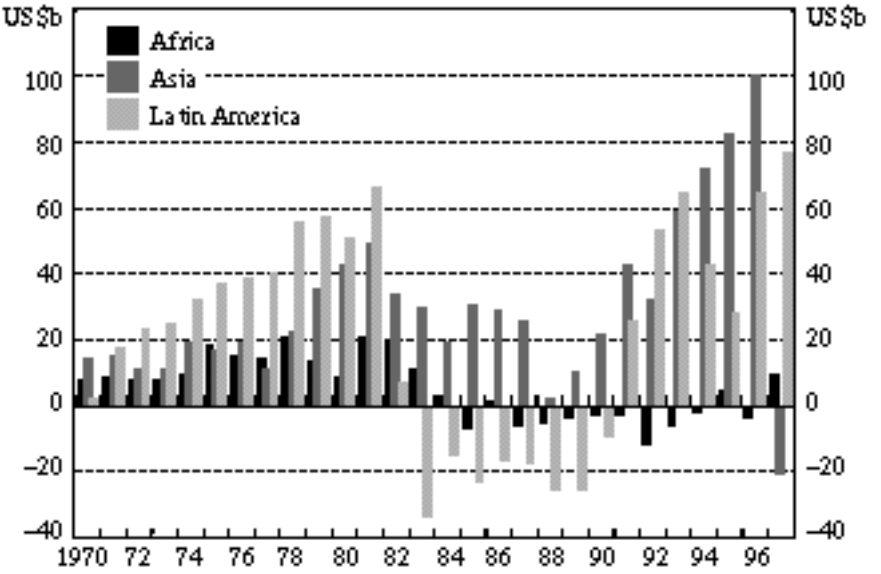

Figure 1.1. Real net private capital inflows (US$ billion, 1997 prices) (*Source*: IMF, International Financial Statistics).

and country funds, the development of regional ratings, and the easing of local capital controls (Grenville 1998; de Brouwer 1999a).

The perceived profit opportunities were not simply the result of expected rapid expansion in the real economy, as important as this was, but also because financial investments offered the potential for very high

Table 1.1. Net private capital flows to emerging markets (annual averages, US $ billion)

	1977-82	1983-89	1990-94	1995	1996	1997	1998	1999
Total private capital flows	30.5	8.8	125.1	226.9	215.9	147.6	75.1	80.5
by type								
Net FDI	11.2	13.3	44.9	92.6	113.2	138.6	143.3	149.8
Net portfolio investment	–10.5	6.5	64.9	36.9	77.8	52.9	8.5	23.3
Bank loans and other	29.8	–11.0	156.2	97.4	24.9	–44.0	–76.7	–92.5
by region								
Asia	15.8	16.7	39.1	104.9	194.1	–1.4	–42.6	–27.0
Latin America	26.3	–16.6	40.8	53.1	72.1	85.5	70.0	54.1
Other	–11.6	8.7	45.2	68.9	39.7	63.5	67.6	53.4

Source: IMF 1995 for 1977-89 data, IMF 1999 and IMF 2000 for 1990s data.

profits. The combination of extremely low Japanese interest rates, modest U.S. interest rates, double-digit domestic interest rates in East Asia, and (close-to-) fixed exchange rates provided the opportunity for a very profitable carry trade, by which investors borrowed in yen and invested in high-yielding short-term East Asian financial instruments. Based on one-month baht forward contracts, for example, Nellor (2001) estimates that the Thai carry trade provided a cumulative 350 percent ex post return from January 1995 to December 1996. The carry trade was very popular among participants in financial markets.[4]

The East Asian carry trade used short-term instruments. This was not a coincidence, but reflected the bias in regional capital account liberalization programs at the time. Both Thailand and the Philippines actively encouraged local offshore banking regimes with what proved to be inadequate governance and supervisory regimes. The Bangkok International Banking Facility grew from 195 billion baht at the end of 1993 to 807 billion baht at the end of 1996, for example, and Philippine Foreign Currency Deposit Units grew from 136 billion to over 300 billion pesos over the same period (Nellor 2001). While Korea did not encourage the international use of the won, it also had a preference for short-term capital inflows

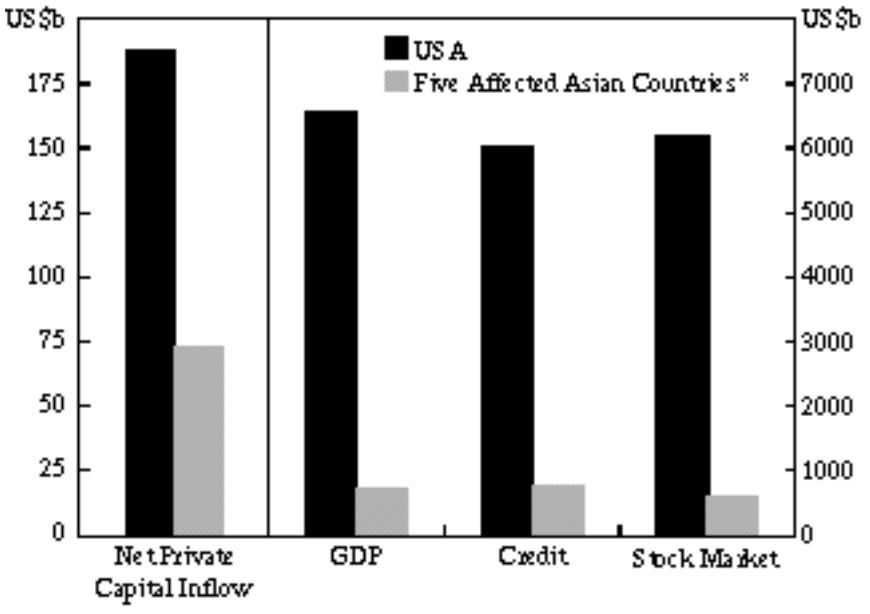

Figure 1.2. Output, credit, and equity capitalization, 1996
(*Source*: IMF, International Financial Statistics).
*Indonesia, Korea, Malaysia, Philippines, and Thailand

before the crisis, discouraging long-term capital inflows like foreign direct investment because it wanted to avoid what it regarded as a possible loss of domestic control. As a result of these and other factors, East Asian capital inflows were biased toward the short term.

These flows were large relative to the size of the recipient economies: while capital inflows in 1996 to the five affected Asian countries—Indonesia, Korea, Malaysia, the Philippines, and Thailand—were less than half the size of flows into the United States, these countries' economies, credit systems, and share markets were one-tenth the size of those of the United States (Grenville 1998) (Figure 1.2).

As is by now well known, capital flows to emerging markets have been highly volatile: the flows to Latin America of two decades ago were abruptly reversed in the early 1980s, and the flows to Asia similarly so in 1997. In the 1990s, foreign direct investment to emerging markets remained the most stable source of capital inflows, even at the peak of the financial crisis, while bank loans were the most volatile and underwent the most violent reversal (Table 1.1).

This was especially the case in Asia. Capital flows flipped from an inflow of over $100 billion in both 1995 and 1996 to outflows of over $42 billion in 1998 and $27 billion in 1999 (see Table 1.1). The reversal of capital flows is consistent with the abrupt change from current account deficit to surplus, as

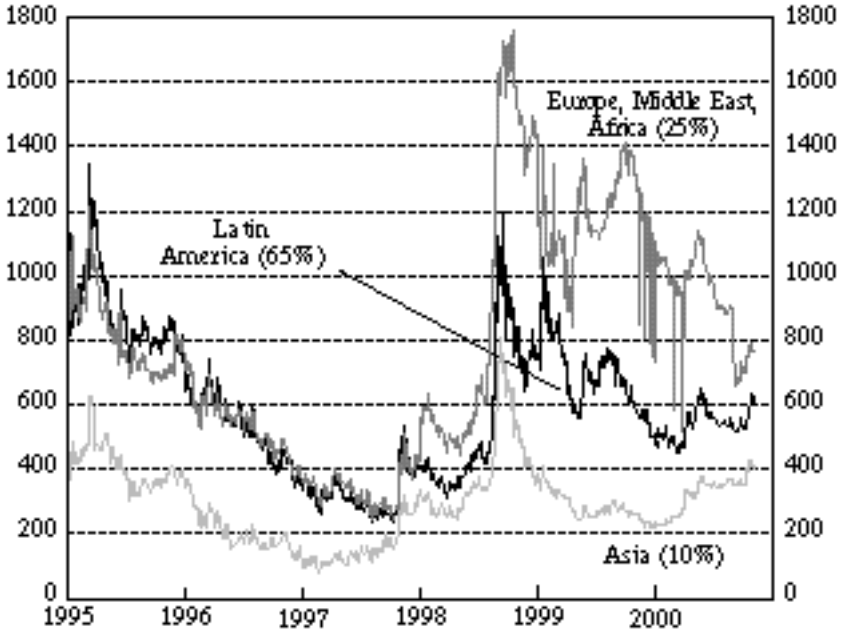

Figure 1.3. Emerging market sovereign spread basis points to U.S. Treasuries

Table 1.2. BIS-reporting banks' unconsolidated assets in East Asia (exchange-rate adjusted changes, US$ billion)

	1997				1998				1999				2000	outstanding
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Mar 2000
Indonesia	2.2	3.2	3.6	-1.7	-4.6	-2.9	-2.8	-3.8	0.8	-2.1	-3.7	-1.1	-1.5	44.4
Korea	4.3	4.9	-1.9	-11.5	-16.3	-3.5	-5.6	-7.5	2.1	-0.2	-1.3	-5.8	5.6	75.0
Malaysia	5.3	1.8	0.2	-3.7	-2.7	-1.1	-1.4	-1.6	-0.2	-0.7	-1.5	-1.5	0.3	20.2
Philippines	1.6	1.9	-0.8	0.5	-0.8	1.0	-2.2	1.2	0.0	1.0	-1.8	1.2	-0.7	16.3
Thailand	0.0	-0.8	-11.1	-7.7	-9.0	-4.7	-6.5	-8.7	-5.3	-2.7	-5.8	-3.5	-0.4	35.4
Affected-5	**13.4**	**11.0**	**-10.0**	**-24.1**	**-33.4**	**-11.2**	**-18.5**	**-20.4**	**-2.6**	**-4.7**	**-14.1**	**-10.7**	**3.3**	**191.3**
China	2.2	3.9	4.9	-0.5	1.0	-2.6	-6.9	-1.8	-2.6	-0.4	-7.3	-5.7	0.1	66.6
Taiwan	1.9	0.5	-0.3	-2.3	-0.2	0.9	-1.9	0.8	-2.4	-1.0	-0.7	0.7	0.7	20.6
Total	**17.5**	**15.4**	**-5.4**	**-26.9**	**-32.6**	**-12.9**	**-27.3**	**-21.4**	**-7.6**	**-6.1**	**-22.1**	**-15.7**	**4.1**	**278.5**

Source: BIS International Banking and Financial Market Developments.

Table 1.3. Net issue of bonds and notes in East Asia (US$ billion)

	1997				1998				1999				2000	outstanding
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun 2000
Indonesia	0.8	2.2	1.9	-0.4	0.4	-0.1	-0.2	-0.6	-0.3	-1.1	-1.4	-0.3	-0.2	12.3
Korea	3.3	4.8	1.7	-0.8	3.3	-1.2	-0.9	-1.1	-1.2	-1.6	0.2	1.7	-0.5	49.7
Malaysia	2.1	0.7	0.4	-0.5		-0.2		0.4	0.9	0.6	-0.1	-0.1		13.9
Philippines	1	1.1	-0.2	0.8	0.7	-0.4	-0.5	1.3	0.8	1.2	0.7	1.7		15.7
Thailand	1.1	0.5		-0.3		-0.1	0.2	-0.2	1.5	-0.6	-0.1	-0.2	-0.1	14.7
Affected-5	**8.3**	**9.3**	**3.8**	**-1.2**	**4.4**	**-2**	**-1.4**	**-0.2**	**1.7**	**-1.5**	**-0.7**	**2.8**	**-0.8**	**106.3**
China	2.7	0.6	0.2	0.3	-0.3	-0.9	0.6	-0.5	0.2	-0.2	0.4	-0.3		17.5
Taiwan	0.9	0.7	0.6	0.4	0.9	-0.1	-0.1		0.3		-0.4	0.6	-0.6	7.3
Total	**11.9**	**10.6**	**4.6**	**-0.5**	**5**	**-3**	**-0.9**	**-0.7**	**2.2**	**-1.7**	**-0.7**	**3.1**	**-1.4**	**131.1**

Source: BIS International Banking and Financial Market Developments.

shown in Grenville and Gruen (1999), although it is worth noting that capital inflows to emerging East Asia in the first half of the 1990s were substantially larger than these countries' current account deficits since their central banks were acquiring reserves. My own research (De Brouwer 1999b) reports that capital inflows for the five affected countries peaked at over U.S. $60 billion in 1995 and 1996, equivalent to over 6 percent of their combined national income (and appreciably higher in some individual cases); outflows in 1998 amounted to more than 7 percent of their combined GDP.

This flip in capital flows was concentrated in a sharp reversal of bank loans, which turned from inflows of around $50 billion in 1995 and $37 billion in 1996 to outflows of $44 billion in 1997, $28 billion in 1998, and $41 billion in 1999. The violence of the reversal in capital flows was reflected in the widening of the risk premium on emerging market securities (Figure 1.3) and the subsequent downgrade of Asian credit ratings.

The Bank for International Settlements (BIS) provides a detailed breakdown of the shift in bank lending. Table 1.2 provides detail on banks' unconsolidated assets in selected Asian economies.[5] Banks' assets in the affected countries rose about $60 billion in the year to June 1997 but fell by $150 billion in the following two and a half years to December 1999. Assets in Thailand were the first to contract, spreading to Indonesia and Korea in the last quarter of 1997. Despite the loan rollover agreement in late December 1997, banks' assets in Korea contracted markedly in the March quarter of 1998, partly reflecting the reversal of repurchase agreements with Korean banks.

Repayment/write-down of loans continued throughout 1998 and 1999 in all cases, except for the Philippines and Taiwan. The reduction in cross-border assets has been greatest in Thailand, where banks' cross-border assets have been cut back by $66.2 billion in the past three years to a stock of $35.4 billion. In Korea, the net reduction in assets has been $45.9 billion to an asset base of $75 billion, and in Indonesia, the net reduction in assets has been $23.4 billion to an asset base of $44.4 billion. The assets of BIS–reporting banks in China were cut back in the second half of 1999, following the closure of GITIC. Net debt issues by East Asian crisis-affected countries also declined, although less markedly, and they showed sporadic recovery in 1999 (Table 1.3).

Two-thirds of the fall in bank lending to Asia has been in lending to other banks, even though interbank lending accounted for only 45 percent of total bank lending at the peak of inflows in mid-1997 (Table 1.4). With the exception of Korea, most cross-border bank lending to Asia is concentrated in the nonbank private sector rather than the bank sector (Table 1.5). Even in Korea's case, however, the effect was disproportionate: about 65 percent of cross-border lending to Korea in mid-1997 was to banks, but almost 80 percent of the subsequent fall in loans was to banks. The concentration of outflows in the interbank market reflects that market's liquidity and short maturity profile.

Table 1.4. Consolidated international claims of BIS-reporting banks (US$ billion)

	on Asia		on Indonesia		on Korea		on Malaysia		on Thailand	
	total	to banks	total	to banks	total	to banks	total	to banks	total	to banks
June 96	339.3	148.3	49.3	10.1	88.0	57.9	20.1	5.6	69.4	28.0
Dec 96	369.2	160.4	55.5	11.8	100.0	65.9	22.2	6.5	70.1	25.9
June 97	393.4	174.4	58.7	12.4	104.2	68.0	28.8	10.5	69.4	26.1
Dec 97	423.6	187.6	60.7	12.4	98.2	58.3	27.9	9.9	66.8	25.1
June 98	360.9	151.2	50.4	7.3	75.1	42.7	23.4	7.3	53.6	18.9
Dec 98	338.3	135.3	46.6	5.9	68.6	39.3	21.3	6.0	47.7	15.3
Jun 99	323.4	121.3	45.0	5.1	67.2	39.2	18.8	4.1	39.4	11.1
Dec 99	304.0	108.5	41.7	4.8	64.8	38.6	18.3	3.9	32.4	7.3
Jun 00	287.4	101.8	40.4	4.5	61.0	34.7	17.5	3.0	29.0	6.1

Source: BIS Consolidated International Banking Statistics, November 2000.

Table 1.5. Banks' consolidated cross-border claims by maturity and sector

		Total	maturity to 1 year	by sector (per cent total)		
		US$ billion	per cent total	banks	public sector	non-bank private sector
Indonesia	mid 96	49.3	60.0	20.5	13.3	66.2
	mid 97	58.7	59.0	21.1	11.1	67.7
	mid 98	50.4	52.0	14.1	15.0	67.9
	mid 99	45.0	48.1	11.3	20.5	66.9
	mid 00	40.4	50.0	11.1	19.7	68.1
Korea	mid 96	88.0	70.8	65.7	6.7	27.4
	mid 97	104.2	68.0	65.3	4.2	30.4
	mid 98	75.1	43.0	56.8	6.4	34.9
	mid 99	67.2	50.7	58.4	7.7	32.2
	mid 00	61.0	58.7	56.8	9.2	33.1
Malaysia	mid 96	20.1	49.7	28.1	11.4	60.5
	mid 97	28.8	56.4	36.4	6.4	57.1
	mid 98	23.4	47.0	31.1	6.5	61.0
	mid 99	18.8	41.6	21.9	13.8	63.6
	mid 00	17.5	37.8	17.0	15.2	66.8
Philippines	mid 96	10.8	55.1	32.0	25.4	42.6
	mid 97	15.1	58.6	40.6	13.1	45.8
	mid 98	17.8	55.4	45.4	12.6	41.6
	mid 99	16.7	41.6	33.7	18.3	47.3
	mid 00	15.5	41.0	25.9	18.5	54.8
Thailand	mid 96	69.4	68.9	40.3	3.1	56.4
	mid 97	69.4	65.7	37.6	2.8	59.5
	mid 98	53.6	55.4	35.3	3.7	60.3
	mid 99	39.4	48.8	28.2	5.4	65.6
	mid 00	29.0	41.4	21.0	7.3	70.6

Source: BIS Consolidated International Banking Statistics, November 2000.

Table 5 provides some information about the changing maturity profile of bank lending. Before the crisis, short-term (less than one year) debt generally exceeded long-term debt in East Asia, notably in Korea and Thailand where around 70 percent of bank claims at June 1996 were due in one year. The BIS data indicate that the maturity profile has changed markedly in all countries, most notably in Thailand, where about 40 percent of bank loans were short term by mid 2000.

According to the BIS, consolidated claims by banks on Asia fell 25 percent from a peak of $423.6 billion in December 1997 to $287.4 billion by June 2000 (see Table 1.5). Japan is the principal creditor to the rest of East Asia, with Japanese banks accounting for over 30 percent of claims on the region at the height of inflows. But Japanese banks repatriated the most funds during the crisis: Japanese banks withdrew $38 billion in the six quarters from mid-June 1997 to the end of December 1998, accounting for more than 40 percent of loan repayments. In this crisis period, their assets fell by $6.8 billion in both Indonesia and Korea, $3.9 billion in Malaysia, and $15.3 billion in Thailand. They have also led the cutback in cross-border assets *after* the crisis, with a further $22.3 billion decline in their assets in Indonesia ($4.9 billion), Korea ($5.7 billion), Malaysia ($0.7 billion), and Thailand ($11.1 billion) from December 1998 to June 2000. The total withdrawal of funds by Japanese banks is more than two times the nominal $30 billion allocated by Japan under the Miyazawa Plan to support East Asia after the crisis.

Figure 1.4 shows bank claims of the three key lending countries—Japan, Germany, and the United States—on four of the affected Asian countries from June 1995 to June 2000. Japan is the principal lender in all cases. Both the loan concentration and the loan reversal are greatest in the case of Thailand,[6] and this pattern has continued in the postcrisis period. The more concentrated the fund supply, the greater the risk of reversal (de Brouwer 1999b). One factor behind the sharp contraction in Japanese banks' exposure was weakness in the Japanese banking system, with the withdrawal of Japanese funds from emerging markets coinciding with the rise in the Japan premium (Figure 1.5). The withdrawal of funds has continued despite the Japan premium essentially disappearing in early 1999. The behavior of Japanese banks' cross-border assets contrasts with those of other major lenders: U.S. bank cross-border assets have increased in some cases, such as Korea, Malaysia, and Thailand. The recovery is most striking with respect to Korea, where U.S. bank assets rose by $2 billion from December 1998 to June 2000.

While aggregate cross-border bank assets are still declining for most of the crisis-affected economies, capital flows have recovered for East Asia as a whole. Figure 1.6 shows that emerging country *gross* capital inflows to Asia, Latin America, and other regions recovered in 1999 and 2000, with a broad mix of bond, equity, and loan financing. There has been a general

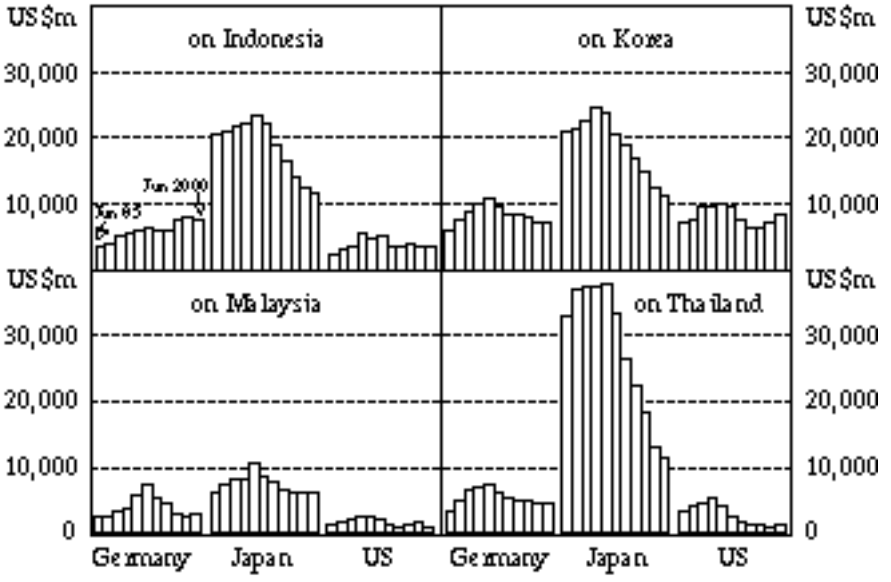

Figure 1.4. Banks' consolidated claims: half-yearly, June 1995 to June 2000 (*Source*: Bank for International Settlements).

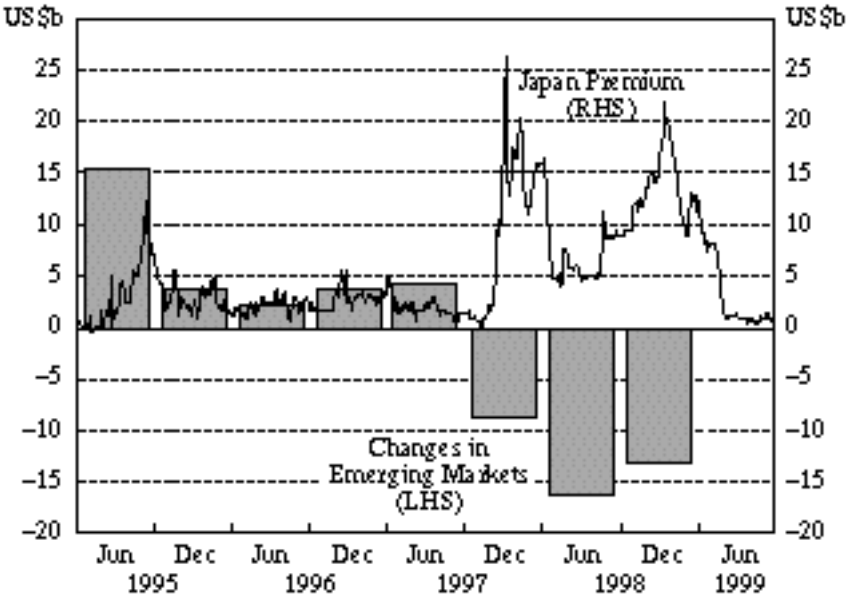

Figure 1.5. Japanese bank lending and Japan premium (*Source*: BIS, *International Banking and Financial Market Developments*, and Bloomberg).

recovery in access to financial markets by emerging markets; emerging market issuance in the yen market, for example, improved markedly in 2000 (Figure 1.7), although the IMF (2000c) indicates that there are signs this is slowing as interest rates start to rise and the chilling effect of the default of China's Hainan ITIC flows through into the market. But the recovery in capital flows has not been a uniform process for the entire region. While flows, especially of equity, have recovered strongly for Korea (Figure 1.8), they have not done so for Indonesia (Figure 1.9), for which reported gross inflows still remain extremely weak.

While a recovery in capital flows to Asia is underway, it will remain a slow process. The IMF's September 2000 *World Economic Outlook* (2000a) forecasts that private *net* capital *outflows* will continue in 2000 but will shift to net inflows in 2001 (Table 1.6). The net outflows in 2000 are expected to be driven by a continued decline in bank loans, with the fall in loans expected to continue in 2001 but at a much slower pace. Capital flows to emerging markets, including in East Asia, also remain vulnerable to changes in the global financial environment, especially financial markets in the United States. Bond flows are vulnerable to U.S. and Japanese interest rates and equity flows are vulnerable to changes in the U.S. stock market, but bank flows are vulnerable to the health of international banks, as the discussion on Japanese banks above shows. In short, the key external vulnerability in capital flows to emerging market economies is possible instability of U.S. financial prices, including the U.S. dollar, stock market, and bond yields (IMF 2000c).

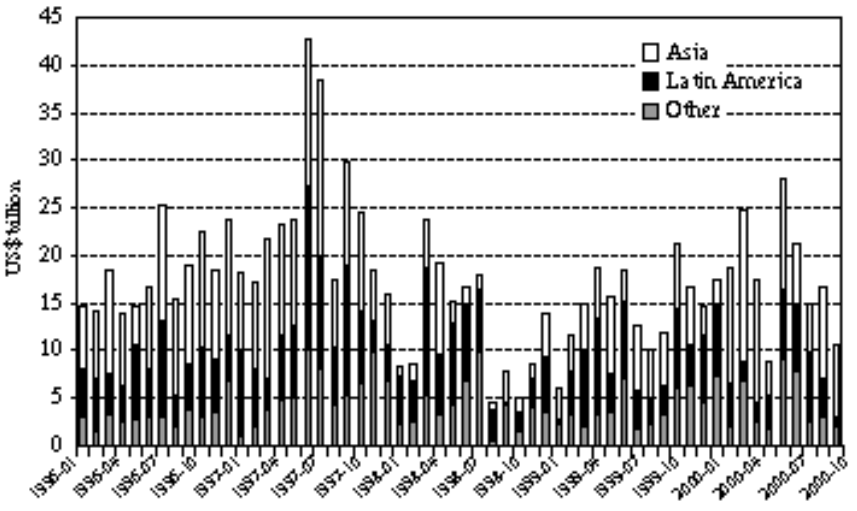

Figure 1.6. Emerging country gross capital inflows
(*Source*: Capital Data and IMF).

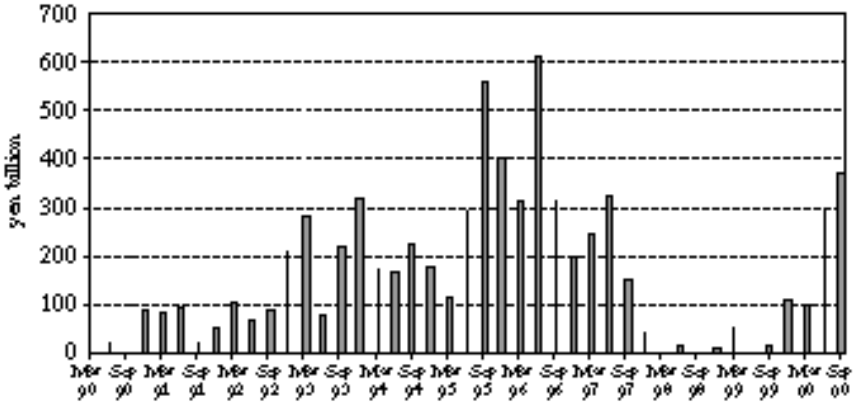

Figure 1.7. Emerging market yen issuance (*Source*: IMF 2000c).

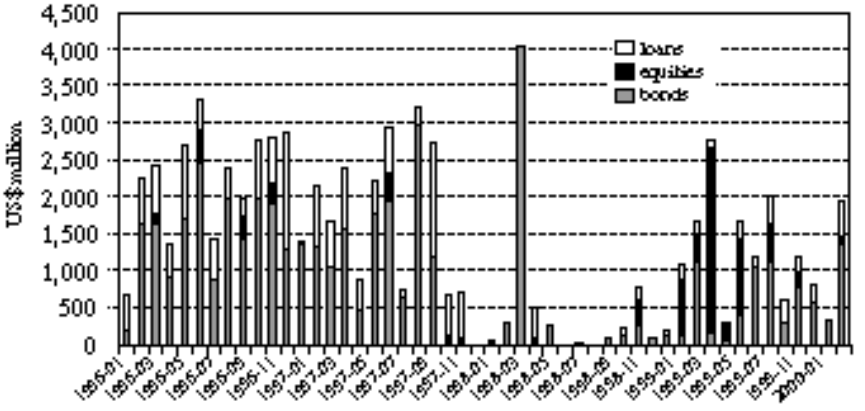

Figure 1.8. Korea gross capital inflows (*Source*: Capital Data and IMF).

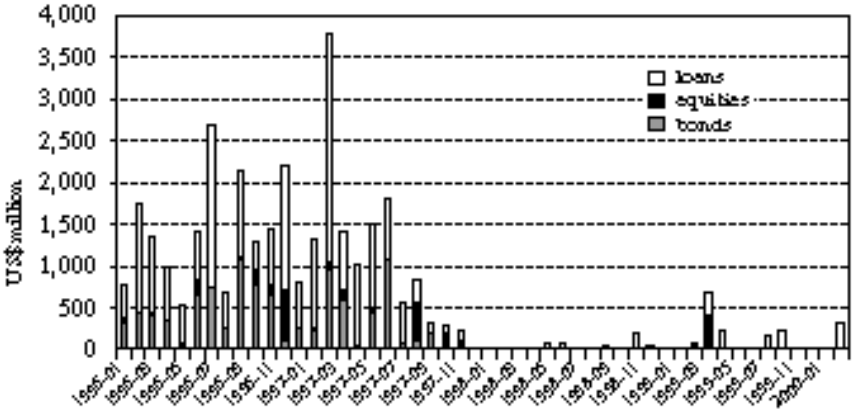

Figure 1.9. Indonesia gross capital flows (*Source*: Capital Data and IMF).

Table 1.6. Net private capital flows to emerging market economies (US $ billion)

	1997	1998	1999	2000	2001
Total	115.2	66.2	67.4	36.4	116.0
FDI	141.3	151.6	154.6	141.9	140.5
Portfolio	39.4	0.3	4.8	17.3	31.8
Bank loans etc	–65.6	–85.6	–91.9	–122.8	–56.4
Affected-5	–15.6	–28.2	2.9	–22.4	10.6
FDI	9.8	10.3	13.1	9.1	9.0
Portfolio	8.4	–8.2	12.8	13.2	3.3
Bank loans etc	–33.8	–30.4	–23.0	–44.6	–1.7
Rest of Asia	22.3	–12.5	–0.6	4.6	13.0
FDI	45.3	49.6	41.1	38.4	38.9
Portfolio	–0.1	–7.2	–8.9	–8.0	–0.2
Bank loans etc	–23.0	–54.8	–32.8	–25.8	–25.8

Source: IMF 1995 for 1977-89 data, IMF 1999 and IMF 2000 for 1990s data.

Policy Issues

The FSF Working Group on Highly Leveraged Institutions (2000: 12) noted: "With hindsight, 1998 may well come to be regarded as a something of a watershed year. Various economic and financial events created a potential deflationary process and challenged long-established beliefs about the behaviour of economies and financial markets."

The impact of episodes of destabilizing speculation in East Asian and South African financial markets in 1998 (following the turmoil of 1997), the Russian default in August 1998, the near-collapse of Long-Term Capital management and the consequent seizing-up of U.S. and Latin American debt markets in the last quarter of the year have all had a profound effect on thinking about international financial markets and institutions.

The international policy response has been multifaceted and complex, recognizing that the events of 1997 and 1998 and the problems facing policy makers are themselves complex and have no simple one-shot solution. There has been a wide range of activities by existing policy institutions, such as the IMF, World Bank, and BIS, as well as by less formal ad hoc country groupings such as the G-7, the G-22, the Financial Stability Forum and, more recently, the G-20. Substantial attention has been paid to improving the operation and transparency of policy-making processes in emerging market economies in order to reduce the likelihood of crises. There has also been widespread discussion by officials and market participants on crucial issues such as the involvement of the private sector in the prevention and, more controversially, resolution of financial crises, although there has been only limited progress and success in this area.

One other element in the debate has been the structure and operation of international financial markets and institutions, and the focus here has been to analyze and address the serious vulnerabilities that can arise from financial integration in order to ensure that countries can maximize the fundamental gains from that process. The FSF set up three working groups—one on Capital Flows, one on Offshore Centers, and one on Highly Leveraged Institutions—each of which presented a major report in March 2000.

The FSF Working Group on Capital Flows (2000) argued that capital inflows can support and enhance economic development but that they can expose economies to new risks and potential costs when they are not well managed, especially when capital flows are short term in nature. The risks include sudden reversals of capital flows, with the potential for large shifts in asset values and economic activity. The working group recommended that national authorities better monitor capital flows and that risk management practices be improved within the public sector (for example, better reserves management and matching of assets and liabilities), the banking sector (for example, better management of foreign exchange exposures, better understanding of liquidity risk, better supervision of credit risk), and the private sector (for example, better transparency and disclosure by firms, including sources of external finance). The IMF and BIS have worked on improving standards and disclosure. There has been a general intellectual shift recognizing that capital controls may be appropriate in certain cases, either on inflows to slow the entry and exit of "hot money," or temporarily on outflows in standfast or standstill proceedings.

The Working Group on Offshore Centers (2000) argued that offshore financial centers (OFCs), which have grown substantially in recent years, do not appear to have been a major causal factor in the creation of systemic financial problems. It noted, however, that some OFCs have featured in recent crises and that "problematic OFCs" create loopholes in international supervision and regulation, giving rise to prudential concerns (poor disclosure, weak supervision, and lack of due diligence) and market integrity concerns (illicit activity and abusive market behavior). It recommended that OFCs be assessed by the IMF in terms of supervisory capacity, law enforcement, information disclosure, and adherence to international standards. The FSF also publicly revealed a list of OFCs that did not respond to its request for information.

The FSF Working Group on Highly Leveraged Iinstitutions (2000) argued that HLIs are large unregulated and opaque institutions that could pose serious risks to the stability of financial systems, both through their reliance on credit from regulated entities, such as banks, and on the effect that the unwinding of large positions in financial markets could have on financial markets, especially in times of uncertainty. It argued for stronger counterparty risk management, better risk management within hedge

funds (especially of liquidity risk), and enhanced regulatory oversight of hedge funds. It also examined issues related to market dynamics in mid-sized markets, noting the potential for large and concentrated positions to seriously amplify market pressures and for aggressive market practices to undermine market integrity. It was unable to reach agreement on the issue of market integrity, but it argued for enhanced national surveillance of foreign exchange markets and the introduction of good practice guidelines for foreign exchange trading.

The issue of market integrity and hedge funds and other highly leveraged institutions, such as the proprietary trading desks of banks and securities companies, is an important one for emerging and midsized market economies, but the debate has not led to any international policy response of substance. Possible connections between market integrity and hedge funds have been extensively examined and assessed in my recent study (2001a, b), in which I identify seven key issues in this debate.

First, it is increasingly the mainstream view that some of the basic assumptions that are crucial to the assessment that unregulated financial markets yield the optimal outcome are not satisfied in practice. The assumption that financial markets are populated by a large number of atomistic price-taking agents is not always met: large players in markets can at times influence the price discovery process and can take advantage of the pervasive feedback or trend trading by other players in markets to influence prices in markets. While foreign exchange markets cannot be cornered like commodity markets because foreign exchange is not in fixed supply, liquidity in the foreign exchange market can and does vary considerably, and rational players can take advantage of this, especially at times of uncertainty or when they have a perceived informational advantage (Devenow and Welch 1996).

Contrary to Friedman's (1953) famous prediction that speculation is necessarily stabilizing because speculators buy low and sell high, speculation can in fact be destabilizing when there is feedback trading because speculators may make profits by selling and pushing prices lower to buy back at even lower prices (De Long, Shleifer, Summers, and Waldman 1990; Brunnermeier 1998). It can also give rise to multiple equilibria (Obstfeld 1996; Corsetti, Dasgupta, Morris, and Shin 2000). The crucial aspect in many of these models is that the leading player has a perceived informational advantage over other market participants. This fits the macro hedge funds in 1997 and 1998: not only were they perceived by other players as having the best understanding of emerging economies and market liquidity, but they knew their own positions and strategies, which was exactly the information that everyone else in the markets wanted to know but could only guess at. While financial integration brings many real substantial benefits to an economy (de Brouwer 1999a), policy makers also need to be realistic about the risks that openness can pose at times of vulnerability

and respond to them in an internationally coordinated way.

Second, Baily, Farrell, and Lund (2000: 99) argue that hedge funds "were not the prime cause of the volatility of global capital flows. In fact, the hot money in the recent crises came mostly from bank lending, not from hedge funds or other non-bank investments such as pension and mutual funds." This argument has initial appeal. As examined above, it is certainly true that bank lending was the most volatile component of capital flight in the East Asian financial crisis and was a crucial element in the instabilities that arose (Grenville 1998; de Brouwer 1999), and it is the reason why the debate about private-sector involvement in the prevention and resolution of financial crises continues.[7] But it is simplistic to say that this means that hedge funds had no role: the crisis was a complex phenomenon and it is not necessary to reduce it to one problem.

The fall in exchange rates of 1997 preceded the bank outflows, and the unstable financial market dynamics and collapse of regional asset prices were key factors in stimulating bank outflows. The BIS data in Table 1.2 show that bank cross-border outflows from Thailand did not begin until the June quarter of 1997, with the real bank outflows occurring in the September quarter, after the first round of currency devaluations. The BIS figures indicate that bank outflows were not in the March quarter of 1997 as Baily, Farrell, and Lund argue, but in the September quarter of 1997, after the hedge fund positions had been closed. Indeed, bank inflows to Thailand were strong throughout all of 1996, even as short positions were being established against the baht.

Third, the assessment of hedge funds has been shaped by the IMF 1998 study led by Barry Eichengreen and Donald Mathieson (1998). While this study broke substantial new ground, its analysis of market integrity contains three serious flaws: it focuses on the size of hedge funds' global capital base relative to other financial firms, when what is relevant is the size and variability of institutions' positions in a particular market; it makes a hasty and incorrect assessment about the size and timing of hedge funds' positions in East Asian—especially Thai—financial markets in 1997; and it oversimplifies the similarities and relative importance of hedge funds and proprietary trading desks in East Asian financial markets in 1997 and 1998, especially in terms of the leverage of these positions.[8] It is also difficult to reconcile the IMF's assessment of hedge funds with the extreme market events of 1998 detailed in the FSF Working Group on HLIs (2000) and my work (de Brouwer 2001).

Fourth, while many countries argue that, by virtue of their sheer size and highly aggressive trading practices, hedge funds posed serious risks to market integrity in 1997 and 1998, the United States has so far rejected this view. As I (de Brouwer 2001a, b) argue, there are three reasons the United States has done this. First, it believes that hedge funds are a distraction from the real issues of bad economic, financial, and governance poli-

cies: the messenger should not be penalized for delivering the message. Second, it believes that the macro hedge funds are no longer an issue because they have either closed down (Tiger) or substantially downsized (Soros Fund Management) (Frankel and Roubini 2000). Third, while many hedge funds are offshore legal entities, most hedge fund managers are based in the United States, especially the greater New York area, and the U.S. authorities will not impede the operations of large profitable institutions so long as they do not harm their own markets.

The two analytical reasons set out above are not persuasive. Consider the "real issue" debate. East Asia's financial crisis was a complex phenomenon and it is obviously wrong to blame it all on hedge funds. But few seriously argue that this is the case. The events of 1997 and 1998 showed to many that market dynamics can become seriously destabilized and asset prices seriously overshoot at times of uncertainty, when markets are dominated by large players who act highly aggressive. The voice of the United States in calling for structural economic reform would not be weakened if it recognized that financial markets can at times be inherently unstable.

The assessment that hedge funds are no longer relevant is shortsighted and premature. Macro funds' asset base still remains large,[9] and recent experience is better viewed as restructuring, which, once complete, will allow the funds to focus on business. This restructuring process has also seen the rise of smaller macro hedge funds, and this spawning process may see a stronger, larger, and more diverse macro hedge fund sector in the future. Whatever the case, the debate has focused on addressing the effects of large players and manipulative activities in general, rather than on any particular subset of institutions that may have these characteristics. Even if the macro hedge fund sector were to decline to insignificance, the behaviors that occurred in 1997 and 1998 could be repeated by some other set of institutions.

The fifth point is that even if HLIs were key players in the market instability and asset price overshooting in 1997 and 1998, it is necessary to draw a sharp distinction between the past and the policy response that is necessary to help secure stability in the future. HLIs were among the key actors in 1997 and 1998, but the problems arose because of very large players and highly aggressive trading practices in foreign exchange markets. Policy should focus on the behaviors rather than the institutions as such. Financial markets and institutions are highly fungible, and policy responses directed at institutions rather than behavior are unlikely to reduce the risk of destabilizing speculation. The main policy proposals to deal with large players and market manipulation are directed accordingly. These proposals are to require public disclosure of positions, to require banks to impose margins on all hedge funds and other borrowers when providing swap or repurchase facilities, to implement a code of conduct for participants in financial markets, and possibly to introduce regulations on for-

eign exchange trading that uses electronic broking systems.

The sixth point is that there has been a tendency to talk about the "problem of hedge funds," especially the macro hedge funds, but severely limiting hedge funds' activity may be shortsighted and ultimately self-defeating. First, attempting to suppress speculative pressures by focusing on hedge funds can lay the seeds for further, different speculative attacks or crises in the future. Second, there are many thousands of hedge funds, and they are involved in financial markets having widely varying risk appetites and engaging in many and diverse activities. They are one of the most important classes of pure speculation in financial markets and are a key source of innovation, depth, and liquidity in financial markets. There is a strong desire in East Asia to develop intraregional financial markets—such as regional bond markets, domestic-currency commodity markets, and bilateral currency markets such as a yen-won market—but these will never develop sufficient instruments and depth if speculators are excluded or their trading tightly controlled. Hedge funds are probably necessary for innovation and the full development of regional financial markets.

The final point is that, because of the failure of policy makers to deal with the issue at the international level, some countries have adopted unilateral means to reduce their vulnerability, including limiting access by nonresidents to local currency for speculative purposes (notably, limiting swap access) and increasing their reserves. While these can reduce vulnerability so long as they are properly enforced, there are costs associated with these policies.[10] For example, limiting swap access by nonresidents limits the ability of domestic firms and banks to hedge the foreign exchange exposure of their international borrowing, which means that risks are kept onshore. Similarly, holding large reserves can be expensive for emerging market economies because the return on reserves is typically substantially lower than the interest cost of the liabilities issued to acquire the reserves. Moreover, both policies can encourage the view that countries should run current account surpluses and avoid international borrowing. Not only does this violate an adding-up constraint (that is, not all countries can run current account surpluses), but the view that developing countries should run current account surpluses or not borrow internationally is counterintuitive: developing economies should be drawing on the resources of developed economies to support and promote their development, not the other way around.

Conclusion

This paper has explored some of the features of capital flows to East Asia before, during, and after the crisis and examined some of the policy responses to these, with particular emphasis on the reports of the Financial Stability Forum.

Using many different data sources, it has shown that capital flows into and out of East Asia have been very volatile in recent years. While a recovery in gross inflows seems to be underway, it is a mixed recovery. Most banks, especially Japanese banks, are still shrinking their cross-border assets in East Asia (the total for which is more than two times the allocation of public funds through the Miyazawa Plan), although U.S. banks are increasing their cross-border assets, notably in Korea. Capital inflows have not recovered evenly across countries, with Korea doing well but Indonesia not. Vulnerabilities still remain, and the IMF (2000a, c) has focused especially on potential instabilities from U.S. asset markets.

The debate on the international financial architecture has been wide-ranging. The paper explored some of the key issues that have flowed from the work of the Financial Stability Forum, especially from its Working Group on Highly Leveraged Institutions. It has argued that the policy debate on the role of HLIs needs to be taken further. It argues that the possibility of destabilizing speculation and multiple equilibria has shifted to the intellectual mainstream in economics, and that recent studies that downplay the effect of HLIs on market integrity, such as Mathieson and Eichengreen (1998) and Baily, Farrell, and Lund (2000), contain serious analytical flaws. It argues that HLIs can cause serious instabilities in financial markets, especially at times of uncertainty, because of their large size and highly aggressive trading practices. But it also argues that the policy response needs to focus on behaviors and not institutions and needs to take account of the diversity of the hedge fund sector and the substantial benefits that HLIs can provide in terms of liquidity and innovation. Preventing speculation and excluding hedge funds are unlikely to support the development of deep regional financial markets. It also points to the difficulties and potential costs of limiting international access to national currencies.

Notes

1. This updates de Brouwer (1999b).
2. This draws on de Brouwer (2001a,b).
3. In Figure 1.1, net private capital inflows are measured as aggregate capital and financial accounts, including net errors and omissions but excluding reserve assets, use of IMF credit, and exceptional financing. The 1997 U.S. dollar values are obtained by deflating the nominal series by the U.S. GDP deflator based at 1997. Figure 1.1 is taken from de Brouwer (1999b). All amounts are in U.S. dollars unless otherwise stated.
4. De Brouwer (2001) reports that market participants reckon that the yen carry trade—the first leg of the transaction described in the text—reached a massive $200–300 billion by mid-1998. See Eichengreen and Mathieson (1998) for a description of the yen carry trade.
5. Loans account for about 90 percent of assets.
6. In my own work (De Brouwer 1999b), I argue that the data may overstate the reduction in Japanese banks' exposure to Thailand. Some proportion of Japanese bank loans are to Thai-Japanese joint ventures or to subsidiaries of Japanese companies operating in Thailand. As direct loans were withdrawn, loans were reportedly made by Japanese banks to the head-office company in Japan, which in turn directed funds to the joint venture or subsidiary in Thailand. This will appear as a reduction in loans and an increase in FDI in the financial account of the balance of payments. This is relatively peculiar to Thailand.
7. See, for example, the summary of the discussion by the IMF Executive Board on this issue in Public Information Notice (PIN) No. 00/80.
8. See FSF Working Group on HLIs (2000), Frankel and Roubini (2000), and de Brouwer (2001). While the on-balance sheet leverage of macro hedge funds was less than that of banks, their off-balance sheet leverage was substantially greater, especially with respect to their positions in midsized markets in 1997 and 1998.
9. According to MAR/Hedge, macro hedge funds had assets of $17.7 billion under management in July 2000.
10. This is a crucial aspect. Swap limits are effective in Malaysia and Singapore because the authorities in those countries are able to strictly enforce the regulation. Swap limits are not effective in South Africa because the authorities are neither able nor willing to enforce the regulation (FSF Working Group on HLIs 2000). This suggests that countries like Indonesia would be unable to apply swap limits effectively.

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2. The Japanese Yen as an International Currency

Eiji Ogawa

Introduction

Our experience with the Asian currency crisis provides some lessons to prevent another currency crisis in the future. One of the lessons is that the de facto dollar peg system is dangerous for the East Asian countries with diversified trade with Japan, the European countries, and the intra-region—as well as the United States. It is suggested that the monetary authorities of the East Asian countries should target exchange rates of their home currencies vis-à-vis a currency basket made up of the U.S. dollar and the Japanese yen and so on (Ito, Ogawa, and Sasaki 1998; Williamson 2000). However, they have tended to stabilize exchange rates vis-à-vis the U.S. dollar instead of vis-à-vis a currency basket. It is said that this is because the U.S. dollar has been generally accepted as the key currency as well as an international currency in the world economy, while the Japanese yen has not been so often used as an international currency.

In this paper, I recognize that internationalization of the Japanese yen should make sense from an international viewpoint and that the East Asian countries should adopt their optimal exchange rate system in order to prevent another currency crisis in the future. I use some data to examine the current status of the Japanese yen and show that it has not yet achieved the status of an international currency.

Next, I study characteristics of the present international monetary system to explore any measures to enhance an international role of the Japanese yen. I explain the results of empirical research (Ogawa and Sasaki 1998)) on inertia of the U.S. dollar as a key currency. Moreover, I characterize the present international monetary system as a Gulliver type, where both network externalities and economies of scale have brought the U.S. dollar into the position of a key currency. As a result, it is difficult to promote an international role for the Japanese yen by itself under the present international monetary system in which inertia works in favor of the U.S. dollar as a key currency.

We face a kind of coordination failure in which private economic agents fail to coordinate with each other in using the Japanese yen as an international currency because of network externalities in using the U.S. dollar as a major international currency in the world economy. We have to solve this coordination failure to use the Japanese yen as an international currency, at least in the East Asian region. Although the Japanese government recently has taken some measures, these are regarded as minimal necessary conditions. We must solve the failure in coordination to satisfy

conditions sufficient for further internationalization of the Japanese yen. It is necessary if we are to gain any momentum toward this goal.

In this paper, I suggest that free trade agreements between Japan and other East Asian countries, including Korea and Singapore, might provide a momentum toward further internationalization of the Japanese yen. We should anticipate foreign exchange risks involving exchange rates of home currencies vis-à-vis the Japanese yen that impede international trade transactions and direct investments even after we remove tariff and nontariff barriers under free trade agreements. We will come to care about the exchange rates vis-à-vis the Japanese yen. Moreover, if free trade agreements include a clause on international monetary cooperation of using their own currencies as a settlement currency in bilateral trade and financial transactions, the free trade agreements are expected to give a stronger momentum to further internationalization of the Japanese yen.

The rest of this paper is organized as follows. The first section gives us findings on the current status of the Japanese yen as an international currency by using some data related to invoice and denomination currencies in international trade and financial transactions. The next section explains the need to internationalize the Japanese yen from an international viewpoint. The section following this presents the results of an empirical analysis (Ogawa and Sasaki 1998) on inertia of the U.S. dollar as the key currency, because we should study the present international monetary system before we consider what is necessary to internationalize the Japanese yen. Next, the international monetary system is characterized as a Gulliver type of system. Finally, I note obstacles to further internationalization of the yen and discuss measures to enhance an international role of the Japanese yen. I summarize my discussion in the conclusion.

Current Status of the Japanese Yen as an International Currency

In Japan, we have had several discussions about internationalization of the Japanese yen since the so-called Yen-Dollar Working Group (officially the Joint Japan–U.S. Ad Hoc Group on Yen-Dollar Exchange Rate, Financial and Capital Market Issues) submitted a report on internationalization of the Japanese yen in 1984. The report recognized that internationalization of the Japanese yen needed both liberalization and internationalization of Japanese financial markets for market participants so that they can freely choose the Japanese yen for financing and investing financial instruments. The report suggested some measures of deregulating the domestic financial markets and the euro-yen markets and internationalization of Tokyo financial markets. Specifically, short-term Treasury bill and government bond markets and offshore markets in Tokyo financial markets were established. “The impact of these steps on the demand for yen as a medium of exchange and a portfolio investment, however, was quantitatively rather

limited," as Ito pointed out (1992:329).

I use some data to look at the current status of the Japanese yen as an international currency. First I compare relative uses of the Japanese yen in the world economy with some relative economic sizes of Japan. Next I look at movements in relative uses of the Japanese yen in both international trade and financial transactions.

Figure 2.1 shows relative economic sizes and relative uses of major currencies including the U.S. dollar, the Japanese yen, and the EU country currencies by assuming that figures in terms of the EU country currencies sum to a figure in terms of the euro with a simple calculation. In Figure 2.1, relative economic sizes of the U.S. dollar, the fifteen EU country currencies, and the Japanese yen are compared in several measures of an invoice currency. This demonstrates that the Japanese yen has not yet been internationalized relative to several sizes of the Japanese economy, while the U.S. dollar and the EU country currencies are used as international currencies relative to their economic sizes. Thus the Japanese yen might become a "junior partner" as forecasted by Bergsten (1997), who predicted after the successful launch of the euro that it would become the second key currency in the world economy in the near future.

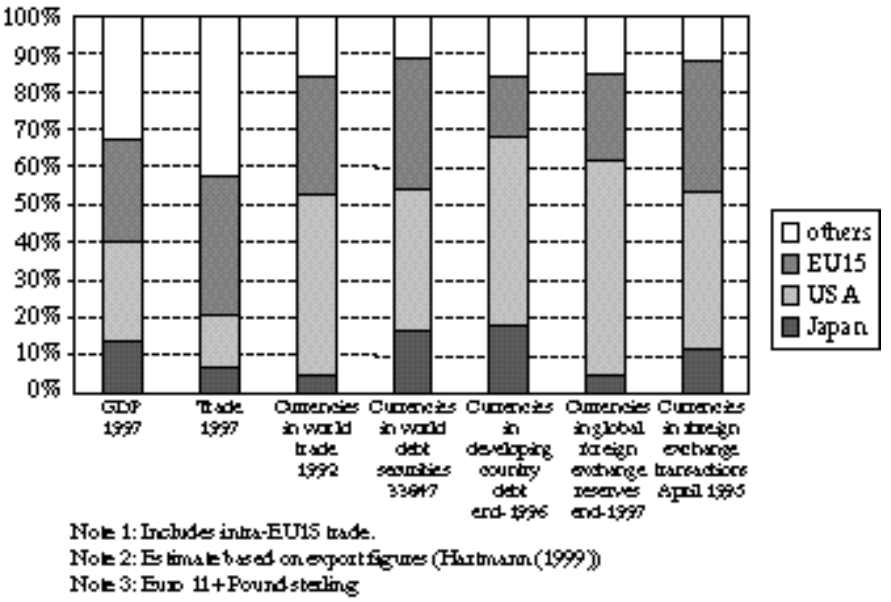

Figure 2.1. Relative economic size and relative use of denomination currencies among the United States, Japan, and the European Union (*Source*: IMF 1977, Council on Foreign Exchange and Other Transactions 1999).

Figure 2.2 shows shares of the United States, the fifteen EU countries, and Japan in world trade in the various trading areas, where trade volume is equal to the sum of exports and imports. This demonstrates differences in trade shares among trading areas. Shares of the United States are extremely high in the Western Hemisphere, which includes NAFTA and the Latin American countries. Shares of the EU countries are very high in Europe—including the EU itself, EFTA, and other European countries—and in Africa. Also, the EU share is relatively high in the Middle and Near East. It is only in Asia and Oceania that Japan has a relatively high share of international trade. But in these regions, the shares of Japan are almost the same as those of the United States and even those of the EU countries.

Figure 2.3 shows movements in shares of the Japanese yen-invoiced transactions in both exports and imports of Japanese domestic firms. The share of the Japanese yen-invoiced transactions in exports peaked in March 1993. The peak was two years ahead of a turning point when the exchange rates of the Japanese yen in terms of the U.S. dollar changed from appreciation of the Japanese yen to depreciation. The share had been increasing before the turning point in April 1995, but it has decreased since then. Also, the share of the Japanese yen-invoiced transactions in imports peaked in March 1995. The share had been increasing before this, but it too has decreased since then as it followed movements in the nominal effective exchange rate of the Japanese yen.

Figure 2.4 shows shares of denomination currencies in international money market instruments. The share of the U.S. dollar-denominated international money market instruments has decreased from 79 percent in 1993 to 43 percent in 2000. The share of the Japanese yen-denominated

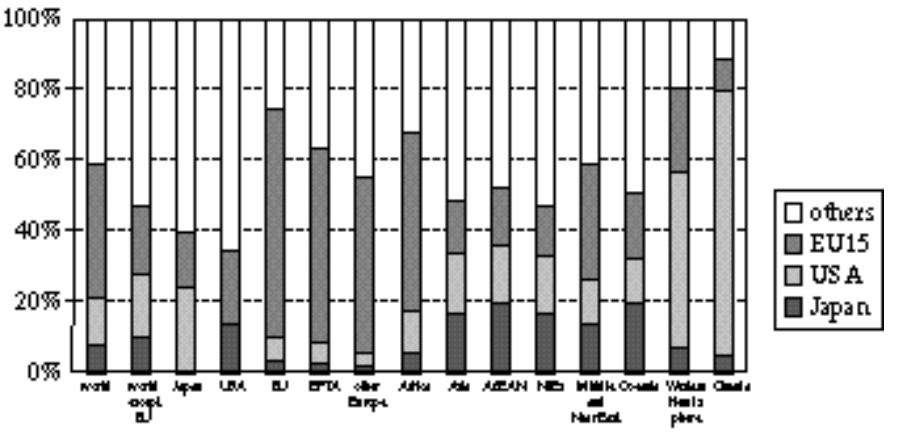

Figure 2.2. Shares in trade (exports and imports)
(Source: IMF, *Direction of Trade,* 1995).

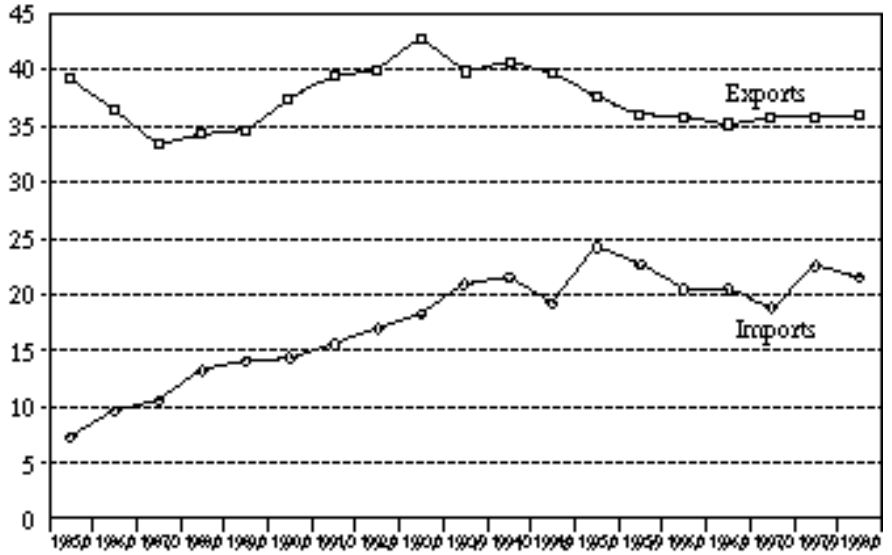

Figure 2.3. Yen-invoiced transactions in Japan's exports and imports (*Source*: Data provided by Ministry of International Trade and Industry).

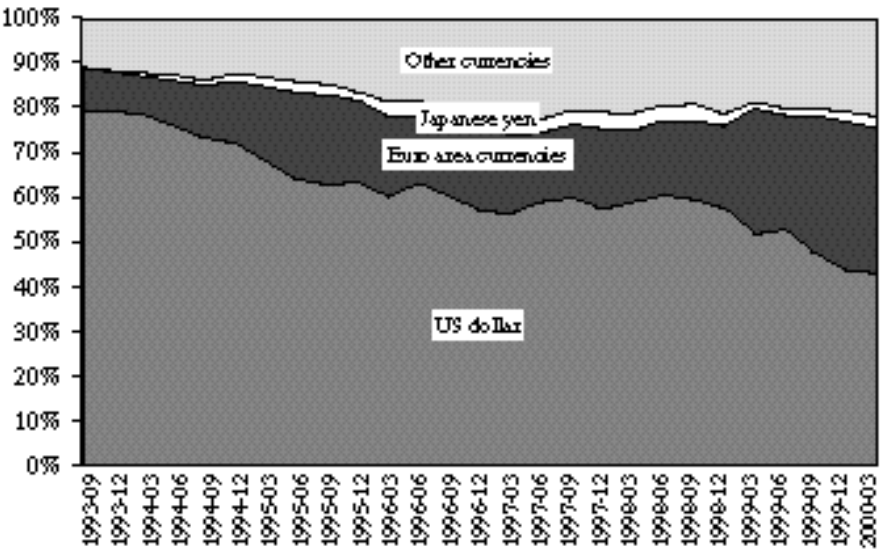

Figure 2.4. International money market instruments (shares of amounts outstanding) (*Source*: BIS 2000).

international money market instruments has been small but has increased from 0.3 percent in 1993 to 2.6 percent in 2000. The share of those denominated in terms of the euro area currencies, including the eleven EU country currencies and the ECU before the introduction of the euro in January 1999, has increased from 10 percent in 1993 to 32 percent in 2000.

Figure 2.5 shows shares of denomination currencies in the international bond market. The share of the U.S. dollar-denominated international bonds and notes has increased from 38 percent in 1993 to 47 percent in 2000. The share of the Japanese yen-denominated international bonds and notes has decreased from 14 percent in 1993 to 10 percent in 2000. The share denominated in euro area currencies has increased somewhat, from 26 percent in 1993 to 29 percent in 2000. Note especially that the share of the euro area currencies has increased much more after the EU countries introduced the euro in 1999.

Figure 2.6 shows shares of denomination currencies in liabilities in terms of foreign currencies of international banks during the period from 1983 to 1999. The share of U.S. dollar denomination decreased from 79 percent in 1984 to 49 percent in 1995, but it increased to 64 percent in 1999. The share of Japanese yen denomination has gradually increased from 2 percent in 1983 to 8 percent in 1999. The share of the euro area currencies increased from 12 percent in 1983 to 30 percent in 1993. Afterward, it has gradually decreased in 1990s. After the currency unification, it was

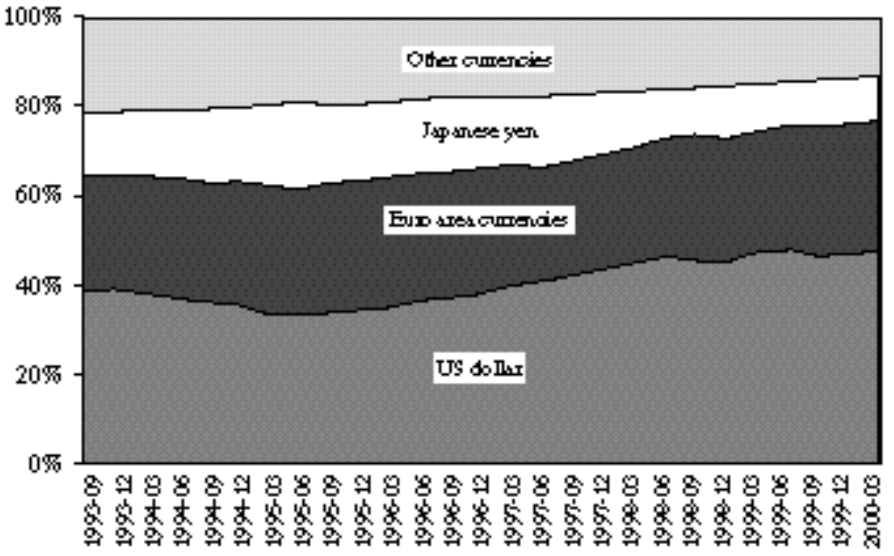

Figure 2.5. International bonds and notes (shares of amounts outstanding) (*Source*: BIS 2000).

12 to 14 percent in 1999.

Thus, the Japanese yen is more likely to be used as a denomination currency in the longer-term capital markets than in the shorter-term money markets. This fact implies that the Japanese yen might have a relative advantage as a means of a store of value. On the other hand, the Japanese yen is not used much in money markets in which liquidity is regarded to be important. The Japanese yen has a disadvantage as a medium of exchange, which is implied by liquidity.

Frankel and Wei (1994) and Kawai and Akiyama (1998) empirically analyzed the extent to which the movements of some Asian currencies other than the Japanese yen correlate with movements of the U.S. dollar and those of the Japanese yen before the Asian currency crisis. The conclusion in both analyses was that the movements in most of the analyzed Asian currencies had a strong correlation with the movements in the U.S. dollar and a weak correlation with those in the Japanese yen, as shown in Table 2.1. The results showed that the monetary authorities of these countries had adopted a de facto dollar peg system before the currency crisis. For example, the monetary authorities of Thailand had, de facto, pegged the Thai baht to the U.S. dollar, although they announced that the peg was to a currency basket that consisted of the U.S. dollar, the Japanese yen, and other major currencies.

The monetary authorities of some East Asian countries had switched their exchange rate system to a managed floating exchange rate system when they faced the Asian currency crisis, though the monetary authori-

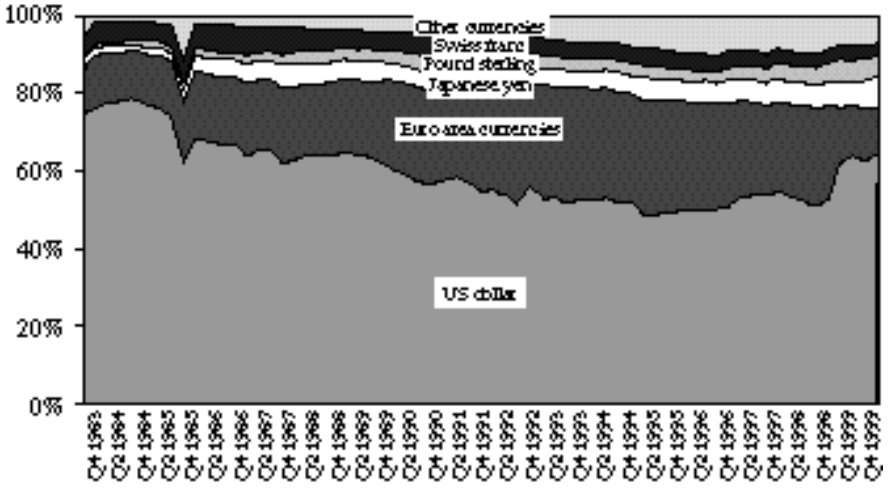

Figure 2.6. Liabilities in foreign currencies of international banks (shares of amounts outstanding) (*Source*: BIS 2000).

ties of Malaysia have adopted the dollar peg system since September 1998. For some time after the crisis, the East Asian currencies had a weaker correlation with the U.S. dollar and a stronger correlation with the Japanese yen. However, we can find that some of the East Asian currencies have returned to de facto pegging of their home currencies to the U.S. dollar since late 1998 as shown in Figure 2.7.

Some factors are pointed out as reasons why the monetary authorities of East Asian countries adopted or adopt such a de facto dollar peg. One of the factors is that the U.S. dollar has been historically used as a major settlement currency in international trade and financial transactions. The monetary authorities that are concerned about foreign exchange risks of exchange rates of their home currency vis-à-vis the U.S. dollar tend to adopt a dollar peg system. Another factor is that the monetary authorities believed they had to have a dollar peg system in order to keep market participants' confidence or international and domestic confidence in their home currencies. They understood that a sudden devaluation of their home currencies might cause a loss of confidence in the currencies. The monetary authorities pegged their own currencies to the U.S. dollar rather than other currencies, including the Japanese yen, because they recognized that the U.S. dollar is a key currency in the world economy.

The Need to Internationalize the Japanese Yen: International Perspectives

The Japanese Council on Foreign Exchange and Other Transactions (1999) pointed out some needs to internationalize the Japanese yen from international perspectives as well as from Japanese domestic perspectives. It stressed that internationalization of the Japanese yen would contribute to both the stability of the international monetary system and economic

Table 2.1. Weights on the U.S. dollar and the yen in exchange rate policies of the Asian countries

	Frankel and Wei (1994) Sample period: 1979–92		Kawai and Akiyama (1998) Sample period: 1990–96	
	Coefficient on the US dollar	Coefficient on the yen	Coefficient on the US dollar	Coefficient on the yen
Singapore dollar	0.75	0.13	0.420*	0.021
Hong Kong dollar	0.92	–0.00	1.002	–0.002
Korean won	0.96	–0.10	0.941	0.088
Malaysia ringgit	0.78	0.07	0.589	0.044
Thai baht	0.91	0.05	0.789	0.104
Philippine peso	1.07	–0.01	1.087	–0.094
Indonesian rupiah	0.95	0.16	0.966	0.014

*Acoefficient on the SDR is 0.600.

Figure 2.7. Movements of some East Asian currencies (*Source:* Datastream).

stability in East Asia from international perspectives.

Following the collapse of the Bretton Woods system, the major developed countries have adopted a floating exchange rate system since 1973. Even while it has continued to lose its value relative to other major currencies, the U.S. dollar remained the key currency throughout this period. This has been highly influenced by the general confidence in the U.S. dollar as supported by the international political leadership exercised by the U.S. government and by the forces of inertia generated by the convenience of the U.S. dollar as an international currency. On the other hand, it has been pointed out that this situation has allowed the United States to adopt an economic policy of "benign neglect" toward foreign exchange markets. However, the United States continues to run massive current account deficits and stands as the largest net debtor country in the world. This fact implicitly threatens the present international monetary system with the single key currency based on the U.S. dollar.

The U.S. dollar, the euro, and the Japanese yen support the three major economic regions in the world. As such, the euro representing Europe and the Japanese yen as the principal Asian currency are in a position to complement the U.S. dollar. Such complementary arrangements can contribute to the establishment of a stable international monetary system supported by the sound economic policies of the United States, the European Union, and Japan. Furthermore, from the perspective of diversifying the risks inherent in floating rate systems, it is desirable to promote the international use of the Japanese yen along with the U.S. dollar and the euro. In this regard, the internationalization of the Japanese yen can be viewed as representing the provision of an international public good.

While the Asian region has developed strong economic relations with Japan, the United States, and Europe, its ties with Japan are very strong in overall terms, covering all aspects of trade, direct investment, capital transactions, and economic assistance. As a reaction to the recent currency crises, Asian countries are showing interest in reconsidering the role of the Japanese yen and are calling for the expansion of its international role.

We learned some lessons from the Asian currency crisis that occurred in 1997. One of the lessons is that the de facto dollar peg system was a dangerous exchange rate system, for the East Asian countries trade significantly with Japan, the EU, and the intraregion as well as the United States. If the monetary authorities of the East Asian countries had adopted a currency basket peg system instead of the de facto dollar peg system, they would not have experienced appreciation in their effective exchange rates, slackening of export growth, and worsening of current accounts (Ito, Ogawa, and Sasaki 1998). Moreover, the de facto dollar peg system stimulated capital inflows to the East Asian countries before the crisis because domestic banks and firms tended to be careless about exchange rate risks under this system (Ogawa and Sun, forthcoming).

One of the reasons why the monetary authorities adopted the de facto dollar peg system is that it is not the Japanese yen but the U.S. dollar that is generally accepted as an international currency in the world economy. Some of the monetary authorities believe that they can maintain confidence in their own currency by pegging it to the U.S. dollar. Also, they are concerned about risks in the exchange rates of their home currency vis-à-vis the U.S. dollar in international trade transactions, foreign direct investments, and international financial transactions. Therefore, enhancing an international role of the Japanese yen in international economic transactions will contribute to the stability of foreign exchange markets of the East Asian currencies and, in turn, to the stability of East Asian economies.

Moreover, using the Japanese yen more frequently as a settlement currency in international economic transactions would decrease foreign exchange settlement risks (so-called Herstatt risks—namely, risks that arise from intraday time-zone differences in settlement) in cross-border foreign exchange transactions in the East Asian region because the time difference between Japan and other East Asian countries is less than that between these countries and either the United States or Europe.

Inertia of the Key Currency

We should study the present international monetary system before we consider necessary measures to promote internationalization of the Japanese yen. The U.S. dollar has experienced a steady trend toward depreciation against the Japanese yen and the deutsche mark since the international monetary system was changed from the U.S. dollar standard system to a general floating system in 1973. We should recognize that both official authorities and private economic agents in the world have still accepted and used the U.S. dollar as the key currency under the present international monetary system.

This fact is very important when we consider issues dealing with the international monetary system and the status of the U.S. dollar and the Japanese yen as international currencies. The issues include what function of an international currency has been regarded to be the most important in becoming a key currency and what factors could contribute to switching one key currency into another. An international currency in an international economic context, like a domestic currency in a domestic economic context, has three functions: as a medium of exchange, a store of value, and a measure of value.[1] The fact that the depreciating U.S. dollar has kept its position as the key currency implies that the function of money as a medium of exchange is in general recognized to be more important than its function as a store of value when we choose an international currency in international economic transactions.

Ogawa and Sasaki (1998) empirically analyzed how much inertia the U.S. dollar has in its position as the key currency by taking account of both its

function as a medium of exchange and a store of value in the context of international currency competition. We supposed that we could enjoy benefits of a medium of exchange function by holding real balances of international currencies while we absorbed costs of holding depreciating international currencies. We assumed a money-in-the-utility model where real balances of international currencies were introduced to a utility function of private economic agents. We specified a Cobb-Douglas type of utility function:

$$\int_0^\infty U(c_t, m_t^A, m_t^D, m_t^Y)e^{-\delta t}dt$$

$$U(c_t, m_t^A, m_t^D, m_t^Y) \equiv \frac{\left[c_t^\alpha\left\{m_t^{A\beta}\left(m_t^{D\gamma}\, m_t^{Y1-y}\right)^{1-\beta}\right\}^{1-\alpha}\right]^{1-R}}{1-R} \tag{4.1}$$

$$0<\alpha<1,\ 0<\beta<1,\ 0<\gamma<1,\ 0<R<1$$

where c = real consumption, m^A = real balance of home currency, m^D = real balance of the U.S. dollar, and m^Y = real balance of other international currencies.

From the first-order conditions for utility maximization subject to intertemporal budget constraints that include payments of seigniorage to foreign monetary authorities, we derived optimal real balances of international currencies. An optimal share of the U.S. dollar ϕ is derived:

$$\phi_t = \frac{m_t^D}{m_t^D + m_t^Y} = \frac{1}{1+\frac{1-\gamma}{\gamma}\frac{i_t^D}{i_t^Y}} = \frac{1}{1+\frac{1-\gamma}{\gamma}\frac{\pi_t^D+\bar{r}}{\pi_t^Y+\bar{r}}} \tag{4.2}$$

where i = nominal interest rate, $\bar{r}$ = real interest rate, and π = inflation rate.

We focused on a parameter γ on the real balance of the U.S. dollar in the utility function. We estimated the parameter γ during the analytical period from the first quarter of 1986 to the second quarter of 1993 by supposing that the other international currencies included the Japanese yen

Table 2.2. Estimates of γ

	Means	Standard deviation	99% confidence interval
Based on Eurocurrency interest rates			
3 months	0.73	0.13	0.67–0.79
6 months	0.73	0.13	0.67–0.79
Based on inflation rate of WPI			
Real interest rate=3%	0.72	0.06	0.69–0.75
Real interest rate=5%	0.73	0.04	0.71–0.75
Real interest rate=8%	0.73	0.04	0.72–0.75
Based on inflation rate of CPI			
Real interest rate=3%	0.79	0.06	0.76–0.82
Real interest rate=5%	0.77	0.04	0.75–0.79
Real interest rate=8%	0.76	0.03	0.74–0.78

Source: Ogawa and Sasaki (1998).

and the deutsche mark. The empirical study's results are presented in Table 2.2. They show that the parameter γ on the real balance of the U.S. dollar in the utility function was about 0.7 and, in turn, that marginal rates of substitution were relatively low between the U.S. dollar and the other

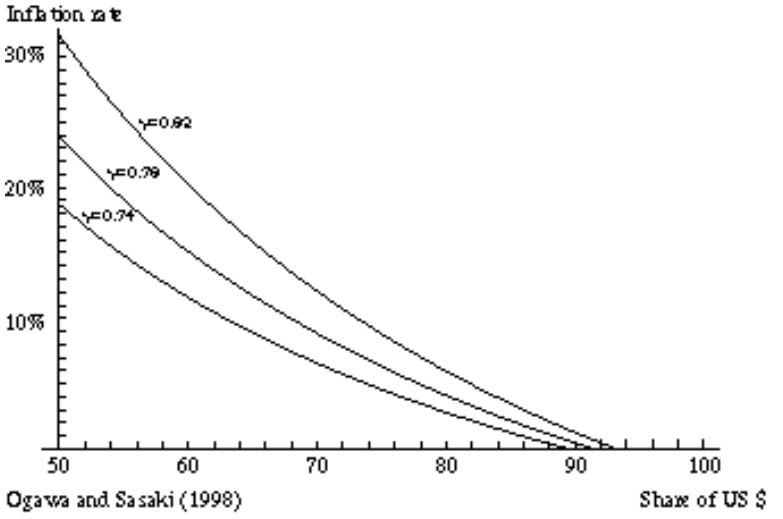

Figure 2.8a. The relationship between inflation rate (CPI) and share of U.S. dollar

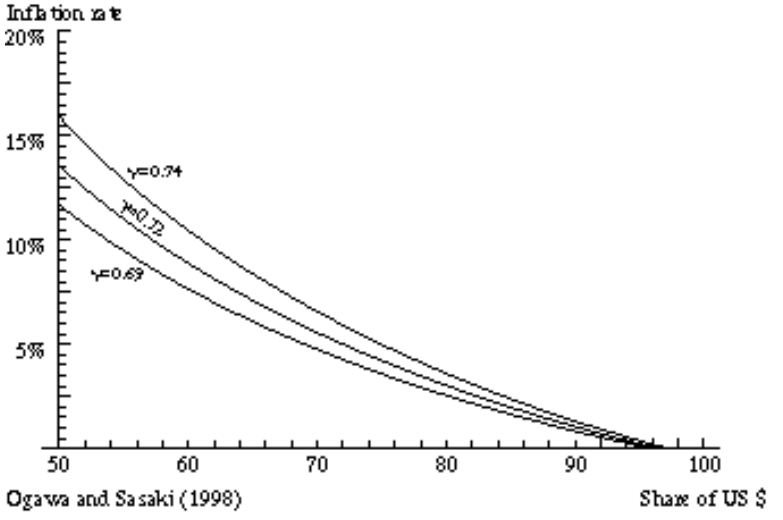

Figure 2.8b. The relationship between inflation rate (WPI) and share of U.S. dollar

currencies. This implies that the U.S. dollar has had an overwhelming function as a medium of exchange compared with other currencies, given the depreciation of the U.S. dollar.

Also, Ogawa and Sasaki (1998) simulated relationships between inflation rates in the United States or a depreciation rate of the U.S. dollar and a share of the U.S. dollar in the international currencies, given the estimated value of the parameter.[2] Figures 2.8a and 2.8b show the simulated relationships between U.S. inflation rates and shares of the U.S. dollar, given the inflation rates in Japan and Germany. The simulation analysis projects that the share of the U.S. dollar in international currencies would make no sudden substantial changes even if the inflation rates in the United States or the depreciation rate of the U.S. dollar occurred at a single-digit percentage level. It might be concluded that the U.S. dollar should experience no sudden fall in its position as the key currency as long as it maintains its overwhelming function as the medium of exchange.

Thus, the U.S. dollar would not change in its position as the key currency as long as it has an advantage as the medium of exchange compared with other currencies. This would be true even if the U.S. dollar depreciated at a moderate rate. The U.S. dollar would keep its international advantage in the present situation. Other currencies such as the Japanese yen might have the power to compete with the U.S. dollar as a store of value. However, a relative advantage in this function is not sufficient for the Japanese yen in order to compete effectively with the U.S. dollar. Rather, it is necessary for the Japanese yen to improve its function as a medium of exchange or its convenience as a settlement currency and an invoice currency in international trade transactions. Both a search theoretical model and a random matching model[3] in the context of international currencies tell us that an international currency, the volume of which is overwhelmingly large in settlements of international trade, is used as a medium of exchange in international transactions.

The function of an international currency as a medium of exchange depends to a degree on its general acceptability among economic agents in the world. A currency is held to use as a medium of exchange, although we cannot enjoy direct utility by consuming it, in contrast with goods and services in general. The reason is that the currency is only accepted and received as a medium of exchange by trading partners. Moreover, the trading partners also are willing to purchase goods and services ultimately by passing the currency to any other economic agents. Therefore, the general acceptability depends on the probability that an economic agent who holds a currency to purchase goods and services can meet another economic agent who is willing to accept the currency to sell goods and services.

Thus the function of a currency as a medium of exchange depends on whether—or how many—other economic agents are willing to use it as a medium of exchange. In other words, its function as a medium of exchange

improves as the number of other economic agents willing to use it increases. Hence, it is said that the function as a medium of exchange has "network externalities."[4] Because such network externalities exist in monetary exchange systems, a currency, the degree of general acceptability of which has been historically high, might in itself enhance its general acceptability.

This implies that economies of scale work in a medium of exchange. In the case of economies of scale, benefits of holding the key currency with a predominantly large share of the international currencies are clearly greater than those of holding any other currencies with a small share. Moreover, the higher share of the key currency broadens gaps in the benefits between the key currency and other currencies. It follows that the key currency with a predominantly large share would enhance its own share as long as monetary authorities supply the currency at a relatively low growth rate and control inflation rates at a relatively low level. Once a currency becomes the key currency with a predominantly large share, it will keep its position unless the monetary authorities institute a large depreciation. The historical fact that a currency became the key currency itself makes it keep its dominant position. Thus, inertia works to maintain its position as the key currency.

It is desirable that a key currency functions both as a medium of exchange and as a store of value. However, a key currency might not function sufficiently as a store of value because the monetary authorities are able to promote seigniorage by issuing the currency on the world market.

The U.S. dollar held the position of key currency during the twentieth century. Under the Bretton Woods system, the monetary authorities of countries other than the United States had to link their own currencies to the U.S. dollar while the monetary authorities of the United States had to link the U.S. dollar to gold. All of the economic agents in the world were forced to approve the position of the U.S. dollar as the key currency. Public and private economic agents in the world had to use the U.S. dollar as the key currency, even though it has had a trend of depreciation and has been losing its function as a store of value. On the other hand, economic agents of the world have not been forced to approve the U.S. dollar as the key currency since the Bretton Woods system collapsed in 1971. They have the freedom to choose a currency other than the U.S. dollar as the key currency if they wish. They would be able to choose a multi-international currency system where there exist more than two international key currencies.

Under the multi-international currency system, private economic agents of the world can freely choose only one currency or more than two currencies as their international key currencies by comparing between both the functions as a medium of exchange and as a store of value. They should choose a key currency by taking into account which function they regard to be more important in using it as an international currency. The U.S. dollar has taken relative advantage of the function as a medium of exchange rather than as a store of value. On the other hand, the Japanese yen has taken relative advan-

tage of the function as a store of value rather than as a medium of exchange. The inertia in the position of the U.S. dollar as the key currency shows that private economic agents of the world have chosen the U.S. dollar as a key currency from the viewpoint of its function as a medium of exchange.

A Gulliver Type of International Monetary System

Here we have to take into account the competition condition in such a multi-international currency system when we consider the possibility of switching from one key currency to another. The condition in which private economic agents are able to choose freely a key currency in a multi-international currency system does not necessarily imply that the multi-international currencies are effectively competing with each other. Both the network externalities and the economies of scale should lead to a natural monopoly condition in international currency competitions. The function of an international currency as a medium of exchange is enhanced as the volume of trade increases as a result of the international currency itself. The volume of trade made possible by the international currency tends to be positively related to its volume of supply in the world economy. Thus, an increase in an international currency improves its quality in its function as a medium of exchange.

The quality of an international currency in its function as a medium of exchange depends on the relative volume in circulation—that is, the share of the international currency in the world economy. According to the relationship between the quality of an international currency and the share of the international currency in the world economy, international currencies with different shares in the world economy are heterogeneous in their function as a medium of exchange. Hence, the international currencies with different shares are imperfect substitutes.

An international currency with a relatively high share should have a relatively better quality in its function as a medium of exchange. On the other hand, an international currency with a relatively low share should have a relatively worse quality in its function as a medium of exchange. An international currency that has an extremely high share in the world economy, such as the U.S. dollar, should have quite a different quality from other currencies. Such a key currency tends to increase a degree of differentiation between itself and other currencies. We can call such a system a “Gulliver type” of international monetary system. It is difficult for the other currencies to compete with the key currency; it can be compared to the competition in markets of homogeneous goods.

It is unlikely that a continuous depreciation of the U.S. dollar would change the present Gulliver type of international monetary system into another system with effective currency competition because inertia works to maintain the position of the U.S. dollar as the key currency. However, if

there were any competitive international currencies other than the U.S. dollar, it could not receive the monopoly profits that it has received in its present situation as the single key currency.

All the economic agents, who hold a balance of foreign currency to use as a key currency, are forced to pay seigniorage to the foreign monetary authorities. If the foreign monetary authorities seek to obtain their seigniorage from all the economic agents who hold a balance of the foreign currency, the authorities might increase the volume of currency at a very high rate. As a result, the currency would depreciate against other currencies.

If the currency effectively competed with other international currencies, however, economic agents in the world economy could switch holdings of international currency from the depreciating currency to an appreciating currency. Moreover, if there is high substitutability among international currencies, it is easier for economic agents to switch holdings of international currency. After they switch holdings of international currency to another currency, the monetary authorities that sought to obtain their seigniorage might in fact obtain a smaller amount of seigniorage than they expected.

Therefore, the monetary authorities should not increase the volume of currency at too high a rate. Rather, they should grow it at an optimal rate to maximize their seigniorage. The optimal growth rate depends on the competitive condition among international currencies. That is, the monetary authorities should increase it at a lower rate as the competitive condition becomes more severe. Thus, if a key currency effectively competed with other currencies, the effective currency competition could prevent the monetary authorities of the key currency from increasing its volume at too high a rate and, in turn, depreciating it against other currencies.

Under the Gulliver type of international currency system, it is difficult for the other currencies to compete effectively with the U.S. dollar because the U.S. dollar and the other currencies, which have included the Japanese yen and the deutsche mark, have been considerably heterogeneous. It is necessary that the other currencies have a share equal to the U.S. dollar in order to compete effectively with the U.S. dollar. In other words, an international currency that has the same share as the U.S. dollar would be able to compete with the U.S. dollar effectively.

It is unlikely, however, that the share of the U.S. dollar will naturally decrease and shares of the other currencies increase under the present Gulliver type of international monetary system, as shown by the simulation analysis of Ogawa and Sasaki (1998). If we experienced some large shocks in the Gulliver type of international currency system, the shares of the international currencies would change by themselves.

One of the shocks might be the significant improvement in convenience of using any international currencies other than the U.S. dollar as a medium of exchange. According to the theory of network externalities, the convenience of using an international currency as a medium of exchange

depends on how many economic agents in the world use it. It is certain, therefore, that one of the shocks that could improve the function of an international currency as a medium of exchange would be a monetary integration among countries such as the European monetary union.

Measures to Enhance an International Role of the Japanese Yen

It is difficult for the Japanese yen to be internationalized further only by relying on its function as a store of value under the present Gulliver type of international monetary system, in which inertia has maintained the position of the U.S. dollar as the key currency. It is necessary that the function of the Japanese yen as a medium of exchange should be enhanced in order to create an international currency that is able to compete with the U.S. dollar together with the euro.

The measures of financial market deregulation and establishment of the Tokyo offshore financial markets, which the so-called yen-dollar working group suggested in the report on internationalization of the Japanese yen, have had little effect on internationalization of the Japanese yen. The deregulations alone could not internationalize the Japanese yen as an international currency that is able to compete effectively with the U.S. dollar.

The U.S. dollar has had an advantage in its function as a medium of exchange while it has had a disadvantage as a store of value because of its depreciation. Private economic agents in the world hold and use the U.S. dollar by taking account of both the advantages and the disadvantages of the U.S. dollar. Deregulation of Japanese financial markets is a necessary but insufficient condition for further internationalization of the Japanese yen. While it is necessary for the Japanese yen to improve its function as a medium of exchange by adopting the measures of financial market deregulation and establishment of the Tokyo offshore financial markets, we have to consider measures that satisfy not only necessary conditions but also sufficient conditions for further internationalization of the Japanese yen.

As explained above, inertia has worked in maintaining the U.S. dollar as the key currency. The inertia of the position of the U.S. dollar as the key currency should reflect on normal business practice in international trade transactions. Normal business practice prevents private economic agents in the world from using the Japanese yen as a settlement currency in international trade and financial transactions. As normal business practice in itself has network externalities, it is difficult to change it and, in turn, the inertia of the position of the U.S. dollar as the key currency.

It has been recently said, however, that Japanese subsidiaries in Asian countries are forced to make a settlement in trading with their parent companies by using the Japanese yen because the parent companies are willing to transfer foreign exchange risk to their subsidiaries. Such a movement in a settlement currency to the Japanese yen might increase the share of the

Japanese yen used as a denomination currency in international lending and borrowing from the viewpoint of natural hedging of foreign exchange risk. This seems to suggest a gradual shift in settlement currency to the Japanese yen. The Japanese government should thus remove some obstacles of regulation and taxation that both the domestic and foreign private economic agents face when they use the Japanese yen as a settlement currency in international trade and as a denomination currency in international lending and borrowing. Such measures should be considered necessary for further internationalization of the Japanese yen.

The Japanese Ministry of Finance recognized that various environmental and infrastructure improvements were necessary for the promotion of internationalization of the Japanese yen. Particular importance was assigned to measures for increasing market depth in the short-term financial markets and arrangements for facilitating investment in Japanese government bonds by overseas investors.

The Japanese government announced some measures in financial markets and implemented necessary arrangements in legal and other frameworks in order to facilitate the internationalization of the Japanese yen (Council on Foreign Exchange and Other Transactions 1999). The measures are as follows:

(A) Acompetitive price auction of Financing Bills began in April 1999.

(B) Original issue discounts for Treasury Bills and Financing Bills issued on or after April 1999 that satisfy requirements including registration of all bonds in the Bank of Japan (BOJ) book-entry system at the time of their issuance and exemption from withholding taxes at the time of issuance; foreign corporations are, in principle, exempt from taxes on original issue discounts for such bonds.

(C) Interest income of nonresidents and foreign corporations accrued from interest-bearing Japanese government bonds that satisfy requirements including registration in the BOJ book-entry system; bonds whose period of interest calculation begins on or after September 1999 are exempt from withholding taxes.

(D) To further diversify the maturities of government bonds, thirty-year Japanese government bonds and one-year Treasury Bills were introduced beginning in 1999. Moreover, five-year and fifteen-year Japanese government bonds were introduced in 2000.

As for the exemption of withholding taxes on Japanese government bonds held by nonresidents, it is sometimes said that the requirements are so rigid that it has still been difficult for nonresidents to hold Japanese government bonds. Therefore, the Japanese government should improve implementation for the exemption of withholding taxes on Japanese government bonds.

Also, the Bank of Japan is now preparing for rebuilding its system in order to start the Real Time Gross Settlements for Japanese government

bonds in January 2001. It is pointed out that it is necessary to increase the scope and liquidity of financial markets in terms of the Japanese yen in order to improve availability in funding money, investing financial instruments, and hedging foreign exchange risks and interest risks. Specifically, the Japanese government should issue a greater variety of government bonds because there is a correlation between the scope of markets and the variety of financial instruments traded in the markets. The government might give private banks incentives so that they could develop and supply financial instruments for hedging the foreign exchange risks and other risks.

We should consider how to internationalize the Japanese yen under the conditions in which inertia promotes using the U.S. dollar because of network externalities. The government failed to promote the Japanese yen-denominated banker's acceptances in the past. It would succeed in promoting them in the present condition where Japanese banks have difficulties in funding the U.S. dollar in international money markets. We should never forget, however, that the network externalities keep the U.S. dollar in its position as the key currency. We should consider measures to go beyond the inertia of the U.S. dollar as the key currency. It is necessary to gain momentum in order to change the condition in which the network externalities support the inertia. The network externalities lead to a situation in which economic agents keep using the current international currency because all of them fail to coordinate the change to another currency, even though they recognize that the current situation is not optimal. Therefore, one of the measures is that the Japanese government give private economic agents both the momentum to coordinate and incentives to use the Japanese yen in international trade and financial transactions.

In promoting internationalization of the Japanese yen, it is most realistic to begin with efforts aimed at boosting its use in the East Asia region, which shares strong economic ties with Japan. The active use of the Japanese yen in the process of Asia's recovery from the currency crisis and its return to a stable growth pattern would provide a potent impetus to enhancing the international position of the Japanese yen. For this purpose as well, it is important that Japan rapidly expand its ties with the Asian economies through trade and capital transactions. Such transactions would supply the Japanese yen to the East Asian region and establish a foundation for circulation of the Japanese yen in international trade and financial transactions.

Japan is now studying the effects and feasibility of bilateral free trade agreements with Korea and Singapore at the same time. Bilateral free trade agreements are complementary to the multilateral trade arrangement represented by the WTO. It is expected that bilateral free trade agreements between Japan and each East Asian country would strengthen their trade and financial relationships. Economic agents of these countries should expect foreign exchange risks of exchange rates of their home currencies

vis-à-vis the Japanese yen that impede international trade transactions and direct investments even after we remove tariff and nontariff barriers under free trade agreements. The economic agents will have to cope with the foreign exchange risks against the Japanese yen and the monetary authorities will become concerned about the exchange rate vis-à-vis the Japanese yen.

The movement toward bilateral free trade agreements might gain an incentive to use the Japanese yen as an international settlement currency if Japan and the partner country cooperate in an international monetary field. For example, if the free trade agreements include a clause that government and private sectors in both Japan and the partner country should make efforts to use their own currencies in their bilateral trade and financial transactions, the clause might provide an incentive for using the Japanese yen as a settlement currency at least in their transactions. Another potential international monetary cooperation Japan and the partner country have is that they can try to create a foreign exchange market for the Japanese yen and the partner country's home currency.

The Japanese government should try, therefore, to conclude free trade agreements with many countries in East Asia, including the international monetary cooperation that contributes to incentives for further internationalization of the Japanese yen. The free trade agreements are expected to contribute to further internationalization of the Japanese yen through strengthening trade and financial relationships between Japan and East Asian countries, as well as through direct international monetary cooperation.

From the lesson of the Asian currency crisis, the monetary authorities of East Asian countries should adopt a currency basket system instead of the de facto dollar peg system (Ito, Ogawa, and Sasaki 1998). They have not adopted a currency basket system that places a heavier weight on the Japanese yen because of the fact that the Japanese yen has not yet internationalized enough to be used in settlements of international transactions. From this point of view, we acknowledge the importance of increased use of the regional currencies in intra-Asian trade and financial transactions and, in particular, an enhanced international role of the Japanese yen.

Conclusion

The de facto dollar peg system, which the monetary authorities in some of the Asian countries had adopted before the Asian currency crisis, has been recognized as a cause of the Asian currency crisis. Under the de facto dollar peg system, the depreciation of the Japanese yen against the U.S. dollar and, in turn, their home currencies, decelerated their growth rates of exports and deteriorated their trade balances. The monetary authorities should have adopted an exchange rate policy that was more weighted on stabilizing exchange rates of their currencies vis-à-vis the Japanese yen.

But the monetary authorities, in fact, had adopted the de facto dollar peg system before the Asian economic crisis. Moreover, some East Asian currencies seem to have returned to being pegged to the U.S. dollar in recent years, while the monetary authorities of Malaysia adopted a rigid dollar-peg system in September 1998.

The Japanese government has an obligation to remove the obstacles that have prevented the monetary authorities in Asian countries from targeting the home currency to a true currency basket that includes the Japanese yen because the Japanese yen has not yet been internationalized sufficiently. It is certain that the Japanese government will encounter difficulties for further internationalization of the Japanese yen under the present Gulliver type of international monetary system in which inertia has been working to maintain the U.S. dollar as the key currency. But again, it should seek all possible measures to facilitate the internationalization of the Japanese yen.

It is noteworthy that the measures are only necessary conditions for further internationalization of the Japanese yen. The measures should not be regarded as sufficient in themselves. An example of a sufficient condition for changing the present Gulliver type of international monetary system is the EU countries, which have integrated their home currencies into a single common currency, the euro. They will be able to use such a big shock to gain momentum in becoming one of the key currencies. In economic terminology, the European monetary integration implies a possible shift from one equilibrium point to another one in a situation of multi-equilibria. Thus, a sufficient condition is that we should gain momentum for stopping the inertia of the U.S. dollar as the key currency in order to enhance an international role of the Japanese yen.

We should use recent movements toward free trade arrangements to gain incentives for further internationalization of the Japanese yen. We expect that the free trade agreements can contribute to further internationalization of the Japanese yen through strengthening trade and financial relationships between Japan and the East Asian countries. Also, we can execute free trade agreements that include international monetary cooperation—such as using our own currencies in our economic transactions or creating foreign exchange markets of our currencies—that would be expected to contribute to further internationalization of the Japanese yen.

Appendix: Network Externalities and an International Currency

In this appendix, I use a simple model with network externalities to analyze theoretical conditions under which the Japanese yen might come to be used as an international currency (Dowd and Greenaway 1993).

Suppose that there are n + 1 economic agents in the world economy and that the economic agents use either the U.S. dollar or the Japanese yen to settle international economic transactions. Also, suppose that each of the economic agents has used the U.S. dollar as a settlement currency by now and that they are about to make a decision on whether to change the settlement currency from the U.S. dollar to the Japanese yen. Economic agents compare benefits obtained from convenience of the currency as a medium of exchange with the cost of holding the depreciating currency. We assume that they need a constant switching cost s when they change the settlement currency from the U.S. dollar to the Japanese yen.

They are assumed to maximize the following utilities when they choose their settlement currency. The utility related to the network externalities is assumed to be proportional to n, a number of other people who use the same currency as a settlement currency. The parameter a represents the utility obtained from an appreciation of the U.S. dollar, independently of the network externalities. $b \times n$ represents the utility of the U.S. dollar related to the network externalities. The parameter c represents the utility obtained from an appreciation of the Japanese yen, independently of the network externalities. $d \times n$ represents the utility of holding the Japanese yen related to the network externalities.

The utility that an economic agent obtains if he keeps settling in terms of the U.S. dollar while any other economic agents switch their settlement currency from the U.S. dollar to the Japanese yen is represented as u_A.

$$u_A = a \tag{A.1}$$

We represent the utility that an economic agent obtains if he keeps settling in terms of the U.S. dollar while any other economic agents keep settling in terms of the U.S. dollar as u_{NA}.

$$u_{NA} = a + bn \tag{A.2}$$

An economic agent obtains a utility v_A when he switches his settlement currency from the U.S. dollar to the Japanese yen at the same time as any other economic agents switch their settlement currency from the U.S. dollar to the Japanese yen.

$$v_A = c + dn - s \tag{A.3}$$

An economic agent obtains a utility v_{NA} if he switches his settlement currency from the U.S. dollar to the Japanese yen while any other economic agents keep settling in terms of the U.S. dollar.

$$v_{NA} = c - s \tag{A.4}$$

An economic agent switches his settlement currency from the U.S. dollar to the Japanese yen if his utility of switching the settlement currency from the U.S. dollar to the Japanese yen is larger than one of continuing to settle in terms of the U.S. dollar while any other economic agents keep settling in terms of the U.S. dollar ($v_{NA} > u_{NA}$). Therefore, any other economic agents also switch the settlement currency from the U.S. dollar to the Japanese yen. The condition of $v_{NA} > u_{NA}$ is rewritten:

$$c - a > s + bn \tag{A.5}$$

Equation (A.5) implies that all economic agents should always switch their settlement currency from the U.S. dollar to Japanese yen if the net benefit of appreciation of the U.S. dollar compared with appreciation of the Japanese yen is larger than a sum of the switching cost and the benefit of network externalities that will be lost by quitting settlement in terms of the U.S. dollar.

Now suppose a situation in which an economic agent has a larger utility of continuing to settle in terms of the U.S. dollar than of switching his settlement currency from the U.S. dollar to the Japanese yen while any other economic agents switch their settlement currency from the U.S. dollar to the Japanese yen ($v_A < u_A$). It is clear that the economic agent should keep settling in terms of the U.S. dollar. Also, any other economic agents keep settling in terms of the U.S. dollar. This condition of ($v_A < u_A$) is rewritten:

$$c - a + dn < s \tag{A.6}$$

Equation (A.6) implies that all economic agents should always keep settling in terms of the U.S. dollar if the total of net benefits of appreciation of the Japanese yen compared with appreciation of the U.S. dollar and a benefit related to the network externalities of settlement in terms of the Japanese yen is larger than the switching cost.

All economic agents should always follow the same behavior pattern given in these two situations. Figure 2.9 shows both of the inequalities (A.5) and (A.6) in a plane of n and $c - a$. Inequality (A.5) is represented by a field of A, where all economic agents should switch their settlement currency from the U.S. dollar to the Japanese yen. Inequality (A.6) is represented by a field of B, where all economic agents should keep settling in terms of the U.S. dollar. It is not necessary that all economic agents switch their settlement currency from the U.S. dollar to the Japanese yen or keep settling in terms of the U.S. dollar in the field of C that is located between both fields Aand B.

If an economic agent has a larger utility of switching his settlement currency from the U.S. dollar to the Japanese yen than of continuing to use the U.S. dollar as a settlement currency while any other economic agents switch their settlement currency from the U.S. dollar to the Japanese yen ($v_A \geq u_A$), he may switch the settlement currency from the U.S. dollar to the Japanese yen. However, he switches it on his expectation that he will be able to enjoy benefits of network externalities when any other economic agents simultaneously switch their settlement currency from the U.S. dollar to the Japanese yen.

There is thus an uncertainty about whether his expectation will be realized.

Suppose that an economic agent has a larger utility of keeping using the U.S. dollar as a settlement currency than of switching his settlement currency from the U.S. dollar to the Japanese yen ($v_{NA} \geq u_{NA}$). The economic agent should keep using the U.S. dollar as a settlement currency. Also in this case, the economic agent keeps using the U.S. dollar as a settlement currency on his expectation that any other economic agents keep using the U.S. dollar as a settlement currency. Here again, the economic agent faces an uncertainty that his expectation will be realized.

If economic agents are to avoid risk under the uncertainties over any other agents' behavior, one of them should wait and observe others' behaviors before changing his. The others should take the same tactics to wait and observe others' behaviors. It follows that no economic agents move at first to change their behavior. They keep their current behavior. That is, all economic agents tend to refrain from switching the settlement currency from the U.S. dollar to the Japanese yen and keep using the U.S. dollar as a settlement currency in the field of C in Figure 2.9.

We face the possibility that no economic agents take action because they tend to wait until they observe others' actions. In this way, inertia works when we choose our international currency. We call the situation a

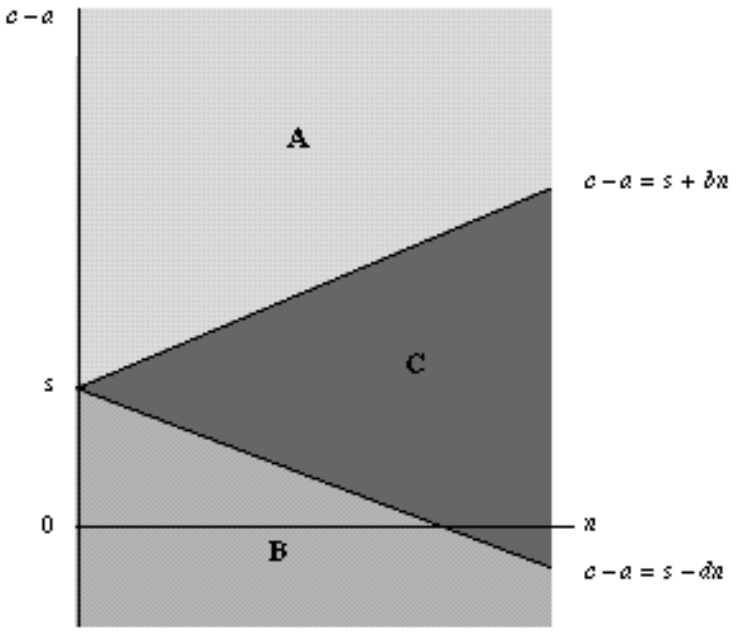

Figure 2.9

coordination failure because all of the economic agents fail to coordinate in switching their international currency. It is necessary that one economic agent should take an action as a leader; then all economic agents should coordinate this action in order to avoid a coordination failure. This is vital if we are to gain the momentum to switch the settlement currency from the U.S. dollar to the Japanese yen.

Notes

1. See Krugman (1984).
2. We used nominal interest rate and inflation rate means data during the analytical period (the first quarter of 1986 to the second quarter of 1993). The weighted average of interest rates used for Japan and Germany was 6.52 percent. The weighted averages of inflation used for Japan and Germany were 0.55 percent for WPI and 2.45 percent for CPI.
3. Matsuyama, Kiyotaki, and Matsui (1993) and Trejos and Wright (1996) applied a random matching model to a theoretical analysis of international currencies.
4. See Hartmann (1998).

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3. Development of Asian Bond Markets

Yoon-Shik Park

Introduction

The Asian financial crisis in 1997 highlighted the importance of a strong and resilient bond market in addition to a well-functioning banking system. Even though savings rates in Asia were generally high, with the possible exception of Indonesia, inefficient financial intermediation touched off the financial crisis. If the high savings of the Asian countries had been channeled into their most efficient uses, some of these countries might not have had to resort to foreign borrowing, especially in the form of short-term foreign currency loans from the international banking system. Many observers have noted that the absence of a strong and robust Asian bond market was one of the main reasons for the 1997 crisis. For example, H. D. Tsang, financial secretary of Hong Kong, noted that the Asian financial crisis was "essentially one of funding mismatch compounded by ineffective intermediation. Despite high growth, high savings in excess of 30 percent of GDP and almost no fiscal deficits, Asia managed to stumble into a world-class liquidity crisis because of private sector over-borrowing, especially in short-term foreign exchange debt. Much of our scarce capital resources were stuck in non-liquid long-term projects, such as real estate, that did not yield the returns to justify the risks."[1] Robust financial markets including strong bond markets in Asia would have encouraged international portfolio investors to invest in Asian capital market securities, which would have been a far more stable form of foreign capital flows than short-term bank loans. Furthermore, strong financial markets would have required Asian countries to enhance their financial and corporate transparency, because capital market financing necessitates more stringent financial disclosure than bank financing.

Gross Domestic Savings as % of GDP

	1996	1997	1998	1999	2000
China	40.5	41.5	41.5	41.0	40.5
Hong Kong	30.7	31.8	30.5	31.0	31.0
Indonesia	27.3	29.9	19.1	18.5	19.0
Korea	33.7	33.1	42.3	34.1	31.7
Malaysia	42.6	43.8	48.0	47.1	46.1
Philippines	18.5	20.3	20.0	20.2	20.3
Singapore	51.2	51.8	52.2	50.0	49.0
Taiwan	25.1	24.8	25.1	24.8	25.3
Thailand	33.7	32.9	35.9	33.2	33.0

Source: Asian Development Bank.

The affected Asian countries relied too heavily on their banking system for financial intermediation. The inefficient and backward Asian banking system misallocated the scarce financial resources, favoring large and powerful firms at the expense of small and medium-sized companies. Credit allocation was manipulated through the symbiotic collusion among influential politicians, top bureaucrats, and well-connected businessmen. Some would defend this Asian way of doing business as part of "Asian values." Bankers were cavalier in their lending decisions, which were based more on political connections than on rational credit appraisals. Excessive reliance on collateral in lending decisions also stunted the credit evaluation capability of local Asian bankers. The result was a predominant flow of credit into property, excess capacity in manufacturing, and other areas that were not the best utilization of the countries' savings.

On the other hand, an efficient bond market can provide a basic infrastructure for the development of a wholesome financial system, supplementing the banking system and providing an alternative funding source, especially for long-term investments. During a financial crisis, banks themselves often come under liquidity pressure due to sudden withdrawal of funds by both domestic and foreign depositors. In such cases, banks not only stop making new loans but also, more critically, recall existing loans from their clients at their most vulnerable moments. Such panic behavior on the part of banks inevitably exacerbates a developing liquidity crisis into a full-blown financial crisis and leads to a credit crunch, with its many ill effects on the entire economy. The existence of a liquid and efficient bond market allows financial institutions to prepare themselves better for risk management. A bond market also provides a source of information for both investors and savers for a more transparent resource allocation.

In most Asian countries traditionally, development of the domestic debt markets was given a low priority, even during the economic boom of the early 1990s. The predominance of the banking systems, recurring fiscal surpluses, lack of disintermediation, and captive investor bases were the primary reasons for the slow pace of domestic bond market development. For eight Asian economies (Hong Kong, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan, and Thailand), bank loans and equities amounted to 92 percent and 71 percent of GDP respectively in 1996, while bond borrowing amounted to only 22 percent of GDP. In contrast, the outstanding fixed income securities in the United States were equivalent to 150 percent of GDP in 1997 and 170 percent of GDP in 1999. The total value of the Asian region's outstanding bonds and notes in 1996 was not more than 2 percent that of OECD countries.

The 1997 crisis aptly illustrated the destabilizing capability of underdeveloped debt markets. Without a deep and mature bond market, it is not surprising that Asia suffered a huge financial crisis in 1997; when bank credit shrank and stock markets collapsed, overseas investors could not

diversify into bonds even if they wanted to. The only way left for foreign investors was to withdraw their capital from the region. The disruption in international capital flows eventually engulfed the region, having negative consequences on the economic, political, and social order in many countries. In the meanwhile, the bulk of Asian savings has been invested in developed capital markets of the West outside Asia. Japanese capital outflow to North America was nearly double that to Asia, while Japan's trade surplus with Asia's newly industrialized economies was 1.5 times that with the United States in 1997. At the same time, the lack of a sophisticated Asian bond market has resulted in substantial foreign exchange reserves of Asia being invested outside the region, particularly in Europe and North America.

This paper discusses the recent developments in non-Japan Asian bond markets, focusing on the postcrisis changes in Asian debt markets. The first section reviews the recent economic recovery of Asia along with the increasing activities of Asian debt markets, which still remain rather small compared to their macroeconomic parameters. The subsequent sections will then discuss various aspects of Asian bond markets, including prices and risks, market infrastructure, benchmarks, credit rating systems, taxation, and regulatory issues. The following section describes the latest bond market developments in the selected Asian countries that were affected by the 1997–98 crisis, such as Korea, Malaysia, and Thailand. The last section concludes with some final observations regarding the prospect for the Asian bond markets.

Recent Debt Market Developments in Asia

Since the 1997 crisis, Asia's domestic bond markets fortunately have become more active. There is no question that the domestic bond markets in Asia were the primary beneficiaries of the crisis. While recent efforts by Asian governments to promote the development of their debt markets have been successful in some respects, much more needs to be done to further advance the range of financial instruments, market depth, and secondary market liquidity. Even though Asia's debt markets still have a long way to go, recent signs suggest that Asia is moving along the path to success in advancing its bond markets.

After severe economic recessions in 1998, the five crisis countries of Asia (EA-5: Indonesia, Korea, Malaysia, the Philippines, and Thailand) recovered sharply in 1999, with their average GDP growth rate achieving 5.8 percent, a marked turnaround from the poor collective performance of –7.9 percent growth in 1998.[2] Growth has been uneven, however, with Korea having the sharpest V-shaped recovery and a GDP growth rate of 10.7 percent in 1999, while Indonesia lagged far behind, barely eking out positive growth for the calendar year. Despite the impressive turnaround

in most EA-5 countries, per capita real incomes are unlikely to achieve their precrisis 1997 level until 2001 in Malaysia, the Philippines, and Thailand, and not until 2005 in Indonesia, with recovery in terms of U.S. dollars taking longer due to the sharp currency declines. Korea, on the other hand, is the exception, where per capita real income has already surpassed its 1997 level.

Accelerated growth in 1999 was spurred initially by strong growth in exports, but it broadened in the second half of the year as consumer demand picked up and the rebuilding of depleted inventories weighed in to buttress growth. In the EA-5 countries, foreign exchange reserves more than doubled from $88 billion at the end of 1997 to $177 billion in 1999, currencies have been generally stable and interest rates have been down, and stock markets have recovered rather well. Outstanding international bond issues by the Asian borrowers, however, have shown a much slower pace of recovery than the stock markets. The total amount of outstanding international bonds and notes by the borrowers from the eight Asian countries (China, India, Indonesia, Korea, Malaysia, the Philippines, Taiwan, and Thailand) stayed flat at about $115 billion during 1999. In fact, the net issue amount of international bonds and notes by Asian borrowers was zero in 1998 and 1999 due to the fact that their current account balances were in surplus, resulting in ballooning foreign exchange reserves during the past two years.

On the other hand, the domestic bond markets have recovered from the crisis very quickly. By the middle of 1999, the outstanding volume of domestic debt securities in the affected Asian countries exceeded the level achieved before the crisis. Among the affected countries, the Korean bond market was hurt most by the crisis, with the outstanding domestic debt securities falling from almost $250 billion at the end of 1996 to $130 billion a year later. But the Korean bond market recovered from the crisis faster than other Asian countries; by mid-1999, the outstanding domestic debt securities reached $264 billion, more than double the amount at the end of 1997.

The need to finance large public expenditures in the aftermath of the Asian crisis provided the key incentive for governments actively to promote the development of deep and active domestic debt markets. The crisis and the dramatic shift in capital flows exposed the glaring need for domestic debt markets to cushion against external shocks. As the primary reasons for the crisis, efforts to develop domestic fixed income markets were a conscious shift away from the dependence on short-term, foreign currency borrowings during the precrisis years. In order to finance large fiscal deficits and to recapitalize the banking sector, governments have had to raise a large amount of funds. For example, Asia's fiscal deficit mushroomed to $85 billion in 1999 from approximately one-quarter of that level in 1996. The magnitude of the bad loans problem in Asia is almost without precedent, both in terms of the share of loans that are nonperforming and because Asian finan-

cial systems are bank dominated. The implied losses clearly exceeded the capacity of the private sector alone to finance them. At the end of the third quarter of 1999, problem loans accounted for perhaps 75 percent or more of the loans in the Indonesian banking system, almost 60 percent of the loans in Thailand, and between 20 and 30 percent of Korean and Malaysian loans.[3] Since more than two-thirds of the bank recapitalization cost is expected ultimately to fall on the governments, this implies a significant increase in government debt in the region that needs to be financed one way or the other—most probably in the domestic bond markets.

Outstanding Domestic Debt Securities in Asia

(In U.S. $ billion)

	1997	1998	1999
China	146.5	194.2	196.4
Hong Kong	28.5	28.5	29.1
India	103.6	112.4	128.4
Korea	130.3	240.1	268.4
Malaysia	57.0	61.9	62.5
Singapore	15.2	19.3	19.3

Source: Bank for International Settlements, International Banking and Financial Market Development, June 2000.

After the crisis, Asian countries set high priorities on developing their domestic debt markets and sharply accelerated the process. Several governments, such as those of Hong Kong and Singapore, issued government bonds to facilitate the development of domestic debt markets. Such countries issued debt well in excess of financing needs to increase the supply of government bonds, develop a domestic benchmark yield curve, and improve secondary market liquidity. The need to recapitalize the battered financial sector plus the greater emphasis placed upon developing local debt markets has led to an explosive growth of government bonds in the region. Furthermore, ample onshore liquidity and low domestic interest rates in the aftermath of the crisis provided additional incentives for shifting borrowing by the private sector from short-term offshore funding to the local bond markets. This in turn spurred the development of corporate bond markets, derivative instruments, and other financial innovations in Asia.

Prices and Risks

In international bond markets, Asian bond prices had a strong rally in 1999, which pushed down their yields. At the beginning of 2000, Asian bonds yielded an average of approximately 225 basis points over comparable-maturity U.S. Treasuries' yields, compared to the 500 basis points spread over U.S. Treasuries at the beginning of 1999. Market observers believe that

the rally was supported by real improvements in credit fundamentals of Asia as the result of financial and corporate restructuring after the crisis. Although it is still in progress, the financial and corporate sector restructuring has successfully reduced the financial risks of the Asian bond markets, as evidenced by the downside momentum of yields. The crisis countries in Asia have begun to lay the foundation for stronger financial and corporate sectors. Throughout the region, new accounting standards, improved disclosure requirements, greater transparency, and better rules for corporate governance have been introduced. One way to mitigate the credit risk and to enhance the efficacy of the primary market is to utilize the bond guarantee system. During the Asia-Pacific Economic Cooperation (APEC) Forum summit in 1999, the Japanese government offered to partially guarantee the sovereign bond issues by crisis-hit East Asian countries up to 2 trillion yen. This sum is in addition to the $30 billion direct aid program under the Miyazawa initiative announced in 1998 during the Asian crisis. Japan's decision to guarantee Asian sovereign debt issues has provided an impetus to the improvement of regional bond markets. It is possible that a large amount of Japanese money, primarily from institutional investors, may flow back to Asia through long-term debt instruments.

The Korean government is also reviving the bond guarantee system in Korea in order to promote bond issues by second- and third-tier Korean corporations besides the top *chaebol* firms. The new scheme, funded by the Korea Credit Guarantee Fund (KCGF) and Seoul Guarantee Insurance Company (SGIC) with the total amount of 500 billion won, will employ two methods for partial guarantee. First, guaranteeing institutions will provide assistance to corporate bonds promoting mergers and acquisitions as well as new investments. The guarantee rate will be based on the credit ratings of bonds themselves. Second, the guarantee fund will be used to promote risk pooling through the use of collateralized bond obligations (CBOs), which are a type of pay-through securities to securitize loan assets held by Korean financial institutions. The guarantee rate in this case depends upon the credit quality of the underlying loan assets.

The liquidity condition of Asian bond markets has gotten better due to financial sector recapitalization and easier monetary policy. Deleveraging as an important part of corporate strategy in the region, as well as the surging current account surpluses in the affected countries, has also improved domestic and external liquidity conditions. As a result, the bid-ask spreads have narrowed considerably in most Asian bond markets in recent years. Overall, Asian bond markets have experienced during the past couple of years a marked improvement in terms of prices and risks, aided by the strong rebound in their macroeconomic performances, such as the real GDP growth rates and balance-of-payments surpluses, in addition to the favorable microdevelopments in the areas of financial and corporate restructuring and reforms. Meanwhile, the surging foreign

exchange reserves and the pay down of foreign debt have helped to mitigate the near-term negative effects of the painful financial sector reform on the region's bond markets.

Market Infrastructure

One of the main weaknesses of the Asian bond markets has been the poor condition of market infrastructure. Paper-based bookkeeping is still used in some Asian countries, while others lack an electronic clearing and funds transfer system. There is no regional clearinghouse for handling the payment and settlement of Asian dragon bond transactions.[4] The bookkeeping for these transactions is handled by such Europe-based clearinghouses as CEDEL and Euroclear, which operate only during European business hours. As a result, the trading operation for such Asian debt instruments as dragon bonds tends to shift to Europe or the United States. In the early 1990s, some Asian market centers such as Hong Kong set up an efficient domestic clearing system, which has greatly improved the efficiency of its domestic bond market operations. It can now be argued that some Asian domestic bond-clearing systems and telecommunication networks have progressed to the point that it is possible to create a regional network of settlement systems in Asia. An electronic clearing system for the region not only will help the dragon bond market but will also promote the local-currency bond markets in Asia. Already, a few countries have been planning to set up a linkage of the bond settlement systems to facilitate cross-border bond transactions. Hong Kong and Australia have linked up their securities clearing systems already. The cooperation within Asia, however, has still been very spotty. While the region is increasingly integrated both economically and financially, there is a considerable rivalry among competing financial centers. Hong Kong, Singapore, Bangkok, and some other financial centers all want to be regional financial hubs.

A limited investor base is another problem for Asian bond markets. Institutional investors are not active participants in the bond market except for their buy-and-hold strategy. In some Asian countries, financial institutions are required to maintain statutory reserve requirements in bonds, thus encouraging them to hold their bond investments until maturity and reducing the availability of such bonds in the secondary market. New long-term investment pools allowed to be set up after the crisis—such as Korea's highly touted "high-yield funds" that invest primarily in low-grade, high-yield securities—have suffered terribly in their performance so far due to the lack of local portfolio management skills. Poor performance of these funds is bound to discourage investors from participating in newly established institutional investment funds.

Traditionally, many Asian countries with relatively balanced fiscal conditions did not have the incentive to develop active domestic bond

markets by floating government debt securities as benchmark issues. Furthermore, some Asian central banks have been suspicious of domestic bond markets. They fear that robust bond markets could weaken the central bank's power to conduct monetary policy. On the supply side, Asian corporations prefer stock markets and bank loans to bond markets. Stock listing and bank borrowing have traditionally been much more convenient than bond market issues due to the stringent issuance criteria, high underwriting fees, onerous listing rules, and the need to undergo credit rating procedures, among other impediments.

Fortunately, the importance of market infrastructure has been recognized by Asian countries, and some improvements have been made. The Korea Securities Depositary (KSD) is now wholly responsible for the clearance, settlement, and custody of all securities in Korea. In 1999, Korea implemented a primary dealer system, which has brought Korea's debt markets in line with the international standard in this area. The new system requires the twenty-four primary dealers to create two-way markets and continually post real-time quotes in government bonds. Thailand is planning to introduce a fully automated system of delivery-versus-payment (DVP) settlement and electronically operated information disclosure, as well as instituting an appropriate code of conduct for market participants. In the past, the transfer of securities involved the physical movement of paper-based certificates. However, developments in technology have enabled securities settlement systems in many advanced countries to issue and transfer securities by simple electronic book entry. Another important achievement has been the establishment of a link, for safety reasons, between the delivery of securities and the settlement of related funds, through the implementation of special mechanisms known as DVP. These facilities allow for the simultaneous transfer of funds and securities in the relevant payment and securities settlement systems. Currently, Thailand has a semi-automated real-time DVP settlement system. The new fully automated system will be supplemented by the intraday liquidity facilities and queuing mechanism, with the latest digital signature technology to ensure smooth, real-time DVP transactions.

The Hong Kong Monetary Authority has instituted a clearing and custodian service called the Central Money-Market Unit (CMU). It covers both exchange fund bills and notes as well as Hong Kong dollar and foreign currency debt paper issued by the private sector. CMU has also established links with the primary international clearinghouses such as CEDEL and Euroclear. Hong Kong has also offered to set up an Internet-based debt market resource center for the Asia-Pacific region in cooperation with the Asian Development Bank. The web site would serve as a primary center for sharing information about debt markets among APEC economies to promote learning from one another's experience.

In China, there is a nationwide computer-based OTC market for

securities trading called the Securities Trading Automated Quotations System (STAQS). All tradable Treasury bills are registered in the computerized system of the Shanghai Stock Exchange in order to facilitate centralized clearing and settlement. But the majority of China's bonds are in bearer form, without standardized settlement or clearing procedures. The Central Government Securities Trust and Clearing Company, established in 1996, is responsible for the custody and settlement of the Treasury bonds and Financial Policy Bonds, and it has provided bond custody and settlement service for the open market operations of the central bank, but there is no comparable facility for other local bonds in China. The Monetary Authority of Singapore (MAS) maintains the registry of Singapore Government Securities (SGS) and operates the book-entry clearing system for transactions in SGS through the MAS Electronic Payment System (MEPS). In 1999, the government established a link between the Central Depositary of Singapore (CDS) and MEPS in order to enable transactions in Singapore dollar bonds to be settled on a real-time and gross DVP basis. To facilitate access by international investors to the Singapore dollar bond market, CDS also has a link with Euroclear and CEDEL. This allows Euroclear and CEDEL to use their CDS accounts via a depositary agency in Singapore for the safekeeping of Singapore dollar equities and bonds as the custodian on behalf of international investors.

Some notable progress has been made in the Malaysian bond market's clearing and payment system. With the increasing number of private debt securities issues, a central depositary system called SPEEDS was launched in 1996 to manage the scripless system for bond trading. It is now mandatory for all new debt issues to be in scripless form and traded through SPEEDS. In 1999, SPEEDS was replaced by the Real Time Electronic Transfer of Funds and Securities (RENTAS) system. It provides a more efficient mechanism for clearing and settlement of debt securities than SPEEDS. RENTAS is a real-time large-value payments system designed to reduce risk in the financial market and will enable payment instructions to be processed and settled individually and continuously throughout the working day, while SPEEDS was a net settlement system where payments were processed during the business hours but the actual settlement of transactions through the central bank fund transfers took place only once at the end of the day.

A key step in bond market development is the establishment of a credit rating industry. Major bond markets in the region all have established their domestic rating agencies. The effectiveness of these rating agencies, however, has been mixed. Overall, the reputation of both domestic and international rating agencies in Asia was severely damaged by their failure to give adequate warning over the approaching crisis of 1997. The agencies tended to be overoptimistic on the prospect for the Asian economy at that time. In Malaysia, the Rating Agency Malaysia Bhd. was established in

1990. During 1996, it completed a record of ninety-three rating exercises for long- and short-term private debt securities. Malaysia's second rating agency, Malaysia Rating Corporation Bhd., was launched in 1996 and had rated six corporate debt issues until the 1997 financial crisis, but it still remains a struggling newcomer.

Korea has three domestic credit rating agencies: Korea Investors Services, National Information and Credit Evaluation, and Korea Management and Consulting Corporation. However, the credit rating system did not serve its purpose effectively until 1998 because the majority of corporate bonds were guaranteed by financial institutions such as commercial banks, merchant banks, and securities companies. After the 1997 financial crisis, Korean financial institutions stopped guaranteeing corporate bonds due to their own dire financial conditions. The retreat of these financial institution guarantors has kept many second- and third-tier corporate bond issuers from the market, ceding it almost entirely to large Korean *chaebol* firms that have monopolized the bond market. Only during the past year or so, Korean credit rating agencies have become active again as bond issuers have been diversified to include non-*chaebol* firms.

There is no mandatory requirement in Hong Kong for debt securities or debt issuers to be rated. But a good rating by a reputable credit rating agency has helped to promote the marketability of the debt issues. Minimum credit rating standards have also been applied by regulatory authorities in Hong Kong. Holders of debt securities issued in Hong Kong that fulfill a minimum rating requirement and other eligibility criteria can enjoy a concessionary profit tax rate. Taiwan Ratings Company is the only rating institution in Taiwan. It is 50 percent owned by Standard and Poor's. From 1999, all nonrated corporate bonds in Taiwan must be issued with stock as collaterals, thus encouraging more new debt issues to be rated in Taiwan. As more companies become rated, the rating will play a larger role in defining corporate funding costs and create greater transparency and market efficiency.

Bond Yield Benchmarks

Benchmarks play a crucial role in the efficient functioning of both the primary and secondary bond markets. They serve many purposes. They are used to measure the prevailing interest rate structure and the market's expectations of future interest rates, inflation, and the associated risk premia. And they also provide hedging vehicles for underwriting and trading risks. In the prevailing capital asset pricing model (CAPM), the risk-free rate is indispensable as the most important benchmark interest rate. While benchmarks do not have to be risk-free, their risk should be easily assessable. The most important characteristic of benchmark securities is their high liquidity, which is often the result of large and regular issues. High

liquidity enables market participants to close out their positions without incurring large and unexpected losses. So benchmark securities are ideal hedging vehicles. For benchmarks to be useful, the size of issuance should be large and they should cover the entire maturity spectrum to create a workable yield curve.

In Asia, the lack of reliable benchmark yield curves has been one of the common impediments for the development of efficient bond markets. In recent years, however, many Asian countries have tried to create benchmarks and index yield curves as part of their efforts to promote the development of domestic and regional financial markets. Singapore Interbank Offered Rate (SIBOR) and Hong Kong Interbank Offered Rate (HIBOR) are often referred to as the benchmarks for money markets in this region. Because of their short maturity, however, they cannot serve the bond markets as well as they do the money markets. Rather than a single benchmark rate, a benchmark yield curve would serve far better as the reference for the whole bond market because it provides the reference rates for the entire maturities spectrum. In Hong Kong, the launch of the Exchange Fund Bills and Notes Program has established a benchmark yield curve for Hong Kong dollar debt. Now it provides information for debt maturities of up to ten or more years.

On the other hand, interest rate control has hampered the efforts to establish benchmarks in China and Korea, as most government and public bonds have not been sold at prices determined by the market. In Korea, the use of Monetary Stabilization Bonds (MSBs) offers alternative benchmarks, although in a limited sense because the maximum maturities of MSBs are only two years. The yield on three-year corporate bonds guaranteed by banks had served as an alternative benchmark for the over-the-counter (OTC) market, but it still suffered from the same weakness. In Indonesia, the rates of money market instruments such as the Jakarta Interbank Offered Rate (JIBOR) and the average bank deposit rates were alternative benchmarks for its bond market because of the absence of government bonds. A few years ago, the central bank, on behalf of the government, issued bonds overseas for benchmark purposes. They were used as a reference for foreign investors in determining the rates for foreign currency debt instruments issued by Indonesian companies in international bond markets, but not in the domestic market denominated in the local currency.

In Malaysia, the central bank bills and Cagamas bonds had been used as benchmarks prior to the Asian crisis.[5] In September 1997, Khazanah Nasional Berhad implemented its benchmark bond program. The main purpose of issuing these benchmark bonds is to issue risk-free debt instruments over a range of maturities. Through their active trading, a yield curve is to be constructed to serve as a benchmark for the pricing of other bond issues. In Thailand, government bonds are not actively traded in the secondary market and thus their yield curve cannot be used as a benchmark rate. Rather

than government bonds, the central bank notes issued since 1995 have been used for producing a short-term benchmark yield curve.

In August 1999, Chase Manhattan Bank launched a new Asian bond index comprising dollar-denominated debt instruments from eight countries/territories, which allows investors to follow the Asian market more closely than other benchmarks. The Chase Asia Bond Index (CABI) tracks dollar bond issues from Korea, Malaysia, Hong Kong, China, the Philippines, Thailand, India, and Indonesia, with a market capitalization of $49 billion as of 1999. The bonds represented in the index have outperformed a competing index by J. P. Morgan called the Emerging Market Bond Index Plus (EMBI+), which reflects the emerging market bond performance globally. Prior to the launch of CABI, Morgan's EMBI+ was expanded to raise the component weighting of Asian debt from 4.6 percent to 14.9 percent. The CABI index includes all sovereign and quasi-sovereign debt and corporate bonds with a minimum issue size of $300 million to ensure adequate liquidity, except for India with a minimum limit of $150 million. Korean issues represent nearly 40 percent of the weighting in the CABI index.

Overall, the development of risk-free yield curves in Asian bond markets has so far been quite limited compared to the situation in Western industrialized countries. The primary reason for the lack of market-based government securities benchmarks has been the fact that most Asian governments have not been active issuers of bonds due to their fiscal balance or even surplus. Another difficulty in establishing effective benchmark yield curves is the relatively short maturities of most bond issues in Asia.

Tax and Other Regulatory Issues

It is well recognized that the government can play an important role in promoting the development of an efficient and robust bond market. Broadly, the positive role of the government can be categorized into two areas. First, the government should adopt a proactive approach in market deregulation, financial liberalization, discontinuing the practice of setting issuance terms, lifting the reserve requirements on repurchase agreements (repos), removal of various taxes such as stamp duties and transfer and withholding taxes, adoption of strong and modernized bankruptcy and foreclosure laws, introduction of modern accounting and auditing standards, adoption of a free brokerage commissions system, and so on. Second, along with the various market liberalization moves such as these, the government should also develop a strong and modern market supervisory framework in order to ensure competition and fair market practices by controlling the potential abuses of the market by powerful commercial and investment banks and other influential market participants.

It is also important to understand the demand side of the capital market, in addition to the supply side such as the issuers, market makers, and

market infrastructure. A healthy bond market can exist only when there is a well-developed body of investors. It would be critical to understand the identity of these investors, their incentives and requirements for capital market instruments, and the measures required to broaden the investor base. In this connection, it is important for Asian countries to promote the development of strong institutional investors such as pension funds, mutual funds, and insurance companies. Furthermore, it is critical to understand the best practices that have been developed in various advanced capital markets so far.

Taxes and related charges, including registration fees, have been an important factor for Asian bond market participants. Tax analysis is very complicated because of the differences in treatment of residents and non-residents, institutions and individuals, Treasury and corporate instruments, interest income and capital gains, and so forth. Taxes and other regulations are important tools for a country to govern its bond market. Since the Asian crisis, many countries have reduced and/or simplified their taxes and regulations related to the bond market in a conscious effort to promote the development of the market.

In 1999, the "real demand" principle was removed from Korean forward foreign exchange transactions. Thus the onshore won financial markets are finally linked with the external debt market. This has improved investors' ability to hedge their currency risk and enabled the convergence of credit curves in the won and dollar markets. After the passage of a set of financial reform laws in December 1997, all financial regulatory and supervisory functions have now been unified under the Financial Supervisory Commission (FSC), which has taken over the entire financial supervisory role, including the bond market. The ultimate goal of FSC is to improve Korean financial supervision levels to meet international standards. In this endeavor, FSC has set up new paradigms through the conversion of supervision practices from direct regulatory methods to indirect ones, from the positive system to the negative system, from the application of abstract and subjective principles to transparent and objective principles, and from organizational supervision to functional supervision. In this sense, FSC is trying to raise its level of financial supervision to that of international best practices.

In 1999, Taiwan eliminated the corporate bond transaction tax and streamlined its withholding tax on interest income from bonds. The first policy has improved the spread between corporate bonds and government bonds, while the second has resulted in a massive portfolio switch from government bonds into corporate bonds, which has again narrowed the yield spread. Since 1998, the issuance of all nongovernment bonds in Malaysia has been exempted from the stamp duty in order to facilitate debt restructuring. Also, individuals were exempted from taxation on their interest income in 1999 earned by investing in bonds. The "tax-free" year of 1999 pushed most domestic investors to realize their portfolio gains

before year-end, but the selling pressure was generally well absorbed by the secondary market. The Malaysian government has also widened the investor base for bonds "issued without prospectus permissible" under the Companies Act to include fund managers, high net worth individuals, and corporations with certain minimum required assets. The purpose is to improve secondary market liquidity and create competitive pricing, thus reducing the cost of funding for issuers. The Malaysian government also designated the Securities Commission as the sole regulatory authority for the corporate bond market.

In early 1998, the Singapore government allowed tax exemption for fee income earned by financial institutions arranging debt issues in Singapore in order to promote the primary market. Furthermore, interest income earned by financial institutions and corporations from holding debt securities now enjoy a 10 percent concessionary tax rate, interest income earned by nonresidents in Singapore will be exempted from its withholding tax, and trade income earned by financial institutions in Singapore from trading in debt securities will be taxed at only 10 percent. In Hong Kong, already there is no withholding tax on nonresidents for their interest income earned in Hong Kong and no income tax is levied on residents for their interest income. Hong Kong also exempts the profits tax on Exchange Fund bills and notes and on Hong Kong dollar debt instruments issued by multilateral development finance institutions such as the World Bank and the Asian Development Bank. In contrast, Thailand removed the tax-exempt status of the gains from debt market transactions in 1999, which is likely to have an adverse effect on the secondary market activities in the country.

Progress in Asian Bond Markets and Remaining Challenges

Many Asian countries have taken some serious steps during the past couple of years in order to develop their bond markets. Obviously, the pace of progress has varied from country to country, but it has been noteworthy in Thailand, Korea, and Malaysia. These countries have strengthened the market infrastructure, broadened benchmark yield curves, and liberalized their markets to foreign participants. Gradually the regional economies have learned to diversify their financial system from the traditional undue dependence on the banking system alone to bond and other financial markets. Governments in the region have also attempted to establish market standards in line with international best practices. Nevertheless, more is needed in the way of improving corporate governance, bankruptcy and corporate workout procedures, information disclosure, and commercial laws. The financial and regulatory infrastructure should be improved further in order to promote both clearing and settlement systems and to enhance secondary market liquidity.

Thailand has seen the growth of a market that has now replaced

domestic bank lending as the main source of funds. After the crisis, bank lending has leveled off as nonperforming assets and credit quality of debtors severely affected Thai banks. To refinance the bad loans taken over by the Financial Institutions Development Fund (FIDF), the government began a massive borrowing program in 1998. As a result, outstanding government debt has risen sharply and now comprises 87 percent of the entire bond market. Outstanding domestic debt issuance in 1999 surged to approximately 2.5 times the level in 1997. A significant development seen in 1999 is a well-defined government yield curve extending out to fifteen years, compared to the average of two to five years in 1998. Government public debt includes the loan bonds, savings bonds, and Treasury bills. Weekly auctions by the Bank of Thailand sustain the yield curve. Development of the bond market has also promoted the derivatives market, and interest-rate swaps and options have made an appearance there.

The Thai government is expected to establish a primary dealership system in Thailand in 2000. Similar to the experience of the Korean bond market in 1998, a primary dealer system should boost liquidity in the market. Banks and financial institutions remain the major buyers of bonds, but a growing number of retail investors have been attracted by the yield pick-up over bank deposits. The government pension fund and provident funds are allocating a greater portion of their portfolios to fixed-income securities. However, similar to other countries in the region, most investors practice a "buy-and-hold" investment strategy. The increasing sophistication of fund managers should gradually allow for greater trading activity and more complex bond issues in the future.

Recently, falling yields have prompted investors to look at corporate bonds for higher yields. With banks unwilling to extend credit, most corporations issued extensively in 1999. As investors continue to search for higher yields, bond issues from second-tier corporations are likely to increase in 2000. The most positive effect of the capital market development in Thailand has been that banks and corporations are now better positioned with respect to their assets and liabilities. Precrisis, most Thai corporations borrowed short term in foreign currency, running huge losses once the currency was devalued.

In Korea, the bond market has considerably increased in size amid aggressive liberalization by the government authorities. Recognizing the importance of a proactive government role in strengthening the Korean bond market, the government has adopted many bold measures during the past couple of years, such as elimination of the ceiling on foreign equity ownership as well as removing limitations on foreign investments in local bonds and short-term money market instruments. Aware of the importance of efficient and reliable credit rating services for a viable bond market, the government has opened the credit rating service market to foreign competition, and it is promoting joint ventures between foreign and

domestic credit rating agencies. Korea has also developed an institutional framework for mutual funds as a way to deepen the rank of institutional investors in the capital market. Private investors, both domestic and foreign, are now allowed to easily establish mutual funds in Korea.

A new law was also enacted to introduce asset-backed securities (ABS), which has been especially useful in disposing of nonperforming loans (NPLs). Korea introduced ABS at the end of 1998 in order to help financial institutions and corporations raise funds more easily by securitizing their assets. In 2000, thirty-five Korean companies have issued ABS totaling 17.2 trillion won in forty-eight issues through the first four months of the year, a sharp increase from 6.8 trillion won recorded during the entire year of 1999. There are several reasons for the recent dramatic increase in the use of ABS as a fund-raising alternative. In the process of financial sector restructuring, many Korean financial institutions have issued ABS to reduce the outstanding amount of NPLs on their balance sheet, which can improve their capital structure and increase the BIS capital adequacy ratios. In addition, the Korea Asset Management Company (KAMCO) has actively issued ABS based on its purchase of NPLs from ailing financial institutions in order to facilitate the early recovery of public funds used in financial restructuring. Most recently, the issuance of CBOs has increased sharply as part of the effort to clean up bad funds following the adoption of the mark-to-market bond valuation system and the ongoing restructuring of many sick investment trust companies (ITCs).

The shake-up from the 1999 Daewoo crisis is likely to speed up improvements in transparency, making the Korean market a legitimate alternative for foreign institutional investors. After Japan's, Korea's bond market is the largest in Asia. The growth of the domestic bond market has been fuelled in part by the Asian crisis and the need to finance financial and corporate restructuring. Although government bonds have been an important component of the market in the past, corporate bonds issued by the *chaebol* firms have long dominated the bond market. However, with the prospect for increased government debt securities in order to fund budget deficits and the greater accessibility of second-tier corporations to tap the market, the composition of the bond market is likely to change once the current market unease—caused by last year's Daewoo crisis, the current Hyundai liquidity problem, and the lingering doubt over Korean ITCs—clears away.

Recent measures to improve the depth and liquidity of the bond market in Korea have been encouraging. In 1999, capital market liberalization was accelerated in order to facilitate foreign participation. The domestic bond market is now fully opened to foreigners and foreign-exchange controls have been relaxed, with current-account transactions being fully liberalized. The elimination of the "real demand" principle from onshore forward foreign-exchange transactions allowed onshore capital markets

to be effectively linked to external debt markets, improving investors' ability to hedge currency risk. The designation of primary dealers is playing a key role in developing the government bond market. In addition, the scope of derivative instruments is improving, providing investors and dealers the ability to hedge various market risks. The introduction of certificates of deposit and three-year bond futures, foreign-exchange futures and options, and deeper currency and interest rate swap markets are clearly benefiting the marketplace.

Recently the Korean government has made a number of proposals to develop the market, including: establishment of a consistent auction schedule for one-year, three-year, and five-year Treasury bonds; streamlining various public sector issues to eventually merge into Treasury bonds in order to increase benchmark sizes; extension of the yield curve beyond five years; introduction of interdealer brokers and Internet-based bond dealing; development of a repo market; and a market-to-market accounting that will apply to all financial institutions in mid-2000. While market depth and liquidity have clearly benefited from many of these measures, obstacles still remain for further development of the Korean bond market. The Daewoo and ITC crises are reminders that the domestic market still lacks transparency and adequate disclosure. The current Hyundai liquidity crisis has considerably increased the investor unease even further. In addition, promoting modern asset/liability management, developing more hedging tools, and eliminating the withholding tax are some of the remaining issues confronting the Korean bond market.

Malaysia has become one of the most promising domestic bond markets in Asia, offering a sound regulatory environment, an established financial system with improving infrastructure for custody and settlement, and a developing institutional investor base. Like many countries in the region, the Malaysian government has put a high priority on developing the domestic debt market and has introduced a number of initiatives to encourage this process. In many ways, this has been successful in laying the groundwork for further progress. The size and liquidity of the domestic bond market has improved since the crisis. In the last two years, private corporations have raised more capital through bond issuance than through equity issuance. Government and high-yield credit curves, longer maturities, and streamlined regulations have helped transform the domestic bond market into one of the largest in the region.

Yet the market's development has been inhibited by the lack of secondary market liquidity, largely due to the limited investor base. The task for Malaysia now is to increase the supply of domestic paper, improving secondary-market liquidity and helping to foster new debt instruments through various financial innovations to meet the needs of growing capital markets. The first step in the process of stimulating the capital market is to increase the institutional investor base, in large part focusing on promot-

ing the financial services sector and encouraging a greater number and a more diverse set of market participants.

At the beginning of 1999, there were fourteen provident and pension funds in Malaysia, of which the Employee Provident Fund accounted for approximately 85 percent. Without the presence of a private pension industry and the concentration of assets in a few funds, it is easy to see how a stimulus for active trading and risk-management strategies are lacking. Although the local insurance industry in Malaysia has grown substantially in recent years, the pace still lags that of some of its neighbors. The insurance sector is underdeveloped and banks continue to be the dominant investor base in Malaysia. Nevertheless, the recent financial sector liberalization has an important impact on the growth and efficiency of the local bond market. The process of financial liberalization in Malaysia has been in motion for some time now, and its bid for entry into the WTO in 2002 is an encouraging step for further market liberalization.

Conclusion

Asian countries have made significant progress in developing their bond markets since the crisis. The affected countries are modernizing the market infrastructure, facilitating both trading and pricing, reducing risks, and increasing transparency. Also, they now provide a number of market incentives, such as favorable tax and regulatory treatments, in order to attract both international and domestic investors. A number of financial innovations have been introduced already or are in the process of introduction into their bond markets, such as securitization, financial derivatives, e-bond issuance, Internet-based bond trading, convertible bonds, and other quasi-equity debt instruments. These developments are all very positive for the Asian bond market, whose recovery after the crisis seems to be based on solid improvement in market fundamentals.

Asian bond markets can greatly benefit from the current electronic revolution sweeping the bond markets in Western countries. It is well known that the Internet wave is transforming the $17 trillion equity market in the United States, even though the U.S. stock market is one of the most efficient and transparent in the world. On the other hand, the $13.5 trillion over-the-counter U.S. bond market is relatively inefficient, with no required reporting of bids and offers as on the stock exchange. Until now, most bond investors did not know the true dealer markups and whether they are getting the best prices, as the market is dominated by big dealers on Wall Street who have jealously guarded their trading books. Now, however, bond issuers, underwriters, and investors have begun to embrace Internet-based bond trading in the secondary market, prompting many borrowers to issue e-bonds through the Internet in the primary market as well. Even short-term commercial paper has been sold through the Inter-

net since 1999 by such companies as Ford Motor Credit Company and General Motors Acceptance Corporation, along with many others. Electronic bond trading through the Internet can certainly increase the liquidity and depth of Asian bond markets and contribute to the integration of the fragmented markets into a regionwide bond market.

Certainly it is dangerous to be overoptimistic. Despite the economic recovery, Asia continues to bear the lingering wounds of the crisis. In many of the crisis-hit countries, unemployment remains well above the precrisis levels, and a large part of the corporate sector has still not returned to its past output levels. The number of people living below the poverty line went up significantly during the crisis and has not yet started to fall down.[6] Asian bond markets still have relatively small market sizes compared to their macroeconomic parameters. The markets lack depth, breadth, liquidity, and operational efficiency. In order to deepen the market, there has to be an adequate financing mechanism to carry inventories by bond dealers and traders. For this purpose, government rules on securities lending have to be established firmly, and a strong repo (repurchase agreements) market needs to be developed, along with an efficient clearing and settlement system for the Asian region. Investors are not satisfied with the still complicated regulations and tax systems, and most issuers still tend to prefer stock markets and bank borrowing to bond markets. Infrastructure is far from developed. All of these constraints have to be tackled through persistent and bold efforts by both governments and private sector participants before the Asian bond market can play its proper role as the main arena for viable funding and investment operations.

On the other hand, the prospect for an Asian bond market can be viewed more optimistically than that for any regionwide macroeconomic policy coordination such as an Asian economic and monetary union. This is because the financial markets and cross-border capital flows are far more sensitive to possible business opportunities for investments and arbitrage operations than conscious government-level macroeconomic policy coordination, as has been demonstrated in the case of Europe. Well before the activation in 1999 of the Economic and Monetary Union (EMU) and the creation of the euro as a new currency, Europe developed a regionwide eurobond market in 1963, which has now developed into a global capital market. The eurobond market was created in response to the chronic balance-of-payments deficit in the United States, which was forced to close off its domestic bond market to European issuers in its attempt to control capital outflows from the United States. The recent Asian financial crisis can thus act as the catalyst to develop an Asian bond market as well.

Notes

1. H. D. Tsang, "Asian Bond Market," speech at the Asian Debt Market Conference, July 1998.
2. World Bank, *Global Development Finance,* March 2000.
3. Deutsche Bank, "Asia's Developing Bond Markets," *Euromoney* (June 2000).
4. Dragon bonds are Asia's eurobonds denominated in a foreign currency, usually in U.S. dollars, but launched, priced, and traded in the Asian region.
5. Cagamas is the National Mortgage Corporation of Malaysia, set up in 1986.
6. Asian Development Bank, *Asian Development Outlook 2000,* Manila.

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Comments

Morris Goldstein

Introduction

I enjoyed reading the interesting papers on East Asian financial markets and I learned a good deal from them. In my remarks, I will first address the development of Asian bond markets, and then go on to offer some comments on the yen as an international currency.

Asian Bond Markets

I very much agree with Prof. Yoon-Shik Park that weak domestic banking systems were at the heart of the Asian financial crisis. I also concur that the development of a strong and robust Asian bond market would offer significant potential advantages. As Federal Reserve Board Chairman Alan Greenspan has emphasized, a healthy corporate bond market can act as an important "safety valve" when banks get into trouble, thereby lessening the extent of a credit crunch. As Prof. Park argues, a bond market can also reduce maturity mismatches that would otherwise result from using short-term borrowing to fund longer-term investments.

In considering the contribution that bond markets can make to financial development, let me underline three caveats that ought to be kept in mind.

First, it is essential that bond markets function on a competitive "arm's-length" basis—lest some of the same connected lending and government interference problems that have plagued emerging-market banking systems would reappear in bond markets. A notable case in point is the Daewoo investment trust problem in South Korea. When the *chaebol* couldn't any longer get the credit they wanted from banks, they turned to corporate bonds—and the investment trusts obliged by financing the deal. This would not likely have occurred if the investment trusts had been truly independent from the *chaebol*. In a similar vein, we have often seen episodes in emerging economies where governments put heavy pressure on banks and others to hold government bonds or to keep interest rates on bonds at nonmarket clearing levels. In short, the bond market won't act as a safety valve for the banking system if it is subjected to similar kinds of problems with respect to "connected" financing and excessive government involvement.

A second caveat is that while international capital flows in bonds can be and often have been less volatile than bank flows, the former have usually been more volatile than flows of foreign direct investment. Likewise, spreads on sovereign bonds can fluctuate widely; for example, since mid-1997, emerging-market bond spreads (over U.S. Treasuries) have gyrated

from 375 to 1,700 basis points. It's also worth recalling that bond and equity markets in emerging Asia remain quite small relative to the portfolios of G-7 institutional investors; as such, even a 1–2 percent shift in those G-7 portfolios can result in huge fluctuations in trading activity in individual emerging markets.

I highlight the potential volatility of bond flows because when tight financial conditions interact with negative shocks, the "rescheduling unfriendly" character of bonds (relative to bank loans) becomes a source of vulnerability. Unanimous consent is often required to reschedule bonds; individual bondholders can sue the issuer; successful lawsuits can trigger cross-default clauses on other securities and accelerated repayment schedules, and there is usually no requirement that proceeds recovered in litigation be shared with other bondholders. That is, bonds usually do not carry "collective action" clauses.

Caveat number three is that the advantage that bonds can offer in reducing maturity mismatches can be lost if emerging-market issuers succumb to the temptation to include put options in their medium and long-term issues. These put options, of course, reduce borrowing cost—but they do so by allowing creditors to demand repayment ahead of the scheduled contract date, thereby turning a long-term instrument into a short-term one whenever the borrower runs into trouble.

Let me also say a few words about the welcome efforts in Asia to improve the market infrastructure and attractiveness of bonds. These are nicely described in Prof. Park's paper. Here I would just note a few relevant lessons from industrial-country experience. One such lesson is that auctions, by opening up the bidding to a larger investor base, often produce a better price for the government than does issuance at fixed prices through syndicates. Also, institutional investors seem to favor a firm, preannounced issue calendar for government bonds (since it decreases uncertainty). The availability of repo financing is also an important consideration since it reduces the need for market participants to fund themselves via uncollateralized lines of credit from the banking system. Finally, the loss of revenue associated with the removal of withholding taxes is often more than compensated by the favorable effect of such tax removal on government funding costs.

The Yen as an International Currency

I agree with Prof. Ogawa that network effects and economies of scale are extremely important in explaining international currency use and that this factor (of incumbency) favors continuation of the U.S. dollar as the dominant currency in the system. I also agree that at present international use of the yen is quite limited. And I share his view that the international ambitions of the yen now face a tougher uphill climb because of the creation of the euro.

That being said, I take a different perspective or view on at least five points offered in Prof. Ogawa's paper. Here are a few words on each of them.

First, I would not recommend that Asian emerging economies take any policy action (including a free trade agreement with Japan) that cannot stand on its own merits simply because it would increase international use of the yen. A larger international role for the yen may be an objective of the Japanese government, but it should not be pushed by Asian emerging economies unless it meets the latter's own objectives. In this regard, one should keep financing arrangements in their proper perspective. No one would recommend that a country run huge budget deficits merely to increase the liquidity of the bond market. Similarly, international use of particular currencies—be it the yen, the euro, or the dollar—is less important than the broader objective of having a well-functioning international monetary system in place.

Second, while I agree that banks and corporations in Asia were too complacent about exchange rate risk in the run-up to the crisis, I don't think this complacency was primarily related to the de facto dollar peg. The complacency would have been there for any pegged rate that didn't move enough to convince market participants that there was a nontrivial risk of devaluation. A fluctuating exchange rate makes people aware of the need for hedging in a way that no long-standing fixed rate does, but the difference is not due to the denomination of the peg.

Third, among the many origins of the Asian financial crisis, I do not regard exchange rate misalignment as one of the key factors. Yes, a number of Asian currencies followed the U.S. dollar up (appreciation) against the yen in the two-year run-up to the crisis. But if you look at the magnitude of the real exchange rate overvaluation in, say, mid-1997, it was far smaller than what we have observed in most other emerging-market currency crises, including the Mexican peso crisis and the Brazilian real crisis. For example, if one takes the deviation from a ten-year moving average as the crude proxy for the extent of misalignment, the Indonesian rupiah was overvalued by about 4 percent in mid-1997; the corresponding figure for the Thai baht would be about 7 percent. The Korean won was *under*valued on this measure by over 7 percent, as was the Taiwan currency (by over 5 percent). Overvaluations were more substantial—in the 9–12 percent range—for the Malaysian ringgit and the Philippine peso. I believe the more important origins of the Asian crisis are to be found in the (then) weak banking and financial systems in these economies, in the low quality of investment, in the high ratios of short-term debt to reserves, in the collapse of important export prices (computer chips), and in the force of cross-country contagion. In short, I don't see the Asian crisis as a strong argument for greater international use of the yen.

My fourth point is that while a larger weight for the yen in Asian cur-

rency baskets may well make sense in view of the region's trade and debt links with Japan, I am doubtful that Asian emerging economies can return to a publicly declared exchange rate target of any kind over the next few years. I say this because the main instrument to defend a fixed rate (after international reserves have been run down) is high domestic interest rates. But the ability of the former Asian crisis countries to hold interest rates sky-high in a currency defense will be limited because of continuing fragilities in their financial systems and because of their growing public debt burdens. It is better not to promise what you cannot safely deliver.

Finally, while the dominance of the U.S. dollar in international currency use owes much to network externalities, this is hardly the whole story as to why the yen's international use has so far been so limited. As part of the Bundesbank's retrospective on the fiftieth anniversary of the deutsche mark, Jacob Frenkel and I recently undertook a comparison of the international use of the three major currencies (Frenkel and Goldstein 1999). We looked at the following thirteen indicators or dimensions of international currency use: advantages of incumbency; control of inflation; long-term behavior of the nominal exchange rate; international net creditor position; economic size in terms of output and foreign trade; openness, breadth, depth, and dynamism of financial markets; official attitudes toward international currency use; shares in international reserves; shares in international assets; private holdings of currency abroad; share of foreign exchange transactions; denomination of currency pegs; and use as an invoice currency in foreign trade. Of these thirteen indicators, the yen ranked first in two (long-term behavior of the nominal exchange rate and net international creditor position), second in five others, and third in seven more. But with the arrival of the euro, the yen today would probably rank third in ten of the thirteen indicators of international currency use. The reality is that the yen area today is small relative to both the dollar and euro areas, and that Japan's promotion of the international use of the yen is being hampered by a near-decade-long period of poor overall economic performance. The strong performance of the U.S. economy over this same time span—the U.S. current-account imbalance notwithstanding—has also been an important factor.

For all of these reasons, efforts to promote greater international use of the yen face a formidable challenge.

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Comments

Mario B. Lamberte

Eiji Ogawa's Paper

The message I got from Prof. Ogawa's paper is that Asian countries that will peg domestic currency to a basket of currency rather than to the dollar alone will be less vulnerable to a currency crisis like the one that struck the East Asian region in 1997. This is difficult to do under present circumstances, however, because East Asian economies could not assign a proper weight to the yen in the basket due to several factors. One is that the U.S. dollar has been widely accepted as an international medium of exchange, occupying a "Gulliver-type" status in which both network externalities and economies of scale have brought it to its dominant position in the international financial market. Another is that the yen, despite being considered a store of value, has not yet been fully internationalized, thereby limiting its potential as an international medium of exchange even in the Asian region where Japan has a substantial trading relationship. The euro, on the other hand, is quickly emerging as a second major international medium of exchange. This is mainly due to an external shock it brought to the system, which is the creation of a euro zone with only one currency. The author has pointed out that the international financial system in general and the East Asian in particular will benefit from the internationalization of the yen because of the stability it will bring to the foreign exchange markets. The recent efforts of the Japanese government to improve the policy environment and financial infrastructure are indeed necessary but not sufficient conditions for the internationalization of the yen. The author goes on to suggest that a shock is needed to internationalize the yen and break the inertia that sustains the position of the dollar as the key international currency. More specifically, he recommends that "the Japanese government should try to conclude free trade agreements with many countries in East Asia, including the international monetary cooperation that contributes to gaining momentum of further internationalization of the Japanese yen."

I would like to make some comments on the following three points: (1) the exchange rate regime and the internationalization of the yen; (2) bilateral free trade agreements with direct monetary cooperation; and (3) steps in the right direction.

The Exchange Rate Regime and the Internationalization of the Yen

The author seems to suggest that the internationalization of the Japanese yen is a necessary condition for economies in the region to adopt a curren-

cy basket system to reduce vulnerability to a currency crisis. This may not necessarily be the case, and to prove it we do not have to look far beyond the region. Singapore, which was only mildly affected by the Asian crisis, has been pegging its currency to a basket of currencies with a band and a crawl (BBC). Although it is a less transparent exchange rate management system in the sense that it does not disclose to the public the band and the corresponding weights of the currencies in the basket, it still works pretty well despite the fact that the Japanese yen has not yet been fully internationalized. In other words, internationalization of the yen may not be a necessary condition for East Asian economies to have successful management of the exchange rate anchored on a currency basket system.

Bilateral Free Trade Agreements with Direct Monetary Cooperation

This is the shock, albeit a milder one, that the author suggests to internationalize the yen. This raises a number of issues. One is that workable bilateral trade agreements need not be complemented by monetary cooperation. The world is full of examples in this regard. If free trade agreements are to be accompanied by monetary cooperation, which would in effect require trading partners to use the yen as a settlement currency, then such trade agreements, though seen as beneficial by both parties, may not materialize if the other party does not want to use yen as a currency for invoicing and settlement. Another issue is foreign exchange risk. Obviously, Japan's trading partners do not want to bear the foreign exchange risk. If Japan insists on including in a bilateral free trade arrangement the use of the yen, then it may have to bear the foreign exchange risk to induce its trading partners to accept yen for invoicing and settlement. Still another issue is the political feasibility of such arrangements. Bilateral free trade agreements accompanied by an agreement to use yen as a settlement currency will likely be perceived by Asian countries as Japan's way of promoting hegemony in the region. It is to be noted that the United States and the euro-member countries have not imposed such a policy on their trading partners. Decisions regarding which settlement currency to use in trade should better be left to the individual players. The euro zone is an entirely different case because member countries decided to create a new common currency.

Steps in the Right Direction

Given the size of Japan's economy relative to the world economy, the yen will eventually become an international medium of exchange. I think the main reason why it did not materialize earlier on is that Japan's financial market was tightly regulated. The recent deregulation of Japan's financial system is an important step toward the internationalization of the yen. Another positive development is the bold decision made by Japanese

parent companies to force their subsidiaries in East Asia to use the yen as a settlement currency. This is easier to do than including monetary cooperation in bilateral free trade agreements. Given the continued volatility of the major currencies in the world, East Asian economies may opt for a currency basket system. Recent experience will likely increase their appreciation of the need to increase the weight of the yen in the currency basket. So, there are already conditions that can promote the yen as an international currency. But the internationalization of the yen will likely take some time because the conditions that led to the rapid internationalization of the dollar and the euro are not available or cannot be made available to the yen. Also, Japan needs to remove the remaining obstacles that prevent East Asian economies from accessing its financial market.

Yoon-Shik Park's Paper

The author makes a comprehensive review of the efforts exerted by Asian economies to develop their bond markets, especially after the Asian financial crisis. He notes some progress but also finds a number of impediments, such as the lack of reliable benchmark yield curves, tax systems, and underdeveloped infrastructure, that stand in the way of developing the bond markets. He concludes that "Asian bond markets still have relatively small market sizes compared to their macroeconomic parameters. The markets lack depth, breadth, liquidity, and operational efficiency." I completely agree with this conclusion, especially in the context of the Philippine experience. Perhaps I can contribute to the analysis made by the author by providing additional information about the Philippine bond market, which was not highlighted as well in his paper as it was for other countries.

The Philippines encountered a severe balance of payments crisis in the mid-1980s. Short-term external debts were restructured into long-term debts and the government began to increasingly rely on domestic borrowings. Figure C.1 shows the total outstanding debts of the country as of 1998 amounting to U.S. $103.2 billion, debts that were almost equally split between domestic and external. However, only about U.S. $36 billion (35 percent) of these are considered tradable debt securities (Figure C.2), which are dominated by domestic issues.

The market for long-term government securities has been developed only recently. However, it took off quite rapidly. As can be seen from Table C.1, the share of fixed-rate T/bonds with maturities of more than one year to thirty years rose from nil in 1993 to 43 percent in May 2000. The government recently made a successful issuance of small-denominated bonds (about U.S. $1 billion in the aggregate), which will soon be listed in the Philippine stock exchange. Corporate issues also rose rapidly during this period. What is notable is that the share of long-term commercial papers whose maturities range from more than one year to five years increased from 54 percent in 1990 to 92 percent in 1998 (Table C.2). Long-term issues

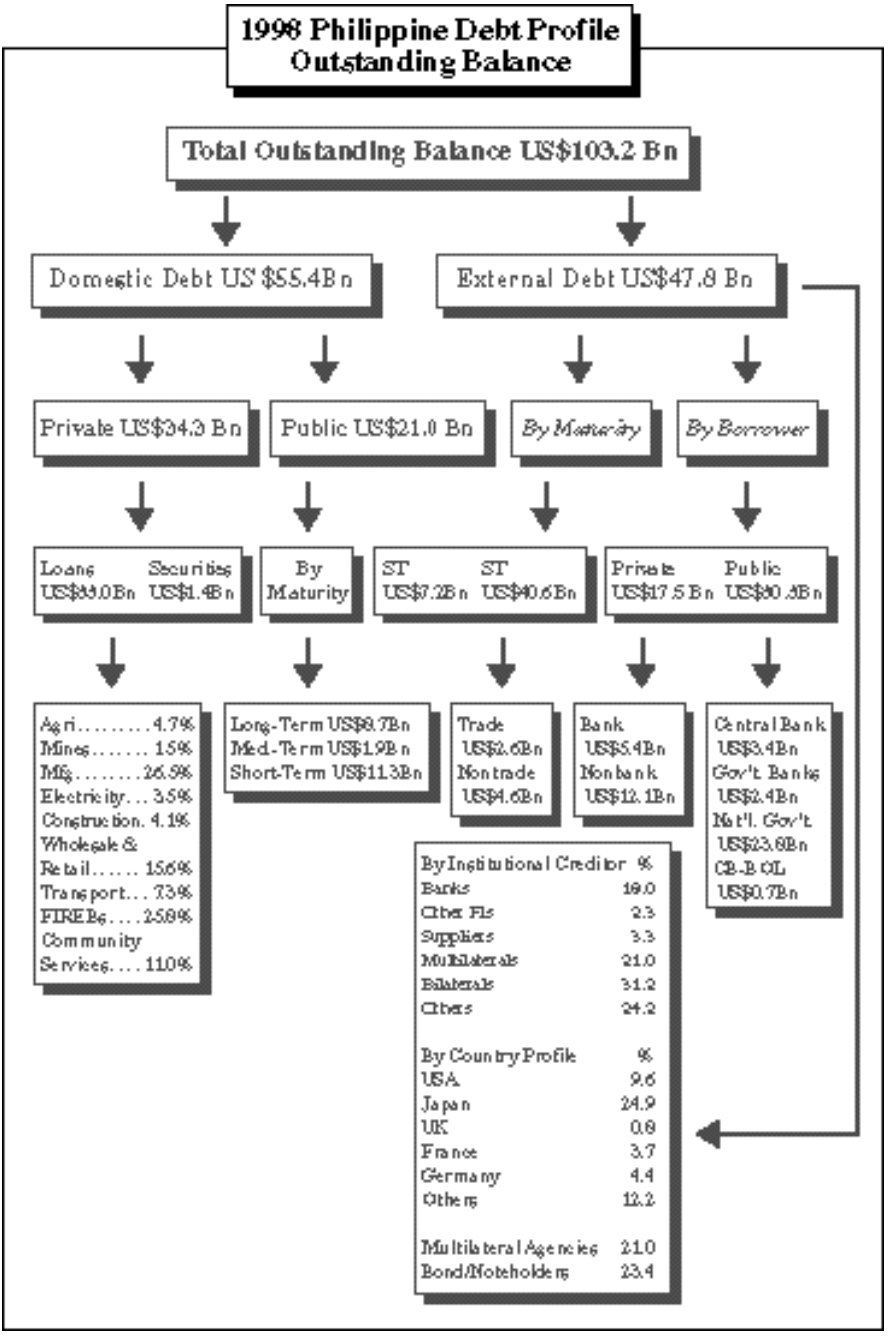
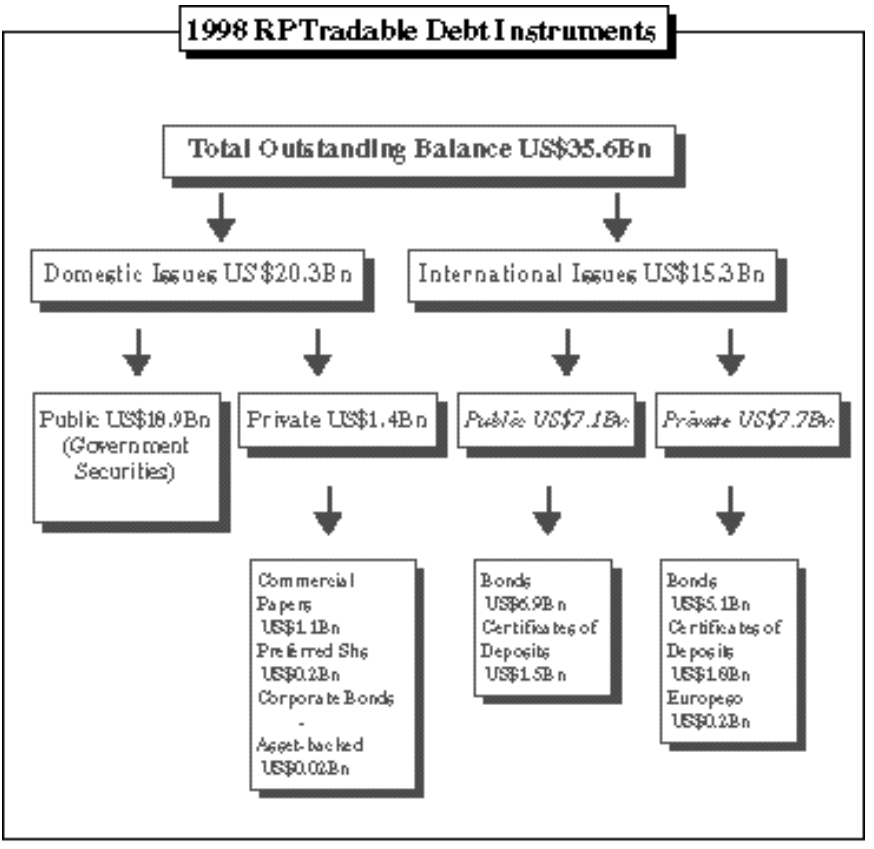

1998 Philippine Debt Profile
Outstanding Balance
Total Outstanding Balance US$103.2 Bn
Domestic Debt US $55.4Bn
External Debt US$47.8 Bn
Private US$34.3 Bn
Public US$21.0 Bn
By Maturity
By Borrower
Loans US$33.0Bn
Securities US$1.4Bn
By Maturity
ST US$7.2Bn
ST US$40.6Bn
Private US$17.5 Bn
Public US$30.3Bn
Agri.....4.7%
Mines.....1.5%
Mfg.....26.9%
Electricity...3.5%
Construction. 4.1%
Wholesale & Retail.....15.6%
Transport...7.3%
FIRE Bs....25.8%
Community Services....11.0%
Long-Term US$8.7Bn
Med.-Term US$1.9Bn
Short-Term US$11.3Bn
Trade US$2.6Bn
Nontrade US$4.6Bn
Bank US$5.4Bn
Nonbank US$12.1Bn
Central Bank US$3.4Bn
Gov't Banks US$2.4Bn
Nat'l. Gov't US$23.8Bn
CB-BOL US$0.7Bn
By Institutional Creditor %
Banks 19.0
Other FIs 2.3
Suppliers 3.3
Multilaterals 21.0
Bilaterals 31.2
Others 24.2
By Country Profile %
USA 9.6
Japan 24.9
UK 0.8
France 3.7
Germany 4.4
Others 12.2
Multilateral Agencies 21.0
Bond/Noteholders 23.4

Figure C.1

practically dried up during the 1998–99 period.

The domestic bond market lacks liquidity for most of the reasons already cited by Prof. Park. I would like to add the following factors that have contributed to the lack of liquidity of government and private medium- and long-term issues in the Philippines:

1. Absence of facilities for financing inventories (repurchase agreements and reverse repurchase agreements are subject to reserve requirements)
2. Absence of a securities lending and borrowing facility
3. Tax disincentives (bonds are taxed at 20 percent per annum on interest income, and a documentary stamp tax of 0.75 percent of the face value upon issuance of every secondary market trading)



**Data as at end 1998*
PHP/US$=PHP40.89/US$1.00
GNP=PHP2.8Tn : US$68.3Bn
Source: BSP, SEC, BTR, PSE, AIBAsia Capital estimates

Figure C.2

4. Absence of an efficient and cost-effective clearing and settlement system (existing systems are still far from being a true DVP system consistent with the G-30 standards)

There are also other nuances that discourage the issuance of long-term papers. For example, the existing Corporation Code stipulates that issuance of short-term commercial papers requires only an approval by the board, whereas issuance of long-term commercial papers needs a two-thirds stockholders vote.

Finally, institutional investors in the Philippines still need to be developed. At present, institutional investors are dominated by government pension systems, which mainly follow a "buy and hold" investment strategy.

Table C.1. Outstanding government securities (in million pesos)

	1993		As of May 2000	
Particulars		% Share		% Share
Total Outstanding Debt	**628,260**	**100**	**990,931**	**100**
I. National Government Issues	623,985	99.32	980,510	98.95
A. Treasury Bills	413,292	65.78	462,969	46.72
B. Fixed Rate T/Bonds	0	—	424,674	42.86
1. 2-Year	0	—	93,619	9.45
2. 5-Year	0	—	158,560	16
3. 7-Year	0	—	87,842	8.86
4. 10-Year	0	—	77,104	7.78
5. 20-Year	0	—	7,452	0.75
6. 30-Year Par Bond	0	—	97	0.01
C. Bonds	62,153	9.89	81,995	8.27
D. Notes	148,540	23.64	2,416	0.24
E. 10-Year Land Bank Bond	0	—	8,456	0.85
II. Guaranteed Corporate Issues	4,275	0.68	10,421	1.05

Source: Bureau of Treasury

Table C.2. Outstanding year-end balances of commercial papers (in PhP Mn)

	Total	% Inc./ (Dec.)	Long-Term	% to Total	Short-Term	% to Total
1990	6,782	—	3,675	54.2	3,107	45.8
1991	10,589	56	7,615	71.9	2,974	28.1
1992	9,371	–12	6,828	72.9	2,543	27.1
1993	12,491	33	9,717	77.8	2,774	22.2
1994	26,072	109	22,165	85	3,907	15
1995	28,896	11	24,977	86.4	3,919	13.6
1996	51,485	78	45,556	88.5	5,930	11.5
1997	54,979	7	50,239	91.4	4,740	8.6
1998	45,902	–17	42,302	92.2	3,600	7.8

Source: Securities and Exchange Commission

Part II

New International Financial Architecture: Its Regional Implications

4. Strengthening the International Financial Architecture: Where Do We Stand?

Morris Goldstein

Introduction

It's not easy to get senior economic officials worked up about the functioning of the international monetary system. Usually, they are preoccupied with the more immediate issues surrounding the national and global economic outlook. But the Mexican peso crisis of 1994–95 and, even more so, the Asian financial crisis of 1997–98 made crisis management important for the economic outlook and pushed many of the otherwise arcane issues in the so-called international financial architecture (hereafter designated IFA) to the front burner of economic policy.[1]

In this paper, I provide a preliminary assessment of where we now stand with respect to strengthening the IFA. Because the IFA covers such a wide subject area, it is necessary to be selective in a short paper.[2] For this reason I have used the lending policies and practices of the IMF as a convenient organizing device to discuss selected key issues in the reform debate. More specifically, the first section looks at the interest rate and maturity of IMF loans. The next section focuses on the size of IMF rescue packages. The following section, which covers the most ground, examines various dimensions of IMF conditionality, including ex post macroeconomic policy conditionality versus prequalification based on structural policies, the scope of IMF conditionality, the roles of currency-regime choices and private-creditor burden sharing in conditionality, and links between fund assistance/conditionality and implementation of international financial standards. In the final section I offer some concluding remarks on priorities for IFAreform over the next year or two.

I have not attempted to provide a comprehensive review of the burgeoning literature on the IFA. Rather, I have selected a subset of leading reform proposals by drawing on a group of recent appraisals of the IFA, including: the "Report of an Independent Task Force Sponsored by the Council on Foreign Relations" (hereafter the "CFR Report 1999" and "CFR Task Force"); the "Report of the International Financial Institution Advisory Commission" (hereafter the "Meltzer Report 2000" and "Meltzer Commission"); the "U.S. Treasury Department Response to the IFI Advisory Commission" (hereafter "U.S. Treasury 2000"); the "Report from G-7 Finance Ministers to the Heads of State and Government" at Fukuoka, Japan, on July 8, 2000 (hereafter "G-7 Finance Ministers 2000"); speeches on the IMF by U.S. Treasury Secretary Summers at the London Business School in December 1999 (hereafter "Summers 1999") and before the

Congress' International Monetary and Finance Committee in April 2000 (hereafter "Summers 2000"); and speeches on the need for an international lender of last resort and on the IMF by IMF First Deputy Managing Director Stanley Fischer in New York in January 1999 (hereafter "Fischer 1999") and in Washington, D.C., in February 2000 (hereafter "Fischer 2000").

Much of the implementation of IFA reform is being carried out with the participation of a wider group of countries than the G-7—be it in the Group of 20, or in the Financial Stability Forum (hereafter FSF) and its working groups, or in regional fora (e.g., ASEAN + 3). Nevertheless, the reform proposals discussed here are relevant for gauging the broader thrust of the reform effort and perhaps also for sensing which way the "wind is blowing."

Interest Rates and Maturity of IMF Loans

Part of Bagehot's (1873) famous counsel for an official lender of last resort is that it should lend at a penalty rate. If the interest rate is too low, borrowers that are in trouble may not face a sufficient incentive to be more careful next time; they will also see the official lender as their first, not last resort. In addition, borrowers that are not currently in trouble may take excessive risks because they know that there is a cheap source of credit available if things turn out badly.

With these considerations in mind, it has often been suggested that the fund increase the interest rate it charges borrowers. Countries that enter into standby and Extended Financing Facility (EFF) arrangements with the fund pay an interest rate (called the rate of charge) that is a weighted average of short-term interest rates in the G-5 countries (United States, France, Germany, Japan, and the United Kingdom) plus a small surcharge. The rate of charge averaged 4.7 percent in 1997, 4.4 percent in 1998, 3.9 percent in 1999, and 4.8 percent in the first half of 2000. Developing countries, particularly when they are encountering difficulties and/or crisis conditions, have to pay much more than that to access private international capital markets. For example, emerging-market bond spreads (relative to U.S. Treasuries) have fluctuated from 375 to 1,700 basis points since the outbreak of the Thai crisis in mid-1997. This large difference between fund and private borrowing costs is characterized by some as an unwarranted subsidy that promotes both excessive borrowing from the fund and borrower "moral hazard."

In late 1997, the fund seemingly took some account of this criticism by endowing its newly created Supplemental Reserve Facility (SRF) with an interest rate of 300–500 basis points above the rate of charge on regular IMF loans (with the rate higher for longer repayments than for shorter ones). Judging from the recent G-7 Finance Ministers Report, a move to impose a similar pricing structure on all IMF nonconcessional lending

windows could be in the offing so as to "encourage access to private capital and discourage prolonged use (of IMF resources)" (G-7 2000). U.S. Treasury Secretary Summers concluded in April of this year that "a strong case could be made for an overall increase in the basic rate of charge" (Summers 2000: 5).

The Meltzer Commission (2000) concluded that IMF interest rates (presumingly including SRF rates) are not high enough; specifically, they propose that fund borrowing cost be set at a premium over the sovereign yield paid by the borrowing country one week prior to applying for an IMF loan. The U.S. Treasury (2000) concluded that such a (Meltzer Commission) penalty rate would be too high—so high as to worsen the underlying financial position of the borrowing country. The fund's first deputy managing director, Stanley Fischer (1999), has also argued that the penalty rate charged by the lender of last resort should be defined relative to the interest rate during "normal" times (not one week prior to the crisis), since the objective of the rescue is to achieve the good—nonpanic—equilibrium. This would imply penalty rates closer to SRF terms than to "Meltzer" terms.

I suspect that if SRF interest rate terms were extended to all nonconcessional IMF lending, the impact would be greater on the speed with which countries repay their fund borrowings than on the frequency of fund borrowing. I say this for two reasons.

First, when countries finally decide to ask the fund for emergency financial assistance, it is usually in dire circumstances when financing from the private capital markets is unavailable in large amounts. As argued by Eichengreen (2000), politicians who are fighting for survival are not likely to be deterred from "gambling for resurrection" by a higher interest rate. Thus the decision to go to the fund is apt to be less price elastic than the decision of how rapidly to repay the fund loan (since the crisis country should have more room to maneuver at the time of repayment).

Second, we should not forget that a big difference between upper credit tranche IMF programs and loans from the private sector is that the former come with strong policy conditionality. Whatever its economic merits, such policy conditionality may be viewed as politically costly by the borrowing country since domestic political opponents can argue that the authorities have surrendered the steering wheel to "foreigners." In other words, when comparing IMF loans to private sector loans, we have to look at the "conditionality-equivalent" interest rate, not just the nominal interest rate. A strong hint that conditionality matters for perceived borrowing cost is that, despite the large difference in nominal borrowing costs as between the fund and private markets, we don't observe emerging economies tripping over themselves in a rush to come to the IMF at the first sign of balance-of-payments trouble. Instead, as argued above, countries come to the fund late in the game. Conditionality (along with the fund's senior creditor status) also gives fund loans a higher probability of

repayment than loans made by private creditors, implying that the market-clearing nominal interest rate for fund loans is lower than that for private sector ones. All of this in turn suggests that an increase in the rate of charge may not have a huge impact on the frequency of fund borrowing.

Next, consider the maturity of IMF loans. Standby arrangements cover a one-to-three-year period, drawings are phased on a quarterly basis, and repayments are made within 3.25 to 5 years of each drawing. EFF arrangements, which are meant to address adjustment problems that require bold structural transformation of the economy, normally run for three years (and can be extended for a fourth), have phasing comparable to standby arrangements, and repayments are made within 4.5 to 10 years of the drawing. Since the SRF was meant to deal with "exceptional balance of payments difficulties due to a large, short-term financing need resulting from the sudden disruptive loss of market confidence," it was created with shorter than normal repayment terms—namely 1 to 1.5 years after each disbursement.

The Meltzer Commission (2000) has proposed that the maturity of IMF loans be cut back more drastically—to a maximum of 120 days with only one allowable rollover (leading to a maximum maturity of 240 days). The underlying rationale is that the fund ought to be lending solely to counter liquidity crisis (not insolvency crises) and that liquidity crises are typically very short-lived. The Meltzer Commission notes that prolonged use of IMF resources has been a serious shortcoming of IMF lending, with twenty-four of the fund's member countries in debt to the fund in thirty or more of the past fifty years, and forty-six more countries in debt for at least twenty of those years.

The U.S. Treasury (2000) has called the Meltzer repayment period "unrealistically short," noting that even in recent success cases, countries needed much longer than four months to be in a position to repay IMF loans. Fischer (1999) has rejected the notion that it is straightforward to distinguish cases of illiquidity from insolvency. He argues that this distinction is often indeterminate in a crisis since it depends on how well the crisis is managed.

The G-7 Finance Ministers (2000), along with U.S. Treasury Secretary Summers (2000), have acknowledged that prolonged use of fund resources needs to be more strongly discouraged, albeit without suggesting a specific maturity cap. Instead, they would rely on an SRF-like price incentive to encourage prompt repayment. The G-7 Finance Ministers Report argues that for all nonconcessional IMF facilities, "the interest rate should increase on a graduated basis the longer countries have IMF resources outstanding" (2000). Presumably, they are aiming for something closer to SRF maturities (one to two years) than to Meltzer maturities (four to eight months). In addition, there is a definite suggestion to make more selective and less frequent resort to the longer-maturity EFF window (in favor of

shorter-maturity standby arrangements). Summers (2000) argues that the countries that are likely to fit the EFF's (new) requirements are lower-income transition countries that are undertaking far-reaching structural reforms to secure stabilization and countries with incomes just above the threshold for concessional IMF financing under the Poverty Reduction and Growth Facility (PRGF).

Given the contrast between the fund's stated purpose (Article I of the fund's Articles of Agreement speaks of making the fund's general resources "temporarily available" to members dealing with balance-of-payment problems) and the track record of frequent prolonged use of fund resources, moving to reduce the maturity and repayment periods for IMF loans makes sense. Charging higher interest rates for longer repayment periods should help to promote that objective. Likewise, making resort to the EFF less frequent should keep the fund from getting too involved in those longer-term structural aspects of development that are best handled by the World Bank (see discussion below on the scope of fund conditionality). It seems neither necessary nor desirable, however, to insist on repayment within a few months' time a la the Meltzer Commission recommendations. The recoveries from both the Asian crisis and the Mexican crisis have been rapid—indeed, much quicker than is normally the case for countries experiencing "twin crises" (i.e., the simultaneous occurrence of currency and banking crises).[3] Policy should not be set solely in terms of the best performers. Moreover, in many cases, the relatively rapid resumption of market access was accelerated by large-scale bailouts and guarantees for large, uninsured creditors of banks—bailouts that we should seek to avoid or reduce in the future. And in cases where the illiquidity/insolvency distinction is more blurred (e.g., in the debt crisis of the 1980s), it will be helpful to have longer than eight months for countries to repay.

It is also relevant to contrast the current mood on repayment maturities with that prevailing at the time the longer-maturity fund lending windows (the EFF, the Structural Adjustment Facility, and the Enhanced Structural Adjustment Facility) were created. At that time, the maturity of fund loans was also under attack—but from the opposite direction.[4] The criticism then was that fund lending programs were too short-sighted, too focused on correcting balance-of-payments disequilibria, and not focused enough on promoting sustainable economic growth. Demand management alone could not do the job; supply measures were needed, and these would take time. The recommended prescription was greater financial support for structural reforms, along with longer program periods and repayment maturities to allow those structural reforms to take hold and bear fruit. Now that many more developing countries have access to private capital markets, that private capital flows have become extremely large relative to official finance, and that prolonged use of fund resources has become a widespread problem, the pendulum is swinging back the other way.

Size of Fund Loans

Another important dimension of fund lending is the size of rescue packages. The fund's normal access limits for its loans are expressed in terms of a country's quota in the fund. More specifically, the normal access limits are 100 percent of quota annually and 300 percent on a cumulative basis. By this metric, the amounts committed under rescue packages for Mexico (1995), Thailand (1997), Indonesia (1997), and Brazil (1998) were exceptionally large since they fell in the range of 500–700 percent of quota. The rescue package for South Korea (1997) was much larger still—1900 percent of quota.[5]

The amounts actually disbursed under the Asian rescue packages were, however, considerably smaller than the amounts committed. More fundamentally, the IMF has maintained that other metrics should be used to evaluate the size of packages instead of quotas (or absolute dollar figures). Fischer (1999) and Mussa (1999) have noted that fund quotas have not kept pace with the growth of GDP, trade, or capital mobility, and therefore that quotas constitute a poor benchmark for evaluating the size of fund loans. Fischer notes that if the IMF quotas were today the same size relative to output of IMF member countries as they were in 1945, quotas would be three times larger; adjusting quotas for the growth of world trade over the same period would leave them nine times larger. In a related vein, Mussa contends that official financing in the Asian crisis was not large relative to the decline in gross private capital flows during that period, or to the crisis countries' current-account adjustments, or to the huge output losses borne by the crisis countries.

Much of the recent concern about the size of fund emergency financing has been that large rescue packages may contribute to moral hazard on the part of private creditors to emerging economies. If these private creditors come to expect that fund loans to emerging-economy governments will make these governments more capable and more likely to bail them out in cases of adverse circumstances, then private creditors will act less prudently in monitoring the performance of borrowers. Put in other words, if private creditors are shielded unduly from the consequences of poor lending and investment decisions, market discipline will suffer and future crises will become more likely.

Most analysts who call for smaller IMF rescue packages on grounds of lender moral hazard acknowledge that moral hazard is a problem with all insurance arrangements. The solution is not to eliminate insurance but rather to limit the amount of payment (e.g., coinsurance or deductibles) and/or to price the insurance appropriately (i.e., higher insurance rates for more risky policyholders). They also concede that a lender of last resort, by providing emergency assistance to an illiquid (but not insolvent) borrower and thereby preventing a costly default and its spillover to other

borrowers, serves a useful function for the economy as a whole. Moreover, it is recognized that equity holders and bond holders suffered large losses in the Asian crisis and that banks took a sizeable hit during the Russian crisis. Still, most of the critics conclude that smaller IMF rescue packages would reduce lender moral hazard and improve market discipline and crisis prevention.

On the other side of the fence, even those who regard the (lender) moral hazard criticism as greatly exaggerated acknowledge that fund rescue packages in the run-up to the Russian crisis of 1998 were too large and were a key reason why investors continued to pour money into Russian government securities (GKOs) despite weak economic fundamentals. They argue, however, that there is no empirical evidence suggesting that moral hazard was driving private capital flows to Mexico and/or to Asia in the run-up to their crises, or that the composition of capital flows has since then switched in favor of the lenders (banks) usually singled out as the main beneficiaries of lender moral hazard.[6] On conceptual grounds, they also emphasize that fund rescue packages are loans (not grants) with reasonable interest rates and with a history of very low default; since there are no losses on these loans, fund lending cannot be considered a "direct" source of moral hazard.[7] Moreover, they maintain that moral hazard is small relative to the real hazards facing developing countries in today's capital markets.

Although the Meltzer Report (2000) concludes that fund loans generate serious moral hazard problems ("the importance of the moral hazard problem cannot be overstated," 33), the commission does not recommend smaller IMF rescue packages as an antidote for that problem. Following the Bagehot (1873) guideline that a lender of last resort should "lend freely" (albeit at a penalty rate and on good collateral), they propose that the fund lend on a substantial scale—indeed, up to one year's tax revenue—to countries that have met certain prequalification criteria. This could result in massive rescue packages—far larger than any loans the fund has extended heretofore. For example, as noted by the U.S. Treasury (2000), such a lending guideline, if, say, applied to Brazil in 1997, would have resulted in a $139 billion rescue package—3088 percent of Brazil's quota in the fund and almost ten times as large as the fund rescue package extended to Brazil in early 1999. The Meltzer Commission proposes instead that moral hazard problems be tackled by encouraging financial institutions in the borrowing countries to adopt higher standards of safety and soundness and by discouraging reliance on short-term borrowing.

The strongest call for a return to smaller fund loans has come from the CFR Task Force. The CFR Report (1999) argues that the fund should distinguish "country crises" (crises that do not threaten the functioning of the international financial system) from "systemic crises," and should treat the two differently. For country crises, the fund should return to normal access

limits (100–300 percent of quota). For systemic crises, the fund should turn to systemic lending windows—the existing New Arrangement to Borrow (NAB) if the crisis is mainly the result of the borrowing country's policy inadequacies and a fund program is needed to correct those policy shortcomings; and a newly created "contagion facility" if the country is mainly a victim of contagion. A supermajority of creditor countries would have to reach the judgment that the crisis was "systemic" to activate either the NAB or the contagion facility. Once activated, however, the systemic facilities could provide large access and the contagion facility would be funded by a special allocation of IMF Special Drawing Rights (SDRs).

The CFR Report (1999) maintains that smaller fund loans for country crises would still permit some cushioning of the recession, some smoothing operations in foreign exchange markets, and a modest contribution toward the cost of bank restructuring and recapitalization. These loans would not, however—desirably in the report's view—be large enough to support the defense of overvalued fixed exchange rates or to bail out large uninsured private creditors. The CFR Task Force also rejects the view that there is a certain unique size of a fund rescue package that is needed to restore "confidence" in the crisis country. It notes that some empirical studies have found that asset prices typically fail to stabilize right after the signing of a fund program;[8] instead, stability comes later, when there is stronger evidence of political leadership and when there are concrete policy actions to deal with policy shortcomings. Yes, the CFR Task Force acknowledges that smaller fund rescue packages would probably increase the cost of market borrowing for developing countries and perhaps reduce somewhat the flow of private capital to them. But it argues that since net private capital flows to emerging economies in the 1990–96 period were too large and the interest rate spread on that borrowing too low, some moderate move in the opposite direction would be no bad thing.

By going to smaller fund loans for country crises, by making IMF loans to countries with unsustainable debt profiles conditional on greater private-creditor burden sharing, and by encouraging all countries to include "collective action clauses" in their sovereign bond contracts, the CFR Report (1999) concludes that it would be possible to reduce significantly indirect (lender) moral hazard stemming from fund rescue packages.[9]

The U.S. Treasury (2000) has rejected the very large fund loans implicit in the Meltzer Commission recommendations as "unrealistic and undesirable" and as surpassing the financial capacity of the fund and increasing moral hazard.

It is only relatively recently that the U.S. Treasury and G-7 Finance Ministers have come out in favor of some incentives or mechanisms to reduce the scale of IMF loans. In his April 2000 speech, Secretary Summers proposes that the interest rate on all nonconcessional IMF loans should not only increase with the length of time loans are outstanding but should also

increase with the *scale* of financing above certain thresholds (he doesn't specify what these thresholds should be). Even more recently, the G-7 Finance Ministers' Report states that "the possibility of adding a premium when the scale of (fund) financing goes beyond certain thresholds should be explored" (2000).

There appear to be three main differences between the CFR view and the U.S. Treasury view on the scale of fund financing.

First, as regards constraints / disincentives on large rescue packages, the Treasury prefers a price (interest rate) mechanism while the CFR Task Force prefers a quantity-cum-governance constraint (i.e., loans above 300 percent of quota would have to be deemed "systemic" by a supermajority of creditors, and those official creditors—not the fund—would bear the credit risk). Adisadvantage of the interest rate approach (and of leaving the decision to be made by the borrower) is that countries in crisis may be willing to pay a large premium to get enough fund resources to defend overvalued exchange rates or to bail out uninsured private creditors—even if there is no systemic risk involved. If such a demand for large rescue packages is relatively price inelastic, then lender moral hazard will not be much deterred by such a (moderate) size-related premium. The disadvantage of the quantity-cum-governance approach is the risk of inaction in the face of a genuine systemic threat; that is, a supermajority of official creditors may allow the crisis to spread by refusing to extend the larger loan.

A second difference is that the Treasury's approach gives more "discretion" to IMF management and to U.S. authorities in deciding when to activate very large rescue packages. This is because the definition of "exceptional circumstances" that activates abnormally large access under standby and EFF arrangements, and the definition of "systemic" that activates very large access under the SRF and CCL, are in the eye of the beholder and don't require supermajority consent. In contrast, the CFR approach makes the decision to activate very large access one is that is shared more equally among a wider group of creditor countries.

Yet a third difference relates to the financing of very large rescue packages. Under existing fund policy, the large access afforded under the SRF and CCL are financed out of the fund's existing quota pool of resources. This runs the risk that if there are many serious financial crises occurring simultaneously and if it has been some time since the fund has had a quota increase (as in 1998), then the fund may not have enough resources to put out such a large and contagious fire. In contrast, the CFR approach provides new money for systemic contagion cases by financing large access with a special SDR allocation.

Like the U.S. Treasury and the IMF, I regard the potentially huge access levels recommended by the Meltzer Report as unrealistic and counterproductive (especially given their shunning of ex post macro policy conditionality; see discussion below). Also, and not surprisingly (given

my role as project director and author of the CFR Report), I regard the CFR approach to discouraging large rescues as preferable to the interest-rate-premium approach proposed recently by the U.S. Treasury. That being said, I welcome the readiness on the part of the Treasury—and hopefully the G-7 as well—to explore ways of returning to smaller IMF rescues. In my view, this is crucial to getting a better handle on indirect lender moral hazard on the part of the IMF.

IMF Policy Conditionality

Returning once again to the Bagehot (1873) guideline for a national lender of last resort, it specifies that lending should be done on "good collateral." In this context, good collateral serves several purposes. It provides a test of whether the borrower is just illiquid rather than insolvent (i.e., a solvent borrower has good collateral to pledge; an insolvent one does not). Because the good collateral has market value, it safeguards the solvency of the lender. It also avoids the potentially time-consuming process of negotiating and monitoring conditions on the borrower that would maximize the likelihood of repayment. And it reduces borrower moral hazard by discouraging the borrower from holding risky assets that would not be accepted as good collateral.

The IMF does not lend to countries against collateral. Instead, it lends to countries that have a balance-of-payment need under "adequate safeguards." What are these safeguards? The main one is the policy action(s)—so-called conditionality—that the borrowing country agrees to undertake to qualify for the loans. These policy conditions are meant to correct the underlying balance-of-payments problem and to restore the borrower's ability to repay the fund. Policy conditions are negotiated and agreed between the borrowing country and the fund. These conditions typically cover macroeconomic policies (i.e., monetary and fiscal policies), exchange rate policy, and a range of structural policies (e.g., financial sector policies, trade policy, reform of public enterprises, etc.). As a further safeguard, fund disbursements are made in phases or "tranches" (rather than all at once), with the ability to draw that tranche dependent on the borrower meeting certain preagreed performance criteria.[10] Because some other lenders (both official and private) condition their lending to the borrowing country on either the existence or the successful implementation of a fund program, the amount of funding that the borrowing country can lose by not meeting the performance criteria is usually larger than the loss of fund support. If the borrower does not repay the fund on time, it faces loss of access to future fund lending and ultimately even expulsion. And since member countries regard their creditor position in the fund as part of their international reserves, the fund has consistently maintained the view that it cannot reschedule its loans to countries with debt-servicing difficulties.

Some observers submit that the explicit and implicit costs that would be associated with not repaying fund loans give the fund a de facto if not de jure status as a preferred senior creditor.

Even the most ardent supporters of the fund would admit that the above description of fund conditionality does not do justice to the problems often encountered in its implementation. In some cases, negotiations over policy conditions can be long and contentious, and the borrowing country may never take "ownership" of the program. Drawings may be interrupted because of nonobservance of the performance criteria. Sometimes, funding may continue despite nonobservance of performance criteria because of political pressures from a variety of sources (including the fund's major shareholder countries). In still other cases, the economic analysis and advice embodied in the policy conditions may be inappropriate for the unfolding economic conditions on the ground (e.g., the recession may be deeper than anticipated when the program was formulated) and revisions to program design may be too slow in coming. And borrowing countries that do not repay on time may either get de facto rescheduling (extension of new IMF loans to repay earlier ones) or may get many chances to repay before their eligibility for new loans is cut off or before they get expelled. Still, when all is said and done, supporters argue that the existing system of conditionality works reasonably well most of the time, and that, just as importantly, it works better than the leading alternatives.

Much of the recent debate about the need for IMF reform revolves around various dimensions of policy conditionality. Next I will take up in turn four such dimensions: (1) ex post policy conditionality versus ex ante conditionality (i.e., prequalification based on structural policy preconditions); (2) the scope of conditionality; (3) currency regime and private sector burden-sharing aspects of conditionality; and (4) implementation of international financial standards.[11]

Ex Post Policy Conditionality versus Ex Ante Conditionality

The Meltzer Report (2000) was extremely critical of the existing (ex post) approach to fund conditionality. The majority in the Meltzer Commission concluded that detailed fund policy conditionality has "burdened IMF programs in recent years and made such programs unwieldy, highly conflictive, time consuming to negotiate, and often ineffectual" (2000: 7). They go on to argue that there is no evidence of systematic, predictable effects from most of the IMF's policy conditionality. Later on, they maintain (not entirely consistently) both that if the IMF did not exist, the market would force a country in crisis to follow similar policies and that IMF policy conditionality in the Asian crisis actually made the crisis countries worse off than they would have been without IMF assistance. Put in other words, when the bottom-line results in IMF program countries look good, the outcome would have happened anyway (without the IMF); and when the

results look bad, they reflect the negative influence of IMF policy conditionality and advice.

Interestingly enough, the Meltzer Report did not recommend that the fund insist on "good collateral" as a substitute for its policy conditionality (despite the fact that the commission's chairman favored this prescription in his recent writings on how to redesign the fund).[12] Some have argued that if countries in crisis were able to satisfy a stringent collateral requirement, then they wouldn't need the fund (i.e., they would be able to use this collateral to borrow from private creditors); hence, little "additional" financial stability would be obtained by such a reform. While one can point to episodes where even borrowers with good collateral could not get credit in a panic, perhaps the commission gave this "additionality" argument some weight. Or perhaps the commission became convinced that giving the fund a more established de jure status as a preferred creditor—lending only to countries that met certain prequalification requirements (see discussion below)—would provide sufficient protection for the fund against credit risk. Or perhaps the collateral idea just wasn't deemed attractive enough to elicit majority support either within the commission or outside more generally. In any case, the collateral idea (as a substitute for ex post policy conditionality) went by the wayside.

Nevertheless, the Meltzer Report did recommend that the fund eliminate most of the macroeconomic and structural policy conditions that have characterized upper credit tranche fund programs in the past. It proposed instead that countries qualifying for short-term fund liquidity assistance would need to meet the following preconditions: (a) freedom of entry and operation for foreign financial institutions; (b) regular and timely publication of the maturity structure of outstanding sovereign and guaranteed debt and off-balance sheet liabilities; (c) adequate capitalization of commercial banks—either by a significant equity position a la international standards, or by subordinated debt held by nongovernmental and unaffiliated entities; and (d) a proper fiscal requirement. These new rules would be phased in over a period of five years.

Developing countries that met these preconditions would be eligible immediately for short-term liquidity assistance; those developing countries that didn't meet these preconditions would not be eligible (unless there was an unusual situation where the "crisis poses a threat to the global economy"). Larger industrial countries would not be eligible for IMF liquidity assistance; their central banks would assume this task.

To establish the seniority of IMF claims on borrowing countries, members would exempt the IMF from negative pledge clauses and would give the IMF specific legal priority with respect to all other creditors (secured and unsecured). Countries that defaulted on IMF debts would not be eligible for loans or grants from other multilateral agencies or other member countries.

Under the Meltzer Commission plan, the IMF would continue to offer

advice on a wider range of economic policies (including the currency regime) in its Article IV consultations with developing countries, and these reports would be published promptly. Industrial countries could opt out of these IMF consultations if they wished. But the IMF could *not* make its advice on economic policy a condition for its loans. Nor could the IMF make other types of loans for whatever purpose. Longer-term institutional assistance to foster economic development would be the responsibility of a reconstructed World Bank or regional development banks. The IMF's Poverty Reduction and Growth Facility (PGRF) would be closed.

Criticisms of the structural policy preconditions in the Meltzer Report have been offered mainly on four grounds. First, there is the charge that the majority in the Meltzer Commission misread history. This criticism is evident within the Meltzer Commission itself from the dissent penned by four of the commission members appointed by the congressional Democrats (namely, C. Fred Bergsten, Richard Huber, Jerome Levinson, and Esteban Torres).[13] In looking at the fifty-year tenure of the IMF and the World Bank (hereafter the IFIs), the dissenters concluded that "the bottom line of the 'era of the IFIs,' despite obvious shortcomings, has been an unambiguous success of historic proportions in both economic and social terms" (119). They note, in addition, that almost all the crisis countries of the past few years, ranging from Mexico to East Asia to Brazil, have experienced rapid "V-shaped" recoveries; that never in human history have so many people advanced so rapidly out of abject poverty; and that more than half of the world's population now lives under democratic governments. In short, "the allegations of the report simply fail to square with history" (121).

The CFR Report (1999), while stressing the need for IMF reform, painted a more favorable picture of IMF involvement. For example, in evaluating the fund's role during the Asian crisis, the report concluded: "As costly as the Asian crisis has been, no doubt we would have seen even deeper recessions, more competitive devaluations, more defaults, and more resort to trade restrictions if no financial support had been provided by the IMF to the crisis countries. . . . There can be legitimate differences of view about IMF advice on fiscal and monetary policy in the crisis countries. . . . But we had a look in the 1930s at how serious global instability is handled without an IMF, and few would want to return to that world" (88).

The IMF has challenged the Meltzer Report's reading of the empirical studies on the effects of IMF programs. Fischer, for example, sums up the recent studies as follows: "The consensus view now seems to be that in a typical (IMF) program, economic activity will be depressed in the short term as macroeconomic policies are tightened, but that growth subsequently revives as structural reforms take root. Meanwhile, the balance of payments improves, removing the need for further fund financing. The impact on inflation is usually favorable (although in general not large enough to be statistically significant)" (2000: 8).

A second line of criticism of the Meltzer preconditions approach is that these preconditions would not suffice either to prevent financial crises or to achieve the balance-of-payments adjustment necessary to restore countries' ability to repay the fund; some critics would go farther and argue that reliance on these preconditions alone would promote financial instability.

Again, the dissenting group within the Meltzer Commission reached very different conclusions than the majority. Specifically, they argued that the majority would have the IMF totally ignore the macroeconomic policy stance of the crisis country, thereby sanctioning fund support for countries with runaway budget deficits and profligate monetary policies. They go on to conclude that "this would virtually eliminate any prospect of overcoming the crisis; it would instead enable the country to perpetuate the very policies that triggered the crisis in the first place and thus greatly increase the risk of global instability" (121). They also note that the "proper fiscal requirement" included in the preconditions is left undefined in the report, and if left open to content, this would require fund conditionality of the same type that the majority rejects.[14]

The U.S. Treasury (2000) reached a similar verdict on the effectiveness of the proposed Meltzer preconditions: "The proposed eligibility criteria are too narrow. Even where they are met, they would be unlikely to protect economies from the broad range of potential causes of crises. The criteria focus on the financial sector, and yet even problems that surface in the financial sector often have their roots in deeper economic and structural weaknesses" (17). The Treasury worries further that combining large fund disbursements with ineffective eligibility requirements could actually increase the amount of moral hazard in the system.

Yet a third criticism is that it would prove neither feasible nor desirable to exclude completely from IMF financing those countries that don't meet the structural preconditions. Fischer offers the following assessment on this point: "It is doubtful that the international community would be indifferent to the fate of countries that do not meet the pre-qualification requirements, or to the instability that might be generated when they get into trouble and are denied help. In practice, in such circumstances the large industrial countries would probably find another, less transparent, way to help the country in crisis" (1999: 10). I suppose the retort of the Meltzer Commission would be that other ways of assisting countries that don't meet the prequalification requirement are to be preferred to IMF assistance since they would be more (not less) transparent and wouldn't risk turning the IMF into a "political slush fund."

The CFR Report (1999) rejected the all-or-nothing approach to eligibility for IMF assistance. In its recommendations, countries that follow a set of "good housekeeping" crisis-prevention policies qualify for a lower interest rate from the fund than do countries that do not follow these policies. But the latter group is not excluded from IMF assistance.

In its evaluation of the Meltzer Commission's prequalification criteria, the U.S. Treasury argued: "This recommendation would preclude the IMF from being able to respond to financial emergencies and support recovery in the vast majority of its members, possibly including all of the emerging market countries affected by the financial crises of 1997 and 1998.[15] The exclusive focus on relatively strong emerging economies would leave out most of the fund's membership, notably all low income countries and many transition economies" (2000: 17).

The fourth set of criticisms of the Meltzer preconditions is that their implementation would involve more serious operational problems and raise more questions than the authors imply. For one thing, as argued in the CFR Report (1999), it is far from clear that prequalification would deter speculative attacks. Hong Kong, for example, had $60–100 billion of reserves in 1997–98 and pledges of financial support from Beijing; yet it faced strong attacks on its currency during that period. For another, it is probably naive to assume that the decision to declare countries that originally met the preconditions as ineligible (because of subsequent backtracking on compliance) would not be subject to strong political pressures. Also, the report does not discuss who would monitor compliance with the preconditions; if the answer is that national regulatory authorities would do it (see discussion below on international financial standards), then there is a serious question of whether those judgments would be objective. Last but not least, there are questions about whether some of the preconditions would have their intended effects. For example, Garber (2000) has argued that a subordinated debt requirement for banks (similar to the proposal advanced by the Meltzer Commission) could likely be manipulated and evaded, thereby weakening its attraction as a mechanism for stronger market discipline.

At present, the notion of prequalifying for IMF liquidity assistance applies only to drawings under the fund's recently established (April 1999) Contingency Credit Line (CCL). Countries can qualify for the CCL if they have good macro policies, are complying with international financial standards, and have constructive relations with their private creditors. As originally formulated, eligibility to draw was far from automatic, however; specifically, prequalified countries could not draw until the IMF's Executive Board conducted an activation review to determine if the country was severely affected by contagion and if it intended to adjust its policies as needed. In addition, countries were to pay a commitment fee and an interest rate that was the same as under the SRF. So far, all of this has been academic, as—somewhat embarrassingly—no country has yet applied for the CCL. According to the IMF (Fischer 2000), the unpopularity of the CCL probably owes to its pricing structure: because the interest rate on the CCL is the same as that on the SRF, there is no incentive to prequalify; in addition, access to the credit line is not automatic enough once the crisis breaks out. An alternative hypothesis is that the unpopularity derives from the

ambiguous signal that applying for the CCL sends; that is, it could be interpreted as suggesting the country is expecting trouble. In addition, because the IMF has recently speeded up its decision making for disbursement from other fund facilities in a crisis, prequalification may not confer as much of an advantage as previously supposed. In any case, the G-7 Finance Ministers (2000) have suggested that the CCL be made more attractive: the commitment fee should be abolished, the interest rate on it should be reduced below that on the SRF, and the initial drawing on the CCL should be made more automatic (up to a certain predetermined limit). We'll see if that sweetener attracts any more bees.

In the end, I do not find the Meltzer structural policy preconditions attractive as an alternative way of qualifying countries for IMF financial assistance. While I think that meeting those criteria would, ceteris paribus, reduce the risk of getting into a crisis, they're not sufficient by themselves to deter a crisis; just as important, they are not very useful for getting out of a crisis once it hits. While many financial crises begin in the banking sector, more than a few others do not, and freedom of entry in banking plus a subordinated debt requirement are not likely to be good substitutes for the broader range of criteria outlined in Basel Core Principles of Effective Banking Supervision. Giving huge credit lines to countries without any monetary policy conditionality seems counterintuitive. The fiscal policy precondition is not discussed in a serious way in the Meltzer Report; it reads like an afterthought. More troubling still, freedom of entry for foreign banks and timely reporting of debt maturities will not get you out of a balance-of-payments crisis. Without measures to reduce absorption and to switch expenditure from foreign to domestic goods, the crisis country's ability to repay is not likely to improve. While I share the Meltzer Commission's desire to reduce the scope and intrusiveness of present fund structural policy conditionality, this does not look like the best way to do it.

By the same token, I am not a big fan of the CCL. I believe the design flaws there extend beyond pricing and that it is possible to create a superior lending window to deal with the systemic cases of cross-country contagion along the lines outlined in the CFR Report (1999).

Scope of Conditionality

Among the charges leveled at the IMF during the Asian crisis, none was probably more widespread than the criticism that the fund has allowed the scope of its conditionality to become overextended, particularly in the area of structural policies. The most recent visible manifestations of the "reach" of fund programs were the much-publicized dismantling of the clove and plywood monopolies in the fund's 1997 program with Indonesia and the financial sector and/or corporate governance reforms that were at the center of fund programs with the Asian crisis countries. It is now not uncommon for performance criteria in fund programs to include actions in any

number of the following structural policy areas: financial sector reform, privatization and public enterprise reform, social safety nets, tax and expenditure policies (including so-called unproductive public expenditures such as high military spending), labor market policies, pricing and marketing/distribution policies, agricultural policies, environmental policies, and policies to combat corruption and money laundering. In addition, through ESAF and its successor, the Poverty Reduction and Growth Facility (PRGF), the fund in collaboration with the World Bank has been deeply involved in efforts to promote sustainable growth and reduce poverty in low-income developing countries.

I suspect that at least four factors have been at work in generating the fund's "mission creep."

(a) First, the breakup of the Soviet Union and the rise of democracy in Eastern Europe brought forth a huge demand for structural reform in the transition economies. A market economy presupposes a market-friendly institutional and legal framework, and that framework had to be built from the ground up in many of these economies. Since the fund (along with the World Bank) was at the forefront of providing economic advice and financial support to those economies, it was not surprising that fund programs with these countries contained many performance criteria related to structural transformation of the economy. In a similar vein, because the Asian financial crisis was marked by the collapse of banking systems and large-scale corporate debt-servicing problems, these programs too were apt to have an above average structural component.[16] What is not straightforward is whether even in these "special" cases fund programs went "too far." Even more so, these two regional transformations/crises do not explain why fund structural performance criteria also went up in other regions/countries where there was no analogous, pressing structural transformation.

(b) Second, there is the "political" demand for structural performance criteria. This has several dimensions.

Because fund conditionality brings with it substantial financial assistance, many interest groups in creditor countries—running the gamut from the environment to core labor standards, to exporters, to financial service firms, to human rights activists—have come to the conclusion that they can get more leverage for their objectives if they can get them included as performance criteria or as potential deal breakers in fund programs rather than pursue them through the agencies or IFIs with more specialized mandates but with less financial leverage or longer-term agendas (e.g., the International Labor Organization, international trading rounds, environmental treaties, etc.). Perhaps the best example of such pressures is the very large number of congressional directives that the U.S. executive director of the fund is obligated to follow by voice and vote. To the extent that such interest groups have legislative clout, they can place creditor governments in an

awkward dilemma: rejecting the demand of these groups will permit the fund to "keep to its knitting," but it may not generate enough support to pass legislation giving the fund the financial resources it needs (say, via quota increases or bilateral contributions) to carry out its mainline functions (e.g., crisis management); on the other hand, giving in to such pressures will multiply the number of performance criteria in fund programs and move the fund away from its core competence.

Another "political" demand for structural performance criteria can arise when a creditor government supports liquidity assistance for an economy in crisis but does not want to be seen as supporting the ruling party or head of government without concrete action against "cronyism" or measures in support of democratization. Such measures will often be seen as "public signals" that reform is underway and will be "evenhanded"—even if these measures are not macro enough to have much influence on the overall balance of payments. Again, they will take the form of structural performance criteria (e.g., the withdrawal of a monopoly trading franchise from a widely known crony of the prime minister, or the cancellation of a showboat project, etc.), and they may be lobbied for directly by the creditor government.

Political demands for structural performance criteria can also come from the program country itself. Here the reformers may reckon that the crisis is their once-in-a-lifetime chance to implement a long list of reforms for the economy that have met resistance during normal times. Many of these reforms may be desirable for long-term economic performance but are not necessarily directly related to overcoming the crisis itself. Still, they may press the fund to "make hay while the sun shines."

(c) The fund's concessional lending activities to poor countries can also generate some increase in structural policy conditionality. This is notwithstanding the fact that such lending is typically done in collaboration with the World Bank (which is supposed to take the lead on poverty-reducing structural measures and the design of social safety nets). For example, the composition of cuts in public investment and public consumption can then become separate performance criteria (so as to protect the most vulnerable groups), along with improving the overall budget deficit.

(d) Last but not least, the fund itself has probably been a source of additional structural policy conditionality; that is, not all of it is demand driven from the "outside." It can seek to extend its mandate either to improve the bottom-line results of fund programs, to close loops for evasion in a more limited set of performance criteria, or to preserve or increase its "turf" in the face of a changing global environment.

Whatever the origins of the wider scope of fund conditionality, several concerns have been expressed about its impact on the effectiveness of and popular support for the fund.

One is that wide-ranging and overly intrusive structural policy condi-

tionality will encourage countries to delay even longer in coming to the fund, thereby magnifying the task of crisis management and resolution. A second concern is that this kind of conditionality will paint the fund as insensitive to the cultural and social differences among emerging economies. Concern number three is that involvement by the fund staff in areas outside their primary competence will weaken the fund's reputation for professional, apolitical advice.

Feldstein (1998) has argued that when the fund contemplates including a particular policy reform in its programs with emerging economies, it should ask itself two questions: (1) Is this reform necessary to restore the country's access to international capital markets? and (2) Would the fund ask the same measures of a major industrial country if it were the subject of a fund program? If the answer to either question is no, then that policy should not be part of the fund program.

The CFR Report (1999) concluded that the traditional separation of responsibilities between the fund and the World Bank had become blurred in recent years—to the disadvantage of both institutions and their clients. It recommended that the fund confine the scope of its conditionality to monetary, fiscal, exchange rate, and financial sector policies. This is the same "core competence" outlined for the fund in a recent external review of fund surveillance by a group of outside experts led by former Bank of Canada governor John Crow (see Crow et al. 1999). Financial sector policies (and surveillance) were included in the fund's mandate under the rationale that banking and financial sector problems were much more connected than other structural policy areas to the prevention, management, and resolution of financial crises. The CFR Task Force also recommended that the World Bank should concentrate on the longer-term structural and social aspects of economic development and should expand its work on social safety nets. The bank should not be involved in crisis management, in emergency lending, or in macroeconomic policy advice.

As noted earlier, the Meltzer Report (2000) recommended that the IMF cease lending to countries for long-term structural transformation (as in the transition economies) and for long-term development assistance (as in sub-Saharan Africa). It would eliminate the PRGF. Long-term structural assistance to support institutional reform and sound economic policies would be the responsibility of the World Bank and the regional development banks (i.e., the Asian Development Bank, the African Development Bank, and the Inter-American Development Bank).

The U.S. Treasury (2000) opposed the Meltzer Commission's recommendations that the PRGF be closed and that long-term assistance to foster development and sound economic policies be handled exclusively by the World Bank and the regional development banks. It emphasized that poverty reduction in poor developing countries will not occur without economic growth, and that good growth performance in these countries

will not take place without sound macroeconomic policies. Since the Treasury saw the fund's particular expertise in helping countries to set up appropriate macroeconomic frameworks as not being shared by the multilateral development banks (MDBs), it was opposed to transferring this responsibility from the fund to the MDBs. Moreover, it did not feel that the fund advice on macroeconomic policy would be influential in poor countries unless it was supported by some fund lending arrangement.

It also hinted that bilateral contributions funding the IMF's concessional lending activities might be cut back to some extent if the IMF were no longer involved in lending to poor countries. All this being said, the U.S. Treasury did acknowledge that the IMF's role in concessional lending "needs to change significantly" (2000: 22). Specifically, it called for—within the PRGF—a clearer division of labor between the fund and the bank, with the fund focusing on macroeconomic policy and structural reform in related areas (tax policy and fiscal management) and with the bank taking the lead on national poverty-reduction strategies and other structural reforms.

For its part, the fund continues to defend its lending activities to its poor country members. Fischer argues that poor countries also have macroeconomic problems and that they have a right like every other member to access the facilities of the fund. He also maintains the new PRGF will improve lending to the poor countries because it forces the fund, in cooperation with the bank, "to make sure that the macroeconomic framework is fully consistent with what needs to be done for social reasons" (2000b: 4).

Regarding the scope of structural policy conditionality, it may be too early to tell what the new managing director of the fund, Horst Kohler, will do. Nevertheless, recent press reports (Fidler 2000) suggest that the new managing director is committed to having the fund halt "mission creep," and that he wants to narrow the fund's mandate by reducing the number of structural policy performance criteria included in fund programs.

In the recent G-7 Finance Ministers Report (2000), there is support for the fund's role in the PRGF. The report also notes that the issues dealt with by the fund and the bank are increasingly interrelated. It acknowledges that a "clearer definition of their respective responsibilities and activities" would be desirable but doesn't provide any specific suggestions on what this definition should be. Indeed, it pretty much ducks the issue.

Given the political pressures—particularly from its largest shareholders—to maintain wide-ranging structural policy conditionality, I don't underestimate the practical difficulties of getting the fund to adopt a leaner agenda. Still, I think it's a battle well worth waging. If future quota increases are not able to go forward without expanded conditionality side payments, then the fund should give consideration to funding itself in private capital markets.[17] For reasons laid out in both the CFR Report (1999) and the Crow Report (1999), I think the most sensible definition of fund

core competence is monetary, fiscal, exchange rate, and financial sector policies; the rest should be the comparative advantage and primary responsibility of other IFIs. If, as reported, the new managing director of the IMF is moving in the direction of getting the fund "back to basics," I applaud that effort. Also commendable was the decision of the fund in 2000 to eliminate several lending facilities that are no longer needed (namely, the Buffer Stock Financing Facility, the contingency element of the Contingency and Compensatory Financing Facility, the Currency Stabilization Fund, and the Debt and Debt Service Reduction Facility).

I find unpersuasive the argument that if the PRGF were transferred to the World Bank, the fund would be unable to have a significant influence on the macroeconomic framework in its poorer member countries. If the focus of the PRGF is really on long-term poverty reduction strategies, I think the bank should take the lead role, including supplying the financing. To ensure that the fund's voice on macroeconomic policies is heard loud and clear, there may be a need for a stronger "sign-off" mechanism. Having the bank create its own PRGF-type lending window, as is sometimes suggested, hardly seems a good solution; why does the world need two windows to do nearly the same thing? Here the institutional specifics of IFI lending facilities need to give way to a sensible and consistent division of labor—not the other way around.

Currency Regime and Burden-Sharing Aspects of Fund Conditionality

Given the crisis events of the past several years, no discussion of fund conditionality would be complete without addressing currency regime and private creditor burden-sharing issues.

Among larger emerging economies with relatively open capital markets, the list of those that have been able to maintain a fixed exchange rate for five years or longer is now very short: Argentina and Hong Kong. During the past six years, Mexico, most of the Asian crisis countries, Russia, and Brazil (among others) have all been forced to abandon publicly declared exchange rate targets of one kind or another. The main lesson that has been taken away from this experience is that emerging economies should choose either a regime of managed floating or a "hard peg" (i.e., a currency board or dollarization). Adjustable peg regimes (so-called soft pegs) are now widely regarded as too fragile for a world of high capital mobility—both because they offer no workable "exit mechanism" once the fixed rate becomes overvalued, and because there are strict limits to how long emerging economies can keep interest sky-high in a currency defense (especially when the country has a weak banking system, the corporate sector has a high debt-to-equity ratio, the economy is in recession, or the government has a large fiscal deficit with a lot of floating rate debt). Despite these vulnerabilities, history suggests that some emerging economies will be tempted to try to maintain overvalued soft pegs if they

think they can get large-scale IMF or G-7 financial support in a crisis; the Brazilian crisis in early 1999 is a leading case in point.

The Meltzer Commission (2000) recommended that countries avoid pegged or adjustable exchange rates and suggested that the IMF should use its Article IV consultations to make countries aware of the costs and risks associated with pegged or adjustable rates. The report states that fluctuating exchange rates or hard pegs would be a better regime choice. It is noteworthy, however, that the Meltzer Report (2000) did *not* recommend that the IMF include the currency regime as one of the structural preconditions for IMF liquidity assistance, arguing that stabilizing budget and credit policies are far more important than the choice of exchange rate regime.

The CFR Report (1999) concluded that managed floating should be the fund's mainline currency regime recommendation for emerging economies, with hard pegs also advocated in particular circumstances.[18] It went farther, however, than the Meltzer Commission. Specifically, the CFR Task Force recommended that the IMF not provide large-scale financial assistance to countries that are intent on defending arguably overvalued fixed exchange rates.[19] In this sense, the CFR Task Force would make exchange rate policy an integral part of fund conditionality.

The IMF also seems to share this consensus on currency regime choices for emerging economies. Fischer noted that all the countries that recently had major international crises had relied on a pegged or fixed exchange rate system before the crisis. He also projected that "we are likely to see emerging market countries moving towards the two extremes, of either a flexible rate or a very hard peg—and in the long run, the trend is most likely to be towards fewer currencies" (2000a: 10).

The U.S. Treasury has likewise endorsed the "corners" view of currency regimes for emerging economies. Summers has stated that countries maintaining a fixed rate should be expected to make explicit the extent to which monetary policy is being subordinated to the exchange rate objective, and (if using fixed rates as a tool of disinflation) to disclose the nature of their exit strategy. He concludes that "countries that are involved with the world capital market should increasingly avoid the 'middle ground' of pegged rates with discretionary monetary policies, in favor of either more firmly institutionalized fixed rate regimes or floating" (1999: 4).

In my view, the "corners school" consensus on currency regimes for emerging economies is soundly based on the lessons of experience. The key question is whether the G-7 and the IMF are prepared to act on that recommendation when push comes to shove by not providing large-scale support for defense of overvalued fixed rates. I don't think merely advising emerging economies on choice of regime in Article IV consultations (as recommended by the Meltzer Commission) will get the job done.

On the conceptual level, we also need to understand better why so many emerging economies exhibit a serious "fear of floating," as docu-

mented in several recent empirical papers.[20] One explanation is history—that is, a long memory by domestic and foreign creditors of earlier periods of high inflation (and sometimes, also, negative or very low real interest rates). This memory can lead private creditors to think that any temporary easing of monetary policy means the authorities are again "off to the races." Brazil's recent postcrisis experience, however, with managed floating-cum-inflation-targeting and an independent central bank, suggests that history need not be insurmountable. A second and more weighty explanation is that many of these economies have large, unhedged, foreign-currency denominated liability positions on the part of banks and/or corporations; given that mismatch, a large depreciation would make many banks and firms insolvent, with large adverse effects on the real economy a la the Asian crisis. Here, dollarization is seen as a sensible "second-best" policy choice, given the difficulty of reaching the first-best policy—namely, reducing or eliminating the mismatch itself. To me, however, the usual arguments put forward as to why the first-best policy option is not available (e.g., private capital markets will not lend to emerging economies in their own currency) are not convincing. Thus I still regard managed floating—probably with inflation-targeting as a nominal anchor—as the preferred choice in most circumstances.

I suspect that the choice between the two corners over the next few years will depend heavily on the real-life experiment now going on in Latin America. If Argentina's currency board blows up because it does not have a monetary policy available to help it emerge from its near recession, then the momentum for currency boards and dollarization will fade in favor of managed floating. On the other hand, if Brazil is unable to sustain its recent progress and inflation and/or the exchange rate runs out of control, then managed floating could well become a relic for most emerging economies. We will see who wins the horserace; right now, I would bet on Brazil (managed floating).

Turning to private creditor burden-sharing—or PSI (private sector involvement)—the aim is to see that private creditors do not escape from paying their "fair share" of the burden of crisis resolution. As outlined earlier, the worry is that if private creditors do not "take a hit" when they make poor lending and investment decisions, there will not be sufficient incentive to undertake more careful risk assessment in the future.

Judging from the Report of G-7 Finance Ministers (2000), recent congressional testimony by U.S. Treasury Secretary Summers, and a recent progress report on IFA reform by the IMF (2000), the official sector (at least in the major industrial countries) feels it is making real progress on PSI. In this connection, the G-7 Finance Ministers have noted that "private sector investors and lenders have been more involved in the financing of recent IMF-led programs" (2000: 2). Similarly, in listing recent important achievements on the reform of the IFA (in testimony before the House Banking

Committee), Secretary Summers stated that "we have found new ways to involve the private sector in the resolution of crises—most notably in the cases of Korea and Brazil" (2000: 2–3). And an IMF progress report observed that "two recent cases of efforts to secure private sector involvement with members that had lost spontaneous access to capital markets through the restructuring of international bonds had been encouraging" (2000: 14); later on, however, that same IMF report also acknowledged that "only limited progress has been made in lifting institutional constraints to debt restructuring" (17). The references above are to the less than voluntary rollover (albeit with a government guarantee and interest rates 150–200 basis points higher than precrisis rates) of interbank credits by G-7 commercial banks in South Korea in early 1998, to the voluntary rollover of interbank and trade lines in Brazil in March 1999, to a tougher stance by the IMF and/or the Paris Club in several recent (1999 and 2000) emerging-market bond restructurings (Ecuador, Nigeria, Pakistan, Romania, and Ukraine), and to rather limited success in encouraging creditor committees and inclusion of "collective-action clauses" (hereafter, CACs) in sovereign bond contracts (at least among the G-7 countries).

It is enough to say that some private analysts do not share this rosy assessment. Eichengreen (2000), for example, in a recent comprehensive review of PSI efforts of the past few years, concludes that efforts to significantly enhance the participation of the private sector in crisis management and resolution have so far been a "failure," and characterizes recent progress as "halting." He also argues that to do better on PSI, it will be necessary to add both CACS and internationally sanctioned standstills to the official arsenal.

The Meltzer Report took a decidedly hands-off approach to the PSI issue, nothwithstanding its concern about lender moral hazard. It concluded that "the development of new ways of resolving sovereign borrower and lender conflicts in default situations should be encouraged but left to participants until there is better understanding by debtors, creditors, and outside observers of how, if at all, public-sector intervention can improve negotiations" (2000: 50).

In contrast, the CFR Report (1999) took a more activist position on PSI. More specifically, the report recommended: (a) that all countries—including the G-7 countries—commit to including CACs in their sovereign bond contracts and require that such clauses be present in all new sovereign bonds issued and traded in their markets; (b) that the IMF advise all emerging economies to adopt a "structured early intervention and resolution" approach to deposit insurance reform in their banking systems and reward countries that do so; (c) that the IMF make it known that it will provide emergency financial assistance only when there is a good prospect of the recipient country achieving "balance of payments (BOP) viability" in the medium term (including a sustainable debt and debt-servicing

profile); that, in extreme cases of unsustainable debt profiles, the IMF expect as a condition for its support that debtors engage in good-faith discussions with their private creditors with the aim of reaching a more sustainable debt profile; and (d) that the IMF recognize that orderly debt rescheduling may be facilitated by having the debtor declare a temporary payments standstill (with the final decision to impose the standstill resting with the debtor country—not the IMF).[21] The aim of the CFR approach was to reduce lender moral hazard at the national and international level and to promote timeliness and orderliness in private debt rescheduling—but without going so far as to promote borrower moral hazard.

The IMF, U.S. Treasury, and G-7 Finance Ministers all seem to favor a differentiated case-by-case approach to PSI, guided by a few principles. They also favor some institutional changes but are not very specific about what they are willing to do to make these changes come about. The recent G-7 Finance Ministers Report illustrates the state of play. They say that the IMF should "encourage" use of CACs to facilitate more orderly crisis resolution but don't indicate what form this encouragement should take. Similarly, they say that use of CACs in international bonds issued by emerging economies in G-7 financial markets should be "facilitated" but don't say how. They recommend different approaches on PSI depending on the borrowing country's medium-term debt and balance-of-payments profile. Where that profile is sustainable, they prescribe catalytic official financing and policy adjustment or voluntary approaches to overcome creditor coordination problems. Where the debt and BOP profile is unsustainable, a broader spectrum of actions by private creditors—including comprehensive debt restructuring—is regarded as appropriate. If there is any "tilt" in the policy line, perhaps it is that countries with unsustainable debt and BOP profiles should be told "at the start of the process" of the "consequences" of any failure to secure the necessary contribution from private creditors (2000: 10). These consequences could include the need for stronger program adjustment, the option of reduced official financing, or conversely, the decision by the IMF to "lend into arrears" if the country has suspended payments while seeking to work coopertively and in good faith with its private creditors and is meeting its other program requirements.

Unlike the Meltzer Report, I do not believe that the PSI problem will solve itself in the marketplace. Also, what the official sector does on PSI inevitably influences the balance of power between official debtors and private creditors in debt negotiations (as the IMF implicitly acknowledged in the late 1980s when it finally endorsed selective use of IMF "lending into arrears" to private creditors). As argued in the CFR Report, I think the G-7 countries will need to be more activist in facilitating wider use of CACs in sovereign bond contracts, as well as in endorsing selective use of temporary standstills. The decisions by the United Kingdom and Canada to include CACs in some of their sovereign bond contracts is welcome; other G-7 countries should now follow their lead.

Recent empirical work by Eichengreen (2000) suggests that the worry that such measures will raise the cost of borrowing for emerging economies (with good credit histories) seems not to be well grounded (that is, the benefits of avoiding a creditor grab race outweigh the borrower moral hazard effects). In addition, in cases of unsustainable debt profiles, the official sector will need to insist on appropriate debt restructuring with private creditors as a condition for IMF financial support. Thus far, IMF inclination to take that position has been evident only in small-country cases. The unanswered question is whether the official sector will be prepared *not* to put its money where its mouth is in a large-country case. Finally, but probably most important, the IFIs need to push much harder on emerging economies to put in place "good" deposit insurance systems; most lender moral hazard occurs at the national level, not at the international level, and this will continue until incentive-compatible financial safety nets are in place.[22]

Implementation of International Financial Standards

It is widely recognized that the elements of IFA reform discussed thus far in this paper are not likely to have much of an impact on crisis prevention in emerging economies unless those economies also undertake a broad and determined effort to strengthen their domestic banking and financial systems. After all, over the past fifteen years there have been more than sixty-five episodes where banking problems in emerging economies got so bad that the entire banking system was rendered insolvent. In the Asian crisis countries, we are now looking at fiscal costs of bank recapitalization that range from 10 to 60 percent of GDP.[23]

One of the key mechanisms being used to guide this upgrading of financial systems in emerging economies is international financial standards. Each of these standards is drawn by an international group of experts and represents agreement on what are minimum requirements for good practice. The FSF has now decided that twelve of these standards are crucial for sound financial systems and deserve priority implementation. The twelve key standards (known as the "Compendium of Standards") cover data dissemination, banking supervision, insurance supervision, securities regulation, insolvency regimes, corporate governance, accounting, auditing, payment and settlement, market integrity, fiscal policy transparency, and monetary and financial policy transparency.

Establishing standards is one thing. Getting countries to implement and enforce these "voluntary" standards is another. In seeking to identify incentives that would speed the implementation of international financial standards, the official sector has relied on three channels.

First, there is the expected market payoff. If market participants can tell who is and who is not implementing the standards and if complying countries are regarded as more creditworthy, then the latter should be the beneficiaries of a lower market cost of borrowing. Early on, there was

some hope that the private credit rating agencies might take up the task of evaluating compliance with standards and publish the results. That has not happened. Instead, it is the official sector—and primarily, the IMF—that has taken the lead in this process. A few examples illustrate the process. The fund now posts on the Internet the list of countries that have signed on to the data dissemination standard. Similarly, for the banking supervision standard, the fund prepares Reports on the Observance of Standards and Codes (ROSCs); so far, ROSCs for about fifteen countries have been completed and another twenty or so are under preparation. The decision to prepare an ROSC and to have the report published are both at the discretion of countries; the majority of completed ROSCs have been published. The fund and the World Bank jointly produce Financial Sector Assessment Programs (FSAPs) that evaluate financial sector vulnerabilities as well as assess compliance with those financial sector standards that affect stability. World Bank staff expect to have about six corporate governance and six accounting reports available soon (see IMF 2000).

Two factors have constrained the market payoff channel. One is the concern that naming publicly the noncomplying countries could precipitate runs or crises. Recently, however, that concern appears to be waning. Within the past few months, the FSF published the list of offshore financial centers whose regulatory and supervisory practices are regarded as "lax"; the OECD named jurisdictions that promote harmful tax competition; and the Financial Action Task Force identified fifteen jurisdictions that were judged to be uncooperative in the fight against money laundering. This recent public "naming of names" could be ushering in a more aggressive stance by the official sector. The other constraint is that evaluation of compliance in areas outside the competence of the IMF and the World Bank presupposes a good deal of interagency cooperation and coordination. This still remains a bottleneck.

The second incentive channel for implementation of financial standards is the Bretton Woods channel. More specifically, the IMF and the World Bank could give those countries implementing the standards a better insurance deal (larger access or lower interest rates) when they needed financial assistance. This still appears to be on the drawing board. Implementation of financial standards is supposed to be one of the eligibility factors for accessing the CCL, but as mentioned earlier, no country has yet applied for CCLassistance.

Potential incentive channel number three is the regulatory channel. Bank loans to countries implementing the standards could qualify for a preferred risk weight under the revised Basel Capital Accord (which sets minimum capital requirements for internationally active banks). In fact, the proposed revision of that accord does stipulate that countries can't get the best risk weight unless they are judged to be implementing several of the key standards. Again, however, this still seems to be a way off since the

revised accord has not yet been agreed upon.

The U.S. Treasury and the G-7 Finance Ministers look to be on the same page on where they want to go with the standards. In brief, they are encouraging countries to sign up for assessments of compliance with the standards and to allow the results to be published; in addition, they are encouraging the IMF to identify which standards should have the highest priority for which countries. They are also asking the FSF to see if there are further supervisory and regulatory incentives that would promote observance of the standards.

The Meltzer Report (2000) took a different tack. It recommended that financial standards should be set by the Bank for International Settlements (BIS) and that implementation of standards—and decisions to adopt them—should be left to domestic regulators and legislators.

In contrast, the CFR Report (1999) called on the IMF to monitor countries' compliance with standards (at least the ones that fall into its core competence) and to charge lower interest rates to countries that make better crisis prevention efforts, where implementation of standards would be one of the key elements in "crisis prevention efforts." Furthermore, the report urged that this risk-based insurance premium apply to all the fund's nonconcessional lending—not just to the CCL. In addition, the CFR Task Force recommended that the fund publish its evaluations of compliance with standards so that the markets could take note.

Implementation of international financial standards is one of the areas in IFAreform that has shown the most progress over the past few years.

The Meltzer Report (2000) recommendation to have domestic regulators evaluate compliance with standards is a bad idea. It is very unlikely that such self-evaluations will be objective rather than self-serving. In this connection, a survey sent to 129 countries in 1996 by the Basel Committee on Banking Supervision is instructive; on element after element of banking supervision (from government-directed lending to loan classification procedures to independence of the supervisory agency—on and on), a very large proportion of respondents ranked themselves as doing a very good job—and this despite the sorry record of banking crises over the preceding twenty years, to say nothing of the banking crises to come (just a year or so after the survey) in Asia.[24] I would argue instead that assessment of compliance with international financial standards should continue to be done by more objective international agencies with the relevant expertise (at least until the private sector is prepared to take up that task in a serious way). The recent decisions by the FSF and other official agencies to publicly "name names" of noncomplying economies suggests that they have "crossed the Rubicon" on this issue. This should increase the market payoff for implementing the standards.

The next bottleneck that needs to be tackled is better coordination among the evaluating agencies. It would be very helpful to have assess-

ments on all twelve of the key standards included in the compendium collected together and published in one place, say in the IMF's Article IV consultation report. In addition, the IMF, World Bank, and the FSF should move forward to strengthen the Bretton Woods and regulatory incentive channels for compliance with standards.

Concluding Remarks

More has been happening on reform of the IFA over the past five years than many people think. But progress has been quite uneven. Progress has been considerable in the setting and implementation of international financial standards and in transparency and disclosure (including the transparency of the IMF itself). Currency regimes for emerging economies have likewise improved, although that has been forced by the market—not by the official sector. Judging from recent pronouncements, the redesign of fund lending facilities also appears to be moving in the right direction. Much less progress has been made, however, on PSI and on refocusing the mandates of the IMF and the World Bank. That is where the priority needs to be over the next year or two.

On PSI, the top priority should be to get in place a sensible system of deposit insurance for banks in emerging economies. That is where the bulk of the lender moral hazard problem now resides. Next in line on PSI should be efforts to cut back on the size of IMF rescue packages for country crises and to move toward a more rules-based approach for defining systemic crises and for activating larger resources. More attention to CACs and creditor committees and to internationally sanctioned standstills (in extreme cases) would also pay dividends.

Former fund managing director Michel Camdessus was fond of saying, "The fund should do more and do it better." I would argue the fund should do less so that it can do it better. Comparative advantage should apply to the IFIs as well as to their member countries. A way needs to be found to resist the constant calls on the fund to become a "general purpose organization." Its core competence in monetary, fiscal, exchange rate, and financial sector policies should be protected; this will require the cooperation of the membership—and particularly of the largest shareholders. It will also require firmness from the fund's new managing director to see that safeguarding financial stability is paramount among the fund's objectives. None of this means that the fund should not take account of social needs in its programs or that the fund cannot provide good service to its poorer member countries (any more than making price stability the key objective of central banks means that they should ignore the real economy or financial stability). But it does mean that both the fund and the World Bank have to allow their 19th Street partner to lead in the areas of its comparative advantage, as well as rationalize their lending windows.

Postscript

Since this paper was written, there have been several developments in the IFAworth mentioning.

In mid-September 2000, the IMF's Executive Board agreed to make some changes to the fund's nonconcessional lending windows. The main components of this so-called facilities initiative are as follows:[25] (1) repayment maturities have been reduced for standby arrangements (from the previous 3.25–5 years to 2.25–4 years) and for EFF arrangements (from the previous 4.5–10 years to 4.5—7 years); (2) an interest rate surcharge has been added for "large" IMF loans (100 basis points at 200 percent of quota, rising to 300 basis points at about 300 percent of quota); (3) an effort has been made to increase CCL's attractiveness to borrowers by reducing the interest rate surcharge (from the previous 300 basis points to 150 basis points), by reducing slightly the commitment fee, and by both making monitoring arrangements less intensive and the activation review less demanding; (4) access to the EFF is to be made more selective, confining it to cases where longer-term financing is clearly required; and (5) the fund will engage in "post-program monitoring" of economic developments and policies for countries that have credit outstanding to the fund of 100 percent or more of quota at the end of an IMF program.

On September 26, 2000, the IMF's new managing director, Horst Kohler (2000), delivered his long-awaited annual meeting speech. He reiterated his view that "less could be more" on fund conditionality, although he provided fewer specifics than expected on just how this could be done.

Acknowledgements

I am indebted to Trond Augdal for superb research assistance and to C. Fred Bergsten, Stanley Fischer, Mohsin Khan, John Williamson, and participants in the KIEP conference for helpful comments on an earlier draft.

Notes

1. By the IFA, I mean the institutions, policies, and practices associated with the prevention and resolution of banking, currency, and debt crises, primarily (but not exclusively) in emerging economies.
2. For a detailed list of ongoing reform activities in the IFA, see IMF (2000). An integrated analysis of IFA reform issues can be found in Eichengreen (1999) and Council on Foreign Relations (1999). Williamson (2000) presents an analysis of reform proposals, including several made by groups not covered in this paper.
3. See Goldstein et al. (2000)
4. See, for example, Helleiner (1987), Camdessus (1987), and Conable (1987).
5. One of the reasons the rescue package for Korea was so large relative to its quota is that Korea's quota is so small for its economic size.
6. See Zhang (1999) and Eichengreen and Hausman (2000).
7. See Mussa (1999). He refers to "indirect" moral hazard as a situation where international financial support facilitates moral hazard by national governments. The Meltzer Report (2000) has this in mind when it charges that the IMF "did little (in Asia) to end the use of the banking and financial systems to finance government-favored projects, eliminate so-called 'crony capitalism' and corruption, or promote safer and sounder banking and financial systems" (33).
8. See Brealey and Kaplanis (1999).
9. On the importance of collection action clauses and creditor steering committees, see Eichengreen (1999).
10. These performance criteria are meant to be within the control of the borrower. If unexpected developments intrude that prevent the borrower from meeting the performance criteria, the borrower may be granted a "waiver" to draw anyway.
11. There is also an issue of whether fund conditionality should supercede any conditionality that would be linked to crisis lending from "regional" official crisis lenders (such as an Asian monetary fund). I have not taken up this issue here because it is discussed in other papers prepared for this conference.
12. See, for example, Meltzer (1999).
13. The Meltzer Commission had eleven members. Six of those (Allan Meltzer, chairman; Charles Calomiris, Tom Campbell, Edwin Feulner, Lee Hoskins, and Manuel Johnson) were appointed by the congressional Republicans; the other five members (Fred Bergsten, Richard Huber, Jerome Levinson, Jeffrey Sachs, and Esteban Torres) were appointed by the congressional Democrats. In the end, eight members (all six Repubican appointees, Jeff Sachs, and Richard Huber) voted for the report, and four members were opposed (including Richard Huber, who supported both the majority and minority reports).

14. My IIE colleague, C. Fred Bergsten, who was a member of both the Meltzer Commission and the CFR Task Force, maintains that both the undefined "proper fiscal requirement" and the systemic override (that allows assistance to countries that don't meet the prequalification criteria if there is a threat to the global economy) were added to the Meltzer Report at the last minute in an attempt to reduce the impact of the joint dissent.
15. Bergsten (2000) made essentially the same point in earlier testimony on the Meltzer Report before the Senate Committee on Banking, Housing, and Urban Affairs.
16. See Goldstein (1998).
17. Another interesting proposal to counter "political" pressures on fund lending decisions is to make executive directors on the fund's Executive Board "independent" of their national governments—following the lead of independent national central banks; see DeGregorio et al. (1998). The rub here is that I see no evidence that the larger industrial countries want to move in this direction.
18. Under the fund's existing Articles of Agreement, countries can choose any currency regime (with the exception of linking the currency to gold). But this does not mean that the fund cannot ask countries to follow a particular exchange rate policy as a condition for fund financial assistance.
19. A sizeable minority (eleven of twenty-nine members) of the CFR Task Force also took the view that there could be no stability for emerging-economy currency regimes and no international financial stability more broadly until there was greater stability in G-3 currency relationships. Toward that end, they proposed a "target zone" plan for the G-3 currencies. The majority of the task force, however, rejected this approach.
20. See, for example, Calvo and Reinhart (2000).
21. Only one of the twenty-nine members of the CFR Task Force (namely, William Rhodes of Citigroup) dissented from the private sector burden-sharing and CAC recommendations.
22. By a "good" deposit insurance system, I mean one that puts large uninsured creditors of banks at the back of the queue when failed banks are resolved, that places stringent accountability conditions on senior economic officials when they invoke "too large to fail," and that gives banking supervisors better protection against strong political pressures for regulatory forbearance.
23. See World Bank (2000).
24. See Goldstein (1997) for a discussion of the survey results.
25. For further details, see IMF (2000b).

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5. Reforming the International Financial Architecture: The East Asian View

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Introduction

The foundations of the international financial architecture were shaken by the Mexican crisis, which was followed by a much more severe crisis that struck Asian economies and other emerging market economies. Today, it looks like the Leaning Tower of Pisa. Like the Leaning Tower of Pisa, the international financial architecture has attracted a lot of curious onlookers and analysts wanting to offer solutions to fix it. If we go over the voluminous articles on reforming the international financial architecture, we cannot but agree with Eichengreen's (2000) observation that this topic has become a major industry. Indeed, several reports from individuals, research institutions, fora, NGOs, and official national and international bodies come out every day. It is perhaps the only industry today whose growth rivals that of e-commerce. This is not to say that nothing concrete yet has been done to reform the international financial architecture. On the contrary, if we go over the latest report of the deputy managing director of the International Monetary Fund (IMF) circulated on April 12, 2000, we can immediately observe that much has already been accomplished to reform the international financial architecture. Judging from the issues currently being intensely debated, however, it seems that there are still a lot of issues related to the strengthening of the international financial architecture that have remained unresolved.

This paper discusses current issues on reforming the international financial architecture in the East Asian context. The questions it seeks to answer are: What are the desirable ways to reform the international financial institutions (IFIs)? What is likely to be achieved? In light of the experience of the Asian financial crisis, can the present discussions, which are taking place mainly at G-7 and G-20 meetings, prevent future crises in an effective way?

To answer the questions posed above, we need to distinguish developing economies' views in general and East Asian views in particular from the G-7-led views. While it is not difficult to assemble the G-7-led views since most of them can be culled from the various reports of G-7 and G-7-led institutions, the same cannot be said of the developing economies' and East Asian views since there is no single institution like the G-7 that organizes and communicates their views. My approach, therefore, is to gather relevant papers produced by various groups, fora, and individuals that, in my judgment, tend to reflect the developing economies' views in reforming the international financial architecture. Although some of the developing economies' and East Asian views on certain issues have converged,

their views on other issues have differed. I therefore try to put emphasis in this paper on similar views expressed by developing economies and, in certain instances, mention some of the divergent views.

The next section briefly reviews the recent performance and prospects of East Asian economies with special focus on the crisis-hit economies. The third section discusses the G-7-led views and developing economies' views as well as East Asian economies' views on issues related to reforming the international financial architecture. Considering the wide array of issues being debated, I focus only on what I think are the major ones that directly relate to East Asian views on reforming the international financial architecture. The last section attempts to make a general assessment of the effectiveness of the present discussions in preventing, managing, and resolving future crises.

Recent Performance and Prospects of East Asian Economies

The crisis that struck in mid-1997 had interrupted the consistently high growth rates enjoyed by East Asian economies in the previous decade. Hardest hit by the crisis were Indonesia, Hong Kong, Thailand, Korea, and Malaysia (see Table 5.1). The stabilization measures adopted by crisis-hit countries successfully brought down the inflation rate in 1999 (Table 5.2) and paved the way for the remarkable recovery of their economies. The resumption in growth enabled East Asian economies, particularly the crisis-affected economies, to quickly rebuild their foreign exchange reserves to a level much more comfortable than the precrisis levels (Figure 5.1).

Table 5.1. Real GDP growth rates of East Asian economies, 1996–2001 (in %)

Countries	1996	1997	1998	1999	2000	2001
Northeast Asia:						
China	9.6	8.8	7.8	7.1	7.3	7.6
Hong Kong, China	4.6	5.0	–5.1	2.9	6.8	4.7
Japan	5.1	1.6	–2.5	0.3	1.2	2.1
Korea	6.8	5.0	–5.8	10.7	8.5	5.9
Chinese Taipei	6.1	6.7	4.6	5.7	6.3	6.8
Southeast Asia:						
Brunei Durussalam	3.5	4.0	1.0	2.5	na	na
Indonesia	7.8	4.9	–13.7	0.2	4.2	4.5
Malaysia	10.0	7.5	–7.5	5.4	6.0	6.2
Philippines	5.8	5.2	–0.5	3.2	3.9	4.1
Singapore	7.5	8.5	0.4	5.4	6.5	5.5
Thailand	5.9	–1.8	–10.4	4.1	4.4	4.5
Vietnam	9.3	8.2	5.8	4.8	4.5	5.3

Note: Figures for 1996 to 1999 were taken from *APEC Economic Outlook 2000* (July 2000 draft report). Figures for 2000 to 2001 were obtained from PECC, *Pacific Economic Outlook,* 2000–2001 (2000).

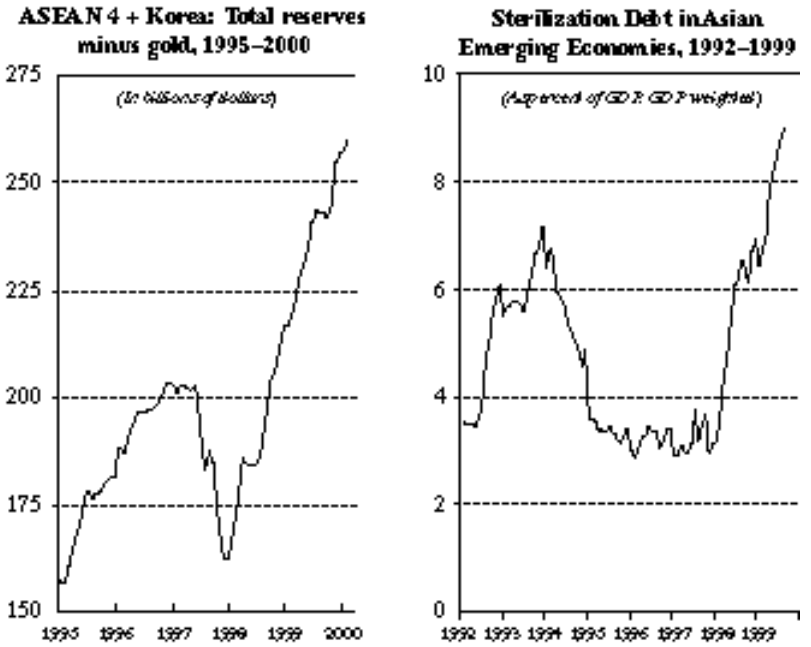


Figure 5.1. Macro policy regime—sustainability (*Source*: David C. L. Nellor 2000).

Table 5.2. Increases in CPI of East Asian economies, 1996–2001

Countries	1996	1997	1998	1999	2000	2001
Northeast Asia:						
China	8.3	2.8	–0.8	–1.4	0.5	1.5
Hong Kong, China	6.3	5.8	2.8	–4.0	–2.2	3.2
Japan	0.1	1.8	0.6	–0.3	–0.4	–0.1
Korea	5.0	4.4	7.5	0.8	2.8	3.2
Chinese Taipei	3.1	0.9	1.7	0.2	2.2	2.5
Southeast Asia:						
Brunei Durussalam	2.0	1.7	–0.4	–0.1	na	na
Indonesia	6.5	10.3	77.6	8.7	8.5	6.0
Malaysia	3.5	2.7	5.3	2.8	2.8	3.2
Philippines	9.1	5.9	9.8	6.6	6.0	6.5
Singapore	1.4	2.0	–0.3	0.0	1.5	2.0
Thailand	5.9	5.6	8.1	0.3	2.0	3.0
Vietnam	4.5	3.6	9.2	0.0	7.5	9.5

Note: Figures for 1996 to 1999 were taken from *APEC Economic Outlook 2000* (July 2000 draft report). Figures for 2000 to 2001 were obtained from PECC, *Pacific Economic Outlook*, 2000–2001 (2000).

Forecasts made by the Pacific Economic Cooperation Council (PECC) suggest that the recovery of crisis-hit and other East Asian economies will likely be sustained in 2000 and 2001, with GDP growth rates ranging from 1.2 percent to 8.5 percent and 2.1 percent to 7.6 percent, respectively. Of course, these forecasts are anchored on the assumption that East Asian economies, particularly those badly hit by the crisis, will continue the reforms they started in 1997 to strengthen their economies and that no negative external shocks (e.g., recession in the United States and Europe, further increases in the price of oil, etc.) will occur in the near term. Indeed, there are indications that the recovery currently enjoyed by East Asian economies is still fragile. First, the recovery of crisis-hit economies was partly underpinned by expansionary fiscal measures (pump priming and rescue operations of ailing private financial institutions and corporations), resulting in higher budget deficits (Table 5.3). These countries will have to address this problem in the next two years to build a strong foundation for sustained recovery. Second, nonperforming loans of commercial banks of crisis-hit countries have still remained at uncomfortable levels, constraining banks to expand credit to the private sector (Figure 5.2). Third, after rebounding in 1999, private capital flows had considerably slowed down in the first two quarters of 2000 (Figure 5.3). Fourth, the growth in exports, which is largely powered by the electronics sector, can be undermined by the continued softening in the demand for electronic products in the United States (Figure 5.4).

Table 5.3. Fiscal balance as percentage of GDP

Year	Indonesia	Rep. of Korea	Malaysia	Philippines	Thailand
1996	1.2	0.0	1.1	–0.6	1.0
1997	–0.7	–1.7	2.4	–0.8	–1.7
1998	–1.9	–4.4	–1.5	–2.7	–2.9
1999	–2.3	–3.5	–3.5	–4.4	–3.7

Source: Asia Recovery Information Center, ADB (2000)

Table 5.4. Selected financial market indicators (percentage change from end of December 1999 to July 5, 2000)

Countries	Exchange Rates	Stock Market Indices	Overnight Interbank Rates
Indonesia	–23	–24	0.3
Rep. of Korea	2	–19	0.35
Malaysia	0	0.4	0.01
Philippines	–8	–28	1.3
Singapore	–4	–16	na
Thailand	–5	–34	2.5

Source: Asia Recovery Information Center, ADB (2000)

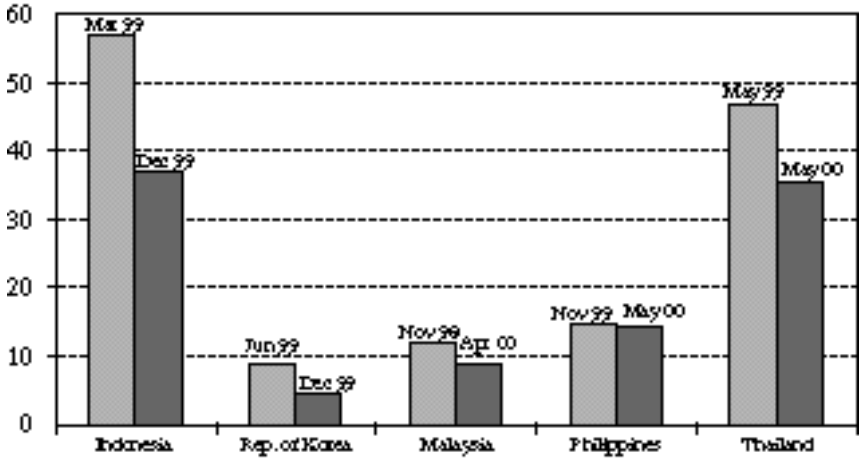


Figure 5.2. Non-performing loans of commercial banks (as % of total commercial bank loans) (*Source:* Asia Recovery Information Center, ADB 2000).

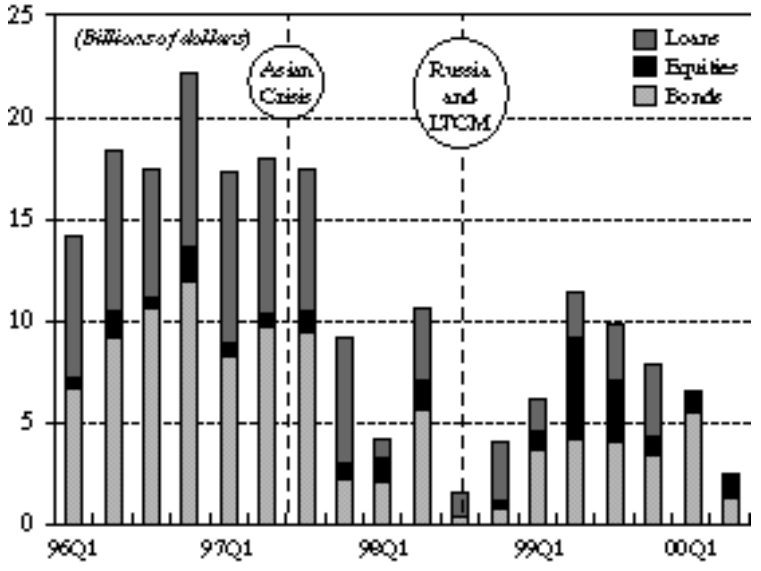
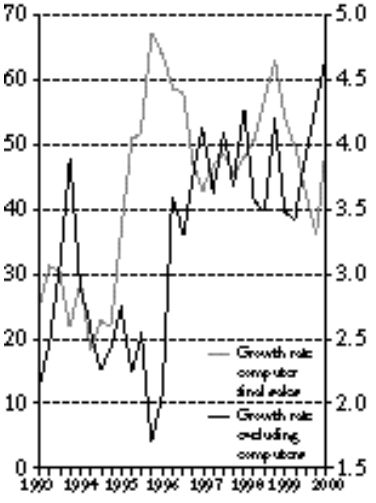


Figure 5.3. Private capital flows (*Source:* David C. L. Nellor 2000).

Most recently, East Asian financial markets are again undergoing some turbulence. With the exception of Korea and Malaysia (which fixed its exchange rate), Asian currencies depreciated from a low of 4 percent in Singapore to a high of 23 percent in Indonesia during the first half of 2000 (Table 5.4).[1] Stock market indices of Indonesia, Korea, the Philippines, Singapore, and Thailand plunged by 16 percent to 34 percent. This has exerted a lot of pressure on domestic interest rates, which already started to inch up for most of the East Asian countries during the indicated period. The Asian Development Bank (ADB 2000) attributed the recent turmoil in the Asian financial markets to both external factors—specifically the rising U.S. dollar interest rates—and internal factors, such as perceived lack of progress with ongoing corporate and banking restructuring and other reforms and political instability in the case of Indonesia and the Philippines. In response to the recent financial market turmoil, East Asian economies have introduced additional measures to curb speculative attacks on their financial markets.[2] Although ADB thinks that the region is not undergoing a "mini-crisis" due to strong economic fundamentals and healthy foreign exchange reserves, still the volatility in the exchange rates and rapid deterioration in the value of Asian equities during the first half of 2000 suggest the need for East Asia to take a harder look at the ongoing reforms of the international financial architecture. The "V"-shaped recovery of crisis-hit countries in East Asia should not be allowed to breed complacency.



Growth 2000 YTD

	Total Exports	Non-Electronics	Electronics	Electronics % Total Exports
Indonesia	39	30	142	13
Korea	27	22	34	38
Malaysia	18	18	17	47
Philippines	11	23	1	50
Thailand	29	31	21	19

Figure 5.4. External environment—U.S. (*Source:* David C. L. Nellor 2000).

The Major Issues Being Debated

I take as my starting point Culpeper's (2000) definition of international reform. He defines it as "any reform to relationships between participants (public or private) in the international market, or to international institutions governing those relationships." However, I would like to stretch the definition to include domestic reforms, which are required due to changes in international relationships so that each participant in the global economy can fully benefit from a stable international financial system. The reforms are needed because cracks have appeared in the domestic financial systems of participating economies, in cross-border financial transactions, and in the international financial institutions. For East Asia, the first major question is: Who is going to write the job specifications for repairing and strengthening the international financial architecture? In other words, what should be the appropriate governance structure for reforming the international financial architecture? The second major question is: What should be the job specifications for repairing the international financial architecture? In other words, what specific issues should be addressed to strengthen the international financial architecture? From the perspective of developing economies in general and East Asia in particular, the major issues are: capital account liberalization and management of capital flows, exchange rate regime, international standards, strengthening the financial system and capital adequacy framework, the role of highly leveraged institutions (HLIs) and credit rating agencies, private sector involvement, the role of the Bretton Woods Institutions (BWIs), and regional financial arrangement (RFA). Each of these major issues will be discussed in this section.

Governance Structure for Reforming the International Financial Architecture

The Bretton Woods institutions (BWIs) have been overseeing the international financial architecture since their creation in 1944. They have been adapting to changes in the international financial market. The World Bank was originally established to finance postwar reconstruction in Europe. When that mission was completed, it turned to promoting economic development in developing countries by funding projects and supporting structural reforms. The IMF, on the other hand, was originally designed to support the Bretton Woods system of fixed exchange rates. When the system collapsed in the 1970s and a number of countries, including the major industrial nations, adopted a floating rate system, the IMF turned to assisting countries with flexible exchange rates. In the 1980s, a number of Latin American countries encountered difficulties in repaying their loans to banks in developed countries. The IMF played a major role in coordinating orderly restructurings of government debts owed to the private banks.

The 1990s posed new challenges to the BWIs. With globalization, financial markets including those of emerging economies have become more integrated with the rest of the world. Cross-border movements of capital had grown rapidly in the last decade, greatly benefiting emerging economies. However, sudden shifts in investor confidence caused a massive reversal of capital flows, immediately plunging several emerging market economies into a severe balance-of-payments crisis. Clearly, the crises that recently appeared in Mexico and East Asia, which later on spread to Brazil and Russia, emanated not from the current account but from the capital account of the balance of payments. As pointed out by Paul Martin, the finance minister of Canada (2000b), these crises arise in stunning regularity, more virulent and contagious than in the past, and they have the potential to disrupt the entire international financial system. Understandably, the IMF's traditional instruments that worked well in dealing with current account imbalances were ineffective in dealing with crises originating from the capital account (Yoshitomi and Ohno 1999). In addition, the resources required to prevent and resolve such crises quickly were far greater than the IMF could provide.

There was, therefore, a clear need to reform the international financial architecture. As already mentioned, a lot of proposals on this issue have been put forward. The issue is: Who should take the lead in reforming the international financial architecture? More specifically, who should set the agenda, provide the environment for open, frank, and intelligent debate on the relevant issues, organize the decision-making process, and implement the decisions being made? Ideally, the IMF should take the driver's seat in reforming the international financial structure, but its legitimacy has been undermined by its poor track record in forestalling and managing the recent crises. In addition, its huge bureaucracy can easily deflect the real issues and slow down the reform process.

Right after the Mexican crisis, the G-7 took this challenge during the Halifax meeting in June 1995. This is significant for the international community in the sense that the G-7, which consists of seven highly industrialized countries, of which five have the largest quotas and are appointed members of the Executive Board of the IMF, can greatly influence the form and substance of the reform agenda (see Table 5.5). Their initial agenda for reform was modest, focusing on issues such as establishing an early warning system and strengthening surveillance, establishing a new, quick-disbursing financing facility at the IMF, and strengthening financial market supervision and regulation. As the debates on reforming the international financial architecture intensified, the G-7 responded by widening their reform agenda and in some cases loosening up their views on certain hotly debated issues, such as capital controls and regulation of HLIs. As observed by Porter (2000), "While much of the G-7 involvement was initially limited to general statements of intention, it subsequently became

increasingly detailed, specific, and associated with identifiable outcomes."

The dominance of the G-7 in the debate and its strong influence on the BWIs have accelerated the reform process, especially right after the Asian crisis.[3] This has alarmed many developing economies, which feel

Table 5.5. Members of G-7-led institutions and G-22.

G-7	G-20	Financial Stability Forum	G-22
Members: 1. Britain 2. Canada 3. France 4. Germany 5. Italy 6. Japan 7. United States	Members: 1. Argentina 2. Australia 3. Brazil 4. Canada Chair 5. China 6. France 7. Germany 8. India 9. Indonesia 10. Italy 11. Japan 12. Korea 13. Mexico 14. Russia 15. Saudi Arabia 16. South Africa 17. Turkey 18. United Kingdom 19. United States 20. European Union	Members: (40) 1. Chairman (1) 2. National Authorities (25)—three from each of the G-7 countries (treasury, central bank, and supervisory agency), and one from Australia, Hong Kong, Netherlands and Singapore 3. International Financial Institutions (6)—IMF (2), WB (2), BIS (1), and OECD (1) 4. International Regulatory and Supervisory Groupings—Basel Committee on Banking Supervision (2); International Organization of Securities Commissions (2); and International Association of Insurance Supervisors (2) 5. Committee of Central Bank Experts (2)—Committee on the Global Financial System (1) and Committee on Payments and Settlement Systems (1)	Members: 1. Britain 2. Canada 3. France 4. Germany 5. Italy 6. Japan 7. United States 8. Russia 8. Argentina 9. Australia 10. Brazil 11. China 12. Hong Kong 13. India 14. Indonesia 15. Malaysia 16. Mexico 17. Poland 18. Singapore 19. South Africa 20. South Korea 21. Thailand
First Meeting: November 1975	First Meeting: December 1999	First Meeting: April 1999	First Meeting: February 1988

Note: Finance ministers and central bank governors of the G-20 member countries attended the first meeting held December 15–16, 1999, in Berlin, Germany. The heads of IMF, WB, and the Development Committee of the IMF and WB also attended the meeting.

that they are being marginalized in the most important reform process that will have far-reaching consequences on their economies (e.g., G-24 1998a). Also, as clearly demonstrated by the Asian crisis, the economic activity of developing economies has substantial influence on the global economy. There are those who defended the G-7. For example, Dale (1998) argued that "the G-7 was never meant to be representative, but to be a caucus of like-minded advanced democracies." It would make a lot of difference if they were pushing for a reform agenda that would have implications worldwide and would require other countries to implement.

In response to the above criticisms, the United States took the initiative of forming an ad hoc group of twenty-two countries (G-22), which included the G-7 member countries, Australia, and fourteen developing and emerging market economies. This was the first informal forum of highly industrialized and developing economies that discussed world financial problems. It turned out, however, that its agenda for reforms was very narrow, focusing mainly on what developing countries should do to reduce vulnerability to a crisis (see Annex A).

In 1999, the G-7 created what Paul Martin called two permanent "virtual" institutions, namely the Financial Stability Forum (FSF) and the G-20, which replaced the U.S.–initiated ad hoc G-22. The FSF was designed to bring together with the G-7 all the international bodies that have something to do with international financial regulation (see Annex B for details). In other words, it will be dealing with highly technical issues of the international financial architecture (see Annex C for the initial tasks). This forum includes a few East Asian economies—namely Hong Kong and Singapore—that are *actively participating in the global financial markets.*[4] In its third meeting held in Singapore in March 2000, the FSF endorsed the recommendations of the three working groups on HLIs, capital flows, and offshore financial centers, and the G-7 finance ministers adopted them.

The G-20, on the other hand, was created in fulfillment of the commitment by the G-7 leaders at the June 1999 Summit meeting at Cologne "to establish an informal mechanism for dialogue *among systematically important countries within the framework of the Bretton Woods institutional system*" (emphasis added).[5] It has a broad mandate, which is to promote discussion, study, and review of policy issues among industrialized countries and emerging markets with a view to promoting international financial stability (G-20 1999). Accordingly, the G-20 will fill the need for representation from emerging markets in a forum that will discuss virtually all major aspects of the global economy or international financial system (Martin 2000a). Handpicked by the G-7, the members of the forum represent more than 85 percent of the world's population and 65 percent of the world's gross domestic product (Martin 1999).

In its first meeting in Berlin in December 1999, the G-20 agreed to a focused agenda aimed at reducing vulnerabilities to international financial crises. The four priority areas are:

- A comprehensive stock-taking of progress made by all member nations in reducing vulnerabilities to crises;
- An evaluation by countries of their current compliance with international codes and standards in the areas of transparency and financial sector policy;
- The completion of Reports on Observance of Standards and Codes (Transparency Reports) and Financial System Stability Assessments by the IMF with the cooperation of the World Bank; and
- An examination of differing exchange rate regimes and their role in cushioning the impact of international financial crises.

Although the fora were designed as deliberative rather than decisional institutions, still, the two permanent "virtual" institutions are expected to dominate the debate and decisions to be made by international bodies to reform the international financial architecture. Understandably, this has drawn some reactions from developing countries, particularly those that have not been included in both institutions. They raised three issues: the appropriateness of the fora, representation in said fora, and the manner of selecting representatives. For instance, the G-24 (2000) states that:

> Ministers are concerned about the increasing role being taken in international monetary and financial affairs by international fora other than the BWIs in which the representation of developing countries is limited. The work of these fora has a direct bearing on developing countries. Therefore, Ministers urge that such issues should be considered within the BWIs, given their universal membership, and that agreements be reached in their decision-making bodies.[6]

Prime Minister Mahathir also questioned the lack of representation and manner of selecting the representatives to the two institutions, saying that the G-7 only wanted to get people who can agree with them (Bangkok Post 2000). He was, therefore, pessimistic about what both fora could achieve. The adequate representation of emerging market economies in said institutions is important in determining the agenda for reforms and in ensuring their acceptance of the needed reforms. For Prime Minister Mahathir, the G-20's agenda should not be limited to promoting information exchange and coordination among national authorities, international institutions, and international regulatory or relevant expert groupings but should pay greater attention to the need to address volatility of capital flows, particularly through direct regulation of HLIs.

Capital Account Liberalization and Capital Controls

It has been widely held that the process of globalization will continue and that presently closed economies will eventually have to embark into full current account and capital account convertibility. One of the important lessons learned from the Asian crisis, however, is that for a country to benefit from globalization, the capital account should be carried out in an orderly and well-sequenced manner in tandem with the degree of development of the domestic financial sector and supervisory regime. While there is consensus on this issue, there are also differences in views as to how best to approach it. The G-7 wanted to amend the IMF Articles to give them a specific mandate to promote capital account liberalization. In contrast, Jalan (1999) and the UN Task Force (1999) argued for the preservation of autonomy of developing and transition economies with regard to capital account issues. It is to be noted that a significant number of member countries had already liberalized their capital account before the Asian crisis. The IMF (2000c) has been conducting surveillance of capital account development under Article IV consultations and has acknowledged that there is no single approach to ensure success of liberalizing the capital account.

There is now broad international consensus that excessive short-term inflows can be a source of potential vulnerabilities. But there is still a debate on how short-term inflows can be moderated or restrained. The FSF (April 2000e) has cautioned policy makers to consider first "a full range of policy alternatives before deciding to introduce controls," and if they decide to impose capital controls, they should "examine the objectives of such controls and assess their costs and benefits relative to alternative means of achieving the same objective." In contrast, the UN Task Force (1999) argued that "developing and transition economies should retain the right to impose disincentives or controls on capital inflows." For its part, the Asian Policy Forum (APF) pointed out that there is a need for Asian economies to impose controls on short-term flows while they are in the process of strengthening their financial systems. The G-24 has expressed the same view.

Regarding the means of controlling capital inflows, the UN Task Force is open to various instruments, including the imposition of various taxes on capital inflows. It considers these instruments to be *permanent* "as long as international financial markets remain volatile and domestic economic structures are weak." In contrast, both the FSF and APF consider only market-based regulations such as the Chilean type of capital control, which imposes unremunerated reserve requirements and minimum holding periods on capital inflows that could be varied depending on the magnitude of capital inflows and the general condition of the economy. They view this as *temporary* capital control that can be lifted once the domestic banking systems of developing economies are strengthened.

There is no consensus yet with regard to the need for imposing con-

trols on capital outflows. The FSF avoided discussing this issue, except to say that Malaysia's experience with this type of control deserves to be studied well. When applied during normal economic conditions, controls on capital outflows can act as controls on capital inflows. But during periods of massive capital outflows, such controls can be considered as a self-help defensive move that can substitute for an international bailout to stabilize the economy. In his assessment of the Malaysian model of levies on capital outflows, Sakakibara (2000) considered it successful in stabilizing the economy, which gave Malaysian authorities some breathing space to address weaknesses in its banking system and corporate sector. He pointed out that such controls do not make Malaysia a closed economy, as trade, investment, and portfolio investments have continued to take place in the country.

The effectiveness of the Malaysian type of capital controls hinges on the administrative capacity of regulatory institutions to strictly enforce the regulations and on a disciplined banking system. The level at which the exchange rate is fixed is important so as not to present opportunities for a parallel market to emerge. Transparency of the measures and efforts exerted to inform the general public of the measures can greatly help in improving the effectiveness of the controls. Finally, the credibility of these measures also depends on the efforts exerted by the authorities to strengthen the banking system. Yet the lessons that can be drawn from the Malaysian case are still incomplete. Malaysia's exit strategy is not yet clear and there is no guarantee that once an exit strategy is adopted, Malaysia can successfully manage it.

Exchange Rate Regime

It is now part of the conventional wisdom that the de facto dollar peg system adopted by many East Asian economies, along with massive inflows of capital, contributed to the Asian crisis. This, together with the emergence of the euro zone, has prompted policy makers to search for the most appropriate exchange rate regime for emerging market economies. The G-7, ASEAN, and the G-24 all agree that there is no single exchange rate regime that is suitable for all countries.[7] The appropriate exchange rate regime for a country may also vary over time depending on changes in economic conditions. The bottom line is that the exchange rate regime chosen by a country must be supported by sound, consistent, and credible macroeconomic policies. On closer look, however, the G-7 seems to be leaning toward greater flexibility in the exchange rates for developing economies when it calls on the international community to refrain from providing large-scale official financing for a country intervening heavily to support a particular exchange rate level, except in certain circumstances. In contrast, the ASEAN and G-24 insist that countries have the right to choose their own exchange rate regime and that the fund's financial

support to them should not be based on the choice of any particular exchange rate regime.

In the wake of the financial crisis, most East Asian economies have moved toward a more flexible exchange rate regime, which could expose them to greater volatility in the exchange rates. As experienced by East Asian economies in the last few months, small open economies can become highly vulnerable to large swings in the major currencies. Thus, the Ministry of Finance and Economy of the Republic of Korea (1999) has pointed out that "maintaining exchange rate stability among major international currencies is becoming important for global financial stability, let alone that of crisis-hit countries." The G-24 (1999b) echoes this view but goes further by calling for "closer surveillance of the major industrial countries, including on the international implications of their domestic policies." On the premise that the objective of cooperation among three industrial economies is not to defend a certain exchange rate level but to promptly correct overshooting or misalignment, Gyohten (1999c) proposed the following multistage plan for ensuring stability of the exchange rates among the three leading currencies:

a. Monetary authorities of the United States, Japan, and the EU and the IMF will make a joint public commitment that they recognize stability among the three currencies—the dollar, yen, and euro—is desirable.
b. The four parties will establish a stabilization council to meet at least once every quarter, or more often as required by circumstances, to monitor international trends and determine if action is needed.
c. The council must reach a consensus on the reasonable or permissible level or range of exchange rates among the three currencies at that point in time.[8]
d. When the market exchange rate deviates from the agreed level or range and, judging from the speed or momentum of the deviation, there is a danger of overshooting, the four parties must decide on and execute a measure to prevent or correct the overshooting.

As regards exchange rate regime for other countries, the APF (2000) does not consider either the freely floating exchange rate regime or the currency board regime as appropriate for emerging Asian economies with open capital accounts. The track record of Asian economies in containing inflation does not give them any reason to adopt a currency board system at the expense of domestic monetary autonomy. On the other hand, a freely floating exchange regime has two potential problems: volatility of the exchange rates in the short term and misalignment of exchange rates in the medium term. East Asian emerging economies have still relatively underdeveloped financial markets, which offer very limited hedging possibilities and can be easily subjected to manipulation by large players. Surges in capital inflows can lead to an appreciation of the currencies, inducing more capital inflows

and hence more appreciation of their currencies. This exchange rate misalignment could last for some time and lead to misallocation of resources. In view of these, the APF has recommended that:

> *Emerging Asian economies with open capital account adopt a managed float exchange rate policy, which would be consistent with sustainable international competitiveness and also would allow sufficient exchange rate flexibility but would avoid a serious exchange rate misalignment caused by persistent capital movements. The exchange rate compatible with competitiveness can be based on an appropriately trade-weighted currency basket rather than a single currency, adjusted appropriately for differences in international inflation rates.*

This exchange rate regime is similar to that adopted by Singapore in 1981 (Peng 1999). Since Singapore has adequately dealt with the Asian crisis, it is certainly worthwhile for other emerging Asian economies to consider this exchange rate regime. Given the diversity of the foreign exchange rate regimes in East Asia, however, the Subcouncil on the Revitalization of the Asian Economy and Financial Markets (2000) of the Ministry of Finance of Japan has suggested that the countries in the region that want to move to the trade-weighted currency basket exchange rate regime should proceed in a coordinated manner. Otherwise, if only one country does it, there is a risk that it will be placed at a disadvantage in terms of international competition if the dollar weakens against other currencies in the basket.

For countries that still have a closed capital account, the APF has recommended that they pursue an adjustable peg exchange rate policy and give a high priority to building a strong banking system and sound long-term securities markets.

International Standards

A broad international consensus has already been reached with regard to the need for developing codes, standards, and practices that could strengthen the international financial architecture. Substantial progress has been made in this area in the last three years, especially in developing codes for enhancing transparency of the public and private sectors and multilateral institutions. The fund's codes of good practices on fiscal transparency and on transparency in monetary and financial policies have already been disseminated. The Basel Committee, IOSCO, and the IAIS have established core principles for supervision in their respective areas of responsibility. It is to be noted that many of the standards that have been developed, such as accounting, auditing, bankruptcy, and capital adequacy, need to be implemented at the corporate level.

The current debate on this aspect of reforming the international financial architecture centers on two issues: participation of developing economies and implementation. Developing economies have called for participation in international fora or bodies that formulate international

standards, which are going to be incorporated in their national regulatory and supervisory regimes and affect the way they conduct economic policies and monitor and supervise specific segments of the economy. These international bodies have recently progressed from standard setters for their members, which mainly consist of industrial countries, to global standard setters. This naturally raises questions on the representativeness of these bodies inasmuch as they expect their standards to be applicable to both developed and developing economies. Cornford (2000) cites the case of the Basel Committee's work on rules regarding capital adequacy.[9] The participation of developing economies in these bodies can certainly enhance the quality, credibility, and effectiveness of international standards.

As regards implementation, the G-7 is determined to promote the implementation of internationally agreed codes and standards. It sent a clear signal to the international community when it stated that:

> As part of policy review, they should enhance surveillance over the broad range of policies now understood to be crucial to financial stability. Countries should be encouraged to demonstrate their commitment to making rapid progress towards full compliance with existing international codes as part of IMF and World Bank conditionality when the IFIs extend loans or credits. (G-7 1999b)

It is worthwhile to emphasize the point that the G-7 wants *rapid progress toward full compliance* and inclusion of such standards in the World Bank and IMF *conditionality.* The same message was repeated in the July 2000 report of the G-7 finance ministers to the heads of state and government (G-7 2000b).

In contrast, developing economies prefer voluntary and gradual adoption of international standards rather than a faster one. The following statement of the G-24 (2000) articulates well this view: "While they welcome the development of international codes, standards, and best practices, Ministers consider that the scope of surveillance should not be extended to cover the observance of such standards and codes, which should remain a voluntary choice by each member." The same view is echoed by the Ministry of Finance and Economy of the Republic of Korea (1999).

The adoption of international standards must be in step with the capacity of national regulatory authorities, which can only be built over time through training. It should be noted that it took developed economies a very long time to develop the capacities of their regulatory authorities, which even now are not a guarantee that theirs is a completely fail-safe system for preventing a financial crisis. The recent LTCM debacle amply demonstrates this point. Recognizing this problem, the G-7 countries have expressed their keen interest in working together and with the IFIs, the FSF, and international regulatory and supervisory bodies to provide technical assistance and training to emerging market and developing

economies in this area (G-7 2000b). But realities in developing economies must be considered in any program to encourage them to adopt the international codes and standards. As Cornford (2000) pointed out, "the problems for national policy are not limited to expanding training. As supervisors acquire the new skills (which will often include most or all of those required of auditors, for example), the public sector will often find itself competing for their services with banks and accounting firms capable of offering substantially higher remuneration." It is noteworthy that some of these private firms are multinational corporations and financial institutions that have gained entry to the newly liberalized markets of emerging market economies.

To encourage countries to adopt international codes and standards, the Ministry of Finance and Economy of the Republic of Korea (1999) suggests that they be offered some incentives. One possible incentive is to link the participation by emerging economies in the FSF with their adoption of the most essential transparency standards. The G-7 seems to follow a hard-line approach. Aside from including the adoption of internationally agreed standards in the IMF/WB conditionality, it has also considered other measures, such as "moves by our regulators to consider a country's adherence to the range of relevant international standards, including international standards for banking supervision, as part of the prudential criteria used when considering market entry by foreign banks" (G-7 1999a). This will result in asymmetric market access in favor of developed economies.

When it comes to monitoring the adoption of the international standards, Jalan (1999) has emphasized the point that "it is also important that the manner in which these international standards are monitored does not degenerate into categorizing countries as performers and non-performers."

Capital Adequacy Requirements

The Basel Capital Accord of 1988 was designed by the Basel Committee on Banking Supervision (BCBS) to apply to the internationally active bank of its member countries. Within a span of ten years, a number of nonmember countries including emerging market economies had adopted the accord and applied it also to purely domestic-oriented banks.

The 1988 Accord was primarily concerned with minimum capital standards to cover credit risk. This was later revised to also cover market risk. With the rapid development and growing complexity of the international system, the BCBS feels that the bank's capital ratio calculated using the current accord may no longer be a good indicator of its financial condition. For developing economies, the relevant issue relates to the incentives that the accord was capable of providing to short-term interbank lending, a significant element of the volatile capital movements perceived as having contributed to the Asian crisis (Cornford 2000). In June 1999, the BCBS circulated its proposed new capital adequacy framework, which consists of

three pillars: minimum capital requirements, a supervisory review process, and effective use of market discipline. Given its overriding goal, which is to promote safety and soundness in the international financial system and wide acceptance of the 1988 Accord, the BCBS is therefore right in saying that "the Accord is a corner stone of the current international financial architecture" (BCBS 1999). Unlike the 1988 Accord, the proposed new accord was developed with the intention that the guiding principles embodied in the three pillars will be generally suitable for any bank in any jurisdiction.

With regard to the first pillar, the BCBS proposal involves two approaches for risk weighting: the standardized approach and the internal ratings-based approach. The latter is more applicable to some sophisticated banks. The former, on the other hand, is much more relevant to developing and emerging market economies. The standardized approach proposes specific risk weightings for sovereigns, banks, and corporations. For banks, two alternative options are being offered: risk weighting based on risk weighting of sovereigns in which the bank is incorporated and risk weighting based on the assessment of the individual bank. In a nutshell, banks' capital asset requirements will be linked to external ratings prepared by international credit rating agencies.

The G-24 (1999b) has expressed some concerns about the new capital adequacy framework aimed at strengthening the soundness of the global banking system, fearing that it could result in more stringent conditions and impede access for developing countries to international capital markets. Indeed, this fear has some empirical basis. In their study using historical data on sovereign and individual borrowers, Ferri et al. (2000) found that:

a. Rating of banks and corporations in developing countries is less common, so capital asset requirements would be practically insensitive to improvements in the quality of assets, widening the gap between banks of equal financial strength in higher- and lower-income countries.
b. Bank and corporate ratings in developing countries are strongly linked to the sovereign ratings for the country and appear to be strongly related (asymmetrically) to changes in the sovereign ratings. Thus, capital requirements in developing countries would be exposed to the cyclical swings associated with the revision of ratings.

The authors conclude that the new framework would reduce the credit available to non-high-income countries and make it more costly, limiting economic activity. Also, bank capital needs in developing countries would be more volatile than those in high-income countries. Cornford (2000) has reached similar conclusions, but he emphasizes the point that the poor track record of credit rating agencies demonstrates that their ratings cannot be relied upon for setting risk weights under the standardized approach, especially since they tend to reinforce cyclical movements.[10]

Highly Leveraged Institutions (HLIs) and Credit Rating Agencies

HLIs' participation in the international financial markets grew tremendously in the 1990s. Being unregulated, their trading practices can have a significant impact on the financial markets of small open economies. It is not therefore surprising that the unregulated HLIs had figured prominently in the debate on the causes of the East Asian financial crisis. During the height of the Asian financial crisis, authorities in crisis-hit countries had pointed out the possible role played by HLIs in triggering and accentuating the reversal of capital flows and, therefore, called for strict regulations of these institutions. Apparently, developed countries did not pay much attention to this complaint until LTCM encountered serious difficulties, which could have further destabilized the already volatile international financial markets were it not for the quick rescue organized by the Federal Reserve Bank of New York.[11] Thus, policy makers in emerging market economies think that HLIs ought to be regulated. The issue, however, is how to regulate them.

ASEAN's (1998) position on this issue is that HLIs should be subject to regular and timely transparency and disclosure requirements. In their study, FSF examined two concerns related to the trading practices of HLIs. These are the potential systemic risks posed by HLI and HLIs' destabilizing impact on the markets of small and medium-sized open economies. Its recommendations, which the G-7 intends to promote for implementation, are as follows:

a. Better risk management by HLIs and their counterparts.
b. Better disclosure practices by financial institutions, including enhanced disclosure by HLIs and their creditors.
c. Enhanced regulatory and supervisory oversight by national authorities of financial institutions that provide credit to HLIs.
d. Enhanced national surveillance of financial market activity in view of concerns about systemic risk and market dynamics caused by HLIs' activities.
e. Review by leading foreign exchange market participants of existing good practice guidelines for foreign exchange trading and the articulation of model guidelines for possible adoption by market participants in smaller economies.
f. Improved market infrastructure.

It thus appears that ASEAN's position is incorporated in the G-7 position as far as the approach toward regulating HLIs is concerned. Others such as Leong (2000) and the UN Task Force (1999), however, have proposed that minimum prudential standards applied to bank transactions must also be extended to hedge funds. The Ministry of Finance and Economy of the Republic of Korea (1999) has pointed out that one of the lessons from the Asian financial crisis is the need for the financial supervisory authorities of the industrial countries to strengthen their prudential super-

vision of HLIs and their derivative transactions.

Wahl and Waldo (2000) think that the measures proposed by the FSF will allow HLIs to continue to exert their destabilizing effect on the financial system because:

- Derivatives continue to be an opportunity for exorbitant borrowing. Risk funds working with such leverages are not interested in risk management. An improved supervision would not change that because the fast creation of open positions can only be noticed afterwards.
- Once more, an international (regulation) problem is shifted to the national level. This stimulates a race between countries for the weakest regulation as a competitive advantage.
- Three-quarters of all hedge funds are located in offshore centers that lack the political will to implement the recommendations and improve documentation and supervision.

In their view, therefore, only direct regulation of HLIs can stop their potential risk.

The FSF may have anticipated this problem but did not pursue it further at this point. That is why it left the door open to possible direct regulation of HLIs if subsequent reviews found that the recommended measures were not adequately addressing the concerns identified.

The other institutions that attracted a great deal of attention during the Asian financial crisis were the international credit rating agencies. They seem to have influenced the decisions of foreign investors in developing economies, but their performance in Asia appeared to be bad. This can be gathered from the large and swift downgrading of crisis-hit Asian countries they made in a relatively short period.[12] Although credit rating agencies provide information to investors, not much is known about the procedures they use in making sovereign ratings. More importantly, "the inclusion of 'subjective' elements in their evaluation of sovereign risks has generated a procyclical pattern of risk evaluation, which has tended to promote first excessive investment in developing and transition economies and then huge and abrupt capital outflows" (UN Task Force 1999). Thus, developing countries have called for greater transparency in the rating process of international credit agencies (ASEAN 1998; G-24 1999b). In 1999, the APEC finance ministers asked deputies to survey credit rating agencies' rating methodologies and transparency practices. To date, the G-7 has not taken up this issue in its agenda for reforms of the international financial architecture.

Private Sector Involvement

Given the huge cross-border movements of predominantly private capital, there is now a widespread international agreement to involve the private sector in crisis prevention and management. This will reduce the moral

hazard problem present in previous IMF bailout programs and the need for IMF to provide a large amount of resources to restore stability in a crisis-hit country. The G-7 outlined in 1999 a framework for private sector involvement in crisis resolution that involves a broader range of tools (e.g., IMF lending into arrears, standstills, etc.) available to the international community to promote appropriate private sector involvement. It followed it up in 2000 by outlining additional measures (e.g., strong, continuous dialogue between debtors and their private creditors, collective action clauses to be encouraged by the IMF, etc.) to be implemented to move the process farther. The IMF (2000c) has noted two recent cases of successful private sector involvement through the restructuring of international sovereign bonds.

Developing countries went a step farther by proposing to amend Article VIII, Section 2(b) of the Articles of Agreement to allow the fund to sanction a temporary stay on creditor litigation in extreme situations to facilitate orderly debt restructurings (G-24 1999a). The UN Task Force (1999) argues that IMF's sanctioning of standstill can reduce the moral hazard problem on the part of borrowers and, if combined with the fund's lending into arrears, can give a crisis-hit country some breathing space while in the process of negotiating with its creditors. It also proposes an alternative, which is for the debtor country to declare a standstill unilaterally, but it must submit it for approval within a specified period to an independent panel whose sanction will give it legitimacy. For the G-7, standstills must be done in conjunction with the IMF's support for the debtor countries' policies and programs. Still another approach is to organize an ad hoc representative committee for debt workout as proposed by the Ministry of Finance and Economy of the Republic of Korea (1999). This prearranged mechanism, which consists of representatives from debtor and creditor governments, central banks of most G-7 countries, the IMF, and other relevant organizations, can be activated when needed and could recommend an automatic rollover of liabilities that would mature within the three months of IMF assistance.

Given the various options for "bailing-in" the private sector, the IMF (2000c) stresses the point that the precise form will have to be decided on a case-by-case basis.

The Bretton Woods Institutions

Despite calls from some quarters to abolish the IMF (e.g., Chari and Kehoe 1998) or reduce its role, there is widespread consensus among developed and developing countries to reform the institution so that it can play a key role in crisis prevention and resolution in this era of high mobility of international capital. Such consensus is well reflected in the key principles for reform of the IMF contained in the report from the G-7 finance ministers to the heads of state and government of July 2000 in Fukuoka, Japan (see

Annex D). There is an agreement not only on the need to increase IMF's resources so that it can readily deal with the threat of stability of the international financial system, but also on the need to improve its capacity to act as an international lender of last resort. This was done recently with the establishment of the New Arrangements to Borrow in 1997 and the 45 percent quota increase in January 1999, as well as the opening of the Supplemental Reserve Facility (SRF) in December 1997 and the Contingent Credit Line (CCL) in April 1999. There is also agreement on the need to do some "housecleaning" and "renovation" of IMF's facilities, which includes the fine-tuning of the recently opened CCL so that it can be "more attractive and operational for potential candidates" (Suarez 2000).[13]

Viewed from a historical perspective, the IMF now seems to have a much larger role and more comprehensive mandate in managing the international financial system than before. To be effective in carrying its mandate, the IMF's legitimacy must be well secured.[14] The G-7's approach to this issue is to strengthen the governance and accountability of the IMF. For instance, the Interim Committee of the Board of Governors on the International Monetary System was transformed in September 1999 into a permanent committee called International Monetary and Financial Committee and strengthened its role as the advisory committee of the Board of Governors. There is now an explicit provision for preparatory meetings of representatives of committee members (deputies). A permanent independent evaluation office inside the IMF has been established and is about to be made operational. The IMF is being encouraged to make its documents public.

While developing countries welcome such reforms, they want greater participation in the decision-making process at the fund, especially since many of the decisions to be made by the boards and committees will have a huge impact on their economies. More specifically, they want to have greater representation on the boards, with larger voting power so that "the institution's activities better reflect the views of the emerging market economies rather than the existing 'Washington' consensus" (Leong 2000). As Jalan (1999) has observed, "It is one of the ironies of the last forty years that although developing countries, as a group, have grown much faster than the developed countries over this period and their relative economic strength in terms of output and trade has increased substantially, their actual voting power in Bretton Woods institutions has tended to decline!" The present allocation of quotas and voting shares also does not take into account the fact that Japan's economic power has grown rapidly in the last forty years. Japan is a key player in East Asian economies and can help represent their interests in this institution. Thus, changes in the determination of quotas and voting shares to reflect the economic realities of member countries—particularly emerging East Asian countries and Japan—will give them a more powerful voice on the IMF boards.

Related to this, some important decisions specified in the IMF Articles

of Agreement require either 70 percent or 85 percent of the total voting power; other decisions are made by a majority of the votes cast. The United States, which currently has about 17 percent of the total voting power, can have effective veto power over major decisions of the fund's body.

"Enhancing transparency" is one of the phrases that has figured prominently in the debate on reforming the international financial architecture. For example, the "Report of G-7 Finance Ministers to the Köln Economic Summit" mentioned the IMF's Code of Good Practices on Fiscal Transparency, the draft Code of Good Practices on Transparency in Monetary and Financial Policies, and a number of measures to increase transparency in the fund's member countries' policies as well as its own operations. Mention was also made of the improvement of the transparency of IMF's actions and decisions. There is no mention, however, about enhancing the transparency in the selection of the heads of the Bretton Woods institutions. There seems to be an informal agreement between the United States and European countries that the president of the World Bank must be an American and the managing director of the IMF a European. In this regard, the G-24 (2000) has urged "the Executive Boards of the BWIs to design a process for the selection of the Managing Director of the IMF and the President of the World Bank that is transparent, involves the entire membership through the Executive Boards, and allows the selection of the best candidate from any part of the world."

The inadequate representation of developing economies on the boards of BWIs, the effective veto power of the United States, and the lack of transparency in the selection of the heads of BWIs all can undermine the legitimacy of these institutions worldwide. Developing economies are batting for the inclusion of these issues in the agenda for reforming BWIs and other key institutions in the international financial architecture.

Regional Financial Arrangement

The idea of having an Asian regional financial arrangement was inspired by the recent Asian crisis. First, it demonstrated that Asian countries can quickly raise resources within the region to assist a neighboring country in containing a crisis. Second, unlike previous crises, the recent crisis was highly contagious and was aggravated further by herd behavior of investors. This needs regional cooperation. Third, it took the IMF some time to fully understand the nature of the crisis under a regime of high capital mobility, as can be gathered from its strict conditionalities applied to countries encountering current account imbalances, and when it finally did understand, it was found not ready to provide the required resources to contain the crisis. Fourth, it clearly demonstrated the need for tighter surveillance of individual countries and the region as a whole and for developing an early warning system for the region, which could not be adequately provided by an international institution that has a global mandate. Fifth, it took developed countries a long time

to appreciate the global implications of the Asian crisis; in fact, this was not until other large developing countries much closer to their attention or interest began to feel the adverse effects of the Asian crisis.

The original idea of a self-help regional financial arrangement (RFA), which became popularly known as the Asian Monetary Fund (AMF), was proposed by Japan in August 1997. The resources that could be mobilized from Asian countries could be pooled together and used as a regional lender of last resort. This proposal was strongly opposed by the United States and European countries because it could undermine the discipline imposed by the IMF and might pose a serious moral hazard problem (Sakakibara 2000). China opposed it because of Japan's leadership in that effort (Goad 2000). But what was lost in the debate is the idea that, given the growing complexity of the global financial system, the international financial architecture could include a regional financial arrangement that will complement the role of an international financial institution. To borrow a metaphor, the task of strengthening the international financial architecture does not require only that the old edifice be repaired but that a new one should be added. Thus, the East Asian challenge brings home the point that building a regional financial arrangement is essentially part and parcel of the current effort to strengthen the international financial architecture. It implies that the regional financial arrangement must be designed in such a way that it can play a complementary role to the existing international financial architecture and contribute to the stability of the world financial system (Wang 1999; UN Task Force 1999).

Since then, other variants of the proposed regional financial arrangement have been put forward that attempted to address the concerns mentioned above. Shinohara (1999) recommends the establishment of the Asian Monetary Fund with the following functions: promoting policy dialogue, providing a mechanism for emergency support, and providing crisis prevention. Leong (2000) supports the proposal of establishing a stabilization fund like the AMF with a standby regional financial support mechanism to provide liquidity quickly to "hot spots" within the East Asian region to ward off speculative currency attacks. The APF (2000) proposes an RFA that would provide a *lender of last resort facility* together with the implementation of an *effective surveillance system* over Asian economies and *complement* the activities of the IMF through close collaboration with each other. The features of the APF's proposed RFAare:

a. A sufficient quantity of international liquidity to forestall a currency crisis should be prepared and, if needed, provided;
b. Upon satisfying surveillance criteria (e.g., macroeconomic policy, bank regulation and prudential measures, and international capital movements), access to the facility is immediately made available for the requesting economy; and
c. A new structure of "conditionalities" that could focus on strength-

> ening the financial sector should be considered that correspond appropriately to new capital-account crises and are carefully integrated with regional surveillance procedures that monitor key indicators related to capital account crises.

While Shinohara (1999) and Leong (2000) support the idea of having a permanent institution for the RFA, the APF prefers to have a minimalist institutional structure with a highly focused mandate so as not to duplicate the functions of an international lender of last resort. Wang (1999) brought up some possible contractual arrangements—such as regional arrangements to borrow and a bilateral swap arrangement—that do not necessarily need a permanent institution.

Given the political and economic realities in the region, ASEAN has been slowly building up the infrastructure for a regional financial arrangement to supplement the existing international facilities. The Chiang Mai Initiative launched in May 2000 is a significant step in the right direction. The ASEAN + 3 (i.e., Japan, China, and Korea) have agreed to strengthen regional surveillance in East Asia and expand the ASEAN Swap Arrangement that would include the ASEAN countries, and a network of bilateral swap and repurchase agreement facilities among them (ASEAN + 3 2000).

The attitude of the developed economies and the international community toward the establishment of a regional financial cooperation has changed recently. For instance, the latest report of the G-7 finance ministers to the heads of state and government (2000b) includes the following concluding statement on regional cooperation:

> Regional cooperation through more intensified surveillance can help contribute to financial stability by strengthening the policy framework at the national level. Cooperative financing arrangements at the regional level designed to supplement resources provided by the IFIs in support of IMF programs can be effective in crisis prevention and resolution.

Mr. Kohler, the recently appointed managing director of the IMF, expressed the same view:

> Regional initiatives can be very helpful in supporting sustained economic growth and stable financial relations among participating countries—which are precisely the goals that the IMF is tasked to promote, on a global scale, through its surveillance and financing responsibilities. (IMF 2000d)

Obviously, these views are significantly different from their previous views when the idea of establishing a self-help regional financial arrangement aimed at preventing and quickly resolving a liquidity crisis was first brought up by Japan. It seems that a regional financial arrangement is now gaining wide acceptance in the international community as part of the effort to fix the international financial architecture and achieve a more balanced globalization.

General Assessment

The call of the G-7 leaders to reform the international financial architecture at the Halifax Summit meeting in 1995 in the wake of the Mexican crisis has inspired the international community to think about how to fix the system. It turned out that the Mexican crisis was just a prelude to a much larger crisis that struck emerging market economies in Asia and brought home the point that under increasing globalization of trade and finance, a financial crisis of an emerging market economy can easily spread to other financial markets in the region—and can eventually affect the stability of the financial markets in developed economies. This episode has made reform of the international financial architecture more urgent in an effort to avoid the recurrence of similar crises in Asia or other regions of the world. East Asia, armed with a wealth of experience in managing a capital account crisis, can contribute a lot to the debates on issues related to the strengthening of the international financial architecture.

Reform of the international financial architecture is currently underway. We owe it to the international community to quickly reach consensus on a number of issues and immediately put them in place. Yet there are still a lot of issues that have remained unresolved, and developed and developing economies hold divergent views on many of these issues. From the perspective of East Asia and developing economies, the glass is still half full, and the discussions taking place within G-7 and G-7-led "virtual" institutions are unlikely to fill up the glass. The following assessment of East Asia's and developing economies' views on issues regarding the governance structure for reforming the international financial architecture, the substantive aspects of the reform, and the regional financial arrangement will help clarify this point.

Governance Structure

This refers to both the governance structure for reforming the international financial architecture and the BWIs. As many historians had pointed out, there were only two persons actively participating in the formulation of the original Bretton Woods system. This is understandable since most developed economies were weakened by the war and were very much preoccupied with reconstruction. Developing economies, on the other hand, were just starting to shake off their colonial dust and had not yet fully comprehended the implications of establishing the Bretton Woods system.

The situation today is entirely different. Emerging market economies are now exerting influence in the global markets. As the last Asian crisis clearly demonstrates, financial instabilities in emerging market economies can affect the financial markets in developed economies, and financial policies in developed economies can likewise affect the stability of the financial markets in emerging market economies.

There is widespread international consensus on the need for developing and emerging market economies to participate in discussions on reforming

the international financial architecture. Finance Minister Paul Martin of Canada, the first chairman of the G-20, clearly articulates this view:

> Experience with international development programs has shown that even the most well-intentioned programs are likely to fail unless the countries involved are given "ownership" of their development agenda. The same reasoning applies to reform of the international financial architecture. Best practices will not be implemented, and standards and codes will not be observed, if the countries that must adopt them have not had a "voice" in their development. That is why the G-20 is so important—because it brings *key emerging market countries* to the table with the G-7 countries. (Martin 2000b, emphasis added)

Although the G-20 is a significant improvement over having only G-7 dominating the debates and exerting great influence on the form and content of the reforms to strengthen the international financial architecture, still it is a far cry from what developing economies deserve, especially since most of the recent advances in reforming the international financial architecture pertain to the adoption of international standards, codes, and best practices. The G-7's strong hand in the selection of *key emerging economies* in the G-20 could ensure their continued control over the agenda for discussions. The results of the first meeting of the G-20 already provide a clue to this. For instance, the future of the IMF was discussed only peripherally during the first meeting of the G-20 (*Times of India* 1999). Also, the agenda focused too much on improving sound domestic policies to reduce vulnerabilities facing the members' economies and less on thorny issues that aggravate such vulnerability, such as the regulation of hedge funds and improving transparency of international credit rating agencies.

Since the chairmanship of the G-20 will be rotated first among the G-7 countries, it will be only after fourteen years that a participant from *key emerging market economies* will become the chair. This period could be much longer than Keynes' time horizon when he said that in the long run, we will all be dead. The main issue raised by critics against the G-20 is well represented in Kirton's (1999) comments:

> There are thus concerns about whether this fledgling Group constitutes a sufficient degree and form of institutionalized association with the G-7. One doubt arises from the view of some who see the G-20 as part of the "G-7-ization" of the world. In this view, the G-20 was born to legitimize G-7 initiatives to the wider world, by securing a broader consensus for G-7-generated ideas. The G-20's eleven non-G-7 members are thus destined to affect issues merely on the margin, to be informed of G-7 initiatives, and to be given some semblance of participation. The G-20 underscores the fact that the G-7 does not want to leave the reform of the international financial system to the IMF or World Bank, where developing countries have an institutionalized role.
>
> There are substantial benefits to increasing the effective participation

of developing and emerging market economies in international "virtual" institutions and in BWIs. If we go over the substance of the debates over the last two and a half years, the concerns originally expressed by developing and emerging market economies on reforming the international financial architecture have slowly crept into the agenda of the G-7. The crisis East Asian economies recently underwent has enriched their experience in dealing with and preventing a crisis. Their effective participation in international "virtual" institutions and in the BWIs can surely improve the quality of the dialogue and help accelerate the process of arriving at a consensus on certain issues related to the strengthening of the international financial architecture. And key to this is not only greater participation but developing a credible process for selecting representatives to the "virtual" institutions and changing the determination of quotas and voting shares at BWIs to enhance developing countries' effective voice in these institutions.

In brief, East Asia's and developing economies' concern regarding the governance structure for the reform of the international architecture and the governance structure of BWIs deserves to be given utmost attention in discussions on reforming the international financial architecture.

Substance of the Reform Agenda

Strengthening the international financial structure requires domestic reforms, reforms of the rules that govern cross-border transactions, and reforms of the international institutions that oversee and enforce the rules. The issues discussed in the preceding section cover these three areas for reform. As noted, there is a fairly wide divergence of views between developing and emerging market views and the developed economies' views on several key issues. The latter tend to focus on measures aimed at strengthening the domestic financial markets; hence, the emphasis on enhanced transparency, provision of timely and accurate information, improved corporate governance, adopting international standards and codes, and so on. These are all important issues for developing and emerging market economies so that they can strengthen their domestic financial systems and thereby reduce vulnerabilities to both external and internal shocks. In fact, the recommendations of the FSF are keyed mainly toward developing and emerging economies.

There is, however, a limit as to how much developing and emerging market economies can do to reduce vulnerabilities of their financial markets. To paraphrase Wahl and Waldo (2000), one can build a dam to protect himself from the flood; but if the floodwaters continue to rise, there is no way he can protect himself from the flood. This is the scenario that one can get from the proposals of the FSF that tend to shift the responsibility of strengthening the international financial architecture to the national level. The international community must not lose sight of the need to find ways to improve the rules covering cross-border transactions and to reform the IMF. For East Asia, apart from choosing the appropriate exchange rate, issues such as the

stability of the three major currencies, regulation of hedge funds, increased transparency of credit rating agencies, capital controls, and reform of the IMF all deserve to be given their due importance in the discussions regarding the strengthening of the international financial architecture.

Regional Financial Arrangement

The proposed regional financial arrangement is a home-grown proposal of East Asia that can substantially change the international financial architecture. As Bergsten (2000) notes, "it could alter the international financial, trade, and economic architecture more fundamentally than any of the current deliberations in the International Monetary Fund, the World Trade Organization and the G-7." Thus, the proposed regional financial arrangement should be discussed not only in the context of East Asia's desire to develop a regional mechanism to forestall a financial crisis in the region but also in the context of strengthening the global financial system.

The next challenge for East Asia is how to work out the details of the regional financial arrangement so that it can meet its objectives. Even the ASEAN + 3 Chiang Mai Initiative is still short on this. Some of the clues are provided in the APF report, but they also lack some details. Thus, this issue needs to be more thoroughly researched.

The other challenge is whether the Asian regional financial arrangement could later take on additional roles, such as assuming the BIS role for Asia and providing and maintaining a clearing system for Asia (Shinohara 1999) and a springboard for developing an Asian currency as proposed by the Philippines and Hong Kong. The UN Task Force (1999) takes the view that if regional institutions like the one envisioned for Asia are strengthened, then the "IMF could be visualized as part of a network of regional reserve funds, and its operation could then concentrate on relations with these reserve funds rather than on support to specific countries." Bergsten (2000) offers almost the same view. All this only serves to underscore the need to discuss this issue at the international level.

Acknowledgements

The author thanks Ms. Sharon Thea Vital and Ms. Juanita Tolentino for their excellent assistance in preparing this paper.

Annex A

G-22 Reports on the International Financial Architecture

In response to the crisis in Asia, finance ministers and central bank governors from a number of systemically significant economies met in Washington, D.C., in April 1998 to examine issues related to the stability of the international financial system and the effective functioning of global capital markets.[15] In their discussions, ministers and governors stressed the importance of strengthening the international financial system through action in three key areas: enhancing transparency and accountability; strengthening domestic financial systems; and managing international financial crises.

Three working groups were formed to contribute to the international dialogue on how to proceed in these key areas. One strength of these working groups was the diversity of their participants and the openness of their consultation process. Each working group comprised representatives from finance ministries and central banks of developed and emerging market economies; international organizations were invited to participate in the discussions; and contributions and views from other international groups, countries not represented in the working groups, and private sector representatives were sought.

The three working groups have prepared reports on the outcome of their discussions and recommended a range of actions to strengthen the international financial system.

Enhancing Transparency and Accountability

The Working Group on Transparency and Accountability considered the contributions that transparency and accountability can make to improvements in economic performance, as well as the nature of information needed for effective transparency and accountability.[16] Members attached particular importance to enhancing the relevance, reliability, comparability, and understandability of information disclosed by the private sector. They recommended that priority be given to compliance with and enforcement of high-quality accounting standards.

There was consensus on the need to improve the coverage, frequency, and timeliness with which data on foreign exchange reserves, external debt, and financial sector soundness are published. Furthermore, members recommended that consideration be given to compiling and publishing data on the international exposures of investment banks, hedge funds, and other institutional investors.

Transparency is an important means of enhancing the performance and public accountability of international financial institutions. Members recommended that international financial institutions adopt a presumption in favor of the release of information, except where release might compromise a well-defined need for confidentiality.

Members emphasized that there should be "transparency about transparency." They recommended that the IMF prepare a transparency report summarizing the extent to which an economy meets internationally recognized disclosure standards.

Strengthening Financial Systems

The Working Group on Strengthening Financial Systems sought consensus on principles and policies that foster the development of a stable, efficient financial system.[17] Members identified several areas—corporate governance, risk management (including liquidity management), and safety net arrangements—where standards for sound practices need to be enhanced or developed. The report outlines elements that such standards might contain and suggests ways forward.

Members emphasized that the implementation of sound practices is best fostered through market-based incentives backed by official sector actions. The report sets out a number of concrete actions to promote implementation.

Members recognized that cooperation and coordination among national supervisors and regulators and international groups and organizations are crucial to the strengthening of domestic financial systems. The report sets out several options for enhancing international cooperation; for example, the establishment of a financial sector policy forum that would meet periodically to discuss financial sector issues.

Managing International Financial Crises

The Working Group on International Financial Crises examined policies that could help to prevent international financial crises and facilitate the orderly and cooperative resolution of crises that may occur in the future.[18] The report should not be considered an agenda for addressing the problems currently being experienced in many emerging markets.

Members stressed the need to encourage better management of risk by the private and public sectors and recommended that governments limit the scope and clarify the design of guarantees that they offer.

Effective insolvency and debtor-creditor regimes were identified as important means of limiting financial crises and facilitating rapid and orderly workouts from excessive indebtedness. The report outlines the key principles and features of such regimes.

Countries should make the strongest possible efforts to meet the terms and conditions of all debt contracts in full and on time. Unilateral suspensions of debt payments are inherently disruptive. The report sets out a framework to promote the collective interest of debtors and creditors in cooperative and orderly debt workouts, as well as principles that could guide the resolution of future international financial crises.

Source: G-22 Reports on the International Financial Architecture, October 1998.

Annex B

Objectives and Membership of the Financial Stability Forum (FSF)

The objectives of the FSF are:

- to assess vulnerabilities affecting the international financial system;
- to identify and oversee action needed to address these vulnerabilities; and
- to improve coordination and information exchange among the various authorities responsible for financial stability.

In developing priorities and programs for action to achieve its objectives, the forum will work through its members.

In general, the *criteria for selecting issues* for the forum's consideration are:

- to give impetus to work on issues that cut across the mandates and expertise of forum members;
- to coordinate work among forum members, drawing on their comparative advantages;
- to evaluate the completeness of and fill gaps in the body of work among forum members;
- to endorse work by forum members that would benefit from such endorsement; and
- to monitor, where appropriate, implementation and any follow-up in areas where policy recommendations have been issued.

The FSF will meet twice a year or as often as needed to carry out its functions.

The FSF has a total of forty members. The structure of the membership is as follows:

Chairman (1)

National authorities (25; three from each of the G-7 countries; from the treasury, central bank, and supervisory agency)

- Australia, Canada, France, Germany, Hong Kong, Italy, Japan, Netherlands, Singapore, United Kingdom, United States

International Financial Institutions (6)

- International Monetary Fund (2)
- World Bank (2)
- Bank for International Settlements (1)
- Organisation for Economic Co-operation and Development (1)

International Regulatory and Supervisory Groupings (6)

- Basel Committee on Banking Supervision (2)
- International Organization of Securities Commissions (2)
- International Association of Insurance Supervisors (2)

Committees of Central Bank Experts (2)

- Committee on the Global Financial System (1)
- Committee on Payment and Settlement Systems (1)

Source: Financial Stability Forum, September 27, 1999.

Annex C

Tasks of the Working Groups of the Financial Stability Forum (FSF)

Working Group	Chairman	Terms of Reference	Approach	Progress
Working Group on Highly Leveraged Institutions	Mr. Howard Davies, chairman of the UK Financial Services Authority	To recommend actions to reduce the destabilizing potential of institutions employing a high degree of leverage (HLIs) in the financial markets of developed and developing countries.	The group focused on the potential risk to the financial system presented by the failure of large HLIs and the effects of the activities of HLIs on the dynamics and integrity of financial markets in small and medium-sized economies.	The group submitted its report to the FSF in March 2000. The FSF welcomed the report and endorsed its recommendations.
Working Group on Capital Flows	Mr. Mario Draghi, director general of the Italian Treasury	To evaluate measures in borrower and creditor countries that could reduce the volatility of capital flows and the risks to financial systems of excessive short-term external indebtedness.	The group adopted a risk management framework, emphasizing the resulting stocks and liabilities of cross-border capital flows and the risk management problems that need to be addressed if the potential benefits of capital flows are to be realized.	The group submitted its report to the FSF in March 2000. the FSF wselcomed the report and endorsed its recommendations.
Working Group on Offshore Financial Centres	Mr. John Palmer, superintendent of Financial Institutions, Canada	To consider the significance of offshore financial centers for global financial stability.	The group reviewed the uses and activities of OFCs with a view to addressing problems created by OFCs with weaknesses in financial supervision, cross-border cooperation, and transparency that allow financial market participants to engage in regulatory arbitrage of several forms.	The group submitted its report to the FSF in March 2000. The FSF welcomed the report and endorsed its recommendations.
Task Force on Implementation of Standards	Mr. Andrew Sheng, chairman of the Hong Kong Securities and Futures Commission	To explore issues related to and consider a strategy for fostering the implementation of international standards for strengthening financial systems.	The task force emphasized the importance of promoting country ownership, providing market and official incentives, and mobilizing resources through enhanced partnerships as key factors for fostering implementation of standards.	The task force submitted its report to the FSF in March 2000. The FSF welcomed the report and endorsed its main thrusts, including twelve key standards identified by the task force as being most relevant for strengthening financial systems.
Study Group on Deposit Insurance	Mr. Jean Pierre Sabourin, president of the Canada Deposit Insurance Corporation	To review recent experience with deposit insurance schemes and consider the desirability and feasibility of setting out international guidance for such arrangements.	The study group identified common features to an effective deposit insurance system, recognizing the different public policy objectives that account for the wide range of deposit insurance systems.	The group submitted its report to the FSF in March 2000. The FSF welcomed the report and asked the group to consult widely in developing international guidance for deposit insurance arrangements.

Source: Financial Stability Forum, May 19, 2000.

Annex D

Key Principles for Reform of the IMF

1. The IMF should play the central role in promoting macroeconomic and financial stability as an important precondition for sustainable global growth and should continue to evolve to meet the challenges of the future.
2. The IMF is a universal institution that must work in partnership with all its member countries, based on their shared interests in these goals.
3. To be effective, the IMF and its activities must be transparent to the public, accountable to its members, and responsive to the lessons of experience and external and independent evaluation.
4. In order to foster strong policies and reduce countries' financial vulnerability to crisis, preventing crisis and establishing a solid foundation for sustainable growth should be at the core of the IMF's work. Surveillance of economic and financial conditions and policies in member countries and the implementation of internationally agreed codes and standards are primary tools for accomplishing these aims.
5. IMF's financial operations should continue to adapt to reflect the realities of global capital markets while preserving the flexibility to support all member countries, as appropriate, including those with no immediate prospects of market access. They should encourage countries to take preventive measures to reduce vulnerabilities and provide temporary and appropriately conditioned support for balance-of-payments adjustment, including in cases of crisis, and medium-term finance in defined circumstances in support of structural reform, while avoiding prolonged use.
6. IMF lending should not distort the assessment of risk and return in international investment. To this end, the IMF should take appropriate steps to ensure that the private sector is involved both in forestalling and resolving crises, which should help promote responsible behavior by private creditors.
7. While the World Bank is the central institution for poverty reduction, macroeconomic stability—a key tool for the achievement of poverty reduction and growth—is the responsibility of the IMF. The IMF has the crucial role in supporting macroeconomic stability in the poorest countries through the Poverty Reduction and Growth Facility, integrating its efforts with those of the World Bank in working with countries on poverty reduction strategies.

Source: Report from G-7 finance ministers to the heads of state and government, Fukuoka, Japan, July 8, 2000.

Notes

1. The exchange rate volatilities have remained unabated at the time of the writing of this paper.
2. For instance, the Philippine Central Bank has tightened the reporting requirements on foreign exchange transactions of banks and their affiliates.
3. Ten industrialized countries control about 54 percent of the IMF votes.
4. See Table 5.5 for the members of the FSF.
5. See Table 5.5 for the members of the G-20.
6. See below for related views of developing economies on establishing international standards and reforming the BWIs.
7. See "Report of G-7 Finance Ministers to the Köln Economic Summit" (1999a); "ASEAN's Position on the Reform of the International Financial Architecture" (1998); and G-24 Communique (1999b).
8. According to Felix (1999), limiting fluctuations between the Big Three currencies is a looser equivalent of the Bretton Woods exchange rate regime, which relied on the fixed-dollar price of gold.
9. This is discussed in detail below.
10. Refer to related discussion below.
11. In his budget message for fiscal year 1999, Prime Minister Mahathir asked: "Can't this be called 'cronyism'? If that had happened in our country, what would they have said about this?"
12. Thailand was downgraded four notches by both Moody's and Standard and Poor's between July 1997 and early 1998; Indonesia five notches by Moody's and six by Standard and Poor's between June 1997 and early 1998; and the Republic of Korea six notches by Moody's and no less than ten by Standard and Poor's during the same period (Cornford 2000).
13. In their report to the heads of state and government on July 8, 2000, the G-7 finance ministers went as far as proposing to abolish the commitment fee, reduce the initial rate of charge, and introduce greater automaticity of the CCL.
14. Porter (2000) defines legitimacy as "the acceptance of the existence of power or of a set of social relationships because it is believed that these are based on a justifiable set of rules" (p. 2).
15. The April meeting was attended by finance ministers and central bank governors from Argentina, Australia, Brazil, Canada, China, France, Germany, Hong Kong SAR, India, Indonesia, Italy, Japan, Korea, Malaysia, Mexico, Poland, Russia, Singapore, South Africa, Thailand, the United Kingdom, and the United States. The heads of the BIS, IMF, OECD, and the World Bank, as well as the chair of the Interim Committee, attended as observers.

16. Representatives of the following economies contributed to the Working Group on Transparency and Accountability: Argentina, Australia, Brazil, Canada, France, Germany, Hong Kong SAR (co-chair), Japan, Malaysia, Thailand, the United Kingdom (co-chair), and the United States.
17. Representatives of the following economies contributed to the Working Group on Strengthening Financial Systems: Argentina (co-chair), Brazil, Canada, China, France, Germany, India, Italy (co-chair), Japan, Korea, Malaysia, Mexico, Poland, Russia, Singapore, South Africa, Sweden, Thailand, the United Kingdom, and the United States.
18. Representatives of the following economies contributed to the Working Group on International Financial Crises: Argentina, Australia, Belgium, Brazil, Canada, France, Germany, Hong Kong SAR, Italy, Japan, Korea, Mexico (co-chair), the Netherlands, Singapore, South Africa, Thailand, the United Kingdom, and the United States (co-chair).

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6. Appropriate Exchange Rate Regime in Developing Countries: Case of Korea

Chae-Shick Chung and Doo Yong Yang

Introduction

The choice of exchange rate regime in developing countries carries critical importance to their self-protection from speculative attacks and currency crises, as well as achievement of long-term economic growth. Deep integration of developing countries to the global economy makes it difficult to keep the intermediate regime between the two polar solutions. Shifting to more extreme choices between free-floating and credible institutional arrangement (monetary union, currency board, or even dollarization) is recommended for many developing countries.

The question for developing countries still remains whether more shifting toward two polar extremes is viable or appropriate. There are some countries better suited for a fixed regime with monetary union or currency board, while others are better off adopting a flexible regime. The series of currency crises in the 1990s provides strong support for a flexible exchange rate regime, especially for Asian countries. The remaining question is whether it is viable or appropriate for developing countries.

To investigate this issue, this paper examines recent developments in the foreign exchange market as well as the financial market in Korea. Korea has provided an interesting case on the choice of the exchange rate regime for emerging market economies since it has recently experienced both managed floating and flexible exchange rate regimes. Since the crisis in 1997, Korea has adopted a flexible exchange rate regime instead of the previous market average rate (MAR) system—which is classified as a kind of managed floating regime—and pursued more capital account liberalization. This implies that Korea has moved away from the intermediate regime. Some questions still remain, however. First, there is the question about whether the exchange rate adjustments of a flexible exchange rate regime could be enough to mitigate the global shocks and help to stabilize the domestic financial markets. Second, the adopting of a flexible exchange rate arrangement will enhance the foreign exchange risk management in the private sector and increase the efficiency of the foreign exchange market.

To address the first question, we explore the behavior of domestic financial variables such as interest rates, foreign exchange rates, and shock prices responding from the external shocks before and after the crisis. Additional narrative questions are how much foreign financial variables affect levels of three domestic financial variables and to what extent foreign variables stay tightly tied or become a major driving force in terms of

time-varying conditional correlation of the domestic financial variables. To find clues regarding these questions, we resort to a multivariate GARCH model and various Vector Auto Regression (VAR) tools for level as empirical tools. Our findings indicate that the Korean financial markets have achieved greater integration with U.S. financial markets after the crisis. These empirical results are natural consequences of the Korean government's open measures such as liberalization of capital markets and adoption of a more flexible exchange rate regime. The Korean financial markets' integration with international financial markets seems to enhance market efficiency. Still, the slightest sign of either weakness in the domestic economy or fragility of international financial markets might cause foreign investors to flock out of Korean financial markets and result in inviting another turmoil in Korea.

To answer the second question, we survey the foreign exchange market behavior after the adoption of a flexible exchange regime. According to our survey, whereas the environment of Korea's financial markets is globalizing, companies continue to act as they have done in the former managed exchange regime. Noticeably, factors of instability in international financial markets may well give birth spontaneously to volatility of domestic financial markets. Such volatility will ultimately bring about losses from foreign exchange for companies and lessen their global competitiveness, as well as giving rise to a foreign currency liquidity crunch.

Choosing capital account liberalization and a free-floating exchange regime could cause domestic financial markets to further develop. However, if external financial factors dominate financial markets of the emerging economies, then negative impact, be it local shocks or global shocks, will be exerted on the real economy, with implications of a potential foreign exchange crisis. We therefore conclude that it is not appropriate for Korea to adopt a full free-floating exchange regime, which can increase volatility of exchange rates. Cooperative efforts of advanced countries are necessary to sustain stability in international financial markets.

This paper is organized as follows. In the following section we review issues on the choice of an exchange rate regime in developing countries. We describe the brief history of the international exchange rate system and recent issues on the exchange rate regime. The next section covers empirical analyses. This is followed by the conclusion.

Choice of Exchange Rate Regime in Developing Countries

Brief History of International Exchange Rate System

Bretton Woods System

Just before the end of World War II in July 1944, forty-four national leaders of allied countries met at Bretton Woods, New Hampshire, to reconstruct postwar monetary and financial order. The new international monetary

system was launched with the declaration of fixed exchange rate parity against the U.S. dollar, together with the creation of the IMF and IBRD. The agreement stipulated that the central bank of each IMF member country was obliged to keep its currency within a limited range against the U.S. dollar. Each country was to keep its exchange rate within 1 percent of its par value for its currency in terms of the U.S. dollar, which was fixed at U.S. $35 per ounce of gold. The IMF was supposed to assist member countries by issuing foreign exchange loans to carry out their obligation. For most countries, the Bretton Woods era was characterized by more rapid growth and less inflation than the period of floating exchange rates and faster and less variable growth than the gold standard era (Isard 1995).

With the passage of time, the inadequate supply of gold produced a lack of liquidity in international reserve assets. To solve this, the IMF created a new reserve asset, the special drawing right (SDR), in 1968. On the other hand, significant differences in economic performance among developed countries emerged in the late 1960s. Due to its involvement in Vietnam, the United States ran a large current account deficit and later fiscal and monetary policies were tightened to correct the deficit. As the U.S. economy slowed down and other regions experienced economic upsurge, the pressure for depreciation of the U.S. dollar increased. This resulted in the dollar crisis of 1971, which was the most serious challenge to the prevailing system. Speculation against the U.S. dollar grew more intense, and U.S. authorities suspended the convertibility of U.S. dollars to gold. In 1971, a modification to the Bretton Woods system was declared; the so-called Smithsonian Agreement was to devaluate the U.S. dollar and increase the fluctuation around the dollar for other currencies. Despite the effort to keep the Bretton Woods system, most countries found it necessary to float their currencies. The cost of keeping a fixed rate became too expensive. By 1973, the old international exchange rate system had all but broken down and a floating exchange rate system emerged.[1]

Floating Exchange Rate System

The floating system was welcomed in the early period of the post-Bretton Woods system. Many had argued that greater flexibility brought relief after the introduction of the new international exchange rate system. Under the floating exchange regime, the relative price of a country's currency accurately reflects that of underlying economic performance. Also, currency values adjust quickly to reflect changes in international trade flows and in the relative prices of traded goods, which are caused by changes in mutual economic circumstances. The theories of open economy contend that, unlike the fixed rate system, the floating rate regime should prevent sustained, severe imbalances between current accounts of different countries. In a true floating rate regime, there is no need for central bank intervention in the market. During the late 1970s and early 1980s, most government authorities

believed that exchange rates should be left to market forces and that central bank intervention was both expensive and irrelevant to change market movements.

During the middle to late 1980s, however, there were a few cases of interventions among major currencies. The G-7 council generally coordinated these attempts. The first attempt in 1985 was implemented by the G-5 council of economic ministers (the early G-7 council excluded Canada and France) at the Plaza Hotel in New York. They agreed upon a coordinated intervention aimed at lowering the value of the U.S. dollar, and it was successful because the dollar was already on the move toward depreciation. The second attempt from the G-7 council, the so-called Louvre Agreement, started in February 1987. The purpose of the second attempt was to stabilize major currencies and limit the size of exchange fluctuations with the utilization of coordination. The Louvre Agreement, however, had difficulties in influencing the market. It failed to provide substantial aid to Japan, which wanted to prevent the value of the Japanese yen from falling.

Just before the breakdown of the Bretton Woods system, a number of European countries—mostly members of the European Economic Community—established a fixed system of exchange rates among themselves. Floating against other countries, however, was allowed. This was known as "the snake in the tunnel," but it failed since most members found maintaining a fixed rate even among members costly. In 1979, a revised fixed system was formed in Europe, the so-called European Monetary System (EMS). Under the EMS, all member currencies were linked to a composite currency, the European Currency Unit (ECU), which was a GDP weighted average of all the member currencies.

Unlike the previous arrangement, each of the member currencies was allowed to deviate by no more than 2.25 percent from its central parity rate against ECU. The adjustable peg system of the Exchange Rate Mechanism (ERM) worked relatively well to stabilize exchange rates among EMS member countries in the 1980s, but it experienced severe pressure in the 1990s. Due to the increasing capital mobility and the tightening of the adjustable band to give birth to the Economic Monetary Union, the vulnerability of the ERM increased. Market perception and speculative pressures led to the ERM crisis of 1992–93 and forced countries to make significant adjustments to their central parities (15 percent from the parity) or to abandon the ERM (Italy and United Kingdom). But for the remaining members of ERM, the EMU has launched with the new euro to peg exchange rates in the ERM at the beginning of 1999.

Exchange Rate Regime in Developing Countries

Although most currencies in developed countries have been allowed to float since the abandonment of the Bretton Woods system, regimes for

developing countries have been varied. Since the mid-1970s, they have moved to either pegging to a basket of major currencies or adopting a more flexible exchange rates regime, away from a single currency peg. It has been believed that a composite basket-peg arrangement minimizes the adverse effects on economies of fluctuations in the exchange rate of major currencies since the advent of the floating system in 1973. Medium- or long-term swings of major currencies have produced various problems for the developing countries, rising out of the uncertainty of capital flows (including both portfolio and direct investments), international competitiveness of trade goods, management of external public and domestic debts, and foreign reserves.

To reduce such uncertainties, developing countries have had a tendency to adopt an intermediate exchange regime rather than two extreme regimes. More developing countries have shifted toward a flexible exchange arrangement. According to the IMF classification, 86 percent of the developing countries had chosen some type of pegged regime by 1976, with only 10 percent adopting the flexible exchange rate regime. About 45 percent of the developing countries had pegged their currencies to major currencies or composite of major currencies by 1992 (Table 6.1). Some 52 percent of the developing countries adopted a more flexible exchange regime; over half of the developing countries are classified as floating independently, while the rest of them have resorted to a managed floating arrangement.

The adoption of a fixed or flexible regime showed a regional pattern;

Table 6.1. Exchange rate arrangement of developing countries (Unit: percentage of total number of countries)

	1976	1981	1986	1991	1996
Pegged	86	75	67	57	45
U.S. Dollar	42	32	25	19	15
French Franc	13	12	11	11	11
Other	7	4	4	3	4
SDR	12	13	8	5	2
Composite	12	14	18	20	14
Limited Flexibility	3	10	5	4	3
Single	3	10	5	4	3
Cooperative	—	—	—	—	—
More Flexible	11	15	28	39	52
Set to Indicators	6	3	4	4	2
Managed Floating	4	9	13	16	21
Independently Floating	1	4	11	19	29
Number of Countries	100	113	119	123	123

Source: IMF World Economic Outlook, 1997

countries in Africa and the Middle East generally adopted the pegged regime and Asian countries were more prone to adopt flexible exchange rate regimes. Developing countries in Europe and in the Western Hemisphere adopted both types of arrangement, with low-inflation countries generally adopting a pegged regime and high-inflation countries a flexible regime (Aghevli, Mohsin, and Montiel 1991).

The economic performance of different exchange regimes in developing countries for the last two decades has shown some interesting characteristics.[2] First, inflation in countries with pegged exchange rates has been consistently low and less volatile than that in countries with more flexible regimes. There is no clear relationship, however, between the exchange rate arrangement and output growth. The lower inflation associated with a pegged regime reflects the fact that the consistent monetary policy is subordinate to maintenance of the peg. Nonetheless, due to the recent lower inflation rate in most countries, the discrepancy has been reduced. Moreover, countries adopting a flexible regime are in general those with large, domestic-oriented economies. Since large countries have a self-sufficient economy, they are less concerned about foreign fluctuations. On the other hand, the smaller and more open a country is, the stronger is the case for a fixed or pegged exchange rate.

Issues on Choice of Exchange Rate Arrangement

The theoretical literature has established that the optimal choice of exchange rate regimes depends on various characteristics of an economy. There are the policy objectives (such as price stability and exchange stability), the nature of the shocks to the economy (such as nominal or real shocks and global or country-specific shocks), and the structure of the economy (such as wage-price flexibility, factor mobility, and openness of goods and financial markets). Because of the complexity of these concerns, it is hard to define an optimal exchange rate regime in a single country (see Table 6.2).

In general, a policy maker's objectives are focused on increasing the country's welfare. In reality, it is too difficult to define the welfare objective. Thus most policy criteria have focused on minimizing macroeconomic fluctuations. The choice of exchange rate regime depends on ways to minimize the variance of real economic variables when a country faces external and domestic random shocks.

The type of shock to the economy is a key consideration in determining the type of regime. Early advocates of the flexible regime emphasized the insulating properties of exchange rate adjustment in the face of foreign nominal shocks. Changes in the foreign price level would generate offsetting exchange rate changes protecting the value of the domestic currency and therefore protecting domestic output from foreign fluctuations. Friedman (1953) argued that if the foreign nominal shocks were more important, the flexible exchange rate regime would be preferred. Friedman's

argument is effective in the case where a country has limited capital mobility. McKinnon (1963) showed that the insulating property of the flexible regime diminished with more capital mobility.

Table 6.2. Consideration in the choice of exchange rate regime

Characteristics of Economy	Implication for the Desired Degree of Exchange Rate Flexibility
Size of economy	—The larger the economy, the stronger is the case for a flexible rate
Openness	—The more open the economy, the less attractive is a flexible exchange rate
Diversified production structure	—The more diversified the economy, the more feasible is a flexible exchange rate.
Geographical concentration of trade	—The larger the proportion of an economy's trade with one large country, the greater is the incentive to peg the currency of that country
Divergence of domestic inflation from world inflation	—The more divergence a country's inflation rate from that of its main trade partner, the greater is the need for frequent exchange rate adjustment (but for a country with extremely high inflation, a fixed exchange rate may provide greater policy discipline and credibility to a stabilization program
Degree of economic/financial development	—The greater the degree of economic and financial development, the more feasible is a flexible regime
Labor mobility	—The greater the degree of labor mobility, when wages and prices are downwardly sticky, the less difficult (and costly) is adjustment to external shocks with a fixed exchange rate
Capital mobility	—The higher the degree of capital mobility, the more difficult it is to sustain a pegged-but-adjustable exchange rate
Foreign nominal shocks	—The more prevalent are foreign nominal shocks, the more desirable is a flexible exchange rate
Real shocks	—The greater an economy's susceptibility to real shocks, whether foreign or domestic, the more advantageous is a flexible exchange rate
Credibility of policy makers	—The lower the anti-inflation credibility of policy makers, the greater is the attractiveness of a fixed exchange rate as a nominal anchor

Source: IMF, "Exchange Rate Arrangements and Economic Performance in Developing Countries," The World Economic Outlook, 1997

The optimal choice of an exchange rate regime becomes more complicated depending upon whether the source of shocks is nominal or real. When domestic shocks are nominal and prices are sticky, a fixed regime would be more effective in stabilizing output. Under the fixed exchange rate, fluctuations in the domestic money supply would simply affect only the changes in international reserves without changing the domestic output level. On the other hand, when disturbances—whether domestic or foreign—are real, a flexible exchange regime would achieve more output stability. Theoretical literature concludes that neither of the extremes of completely fixed or flexible exchange rate arrangement is optimal in seeking macroeconomic stability (Aghevli, Mohsin, and Montiel 1991).

It has been argued that the more open the economy, the stronger the case is for fixing the exchange rate, since the potential costs to an economy increase when frequent exchange rate adjustments are required. Furthermore, the domestic nominal shocks are easy to transfer abroad when the exchange rates are fixed and the economy is open. A very open country would be better off with a fixed exchange regime in this sense. However, a country would be vulnerable to external shocks with greater economic openness. In this case, frequent adjustments in exchange rates are necessary to mitigate foreign shocks. Thus, the degree of openness does not provide adequate answers for the choice of an exchange rate regime.

Lessons and Issues from Recent Currency Crises

The deep integration of developing countries with the global economy has many advantages and positive effects. It has promoted trade in goods and services between developed and developing countries. Capital flows to developing countries have clearly provided great incentives to foreign direct investment, making it more stable and creating technological advances and access to markets.

On the other hand, large inflows of short-term capital and abrupt reversible capital flows to developing countries produce negative effects. This is a major difference between trade capital and trade goods and services. Traditionally, trade goods and services have been promoted based on the belief that it would enhance welfare between trading partners. But a sharp reversal of capital flows can lead to currency and financial crises and result in serious losses of output, investment, and employment. For the sake of developing countries, greater access to the global capital market poses a policy dilemma for the choice of an exchange rate regime. At no time in history has the choice of exchange rate regime in developing countries been more important to the prevention and resolution of currency crises and the sustenance of long-term economic growth than today.

It has been believed for a long time that exchange rate adjustments play an important role in restoring and preserving external and domestic stability in developing countries. On the contrary, many developing coun-

tries have recently been advised to shift to more extreme choices, such as flexible or fixed with monetary union (or currency board). Generally, the current consensus is that intermediate regimes between the two extreme choices are no longer tenable. The rationale for the suggestion comes from the so-called principle of the impossible trinity. It holds that there is a trilemma in pursuing exchange rate stability, capital mobility, and independent monetary policy. It cannot obtain all three objectives simultaneously. It is possible at most to achieve any two of these objectives, making it necessary to sacrifice at least one.[3] As many developing countries try to have greater access to global financial markets, the choice is narrowed down to the degree of exchange rate flexibility—whether a perfect free-floating one or hard fixed rates such as a monetary union, currency board, or even dollarization.

A series of currency crises from Mexico to Asia in the 1990s provided strong support for a flexible exchange rate regime. First, it has been argued that the fixed or de facto fixed exchange rates in those crisis countries produced a moral hazard in exchange rates and induced excessive capital inflows to those countries. The fixed exchange rate regime, if it is credible or sustainable, could generate a form of implicit guarantee by increasing unhedged currency borrowing and promote more short-term capital flows (Eichengreen and Hausmann 1999).

Second, a flexible exchange rate regime allowed large adverse shocks to be more easily absorbed than a pegged exchange rate regime and thus less likely to provoke currency crises. Furthermore, it has been argued that, with high capital mobility between developed and developing countries, a pegged-but-adjustable exchange rate regime is not viable and even prone to crisis. The fixed exchange rate policies followed by some of the East Asian countries were held partly responsible for the crisis, and this makes it relevant to ask whether some exchange rate regimes are more likely to avoid crises than others. Eichengreen (1999) concluded that pegged exchange rate regimes are inherently crisis-prone for the emerging market economies and that these countries should be encouraged to adopt a floating exchange rate regime. This is closely related to the speculative attacks in a highly integrated global capital market. The first-generation models of speculative attack (Krugman 1979; Flood and Garber 1984) showed how a fixed exchange rate policy combined with excessive precrisis monetary expansion can push the economy into crisis, with the private sector trying to profit from dismantling inconsistent policies. The first-generation models were designed to explain the currency crises of the 1970s and early 1980s in developing countries such as Mexico (1973–1982) and Argentina (1978–1981). The second-generation models (Flood and Garber 1984; Obstfeld 1986) explained how a currency crisis would be developed in a self-fulfilling manner and multiple equilibria generated without inconsistent policies in the event of a speculative attack.[4]

Third, a flexible exchange rate regime allows exchange rates to move in response to market forces and provides a better environment for economic agents to recognize foreign exchange exposure risks and develop prudential management of financial institutions in a country closely integrated with global financial markets. In addition, hedging markets for the foreign exchange rate would develop more efficiently in a country with a flexible exchange rate arrangement.

On the other hand, there are some worries about adoption of a flexible exchange rate in developing countries. When a country experiences massive capital flows due to higher economic growth and potential profit from investment, an irrational swing in the foreign investors' perception may exacerbate misalignment of exchange rates from economic fundamentals. If foreign investors observe appreciation in a developing country, they may invest more in expectation of further profits. Due to increasing capital inflows, a further appreciation lessens the export competitiveness and the current account balance and ultimately reverses capital flows, leading to a currency crash. In this sense, a flexible exchange rate regime is not immune from currency crises. In line with this, short-term volatility and mid- or long-term misalignment in the exchange rates hamper the viability of a flexible exchange rate regime in developing countries.

Second, even though the adoption of a flexible exchange rate regime reduces exchange rate moral hazard by removing implicit guarantees, floating may reduce unhedged borrowing by simply reducing foreign capital inflows, leading to less investment and growth (Fernandez-Arias and Hausmann 1999).[5] This is so because unless the foreign financial institutions are willing to buy domestic currency, it would never be enough to hedge the foreign borrowing. Furthermore, with this constraint in the hedging market, the cost of hedging increases as the volatility of exchange rates goes up by adopting a flexible exchange rate regime, and this may also lead to less investment and growth in developing countries.

Third, while accepting floating in transition, many countries may suffer from nominal anchor fragility and may reinforce their exchange rate stability by avoiding benign neglect. If the country chooses a flexible exchange rate regime, an appropriate nominal anchor for the economy is to be chosen except for the exchange rate. But without a long history of consistent macroeconomic policies except for fixing exchange rates, the credibility of such policies still remains questionable in the market. If there is no credible policy objective, market dynamics exacerbate the misalignments and/or short-term volatility of exchange rates.

For the broad range of developing countries, the exchange rate regime becomes one of the most important policy objectives—increasingly so because of greater access to the global capital market. The choice of exchange rate regime in developing countries means which regime would

be most appropriate not only for preventing massive capital inflows and currency crises but also for better facilitating trade, direct investment, and economic growth. Yet it seems that there is no clear-cut determinant for a developing country to choose an appropriate exchange rate regime. Frenkel (1999) contended that an appropriate exchange rate regime varies depending on the specific circumstances of the country in question and depending on the circumstances of the time period in question. Flood and Marion (1991) argued that the choice of exchange rate regime is a second-best policy choice, which can be directed toward mitigating the distorting effects of price or information rigidities.

As important as are the soundness and appropriateness of an individual country's exchange management, it seems that global or at least regional cooperation in stabilizing most currencies is desired in a highly integrated global economy. Some have argued that G-3 countries should limit their currency volatility (Clarida, 1999; Williamson 1994). Others prefer a regional pegged system, such as an Asian flexible peg system (McKinnon 1999). This harkens back to the early Bretton Woods system.

Recent Financial Market Developments in Korea

Korea has adopted a more flexible exchange rate regime since the currency crisis in 1997. It was an inevitable outcome of the crisis. However, there are some concerns over current Korean won / dollar exchange rate movements, such as short-term volatility and mid- or long-term misalignment.

The purpose of the empirical analysis in this section is to find out whether there are significant differences in interrelations among six financial variables before and after the Korean financial crisis. The six financial variables are two exchange rates (KRW / USD, JPY / USD), two short-term interest rates for Korea and the United States, and each country's stock index. As described below, three periods (precrisis, crisis, and postcrisis) have different economic environments such as regime changes in exchange rates and different degrees of capital account liberalization. Thus our interest is to find out if the six financial variables in foreign exchange and stock and bond markets for the two countries are likely to have different empirical relations in terms of level and volatility.

Since the outbreak of the Korean financial crisis, the Korean government has taken various measures to calm the turmoil in financial markets by adopting a free-floating exchange rate regime and by more actively pursuing capital account liberalization. As a natural consequence, we may expect that Korean financial markets are more likely to be linked to one another as well as to external factors. Many previous studies show that the U.S. financial variables—U.S. interest rates in particular—are by far the most important external factors in determining financial variables' movements in developing countries.[6] Therefore it is quite interesting to investigate how U.S.

financial variables affect levels of the three Korean financial variables.

There are also a number of reasons for studying second-moment links between Korea and U.S. financial markets. Asset volatility of U.S. financial variables and cross-country correlations are important because they affect international capital flows and volatility of the emerging economies' financial variables, partly due to international investors' diversification. In particular, each of the three U.S. asset markets we have chosen is quite large, greatly affecting international financial markets. A study of links between U.S. asset markets and those of emerging economies has important implications for monetary (exchange rate) and regulatory policy.

For empirical analysis, we divide the overall period into precrisis, crisis, and postcrisis periods. The precrisis period covers from January 4, 1995, to September 30, 1997, and the postcrisis period from October 1, 1998, to June 6, 2000. Even though all data are available from March 1, 1990, when Korea began to adopt the market average exchange rate system, empirical analyses are restricted to cover years from 1995 due to the possibility of a structural break or regime change in KRW / USD (hereafter KRW) exchange rates. Joo and Kim (1999), for example, argue that movements of the exchange rates were explained very well by macroeconomic fundamentals after 1995, which is not the case from 1990 to 1995, and that the exchange rates looked like exhibiting structural breaks statistically since 1995.

The time coincides with some noticeable efforts of the Korean government toward capital account liberalization, such as increasing limits on stock investment for nonstate-owned companies by foreigners from 10 percent to 12 percent and opening nonguaranteed convertible bonds issued by small and mid-size companies.[7] Furthermore, S&P had upgraded Korea's sovereign credit rating from A2 to A1 in May 1995, resulting in net capital inflows, an expansionary monetary policy, and depreciation of the Korean won.

We presume that the postcrisis period started in October 1998 because the first round of financial restructuring was completed at that time and the domestic spot rates and the offshore NDF three-month forward rates have moved tightly since then.[8] The closing date of the postcrisis is dictated by the availability of data. Since financial markets in Korea were extremely volatile during the crisis, we do not make a separate analysis of that period.

Methodology

There are many ways to analyze relationships among the three financial variables. One simple but useful empirical methodology to uncover and compare interrelationships among variables is variance decomposition and impulse response function within the framework of Vector Auto Regression (VAR) estimation. Variance decomposition provides information regarding the proportion of the movements in a sequence due to its

own shocks versus shocks to the other variables and, therefore, a sequence is exogenous or endogenous. Impulse response function is also a practical way to visually represent the behavior of a series in response to various shocks. Since it does not make sense for the levels of three Korean financial variables to affect related U.S. financial variables, both methodologies therefore would tell us the causes of domestic financial variable movements or the consequence of movements of related U.S. financial variables.

To investigate volatility relations among the six variables, we resort to the multivariate GARCH (Generalized Auto Regressive Conditionally Heteroskedastic) model to see if there are significant changes in time-varying conditional correlations among the six variables. It is, of course, possible to estimate univariate conditional volatility by way of incorporating volatility of one market into another GARCH specification as an exogenous variable. However, this approach is not efficient. Moreover, when testing for volatility spillovers in one direction, the univariate GARCH approach assumes that there is no reverse spillover. If there is indeed a bidirectional spillover, the test statistics may be misleading. The constant correlation GARCH model,[9] which specifies a multivariate GARCH process with a parametric form for the conditional correlation instead of the conditional covariance, parameterizes the conditional correlation as a constant. The obvious drawback of this model is that it allows no dynamics in the conditional correlation function. There is, however, overwhelming evidence of the time variation in the conditional volatility of asset returns[10] and growing evidence of the time variation in the conditional correlation between assets.[11] If the conditional correlation is time varying, then the constant correlation GARCH model is misspecified—and so is, in particular, any economic inference based on that specification. The full parameterization multivariate GARCH model by Baba, Engle, Kraft, and Kroner (1989) allows sufficient generality, as well as conditional variances and covariances, and guarantees that the covariance matrices in the system are positive definite by construction. However, in our six-variate system, one would have to estimate nearly one hundred parameters.

Among numerous multivariate GARCH models, we choose a recently developed one that is more suitable for a detailed correlation analysis than existing models by Klaassen (1999). The basic motivation of the model comes from the notion that it is the correlations between variables that make multivariate GARCH modeling more than univariate GARCH modeling. The estimation procedure in Klaassen consists of two simple steps. In the first step, principal components of all unconditional correlations of the six variables are calculated by way of removing all unconditional correlations. The conditional means and variance of each component are specified by a univariate GARCH model. In the second step, the estimated first and second moments are transformed into corresponding moments of the six variables themselves.

To describe Klaassen's model using a mathematical notation, we define y_t as the vector of six financial variables at time t.[12] In the first step, we calculate six vectors of principal components defined by:

$$f_t = W' y_t \tag{1}$$

Here, the weighting matrix W is the unique orthogonal 6×6 eigenvector matrix of the unconditional variance $Var(y_t)$. Since the transformation is the same as projecting y_t onto the orthogonal vector space, f_t is not correlated with its components. Following the transformation, conditional means and variances of f_t are estimated using any univariate GARCH model. That is to say, we specify the conditional moments of f_t by:

$$E_{t-1}(f_{tj}) = a_{0j} + a_{1j} f_{t-1j}$$
$$V_{t-1}(f_{tj}) = \omega_{tj} + \alpha_{tj}\epsilon^2_{t-1} + \beta f_{t-1j}$$
$$Cov(f_{tj}, f_{tk}) = 0$$

for principal components i, j = 1, . . . , 6.

After the GARCH estimation, we transform the conditional moments of the principal components into original financial variables that we are mainly interested in. The transformation is simply to reverse the equation (1):

$$E_{t-1}(y_t) = WE_{t-1}(f_t)$$
$$Var_{t-1}(y_t) = WV_{t-1}(f_t)W'$$

Data Description

The data consist of daily prices of six financial variables—Korea three-month CD rates, U.S. three-month T-Bills, KRW exchange rates, JPY / USD (hereafter JPY) exchange rates, the Korea stock index (KOSPI), and the Dow Index—from January 3, 1995, to June 20, 2000, totaling 1,176 observations. Both exchange rates and other data are obtained from Bloomberg. Exchange rates and stock indexes, St, are transformed to percentage changes in compounded rates: 100 ¥ ln [St / St-1]. The levels and differences of the six variables are depicted in Figure 6.1.

The precrisis period, crisis period, and postcrisis periods have 580, 240, and 388 observations respectively. Basic statistics of the six variables are reported in Table 6.3. The three Korean financial variables exhibit very similar statistics in mean and standard deviations during the precrisis and postcrisis periods. The volatility of KOSPI after the crisis increases by having a value of standard deviation twice as high as in the precrisis period. Similarly, KRW exchange rates show a degree of high volatility during the crisis by becoming roughly seven and twelve times higher than that of precrisis and postcrisis periods respectively. The standard deviation of KRW exchange rates during the postcrisis period shows a higher number than that of the precrisis period. However, the volatility of KRW exchange rates

during precrisis and postcrisis periods is less than that of JYP exchange rates but much more volatile during the crisis period. KOSPI and CD rates during precrisis and postcrisis periods move more frequently than their U.S. counterparts. All variables do show large deviation from a normal distribution in terms of the Jarque-Bera test, except KOSPI for the post-crisis period.

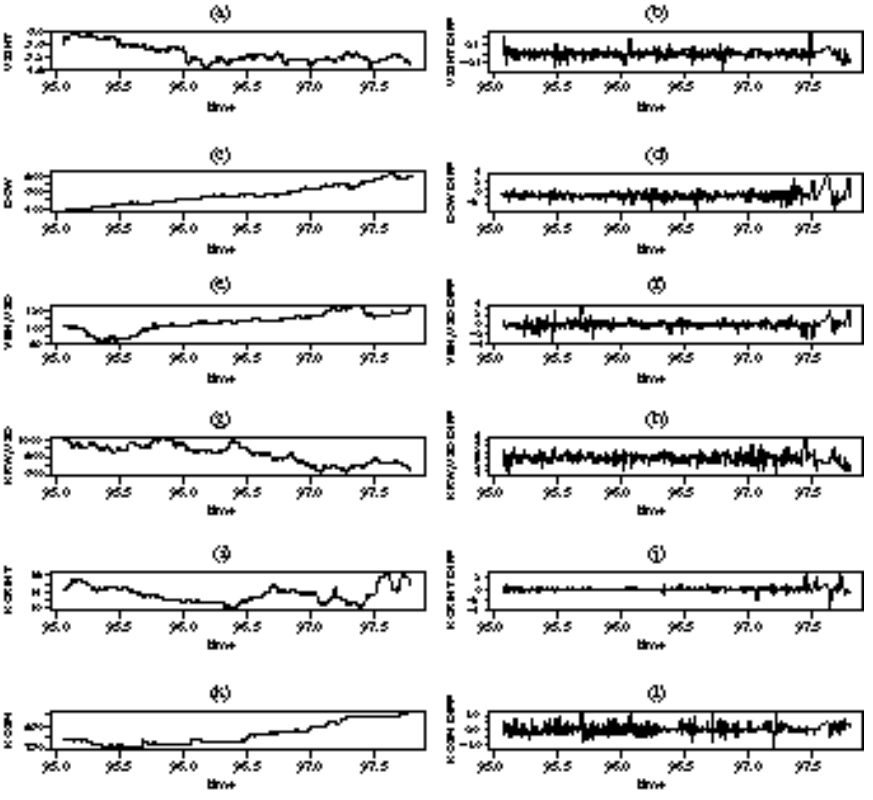

Figure 6.1. Movements of financial variables (*Note:* (a) US interest rates (level), (b) US interest rates (difference), (c) Dow index (level), (d) Dow index (difference), (e) JPY exchange rates (level), (f) JPYexchange rates (difference), (g) KRW exchange rates (level), (h) KRW exchange rates (difference), (i) Korea interest rates (level), (j) Korea interest rates (difference), (k) KOSPI (level), (l) KOSPI (difference)).

Empirical Results

Level Interrelations

Before exercising variance decomposition and impulse response function, it is common to determine lag length of the six-variate system. For the selection of lag length, we resort to the multivariate generalizations of the AIC and BIC and choose one as a lag length as seen in Table 6.4. The choice is very reasonable since we are dealing with daily frequency financial variables.

Table 6.3. Basic statistics of exchange rates, stock prices, and interest rates

	Mean	Max	Min	Standard Deviation	Skewness	Kurtosis
<KRW / USD>						
Whole Period	0.0297	19.0099	–20.3458	1.5447	2.0339	82.0505
Precrisis	0.0255	1.2458	–1.2494	0.2989	0.4907	5.1294
Crisis	–0.2055	19.0099	–20.3458	3.6023	0.7821	15.8834
Postcrisis	–0.0565	2.1006	–2.0788	0.5006	–0.1412	6.1970
<3-Year Corporate Bond Yields>						
Whole Period	–0.0076	3.0000	–3.7500	0.4420	0.0280	16.2292
Precrisis	0.0022	3.0000	–3.7500	0.3685	–0.2411	38.0289
Crisis	–0.0270	3.0000	–2.2500	0.7505	0.1150	4.3780
Postcrisis	–0.0123	1.7500	–1.5000	0.3032	0.4422	11.9956
<KOSPI>						
Whole Period	–0.0034	10.0238	–14.2108	2.4640	–0.0884	6.0218
Precrisis	–0.0754	6.6017	–4.9790	1.3573	0.1705	4.6208
Crisis	–0.3312	10.0238	–14.2108	3.7781	–0.2066	4.1004
Postcrisis	0.2772	8.9202	–7.6248	2.8263	0.1086	3.0250
<Dow Index>						
Whole Period	0.0922	5.5165	–6.5782	1.1010	–0.0106	6.4101
Precrisis	0.1260	5.5165	–3.3504	0.8570	0.6061	8.6940
Crisis	–0.0125	4.8605	–6.5782	1.4444	–0.2853	5.8138
Postcrisis	0.0968	4.0896	–4.2613	1.2115	0.0282	3.6819
<US Interest Rate>						
Whole Period	0.0001	0.2320	–0.3160	0.0483	–0.1701	7.4332
Precrisis	–0.0012	0.2320	–0.1720	0.0401	0.2344	7.2486
Crisis	–0.0037	0.1700	–0.1310	0.0505	0.2834	3.8288
Postcrisis	0.0040	0.1890	–0.3160	0.0573	–0.6073	7.7151

Note: Period 1 is from March 1, 1995 to September 30, 1997; Period 2 is from October 1, 1997 to September 30, 1998; and Period 3 is from October 1, 1998 to May 30, 2000.

Tables 6.5–6.10 provide a look at the variance decomposition for the three Korean financial variables. The impact of the foreign factors on the domestic variables is not large during the precrisis period. We can see that innovations to the foreign financial variables account for less than 2 percent of the variance in KOSPI in two days or twelve months. This phenomenon is almost the same as KRW exchange rates, although the accountability of foreign variables increases by more than 3 percent.

Table 6.4. Lag selection

	Before Crisis		After Crisis	
Lags	AIC	SIC	AIC	SIC
1	5.827037	6.143401	9.734313	10.16558
2	5.870586	6.458902	9.494178	10.29822
3	5.852551	6.713546	9.501255	10.68099
4	5.884094	7.018497	9.579634	11.13803
8	6.009125	8.244521	9.847066	12.95047
12	6.107288	9.455614	10.15796	14.85699
16	6.308211	10.78162	10.29738	16.64547
20	6.393771	12.00463	10.33173	18.38536
24	6.564706	13.32562	10.32929	20.14823

Table 6.5. Decomposition of the forecast error variance for KOSPI (precrisis)

Lags	DOW	JPY	CD 90 Days (Korea)	KOSPI	KRW	US 3-Month Gov.
1	0.014738	0.096839	0.090056	97.72823	1.070134	0.000000
2	0.334865	0.688917	0.738692	96.69980	1.079914	0.457816
3	0.342470	0.690456	0.738411	96.68700	1.083691	0.457941
4	0.342694	0.690987	0.738540	96.68607	1.083718	0.457991
8	0.342694	0.690989	0.738541	96.68606	1.083723	0.457991
12	0.342694	0.690989	0.738541	96.68606	1.083723	0.457991
16	0.342694	0.690989	0.738541	96.68606	1.083723	0.457991
20	0.342694	0.690989	0.738541	96.68606	1.083723	0.457991
24	0.342694	0.690989	0.738541	96.68606	1.083723	0.457991
28	0.342694	0.690989	0.738541	96.68606	1.083723	0.457991
32	0.342694	0.690989	0.738541	96.68606	1.083723	0.457991
36	0.342694	0.690989	0.738541	96.68606	1.083723	0.457991
40	0.342694	0.690989	0.738541	96.68606	1.083723	0.457991
44	0.342694	0.690989	0.738541	96.68606	1.083723	0.457991
48	0.342694	0.690989	0.738541	96.68606	1.083723	0.457991
52	0.342694	0.690989	0.738541	96.68606	1.083723	0.457991

Table 6.6. Decomposition of the forecast error variance for KRW / USD (precrisis)

Lags	DOW	JPY	CD 90 Days (Korea)	KOSPI	KRW	US 3-Month Gov.
1	0.081595	0.000000	0.000000	0.000000	99.91840	0.000000
2	0.105550	3.086827	0.196760	0.138616	96.46458	0.007668
3	0.125296	3.143716	0.196892	0.139816	96.38566	0.008624
4	0.125913	3.145429	0.196962	0.140053	96.38298	0.008668
8	0.125931	3.145515	0.196971	0.140056	96.38286	0.008672
12	0.125931	3.145515	0.196971	0.140056	96.38286	0.008672
16	0.125931	3.145515	0.196971	0.140056	96.38286	0.008672
20	0.125931	3.145515	0.196971	0.140056	96.38286	0.008672
24	0.125931	3.145515	0.196971	0.140056	96.38286	0.008672
28	0.125931	3.145515	0.196971	0.140056	96.38286	0.008672
32	0.125931	3.145515	0.196971	0.140056	96.38286	0.008672
36	0.125931	3.145515	0.196971	0.140056	96.38286	0.008672
40	0.125931	3.145515	0.196971	0.140056	96.38286	0.008672
44	0.125931	3.145515	0.196971	0.140056	96.38286	0.008672
48	0.125931	3.145515	0.196971	0.140056	96.38286	0.008672
52	0.125931	3.145515	0.196971	0.140056	96.38286	0.008672

Table 6.7. Decomposition of the forecast error variance for CD (precrisis)

Lags	DOW	JPY	CD 90 Days (Korea)	KOSPI	KRW	US 3-Month Gov.
1	0.078636	0.011643	99.90972	0.000000	0.000000	0.000000
2	2.078690	0.044626	97.19031	0.229530	0.113062	0.343779
3	2.079515	0.049506	97.17983	0.229525	0.113049	0.348571
4	2.079510	0.049577	97.17947	0.229793	0.113072	0.348576
8	2.079510	0.049580	97.17946	0.229800	0.113072	0.348576
12	2.079510	0.049580	97.17946	0.229800	0.113072	0.348576
16	2.079510	0.049580	97.17946	0.229800	0.113072	0.348576
20	2.079510	0.049580	97.17946	0.229800	0.113072	0.348576
24	2.079510	0.049580	97.17946	0.229800	0.113072	0.348576
28	2.079510	0.049580	97.17946	0.229800	0.113072	0.348576
32	2.079510	0.049580	97.17946	0.229800	0.113072	0.348576
36	2.079510	0.049580	97.17946	0.229800	0.113072	0.348576
40	2.079510	0.049580	97.17946	0.229800	0.113072	0.348576
44	2.079510	0.049580	97.17946	0.229800	0.113072	0.348576
48	2.079510	0.049580	97.17946	0.229800	0.113072	0.348576
52	2.079510	0.049580	97.17946	0.229800	0.113072	0.348576

Among foreign variables, JPY has a stronger influence on the three Korean financial variables than the others. The fact that JPY shock had a stronger influence reflects the competitiveness of Korean industries against Japanese industries. Also, Korea adopted a market average system during the precrisis period, which is an inference that the Korean government has been watching JPY in order to manage KRW.

After the crisis, the influence of foreign variables and other domestic financial variables increase by more than two times compared to the precrisis period. We can see that innovations of the Dow Index account for about 8.5 percent of the variance in KOSPI on a twelve-month horizon. Alternatively, domestic variables are less important. The accountability of Dow Index is less important to KRW exchange rates than KOSPI, but the number increases up to five times compared to the precrisis period. The shocks to JPY exchange rates provide more information than other domestic variables over all time horizons. For the Korean short-term interest rate, its own shocks account for most of the variance in both periods.

The impulse response functions are illustrated in Figures 6.2–6.7. These figures share a similar economic spirit with the results of variance error decomposition. During the precrisis period, other shocks to domestic variables do not affect each financial variable. Shocks to JPY cause a relatively large spike and influence KRW out three to four days. For KOSPI, all variables other than itself do not cause any large spike. For KRW after the

Table 6.8. Decomposition of the forecast error variance for KOSPI (precrisis)

Lags	DOW	JPY	CD 90 Days (Korea)	KOSPI	KRW	US 3-Month Gov.
1	0.422395	0.061097	0.091093	99.42541	0.000000	0.000000
2	8.475624	0.246836	0.246605	90.55336	0.427499	0.050076
3	8.582075	0.266716	0.316923	90.23297	0.499616	0.101700
4	8.582054	0.272519	0.316883	90.22008	0.504109	0.103902
8	8.582514	0.272870	0.316882	90.21954	0.504175	0.104019
12	8.582514	0.272870	0.316882	90.21954	0.504175	0.104019
16	8.582514	0.272870	0.316882	90.21954	0.504175	0.104019
20	8.582514	0.272870	0.316882	90.21954	0.504175	0.104019
24	8.582514	0.272870	0.316882	90.21954	0.504175	0.104019
28	8.582514	0.272870	0.316882	90.21954	0.504175	0.104019
32	8.582514	0.272870	0.316882	90.21954	0.504175	0.104019
36	8.582514	0.272870	0.316882	90.21954	0.504175	0.104019
40	8.582514	0.272870	0.316882	90.21954	0.504175	0.104019
44	8.582514	0.272870	0.316882	90.21954	0.504175	0.104019
48	8.582514	0.272870	0.316882	90.21954	0.504175	0.104019
52	8.582514	0.272870	0.316882	90.21954	0.504175	0.104019

Table 6.9. Decomposition of the forecast error variance for KRW / USD (postcrisis)

Lags	DOW	JPY	CD 90 Days (Korea)	KOSPI	KRW	US 3-Month Gov.
1	0.005949	6.855585	1.061029	5.990686	86.08675	0.000000
2	1.399597	9.227582	1.478094	5.833010	81.69091	0.370804
3	1.499581	9.290309	1.510528	5.839812	81.45678	0.412995
4	1.507382	9.292758	1.510431	5.828822	81.44634	0.414271
8	1.507546	9.292968	1.510464	5.828876	81.44582	0.414418
12	1.507546	9.292968	1.510464	5.828876	81.44582	0.414423
16	1.507546	9.292968	1.510464	5.828876	81.44582	0.414423
20	1.507546	9.292968	1.510464	5.828876	81.44582	0.414423
24	1.507546	9.292968	1.510464	5.828876	81.44582	0.414423
28	1.507546	9.292968	1.510464	5.828876	81.44582	0.414423
32	1.507546	9.292968	1.510464	5.828876	81.44582	0.414423
36	1.507546	9.292968	1.510464	5.828876	81.44582	0.414423
40	1.507546	9.292968	1.510464	5.828876	81.44582	0.414423
44	1.507546	9.292968	1.510464	5.828876	81.44582	0.414423
48	1.507546	9.292968	1.510464	5.828876	81.44582	0.414423
52	1.507546	9.292968	1.510464	5.828876	81.44582	0.414423

Table 6.10. Decomposition of the forecast error variance for CD (postcrisis)

Lags	DOW	JPY	CD 90 Days (Korea)	KOSPI	KRW	US 3-Month Gov.
1	0.119402	0.000000	98.59103	1.289566	0.000000	0.000000
2	0.128654	0.923121	97.07123	1.289633	0.585597	0.001768
3	0.168902	0.940039	96.98469	1.296349	0.595130	0.014892
4	0.169871	0.940073	96.98321	1.296312	0.595138	0.015398
8	0.169871	0.940079	96.98319	1.296313	0.595138	0.015408
12	0.169871	0.940079	96.98319	1.296313	0.595138	0.015408
16	0.169871	0.940079	96.98319	1.296313	0.595138	0.015408
20	0.169871	0.940079	96.98319	1.296313	0.595138	0.015408
24	0.169871	0.940079	96.98319	1.296313	0.595138	0.015408
28	0.169871	0.940079	96.98319	1.296313	0.595138	0.015408
32	0.169871	0.940079	96.98319	1.296313	0.595138	0.015408
36	0.169871	0.940079	96.98319	1.296313	0.595138	0.015408
40	0.169871	0.940079	96.98319	1.296313	0.595138	0.015408
44	0.169871	0.940079	96.98319	1.296313	0.595138	0.015408
48	0.169871	0.940079	96.98319	1.296313	0.595138	0.015408
52	0.169871	0.940079	96.98319	1.296313	0.595138	0.015408

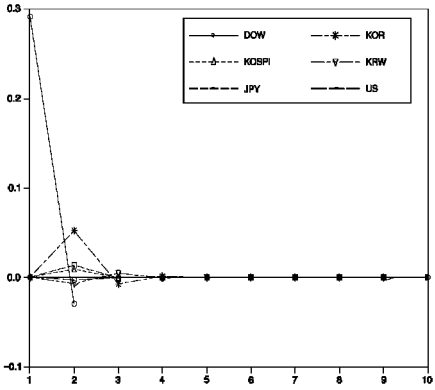

Figure 6.2. IRF of KRW (precrisis)

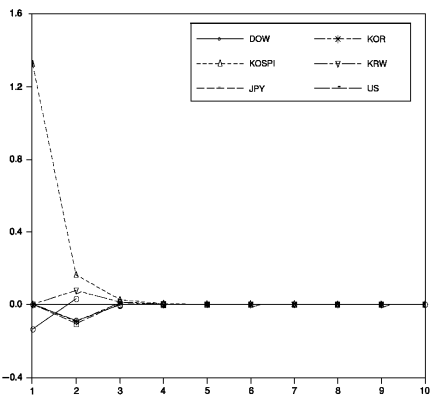

Figure 6.3. KOSPI (precrisis)

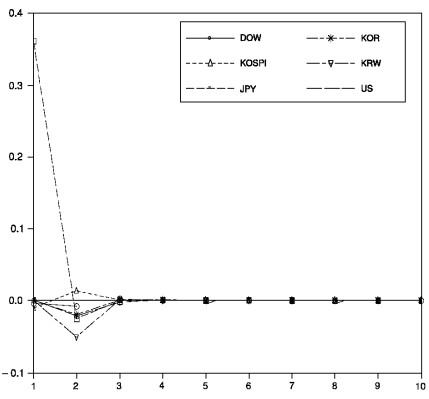

Figure 6.4. K_INT (precrisis)

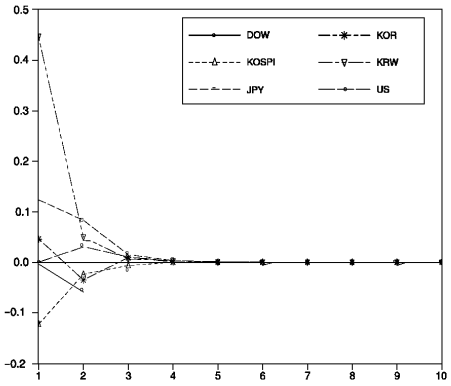

Figure 6.5. IRF of KRW (postcrisis)

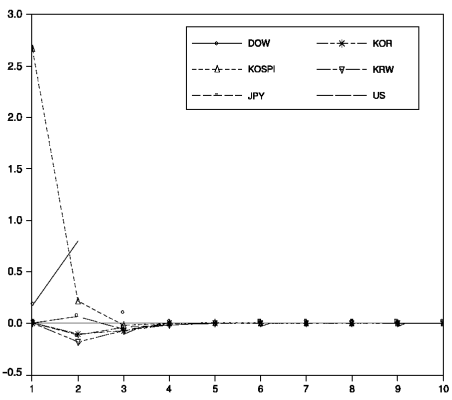

Figure 6.6. KOSPI (postcrisis)

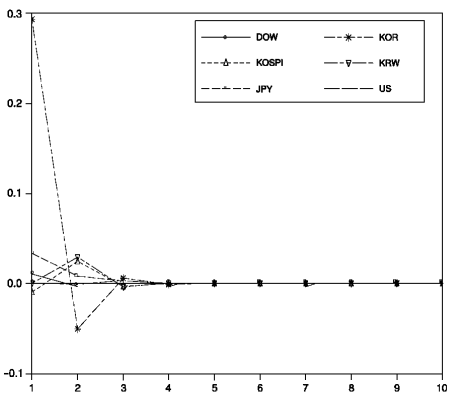

Figure 6.7. K_INT (postcrisis)

crisis, shocks to JPY and KOSPI cause a bigger hump than other variables. After the crisis, shocks to the Dow Index, however, bring out a large spike in KOSPI and a continued increase in KOSPI returns out four days. Shocks to other variables except the Dow Index affect KOSPI out two to three days and level off toward the preshock level.

For the Korean interest rates, U.S. interest rates create a relatively larger hump than domestic variables for the precrisis period; KOSPI, on the other hand, brings out the biggest hump after the crisis. As we saw in variance decomposition for the short-term interest rate, we cannot take the results to mean that foreign factors are less important after the crisis since its own shocks are the dominating ones compared to the other two domestic variables.

In sum, active liberalization of capital markets and adoption of a flexible exchange rate regime after the crisis have exposed the economy to foreign shocks.

Volatility Interrelations

As we have mentioned in previous sections, the first step for Klaassen's GARCH model is to find a weighting matrix composed of eigenvectors of the sample covariance of six variables during the precrisis and postcrisis periods. Table 6.11 presents the results, with the name of the dominating factor at the column head. For example, the second column is headed

Table 6.11. Principal component weights (precrisis)

	US_INT	–KOSPI	–KOR_INT	YEN-DOW	DOW-YEN	WON
US_INT	0.999951	0.007468	0.005956	0.000529	0.002309	0.001379
DOW	0.002532	0.010084	–0.013789	–0.252591	–0.967404	–0.005327
YEN	0.000936	0.066717	–0.071373	0.962517	–0.249820	0.040061
WON	0.001228	–0.024537	–0.007164	0.041328	0.005442	0.998803
KOR_INT	0.005928	0.004283	–0.997270	–0.066237	0.031546	0.004142
KOSPI	–0.007404	–0.997382	–0.009065	0.060526	0.026240	0.027206
Variance	0.001595	0.085800	0.133270	0.570782	0.745690	1.845689
Exp. Var.	0.04718	2.536430	3.939744	16.87353	22.04418	54.55894

Table 6.12. Principal component weights (postcrisis)

	US_INT	–KOR_INT +KOSPI	KOSPI +YEN	YEN-DOW +KOSPI	DOW +YEN	–WON
US_INT	0.999864	–0.013856	0.003320	0.008250	0.000451	–0.000750
DOW	0.002843	0.014267	0.002574	–0.275830	0.958393	–0.071993
YEN	–0.008034	0.011990	0.144460	0.950882	0.273378	0.003360
WON	–0.000797	0.004740	0.048515	0.029850	0.066178	–0.996169
KOR_INT	–0.013490	–0.990522	–0.132269	0.025945	0.022683	0.001010
KOSPI	0.004073	0.135292	0.979421	0.134571	0.043054	0.049512
Variance	0.003167	0.088169	0.210823	1.228122	1.515546	8.775888
Exp. Var.	0.026790	0.745822	1.783354	10.38870	12.82002	74.23532

"US_INT," since U.S. interest rates have the highest weighting number, 0.99. The third column is headed "-KOSPI," as KOSPI has the negatively dominating variables in the column. We can easily notice that each column title is either a domestic factor (or combined ones) or foreign factors. However, the column heads in Table 6.12 (postcrisis period) are not as obvious as in Table 6.11. Three out of the six weighting vectors are mixed even if either the domestic or foreign weight is a single dominating one. The last two rows in Tables 6.11 and 6.12 show the variance of each component and its explained variance. "Explained variance" denotes that each component sample variance is divided by the sum of the sample variances of the individual six financial variables. Therefore, explained variance can be used as a measure of the importance of principal components. During the precrisis period, the components dominated by the domestic variables explain approximately 61 percent of the total variance. However, the "WON" component is a single dominant one after the crisis (over 74 percent).

The next step is to estimate each component using a GARCH model. We have tried to use the GARCH model with standard normal distribution, but the goodness-of-fit test indicated that the standardized residuals are nonnormal in all six variables. We therefore explored other error densities to improve the fit of the model. Since it is known that financial variables have higher peaks and fatter tails than the standard normal, we used the Student-*t* distribution. In the mean equation, f_t is an autoregressive of order 1 (AR1), and the error term is normally distributed with zero mean and variance h_t conditional on past information:

$$f_{it} = a_0 + a_1 f_{it-1} + \epsilon_{it}$$
$$\epsilon_{it} \sim T(0, h_{it})$$
$$h_{it} = \omega + \alpha\epsilon^2_{it} + \beta h_{it-1}$$

Here, T stands for Student-*t* distribution.

Tables 6.13 and 6.14 report the results of fitting the mean and univariate GARCH models to the six principal components. In each case, we report the coefficient estimates with standard errors, likelihood function values, and various residual diagnostics.[13] As usual in financial variables, all but the principal component *f6* shows persistence in variance after the crisis; that is to say, the value ($\alpha + \beta$) is more than 0.9. Therefore, principal components share a very important characteristic in the original six variables in the sense that the magnitude of residuals appears to be related to the magnitude of recent residuals. In terms of diagnostics, both tables show that GARCH with Student-*t* distribution fits very well. The null hypothesis that there is no ARCH up to order 4 in the residuals is fairly well accepted in both periods. Most of the Ljung-Box Q-statistics in normalized residuals and their square, $Q_X(36)$ and $Q_{XX}(36)$, do not detect any significant dependence except a principal component *f2* before the crisis.

Since we have made multivariate GARCH estimations, we can now

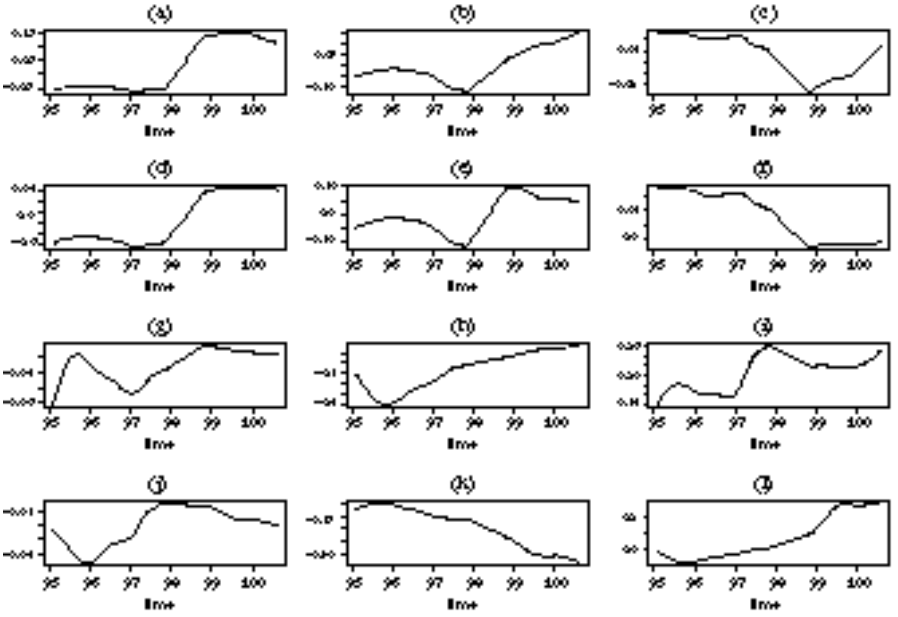

Figure 6.8. Conditional correlations between DOW and Korean financial variables

Table 6.13. GARCH estimation results for principal components (precrisis)

	f1	*f2*	*f3*	*f4*	*f5*	*f6*
a_0	-9.70×10^{-4} (3.96×10^{-2})	8.90×10^{-3} (8.68×10^{-3})	2.02×10^{-4} (4.64×10^{-2})	4.93×10^{-3} (2.33×10^{-2})	-0.175 (2.91×10^{-2})	7.26×10^{-2} (4.94×10^{-2})
a_1	-2.08×10^{-2} (0.717)	-0.132 (4.68×10^{-2})	0.354 (4.56×10^{-2})	-7.33×10^{-2} (5.05×10^{-2})	6.23×10^{-2} (5.37×10^{-2})	0.142 (4.83×10^{-2})
ω	1.83×10^{-4} (2.22×10^{-3})	9.97×10^{-3} (1.38×10^{-2})	6.07×10^{-4} (7.43×10^{-5})	1.33×10^{-2} (1.09×10^{-2})	3.11×10^{-2} (3.36×10^{-3})	0.146 (8.57×10^{-2})
α	0.151 (3.80×10^{-2})	0.404 (0.172)	0.122 (2.34×10^{-3})	4.50×10^{-2} (2.87×10^{-2})	0.173 (6.08×10^{-3})	0.107 (6.31×10^{-2})
β	0.715 (3.66×10^{-2})	0.588 (0.261)	8.76 (2.97×10^{-3})	0.942 (3.53×10^{-2})	0.799 (6.03×10^{-3})	0.815 (9.3×10^{-2})
D	5.970 (870)	3.965 (0.702)	11.09 (14.23)	3.269 (0.620)	6.901 (1.891)	7.752 (2.274)
Ln *L*	1107.46	–35.00	49.46	–568.16	–664.53	–957.802
ARCH(4)	0.300 (0.877)	1.121 (0.345)	0.0663 (0.991)	1.903 (0.108)	1.805 (0.127)	0.187 (0.944)
$Q_X(24)$	20.163 (0.632)	26.42 (0.119)	27.99 (0.216)	36.36 (9.53×10^{-3})	25.20 (0.339)	16.70 (0.820)
$Q_{XX}(36)$	32.70 (0.085)	40.562 (0.003)	0.097 (1.00)	23.66 (0.209)	29.31 (0.170)	12.586 (0.960)

answer the main questions: Have domestic financial variables become more closely tied among themselves and foreign ones, and how do they evolve over the two periods? In Figure 6.8, we plot the estimated conditional correlations during the precrisis and postcrisis periods. For the sake of exposition, we have smoothed the actual estimates using the Hodrick-Prescott filtering method.

We can easily see that correlations are time varying and the two periods are distinguished from each other. The postcrisis period is characterized by an increase in correlation with absolute value. The conditional correlation between U.S. interest rates and KRW (panel a) increases in absolute value, as well as turning into positive ones as implied by uncovered interest parity. Also, the shape of the correlation between U.S. interest rates and Korean interest rates (panel b) shares similar characteristics with panel (a). These results make sense economically. After the East Asian crisis, the United States was lowering interest rates to stimulate the world economy up until mid-1999 and then making the opposite move for fear of inflation in the U.S. economy. On the other hand, KRW continuously depreciates due to favorable world economic conditions and Korea's own restructuring efforts. After

Table 6.14. GARCH estimation results for principal components (postcrisis)

	f1	*f2*	*f3*	*f4*	*f5*	*f6*
a_0	3.74×10^{-3} (2.57×10^{-3})	1.39×10^{-3} (1.19×10^{-2})	2.57×10^{-2} (1.56×10^{-2})	-5.68×10^{-2} (4.61×10^{-2})	5.52×10^{-2} (6.37×10^{-2})	–0.197 (0.156)
a_1	-2.23×10^{-2} (5.45×10^{-2})	–0.145 (6.84×10^{-2})	-1.56×10^{-2} (5.04×10^{-2})	-8.16×10^{-2} (4.84×10^{-2})	1.35×10^{-2} (5.42×10^{-2})	0.103 (5.25×10^{-2})
ω	1.829×10^{-4} (8.99×10^{-5})	2.43×10^{-3} (2.32×10^{-4})	3.23×10^{-2} (2.58×10^{-2})	4.36×10^{-2} (3.59×10^{-2})	3.16×10^{-2} (3.38×10^{-2})	5.239 (0.365)
α	0.110 (4.51×10^{-2})	0.174 (1.08×10^{-2})	0.266 (0.129)	6.39×10^{-2} (4.33×10^{-2})	2.89×10^{-2} (1.85×10^{-2})	3.52×10^{-2} (3.36×10^{-2})
β	0.827 (5.32×10^{-2})	0.788 (6.31×10^{-3})	0.626 (0.195)	0.883 (7.27×10^{-2})	0.951 (3.31×10^{-2})	0.326 (4.50×10^{-2})
D	6.74 (2.25)	16.56 (10.70)	3.717 (0.706)	7.759 (3.104)	16.37 (12.13)	31.507 (39.07)
Ln *L*	596.72	47.58	–186.20	–499.10	–615.59	–947.140
ARCH(4)	0.644 (0.631)	0.553 (0.697)	0.433 (0.784)	2.00 (0.093)	0.024 (0.999)	0.105 (0.980)
$Q_X(24)$	28.99 (0.145)	26.10 (0.295)	21.64 (0.541)	9.077 (0.996)	4.301 (0.230)	21.73 (0.536)
$Q_{XX}(36)$	11.80 (0.961)	16.87 (0.815)	11.93 (0.971)	20.78 (0.594)	12.57 (0.960)	11.70 (0.974)

Notes: (1) Values in parentheses for mean and volatility parameters denote standard errors and those for residual tests denote p-value. (2) $Q_X(n)$ and $Q_{XX}(n)$ stand for Ljung-Box statistics corresponding to nth serial correlation.

KRW maintains around 1,150~1,200 KRW against the U.S. dollar, foreign portfolio investment flows mainly determined by U.S. interest rates are the most important factor that determines the movement of KRW, resulting in a high positive correlation between KRW and U.S. interest rates.

U.S. interest rates and KOSPI have become either negatively or loosely tied after the crisis relative to precrisis period (panel c). The negative correlation in late 1998 or early 1999 might be due to the fact that KOSPI steeply recovered its level and U.S. interest rates decreased. Two asset markets would cause the positive correlation after mid-1999—the U.S. bond market and the Korea stock market—sharing upward trends on average.

The correlation shapes between the Dow Index and the three domestic financial variables (panels d, e, and f) are very similar to those between U.S. interest rates and domestic variables. The loosely tied relationship between the Dow Index and Korean interest rates becomes tight after the crisis. We expect that the Dow Index would be the most influential factor of KOSPI, with the relationship, however, loosely tied after the crisis.

The correlation between JPY and domestic variables decreases after the crisis except for KOSPI. Even if JPY does not move closely with KRW, contrary to our expectation, stock investors take JPYas the most important foreign variable affecting the KOSPI index.

Among domestic variables, KRW and short-term domestic interest rates become loosely tied. Possible interpretations are that short-term interest rates do not reflect either the money market's liquidity situation or Korean government intervention in the foreign exchange market either directly or indirectly. The Korean government was trying to keep interest rates low to speed up financial sector restructuring. That is, high interest rates would result in increasing nonperforming loans in the banking sector, causing the government to allocate more resources to the sector. Therefore, the interest rates are not an indication of market prices reflecting demand and supply for KRW. There are many clues for other interpretations. The Korean government is trying to take various measures to keep KRW from rising (in value), such as encouraging local banks to purchase dollars in order to provide for their foreign currency-denominated nonperforming loans. However, the pairs of KRW/KOSPI and interest rates/KOSPI become tight after the crisis.

In sum, we found that the correlation between the three Korean financial variables and foreign ones become higher after the crisis. That is to say, the foreign environment is a major driving force for Korean domestic financial markets. KRW moves closely with U.S. interest rates and KOSPI. This implies that the foreign exchange market is influenced by capital inflows. The fluctuation in YEN is a major foreign driving force for KOSPI. The short-term interest rates in Korea are closely tied with U.S. interest rates and the Dow Index, with a correlation magnitude amounting to roughly 0.1 and loosely tied, on the other hand, with KRW.

Findings from Survey Data on Foreign Exchange Risk Management

The above empirical results demonstrate that Korean financial markets are closely tied to international financial markets. Also, volatility in international financial markets can turn Korean financial markets volatile. Such volatility of the financial market can dampen the real economy and hinder economic growth; the probability is clearly shown in the results of a recent survey on Korean companies' exchange rate risk management by the Korea Institute for International Economic Policy.

According to the survey results, losses from the exchange rate continue to increase for Korean firms since the introduction of a free-floating exchange rate regime in 1997. With the exception of 1995, losses from foreign exchange in general outnumber profits. In particular, net profits from foreign exchange (profits minus losses) reached –269.2 billion Korean won in 1997, the biggest difference ever recorded. The reason for the enormous loss was an unexpectedly steep rise in exchange rate—that is, the devaluation of the Korean won—rising out of the foreign reserves crisis of 1997.

From a survey on foreign exchange risk management of large companies in Korea, over 30 percent of large Korean firms were found not to be managing exchange risks. Reasons for not managing exchange risks include lack of adequate means of exchange management (24 percent) and absence of risk awareness on the part of the management (15 percent). When asked what urgent tasks lay ahead for systematic exchange risk management, companies gave the following answers: improving awareness of the top management (32 percent); training and a reasonable compensation plan for professionals (34 percent); a systematic internal reporting mechanism (17 percent); and diversification of financial products (17 percent).

Approximately 75 percent of Korea's small and mid-size export-import companies are not managing exchange risks, signaling a red alert. Some small and mid-size companies appear to be managing exchange risks, but they are blue-chip companies with large transactions of export and import, and they also represent a small fraction of the entire number of these companies. In the case of risk managing small and mid-size companies, almost none of them are managing risks by means of forward exchange rates, futures, and options. The majority of companies are using matching or netting techniques. Since the foreign currency crisis, awareness of exchange risks has become higher among small and mid-size companies and the necessity of its management is more strongly felt.

In conclusion, whereas the environment of Korea's financial markets is globalizing, companies continue to act as they have done in the former fixed exchange regime. As previously mentioned, factors of instability in international financial markets may well give birth immediately to volatility of domestic financial markets. Such volatility of domestic financial markets will ultimately bring about losses from foreign exchange for companies and lessen their global competitiveness, as well as giving rise

to a foreign currency liquidity crunch.

Choosing capital account liberalization and a free-floating exchange regime could cause domestic financial markets to further develop. However, if external financial factors dominate financial markets of the emerging markets, then negative impact—be it local shocks or global shocks—will be exerted on the real economy, with implications of a potential foreign exchange crisis. It is therefore concluded that it is not appropriate for Korea to adopt a full free-floating exchange regime, which can increase the volatility of exchange rates. Cooperative efforts of the advanced countries are necessary to sustain stability in international financial markets.

Conclusion

Since the currency crisis, most crisis-hit countries have shifted toward two polar solutions. For countries that choose a more flexible exchange regime, the choice lies on volatility of the short-term exchange rates and misalignment in mid- or long-term exchange rates. For developing countries with shallow financial markets, volatility of exchange rates makes the country more vulnerable. Furthermore, it is a general consensus that the exchange rate volatility does not always derive from economic fundamentals. This exaggerates the situation in the emerging markets. If this were true even in a mid- or long-term period, a free-floating exchange rate regime would remain too prone to crisis, as would the intermediate regime. Even when G-3 currencies deviate from their par values, it is quite possible to make significant foreign shocks for developing countries such as Korea unmanageable by themselves. The impact of foreign shocks on domestic financial variables after the structural changes (both the opening of capital markets and adoption of a flexible exchange rate regime) has been increased by more than two times compared to the previous period. On the other hand, foreign shocks are becoming the major force of Korean financial markets' fluctuations. The Korean exchange rates are moving closely with the U.S. interest rates and Japanese yen. This implies that, without an exchange rate correction, the exchange rate in Korea will deviate from domestic equilibrium more often. However, the dilemma for Korean authorities is that frequent interventions will produce the unwanted market perception that the won exchange rates are managed.

It has been suggested that a flexible exchange rate regime provides a way of giving domestic financial institutions and firms stronger incentives to hedge their foreign exchange exposure, and hence the hedging market will develop. However, our survey data show that it is not the case for Korea. Financial institutions and firms have still not adjusted themselves to the flexible exchange rate system. Thus there is a significant risk not to be hedged in the market. Furthermore, the hedging instrument has not been developed yet to cover most foreign transactions.

To conclude, a free-floating regime is not viable or appropriate for the Korean economy, totally mitigating the negative effect of a flexible exchange rate regime. Of course, the period of empirical studies is not long enough to verify the appropriateness of the flexible exchange rate regime. But it is fair to say that the current transitory period from a managed to flexible exchange rate regime is a very vulnerable period for the Korean economy, and we need to be well equipped to avoid another potentially international financial turmoil.

Notes

1. For a detailed description of the Bretton Woods period, see Isard (1995).
2. See Mussa, Masson, Swoboda, Jadresic, Mauro, and Berg (2000) and Obstfeld (1995).
3. After the Asian crisis, it has been observed that the less affected countries came out with some form of hard fixed rates (Hong Kong and Argentina), heavily managed rates with capital controls (China and India), or flexible rates (Australia).
4. See Eichengreen, Rose, and Wyplosz (1994) and Flood and Marion (1996, 1998) for details.
5. It is argued that the double mismatches (currency and maturity) in developing countries are rooted in original sin. Original sin says that emerging market economies cannot borrow abroad in terms of domestic currency and domestic currencies cannot be used even for long-term borrowing.
6. See Calvo et al. (1993) and Fernandez-Arias (1996).
7. Foreign investors can buy nonguaranteed convertible bonds issued by large companies and nonguaranteed bonds issued by small and mid-size companies since June 1997.
8. See Park, Chung, and Wang (1999).
9. See Bollerslev (1990).
10. See Bollerslev, Chou, and Kroner (1992) for an extensive survey.
11. See Longin and Solnik (1995).
12. We followed closely with Klaassen (1999). See Klaassen (1999) for a more detailed description and for comparison with factor GARCH models.
13. We do not report the coefficient estimates and residual diagnostics for GARCH with standard normal to conserve space, though they are available on request.

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Comments

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Limits to Ad Hoc Reforms

Since the collapse of the gold-dollar standard in the early 1970s, the world has opted for an ad hoc cooperation in dealing with international financial issues. Exchange rates between the three major currencies have largely been left to market forces, with occasional realignment like the one agreed upon during the Plaza Hotel Meeting in 1985, which was negotiated on an ad hoc basis. The rest of the world is free to choose from the myriad of exchange rate systems, which range from floating to fixed. In many cases the chosen exchange rate system was not defended consistently. Governments tend to easily dissociate from a declared choice once problems of fluctuation arise. The European Communities made an early decision to establish an "oasis of monetary stability" in the desert of instability. After repeated crises, which forced experimentation with different exchange rate mechanisms with varying country coverage, this European initiative ended up in the adoption of the euro, which in turn floats against the other two major currencies. Different exchange rate systems prevail in different developing economies. The underlying criteria for the adoption of a particular system are rarely spelled out.

Liberalization of capital flows has also proceeded in a similar ad hoc way. In the course of the 1980s, portfolio investors from the major financial centers were granted a greater freedom to invest a larger fraction of their investment overseas, thereby pushing upward the supply of international capital. At roughly the same time, capital markets in different countries—notably the high-growth performers among developing economies—were deregulated. Foreign ownership of publicly listed shares, which used to be subject to tight restrictions during times of antagonistic relationship between the "North" and the "South," was suddenly discovered as a desirable reinforcement for limited domestic saving. Demand for portfolio investment surged. Again, the opening was promoted in an ad hoc way. Policies on the capital market were relaxed to attract new share flotation. Owners of large companies found the new policies a golden opportunity to mobilize "cheap capital" without materially giving up corporate control. On the other hand, investors were carried away by the capital gain, which during the early development of the capital market was indeed very lucrative. The inadequacy of investors' protection was overlooked. In hindsight, almost all analysts that count in the field argue that the opening was not footed on adequate safety regulations.

Banking underwent a similar process of change. This industry has

traditionally been known as a highly regulated industry. However, banking policy environment changed in a dramatic way in the 1980s. In a matter of only five years starting in 1983, for example, banking in Indonesia was overhauled. In the beginning of this period, interest rate control was done away with. The long period over which borrowers often enjoyed negative interest rates came to an end. The rise in interest rates set forth a search for alternative sources of funding. At the same time the credit ceiling, which was imposed on an annual basis for individual commercial banks, was removed and central banks' liquidity credits were phased out in stages. The deregulation peaked when entry to banking was reopened in 1988. In spite of a notoriously low return on investment in banking, the announcement of the new policy was received with enthusiasm. The number of commercial banks increased from 111 in 1988 to 239 in 1996. The network of bank offices widened tremendously. The number shot from 1,728 in 1988 to almost 6,000 in 1996. The accounting gross domestic product of financial services grew by 13.5 percent a year in the period of 1988–93, or roughly twice as fast as the overall GDP. The same rate of growth was maintained in financial services in the last three years before the crisis. The lack of regulation on prudential banking was discovered later as a fault—and apparently too late, considering the fact that the number of banks had already risen by leaps and bounds and that profitability had been eroded very seriously. The erosion was buried under the capitalization of unpaid interest and arrears.

The bitter experiences with the debt crisis of the 1980s, the Mexican peso crisis of 1994, the Asian financial crisis of 1997, and the subsequent crises in Brazil and Russia have taught an important lesson about the inadequacy of an ad hoc approach to solving financial crises. Demand for comprehensive reform has been expressed in almost all quarters. Use of the term *architecture* suggests that, this time around, a fundamental change is sought rather than a piecemeal one. Numerous committees have been set up to draw recommendations on the new architecture. In one of them, the Council of Foreign Relations' (CFR) Independent Task Force, Morris Goldstein is the project director and author of the report. His current paper, which is focused on emergency liquidity and associated conditionality, with a less penetrating discussion of other issues, echoes to a great extent the recommendations forwarded by the CFR's Independent Task Force. The U.S. Congress also established the International Financial Institution Advisory Commission (IFIAC) to consider the future roles of seven financial institutions. This commission produced a lengthy report, which is discussed at great length by Goldstein, drawing attention at the same time to other important statements—notably the ones by the G-7 Finance Ministers and those by the U.S. Treasury. The great difficulty involved in reaching agreement on the new architecture is already reflected in the dissenting position taken by some members of IFIAC. The differences are deep, as

reflected in the dissenting statements by Fred Bergsten, director of the Institute for International Economics, and those of Jerome I. Levinson. Elsewhere, numerous institutions have also made it part of their business to contribute to the discussion on the new architecture. Mario B. Lamberte provides a complementary listing of the institutions. They include the United Nations' Task Force, the Asian Policy Forum, the ASEAN + 3 Forum, G-20, G-22, and the Financial Stability Forum. The paper by Mario B. Lamberte raises some issues that are likely to divide emerging economies and industrial economies while drawing the new architecture. They include Highly Leveraged Institutions (HLIs), adoption of international standards, and the decision-making process as regards the future of the Bretton Woods Institutions (BWIs) or IFIs. The difficulty involved in choosing an exchange rate regime is brought to light by Chae-Shick Chung and Doo Yong Yang in their paper on the exchange rate regime in developing countries. This paper is confined to the Korean case. The hypothesis of the "hollow middle" is rejected when they argue for an intermediate regime rather than a floating one for Korea. Together with other studies on the same subject, this study on Korea can serve as an additional reference for governments that are yet to make a choice on their exchange rate regime. It also implicitly reinforces the argument that the exchange rate regime is best left to national governments in order to assure that specific characteristics are adequately weighed in the decision.

Direction of Change

Having had a series of crises fresh in memory, the various commissions and authors of extensive works on the new financial architecture have tended to concentrate attention on the weaknesses of the financial system in crisis economies. Changes in the form of more control and regulation are predominantly expected to occur in the emerging economies. The high and allegedly increasing costs of financial crisis may indeed make the crisis economies more receptive to changes than they used to be. Even in an economy as entrenched as that of Indonesia, the attitude toward the many aspects of the new architecture is becoming more positive. However, the direction of change does seem to deserve a deeper discussion. It would be heroic to assume that the frequency and severity of financial crises would be reduced in emerging economies just because they were recently hit by a very costly financial crisis. Nor is it realistic to expect a greater willingness to adopt the principles, rules, and practices that are recommended by the architects of the new financial system because the crisis countries have just learned what it means to live under the conditionality of the IMF loan. History suggests that financial crisis is statistical in nature. It is probable to strike again for reasons that, at least in part, are unknown ex ante. Considering that the new architecture is supposed to cater to future needs, a

discussion of the emerging financial environment is in order.

Integration is inherent in economic development. It is not new in the history of mankind, but was oftentimes disrupted, particularly since the innovation of the nation-state. What is new to some extent is the accelerated pace at which the integration is deepening. Two groups of factors are responsible for this deepening. The first group of factors consists of technology changes, which can be called a push factor. The full impacts of these changes are yet to be felt. Thanks to a declining price and increasing user friendliness, the new technologies are being diffused at a rapid pace. Scattered around the globe with a high concentration in North America and the Nordic countries, users of the Internet have increased from a mere 3 million in 1991 to 250 million in 1999. Among these users, the financial services industry was an early innovator. Needless to say, the new technologies might have spread much more slowly across borders had there not been an equally breathtaking progress in liberalization of both border and behind-border measures. This liberalization serves as a pull factor for the deepening of integration in the world economy. A three-tier liberalization was pursued in many economies. In some developing countries it happened by default. A deteriorating resource position following the deep decline in oil prices in 1986 compelled Indonesia, for example, to embark upon a long series of deregulation, which after six years or so led to a much more open policy environment. This reform was a success story. Unfortunately, the painstaking reform was reversed in the last full term of Suharto's presidency. It was also the failure of central planning to deliver the promised progress that inspired China to experiment with a localized capitalism with great success. In developed economies, reform was given tremendous impetus with the return to power of conservative parties. Under Prime Minister Margaret Thatcher and President Ronald Reagan, two of the world's most important financial centers were experiencing a "big bang" of reform. Continental Europe followed a little later. At roughly the same time, the bankruptcy of central planning in Eastern Europe was becoming unmistakable. This part of the world, too, joined the capitalist wagon in the late 1980s. The hitherto isolated block of economies entered the world capital markets with a great need of foreign capital. This worldwide rediscovery of the market economy may one day stumble over new obstacles. For the foreseeable future, however, the deepening integration is likely to be sustained. The world is enjoying a punctuated enthusiasm for an open economy.

The degree of liberalization of the last twenty years or so has been higher in financial services than in other sectors of the world economy for two main reasons. First, prior to 1980 financial markets were lagging far behind goods markets in term of openness. Tight and multilayered regulation was adopted after the Great Depression. Most of the regulatory measures were retained until the late 1970s. Second, reformers in many

economies usually find it easier to start reform in financial services because vested interest groups' resistance is weaker in these markets than it is in goods markets. Reform of financial services in the 1980s and 90s can be put succinctly as follows. Restrictions on capital outflows and inflows were relaxed simultaneously (Office of Technology Assessment 1989; Smith and Walter 1997). Investors in the developed countries are allowed to diversify their investment across borders to as far as the emerging economies. Higher risks were tolerated for the sake of higher returns. On the other hand, foreign ownership of shares is encouraged in almost all host economies. As a result, the landscape of the world financial markets changed dramatically. Bank credit as a fraction of GDP in G-10 countries rose from 75 percent in 1985 to 86 percent in 1998. Market capitalization of the equity markets in the same group of countries rose even faster, from 44 percent to 98 percent in the same period. The international investment position, both assets and liabilities, also increased tremendously. The portfolio investment position grew progressively, and within this category the foreign equity position increased the fastest. The U.S. foreign portfolio asset position jumped, for instance, from 19 percent of GDP in 1985 to 42 percent in 1998, of which the portfolio equity position shot from a mere 1 percent to 16 percent in the same period. A similarly strong increase was observable in France, Germany, Japan, and the United Kingdom (Mylonas, Schich, and Wehinger 2000). Though much smaller in size, the investment position of emerging economies must also have risen at a similarly rapid pace. On top of the portfolio investment there came the derivative markets with their high complexity. The rapid growth, the enormous size, the increased velocity, and the higher complexity may have resulted in a greater but less predictable potential of instability in the world financial markets, especially in the emerging markets.

"Excessive liberalization" without adequate prudential measures has often been blamed for the recent crises in the emerging economies. Restrictive policies are said to have shielded China against the Asian financial crisis. Malaysia's decision to resort to a fixed exchange rate and short-term capital control is considered by many as an appropriate step in time of crisis (Athukorala 1999). But there is no simple answer to the question on whether or not the vulnerability to financial crisis is positively related to the degree of openness. Both open markets and closed markets appear to entail seeds of instability. Finding the right mix between market and regulation, with due consideration to the stage of development that a capital market occupies, appears to be the more relevant issue. Nor is choosing the right mix of regulatory measures a simple task. Regulation on capital adequacy, for example, may have to be combined with interest rate control in order to improve the chance for stability (Hellmann, Murdock, and Stiglitz 2000). Number counts a lot in respect of stability. The smaller the number of constituting elements of a system, the more vulnerable it is to

instability. At the early stage in the development of a capital market, which relies heavily on a small number of listed shares and investors, the need for regulation appears to be greater. As the market matures and diversifies, tougher competition may play a greater role in maintaining stability or restoring it in the aftermath of a shock.

I consider this relatively lengthy discussion of the global financial environment complementary to the three papers; for the sake of being focused, they refrain from taking up the background issues. Where the polymorphic changes would eventually lead to in the course of the next decade, for example, is hard to even guess. Yet efforts to anticipate at least the major contours are imperative, even though policy makers, corporate organizations, and investors are likely to get more cautious temporarily as long as the tremendous costs of the crisis are fresh in memory. The new architecture should take into account this prospective revision in behavior, however impermanent it is bound to be. Judging the adequacy of the proposed new architecture is basically impossible without a good understanding of the emerging financial environment. Anne Krueger once pointed out that the designers of the new architecture should first question the "optimal global institutional design" before recommending changes in the existing architecture. Unfortunately, she herself did not pursue the statement further (Krueger 1998: 2006). Allowing oneself to be guided almost exclusively by the need to avoid the recurrence of past crisis implies ignorance of the fact that a new crisis is never exactly the same as its predecessor. By implication, the cure to a new crisis is necessarily different from the one that proved effective in earlier crises. Therefore, the future world of finance needs to be discussed, at least in broad outlines, as an important part of the overall context into which the search for a new design has to be placed. Policy makers around the developing world would greatly benefit from such a discussion, even if it would be very brief.

IMF's Lending Policy and Conditionality

Morris Goldstein must have a very strong reason other than limitation of space to use the lending policies and practices of the IMF as an organizing device for his paper. He may be suggesting that financial crises are likely to increase in frequency and that, therefore, the IMF's role as leader of crisis management will be needed more and more. Imperfections are not going to disappear from the world of finance. Human memory is short. Demand for safety tends to be very strong in the immediate period after a crisis. As stability returns, policy makers and participants in the financial markets will get less cautious in weighing the risk-return relation. Tougher competition erodes profitability and is likely to lead one or two agents to switch from prudence to gambling. In other words, crisis will continue to have a nonzero probability that tends to increase as the memory of the

most recent crisis fades away. Crisis management is, therefore, an integral part of a viable financial architecture. As integration in the world financial markets deepens as reflected among others in cross-border mergers among major financial institutions, future crisis management may have to be more international in nature. This call for internationalization may sound paradoxical against the background of decentralization that comes along with the new information and communication technologies. It also assumes that an international crisis manager can treat countries in a way similar to that in which a national crisis manager treats domestic institutions. This assumption is strong, considering that the issues of sovereignty are involved in international crisis management, particularly when a certain government is perceived to have a dominant position in such crisis management. Apparently, the dominant role of the U.S. government in leading and managing the Bretton Woods Institutions is seen with dismay by many other governments. In the recent crisis, for example, the government of Indonesia asked for the IMF program only when domestic crisis management had proved ineffective. Nevertheless, advances in information technologies do not make a systemic crisis improbable. It may even quicken the propagation of a country crisis into a world-threatening systemic crisis. The difficult question then arises as to how the lending policies and practices of the IMF can be redesigned to make them more effective in combating a crisis while at the same time reducing borrower and lender moral hazards.

Interest rate and maturity of IMF loans can do some of the tricks. At least that is part of the message conveyed by the reports that Morris Goldstein discusses in his paper. The interest rates on the existing loans of the IMF are considered low, though the equivalent of conditionality must be added on top of them. Goldstein agrees on the need to charge a higher interest rate on IMF loans for the sake of earlier repayment, though he finds the proposal by the Meltzer Commission neither necessary nor desirable. The penalty rate will certainly pressure a debtor to repay as early as possible. The link between a penalty interest rate such as the one recommended by the Meltzer Commission is more complicated, however. Avoidance of high interest costs is one thing, but the ability to repay debt is another. The way in which high interest rates can improve the ability to repay needs a more careful analysis. For a given loan, they would mean forcing a crisis country to accumulate a larger current account surplus within a shorter period of time than otherwise would be the case. Costs to what Alan S. Binder (1999) called "innocent bystanders" would then increase. Shorter maturity would lead to a similar effect. A successful IMF program requires a coalition for adjustment in the debtor country. This coalition is bound to weaken if higher interest rates must be paid on an IMF loan. Even among government officials of Indonesia, for instance, there are some who criticize the IMF program for reasons related to inter-

est rates. Rumors also circulated at one time about government officials quietly looking for cheaper loans from bilateral sources for the sake of a less stringent conditionality, though so far nothing has come out of this operation. Given that in the run-up to a financial crisis, production and investment were usually distorted in favor of the domestic market, reallocating resources in favor of exports is bound to be difficult. Accumulating a current account surplus can only succeed after a certain time lag, even in cases where domestic demand collapsed after a financial crisis. Obviously, a compromise is needed. Interest rates and maturity should not be prohibitive in nature seen from the perspectives of borrowers. On the other hand, a debtor government should make it clear to domestic constituencies that IMF loans are primarily aimed at restoring balance-of-payments adjustments and that such adjustment is associated with hardship that comes along with the generation of current account surplus. One more important question needs to be raised, however. It relates to the guideline that negotiators can make use of while setting the standard rates and maturity in the context of the new architecture, assuming of course that the major contributors to IMF's resources do not consider these issues as their prerogative. Counting the subsidy equivalent of the interest rates on IMF's loans as exercised by the Metlzer Commission is no great help. The average spread between IMF rates and those of market rates with a due account of conditionality and success rate in the respective programs may be used as an orientation, with a view toward bringing them down to a level that is less likely to cause serious moral hazard.

The size of rescues is equally hard to address. On the one hand, the Meltzer Commission recommends equipping the IMF with the ability to lend freely at the penalty rate and good collateral in times of crisis, indicating the size of emergency liquidity to a crisis country of up to one year's tax revenue. Standards should be used to fight moral hazard, which may worsen under such a large-scale liquidity. On the other hand, the ballooning rescue program of the IMF as a fraction of the quota of the respective crisis countries has been a subject of widespread criticism. Worries about large-scale liquidity eroding market disciplines have also been expressed. This view is shared by the CFR's Independent Task Force, which argues in favor of a smaller emergency liquidity. It proposes three windows of liquidity. The first window consists of the normal access of up to 300 percent of quota to deal with a "national crisis." The New Arrangements to Borrow (NAB) would constitute the second window, designed to combat the type of systemic crisis that erupts as a result of inadequate policies in the borrowing country. The third window would be called "Contagion Facility," the aim of which is to deal with the type of crisis that emanates from contagion. This Contagion Facility should be funded by an allocation of special drawing rights (SDRs). Drawing a distinction between a country crisis and a systemic crisis at the earliest possible stage of a crisis is certainly

problematic. It took Indonesians, for example, months before they finally understood that the Thai baht crisis was more than just a country crisis. On the other hand, Western banks were by and large insulated from the damaging impacts of the Asian crisis, thanks to their small exposures in the crisis economies. Shares of these banks performed even better than other shares did in their respective stock markets. Announcements of the IMF programs added to the shareholders wealth of these banks (Ko and Stulz 1999: 28). This relative insulation might lead some banks to the conclusion that the Asian financial crisis was national rather than global in nature. A crisis may cause a great deal of damage before policy makers can determine its nature. The position taken by Goldstein on the issues of the size of rescues is clear. He finds the recommendation by the Meltzer Commission both unrealistic and counterproductive. He sides with the CFR's Independent Task Force proposal on a quota-based rescue and IMF's return to smaller rescues. Such smaller rescues may turn out to be highly effective, provided that the policy setting in which they are deployed is conducive to rapid change. The fact that the Korean crisis largely subsided before the financial pledge was exhausted suggests that the success of a rescue does not require a large-scale rescue. On the other hand, the persistent instability in the Indonesian financial system in spite of the similarly large financial pledge by the IMF-led consortium indicates that there is much more to a successful rescue than large-scale liquidity support. The quality of national policies is probably the most important ingredient to the outcome of crisis management.

Assuming a continuous deepening of integration in the global financial services industry, emergency liquidity will become all the more important among the constituent elements of the new financial architecture. Even if one assumes that the probability of occurrence of a crisis is constant over time, the increased number of economies that are actively involved in the global financial market implies a larger number of crisis economies. Therefore, more attention needs to be given to the economics of emergency liquidity. Comparing the size of the recent IMF rescues with existing quotas is faulty, recognizing that the quotas have not kept up with the global economy, as pointed out by Stanley Fischer. If the amount of emergency liquidity is made dependent on quotas, then the latter will have to adapt to the growing size of the world economy, the rising trade intensity, the rising share of foreign direct investment in gross capital formation, and the increasingly mobile capital following the wider regional dispersion of good investments. However, there is a problem of asymmetry in the way the quota at IFIs is currently financed, as discussed in the Meltzer Report. "Hard currencies" are diminishing in number, and among them the U.S. dollar is gaining in importance. It is these hard currencies that the IMF can count on to finance its rescue program. On the other hand, an increase in IMF's stock of many other currencies does not mean a proportional increase

in emergency liquidity. Under these circumstances agreement on an increase in quota is hard to reach, let alone an agreement on a disproportionate change in voting rights. One possibility to overcome this discrepancy between a quota increase and that of the deployable resources of the IMF is a formula that somehow links the increase in voting rights with the fraction of quota paid in convertible currencies, however unpopular such a linkage may be, especially among countries that suffer from a severe shortage of convertible currencies.

Some other factors do affect the size of the emergency reserve, which is needed in times of country and systemic crises. Less flexibility in the exchange rate arrangement requires a larger amount of emergency liquidity. If more and more countries choose to peg their currencies, the IMF may have to maintain a larger emergency liquidity. The policy on capital accounts also plays a role. A greater freedom of capital to move necessitates a larger reserve, unless it is combined with a floating exchange rate. On the other hand, the tendency in a growing number of economies to impose at least the soft types of restriction on capital implies less need for reserve. Together with the opportunity costs of holding reserves, the new trends in global financial services will have to be taken into account while making an estimate on the size of emergency liquidity. Recent experience shows that the optimal size of rescues needs to be studied more carefully, bearing in mind that in most cases the rescue commitment is greater than what is actually used. Pending such a careful estimate, the size of emergency liquidity will have to be determined with the help of rough indicators such as a weighted sum of import, stock of short-term foreign capital, and the volatile part of bank deposits. They may even be guided by the rule of thumb of more is better than less along the line of "the wardrobe theory of reserves." The latter would require, among other things, a continuous increase in reserves and a determination to resist the temptation of an expansionary policy, even under a highly favorable export expansion. Obviously, China, Taiwan, and Hong Kong have adhered to this type of policy as reflected in the large size of their respective reserves. If many more countries opt for a similar policy, the need for international emergency liquidity would greatly be reduced. However, any increase in emergency liquidity is associated with opportunity costs. In short, there is no simple formula that governments can readily employ to determine the size of emergency liquidity.

The immediate objective of IMF's program is to restore balance-of-payments equilibrium. Countries undergoing such a program will have to generate a current account surplus large enough to pay interest on and repay the emergency loan within the specified period of time. To assure the attainment of this objective, conditionality is attached to the package. It is this conditionality that draws severe criticism against the IMF. When then president Suharto of Indonesia signed the first Letter of Intent (LoI),

the event was widely criticized as an act of surrendering Indonesia's sovereignty to the IMF. In the subsequent reviews, such emotion keeps resurfacing. Even among officials there are some who accept the conditionality only grudgingly, refusing to "own" the program and, thereby, making it less credible than otherwise would have been the case. However, opting out of the program has never been openly considered. The bitter medicine seems to have worked. The fact that the return to balance-of-payments equilibrium has been much slower in Indonesia than it has been in other crisis economies of Asia appears to have less to do with conditionality than with other factors. The wider context in which the IMF program was activated in Indonesia was extremely different than it was in Korea and Thailand. There were many more dimensions to the Indonesian crisis than there were to the crises in Korea and Thailand. The exchange rate crisis hit Indonesia at a time when:

1. The supply of staples shrank in the wake of a prolonged drought.
2. The supply of exportable goods was stagnating because of distortions in the incentive system, shifted in favor of nontradable goods and services in almost five years before the crisis, following the footsteps of the privileged few among businesspeople.
3. The devastatingly deep depreciation of the Indonesian rupiah damaged the balance sheets of banks and corporations beyond recognition.
4. A long overdue presidential succession was fought out with the help of a popular uprising against the armed forces, which defended the status quo to the last minute.
5. An end to a long-time oppression unleashed different kinds of amok, with damaging effects on the functioning of the economy.
6. The pervasiveness of bad practices of governance in politics and business was such that even the democratically elected current government cannot move quickly in its public sector reform.

The Indonesian crisis was, in other words, one of an implosion of a massively centralized power of government and business (Simanjuntak 1999). The exodus of private capital was very severe in the two quarters starting in October 1997—namely $8.6 billion and $7.1 billion respectively, compared to an average of roughly $2 billion in the previous two quarters. Developments in the current account have been much more encouraging, however. The current account surplus averaged $1.2 billion per quarter in 1998 and 1999 as a combined result of a free fall in imports and a slight increase in exports, including the reexport of some goods that turned dormant immediately after the crisis. This trend of a positive current account still continues to the first half of 2000, if at a decelerating speed. It occurs under the IMF program, though one may never be able to tell exactly how much of it is attributable to conditionality.

Together with the even more impressive performance of Korea and Thailand in restoring balance-of-payments equilibrium, the Indonesian

experience suggests that conditionality still serves its stated purpose. Replacing it with a new scheme such as preconditions, as recommended by the Meltzer Commission, appears to have less to do with empirical evidence rather than a preconceived set of ideas. The inclusion of freedom of entry and operation of foreign financial institutions in the proposed preconditions is particularly puzzling when contrasted with another element that calls for the elimination of structural policy conditions. After all, foreign financial institutions are not immune to crisis, as Americans themselves understood full well when some major American banks were pushed to the brink of bankruptcy as a consequence of imprudent lending in the 1970s and early 1980s. Japanese banks appear to have also suffered severely under the Asian financial crisis. Goldstein considers such preconditions unattractive and insufficient to deter crisis. History tells us that financial crises can and do mutate over time. There is always a surprising dimension in a new financial crisis that is impossible to identify ex ante. Had emerging economies been ranked according to the degree to which each of them fulfilled the preconditions of the Meltzer Commission in the run-up to the crisis, Indonesia might have occupied a prominent rank. This is not an argument against precaution. Nor does one need to deny that investors continuously weigh the soundness of the macroeconomic policy of alternative locations by referring, among other things, to the ratings issued regularly by rating agencies. However, promising to reward the fulfillment of preconditions in quiet times with an access to an unlimited emergency borrowing from a last-resort lender in crisis times may indeed aggravate the problems of moral hazard. Goldtein's point on the uselessness of preconditions once a crisis hits is also obvious. How else could an emergency lender maximize the probability of repayment other than by imposing conditionality, considering that the preconditions may have turned out to be irrelevant once the crisis strikes? If worse comes to worst, lender and borrower will have to resort in one way or another to the current practices of IMF's conditionality.

The widening issue coverage of IMF's conditionality has almost stumbled on a universal criticism. The core competence of IMF, according to Goldstein, lies in monetary, fiscal, exchange rate, and financial sector policies. He applauds the intent of the new managing director of IMF to navigate this institution back to basics and proposes to move the Poverty Reduction and Growth Facility (PRGF) to the World Bank. At first glance, one cannot argue against such a recommendation. Yet there must have been reasons for this extended scope of conditionality other than the internal mechanics within the IMF bureaucracy, which like other bureaucracies is faced with the "law" of self-proliferation. Before the crisis, for example, Indonesian policy makers were fond of asking the IFIs a favor to insert in their recommendations "sensitive" policy changes that Indonesian themselves did not dare to put on the table. This habit of borrowing

the hands of international organizations to strengthen policy-making discipline was counted as an important benefit of participation in international regimes. It was given a high priority in Indonesia's participation in the ASEAN Free Trade Area (AFTA), Asia Pacific Economic Council (APEC) and even the World Trade Organization (WTO). When things look rosy, a leader can easily find arguments to oppose painful policy changes. However, a crisis offers a good opportunity for cleaning up the accumulated mess. International organizations can quicken such a cleanup by using their resources as a lever. The need for such a tactic has diminished and will continue to do so, thanks to the democratization that is occurring in many troubled economies. Still, open debates on sensitive issues remain a dream for many developing countries.

The window for using conditionality as a booster for reform should be kept open. What is needed is a rearrangement. Policy issues that relate to the "core competence" of IMF should be inserted into IMF's conditionality, while structural issues such as industrial and trade policy reform should be relocated to the World Bank. Yet even with the best intentions to promote division of labor among the IFIs—getting totally rid of issues that are not related or are related only remotely to the core competence of IMF—is not as simple as it sounds. Consider the Indonesian case again. If one addresses fiscal policy, the scope of works will necessarily extend to state enterprises that control large-scale productive assets, including some key natural resources with crucial contributions to government finance and export earning. Taking up the issues of subsidy as a way of reducing fiscal imbalance requires one to venture into the pricing of fuel, electricity, and public transportation, to name only a few examples. Recognizing that in a rescue program the IMF serves not only as a lender but also as the coordinator of a consortium, IMF's conditionality is likely to continue to extend beyond its perceived core competence. In other words, there are practical limits on the extent to which the streamlining of IMF's mandate can be pushed.

Other Important Issues

The success of a rescue program depends, among other things, on the behavior of private lenders. Whether they like it or not, private lenders cannot escape paying some of the bills that are incurred in the course of a systemic crisis. Persuading them to do so at the earliest point in time is hard, however. The Jakarta Initiative, which was established as a "clearinghouse" of a kind where debtors meet creditors, has performed rather miserably, though some signs of an accelerated progress are observable in recent months. Both debtors and creditors were very slow to discover the merits of turning to the Jakarta Initiative. Part of the explanation of the slow progress is technical in nature. Debtors are still expecting the rupiah

to return to a considerably stronger position and prefer, therefore, to delay debt renegotiation. For another part, such a wait-and-see attitude seems to have something to do with the notorious malleability of the law. Recognizing the very poor record in law enforcement, debtors do not have to worry about being bankrupted. In some other cases, debtors may have been trapped in a hopeless financial situation and thus prefer to keep quiet. On their side, creditors may still expect to be bailed out, though there is no sign that this strategy would ever pay off. Yet the link between private debt workout and economic rehabilitation is well known. The latter will be seriously handicapped unless private lenders are willing to share the burden left by the crisis by agreeing, for instance, on a temporary standstill. In an emerging economy where capital transactions have increasingly been dominated by the private sector, private sector initiative (PSI) is increasingly needed in crisis management. It is, therefore, surprising to know that the Meltzer Commission refrained from addressing the PSI. The CFR's Independent Task Force, on the other hand, is much more explicit in their recommendation on PSI, mentioning among Collective Action Clauses (CAC), good deposit insurance, good faith discussion, and temporary payments standstill by debtors as possible ways of encouraging PSI. Lamberte's paper draws attention to proposals along the same lines. They include the recommendation by the G-24 on orderly restructuring and that of the United Nations on a standstill sanctioned by the IMF. This idea on standstill seems to have been gaining ground. Even G-7 seems to have embraced the idea in conjunction with IMF's program.

The choice of an exchange rate system is universally covered in discussions about the new financial architecture. Economists widely agree that the choice of exchange rate regime should be left to individual countries. The hypothesis of the hollow middle is not universally supported. A middle ground between a pure floating and rigid fixed regime will continue to be appropriate (Frankel 1999: 37). What is crucial is not the choice but the credibility in supporting whatever choice is made. On this issue, Goldstein also sides with the CFR's Independent Task Force, preferring managed floating with inflation targeting as an anchor to other arrangements as far as emerging economies are concerned, in contrast to the Meltzer Commission's recommendation on the corner solutions. Chae-Shick Chung and Doo Yong Yang also argue in favor of managed floating for Korea in order to allow Korea to dampen the effects of changes in the external financial markets, which they found to be the dominating factor in the Korean financial markets. The slow pace at which Korean companies uncouple themselves from the types of behavior that are common under a fixed exchange rate system is also mentioned as an additional argument against free floating. The long list of factors that need to be considered while choosing an exchange rate system as compiled by the two authors in Table 6.2 of their paper makes any externally imposed exchange regime highly

questionable. The right to choose an exchange rate regime is also mentioned in Lamberte's paper. Even in the absence of a good track record in stabilization, the ASEAN Policy Forum rejects the two extremes.

Indonesia provides a good example for the difficulties involved in choosing an exchange rate system. Years before the crisis it subscribed to managed floating. The rupiah was allowed to depreciate at a small annual margin. Given the crucial importance of dollar revenue from oil and other primary commodities, the exchange rate for a fiscal year was and is basically preannounced. When the signs became clear that the Asian financial crisis was spreading to Indonesia, the intervention band was first widened. A target zone was put in place. But this decision did not prevent the rupiah from continuing to fall. Even when the policy interest rate was more than doubled from 12 percent to 30 percent, the reversal of the downward trend in the exchange rate was less than convincing. Confidence in the ability of the government to stabilize the rupiah weakened further. During this desperate time, the idea of the Currency Board System (CBS) was introduced to Indonesia. President Suharto hinted on its adoption even at the cost of antagonizing the IMF. An attempt was made to mix the IMF program and CBS, and the result was known as the "IMF-Plus Solution." Rumors about dollarization also circulated. Some economists recommended a return to a fixed exchange rate system in spite of the dwindling international reserve. Officials rallied to issue a statement that the rupiah was to bounce back strongly, indicating an opposition to floating. On the other hand, worries were expressed about the detrimental effects of a strengthened rupiah on the competitiveness of export. This indeterminacy might have contributed to the deep free fall of the rupiah. The story continues under the new government. The idea of CBS was revived recently. Some members of the People's Consultative Assembly, constitutionally the most powerful institution in Indonesia's political system, even proposed the inclusion of a rigid exchange rate system in the amendments to the constitution. This story clearly tells how difficult it is to remain firm in regard to the exchange rate system once a country is struck by a severe crisis.

The regional approach to stabilizing the exchange rate has gained in popularity since the adoption of the euro. Asians, too, have considered monetary cooperation in a more serious manner. The design of this Asian monetary cooperation is still in the making. In spite of the strengthened trade and investment links between the Asian economies, monetary integration is unlikely to take off anytime soon. The boundaries of Asia are yet to be defined when it comes to monetary cooperation. At the current stage of development, the initiative is confined to ASEAN + 3 (Japan, Korea, and China). Secondly, even these countries make up a wide spectrum in terms of economic development, ranging from a new starter to a very advanced one. Thirdly, ASEAN + 3 is akin to the Tower of Babel as far as the basic

direction of monetary policies is concerned. This lack of convergence constitutes an unfavorable initial condition for monetary integration. Yet such convergence is perhaps an ingredient rather than a consequence of monetary integration (Rose and Engel 2000). Requiring these countries to adhere to a meaningful set of standards of good monetary policy is highly unrealistic for the time being. Perhaps Japan, Korea, Singapore, Brunei, Malaysia, Thailand, and possibly also the Philippines may find certain common interests in monetary integration, such as intragroup exchange rate stabilization, with the help of a certain exchange rate mechanism. With such a reduced country coverage, however, there would be little left of the idea of Asian monetary cooperation. The other choice apparently is to defuse divisive issues and concentrate the cooperation instead on issues that are far easier to agree upon. They include data compilation and dissemination on a real-time basis, training in financial policy making and implementation, and a soft type of concerted monitoring. While a limited pooling of emergency reserves has been agreed upon among ASEAN + 3, it is unlikely to result in a regional reserve that would be adequate to deal with a crisis of the severity that swept over Asia in 1997. Asian monetary cooperation is, therefore, not meant to challenge the IMF. What is currently being discussed by the prospective members is a second line of defense that member countries could rely on while fighting a country crisis before it propagates into a systemic crisis.

Control on capital flows constitutes another controversial issue in the debate on the new financial architecture. "Excessive" flows of short-term capital are widely considered to have been partly responsible for the crisis. Lamberte discusses this issue at length. In the extensive writings on this issue, a sentiment in favor of restrictions on short-term capital is observable. Measures proposed include the famous Chilean type of deposit, taxes on short-term capital inflows, and levy on outflows in times of massive capital outflows. The extent to which such restrictions would work when they are most needed remains to be seen. They may work effectively if applied only in a small number of economies. Should they be adopted more or less universally, however, capital flows would be less affected, considering the need for portfolio diversification on the side of investors around the globe. Besides, a corruption-free and competent bureaucracy is needed to make restrictions on capital flow work. Such a bureaucracy is hard to find in emerging economies. Even if one assumes the existence of a good bureaucracy, calling for capital control in the aftermath of a crisis that erupted partly because of a panic outflow of local capital is, obviously, inopportune. After all, it is the sudden exit rather than the "excessive" inflow of capital that hurts. What matters more is the illiquidity of investment financed with the incoming capital (Diamond and Rajas 2000: 4). If short-term capital flows in because of a good return that results from a set of good policies, it would contribute to sustaining growth. While consider-

ing restrictions on short-term capital, one should bear in mind the positive relationship between financial development as reflected, for example, in rising financial assets as a fraction of GDP on the one hand and economic growth on the other. Inflows of foreign portfolio equity may help improve the ability of the financial system to channel limited resources to the most profitable projects (Tsuru 2000). It may also contribute to the betterment of corporate governance.

Reforming the IFIs is generally included in discussions on the new financial architecture. Strong criticism is found in the Meltzer Report on the basis of indicators of historical performance. Accordingly, it was recommended in the report to rename the World Bank the Development Agency, an issue on which the commission is divided. In some other studies the performance of the IFIs was rated high. Anne Krueger, for example, includes the contribution to economics knowledge and its dissemination to the whole world and institutional capacity building among the important benefits that spring from the IFIs (Krueger 1998: 2008–2009). One cannot overemphasize the importance of such contributions to economic development in many countries. One of the distinguishing characteristics between a less developed economy and a developed one is precisely the quality of policies. Yet even strong supporters of the IFIs agree that these institutions are ripe for reform. In addition to the redefinition of mandate alluded to earlier in these commentaries, some other changes are considered important. They include a change in lending policy to do justice to the changed landscape of developing countries. Perhaps a reallocation of resources is urgently needed away from physical capital formation in favor of human capital formation, particularly in the case of emerging economies.

In the past, relative inability of developing countries in building and administering physical infrastructure such as power plants, irrigation, and roads was more acute than the relative inability to run elementary education. In a number of emerging economies, the comparative disadvantages have reversed. Relative inability to provide education and training commensurate with the "new world economy" appears to have been more acute than the relative inability in building and managing physical infrastructure. Besides, some emerging economies can now count on foreign investment while seeking to provide a better physical infrastructure. Human capital formation, however, is less attractive to foreign investment, though cross-border investment in this area has tended to increase in recent years through direct presence, licensing, and franchising agreements. The same logic applies to basic health services, environmental conservation, empowerment of women, and other soft issues. Such a shift in lending priorities would require a major change inside the World Bank.

Lamberte also raises issues related to the future participation of developing countries in the IFIs. He mentions the tendency of the combined quotas of developing countries to decline in spite of their increased rela-

tive importance in the global economy. The lack of transparency in the appointment of directors was also criticized. He implicitly argues that the positions of managing director at the IFIs should be made contestable rather than allocating each of them to Western Europeans and Americans. This proposal may look unrealistic given the long tradition of linking important decisions of the IFIs with quotas. Pushing a meaningful shift in quotas in favor of developing countries is also not very likely to succeed in the foreseeable future, as discussed earlier. Nevertheless, the current review of the financial architecture offers a good opportunity to do away with certain taboos, including the issues of governance of the IFIs, even if in the end Americans and West Europeans may still have a far greater chance to win the race for leadership at the IFIs.

National policies are frequently touched upon in this first session. However, a deeper discussion seems to be needed. A redesigned international financial architecture necessarily requires a range of changes in domestic policies. International protection against financial crisis can only work within a good policy environment. An unlimited emergency lending by the IMF as recommended by the Meltzer Report is likely to end up in nothing, unless it is meant as a lubricant to the working of good policies. There is a strong case for self-protection even under the best possible international insurance. Martin Feldstein advises emerging economies in this connection to avoid "excessive" short-term foreign debt, accumulate foreign exchange reserves, and create a collateralized credit facility to increase the level of self-protection. Perhaps good policies and a comfortable level of international reserves are the best way of reducing the vulnerability of an economy to a crisis.

The building block of a good policy environment is well known. However, it needs to be restated. A credible commitment to good macroeconomic policies is one of them. In many developing economies, for example, a credible commitment to price stability is still missing. To craft such credibility, one anchor or the other appears to be needed. Inflation targeting, for instance, is being considered as an anchor for Indonesia. Government, too, will have to demonstrate unmistakably its determination to respect the independence of the central bank. Nonmonetary objectives, however noble they may be, should not be allowed to create unnecessary noises in monetary policy. Their attainment can be sought through other policies. Central bankers themselves should attach a very high priority to reputation building. Independence alone is insufficient to assure the attainment of a good monetary policy. Limits must be imposed on the discretionary power of a central bank. One way of doing that is to draw a contract in which conditions are specified under which discretionary measures are allowed. Progress will have to be made in fighting corruption. The same applies to the banking supervisory agency. Had this agency functioned well in policing the compliance to the prudential banking

regulations, the severity of the banking crisis might have been reduced a great deal. Likewise, adoption of best practices in budget policy needs to be promoted. Indonesia, for example, is undergoing far-reaching changes in regard to government finance. Decentralization, restructuring of government expenditures, rapid reduction in external debt, increase in tax revenue, and privatization are sought simultaneously. Unfortunately, progress has turned out to be very slow. Reforming the public sector is at least as difficult as redesigning the international financial architecture.

One cannot stop at good macroeconomic policy in the attempt to establish and maintain a policy environment that is needed to minimize the probability of a crisis and the costs that arise in case a crisis occurs. A wide range of microeconomic issues will have to be dealt with as well. Joseph Stiglitz argues strongly that these microeconomic issues should be taken into account in the search for the new financial architecture. Indonesia might have avoided a substantial portion of the costs that arose after the crisis if it had managed to maintain the course of deregulation that it launched painstakingly in the mid-1980s. Unfortunately, the reform of the 1980s dissipated in the last full term of Suharto's presidency. Corruption, collusion, and nepotism went wild. The neutrality of the incentive system was dismantled brick by brick. Favors were granted in a brutal way to politically privileged businesspeople. The quality of governance worsened in both politics and business. Investment decisions were guided more and more by what an investor can earn after spending resources to win partnership with politically well-connected people.

To a certain extent, the recent financial crisis can be seen as a crisis of transition from relationship finance to arms-length finance without the support of a well-functioning legal system. Admittedly, pragmatism had brought some Asian economies to a higher stage in the development ladder before the crisis. However, the relationship finance that thrived under this pragmatism has obviously reached its limits. Almost all of the big conglomerates of Indonesia were pushed to the brink of collapse after the crisis. Their assets, including banks and other financial arms, were surrendered to the government in exchange for the emergency liquidity that they were forced to resort to in the course of the crisis. The fact that such conglomerates were able to dominate businesses in Asia in general and in Indonesia in particular is perhaps a logical consequence of an extremely weak legal system. The core issue is related to enforcement rather than the existence of written laws. While demand for an indiscriminate law enforcement has grown, progress has turned out to be very slow, to put it mildly. Studies on corporate governance, for example, consistently found law enforcement to be a crucial weak point in Indonesia. Under these circumstances, expecting a successful transition to arms-length finance is simply unrealistic. Lacking reliable legal protection, businesspeople would stick to a controlling majority ownership as the only dependable way to

protect their interests.

Financial crisis may still occur even under the best possible policy environment. Nevertheless, good policy can at least serve as an insurance against unbearable costs in times of crisis. Undoubtedly, in a deeply integrated financial market, international cooperation is increasingly crucial as an ingredient for greater stability. Pushing this cooperation forward is bound to be very difficult. Views differ a great deal as to what the new architecture should consist of. The paper by Goldstein, which essentially deals with the works of the developed countries, and that by Lamberte, which brings the concerns of the developing countries to the fore, show clearly that the designers of the new architecture will also have to filter common interests that may be buried in divisive issues. The time seems to have past when two renown architects can by themselves work on a grand architecture and present the draft to the whole world for approval. As mentioned by Lamberte, governing the search for the new architecture is a painstaking process. The differences are also found among the different groups of officials and economists in the developed countries themselves. The same applies to developing countries.

Admittedly, there is always a certain level of leader-follower relationship in a functioning regime. A leader usually dominates the drafting of the architecture and the running of the regime, a privilege that is backed up by a resource commitment, be it human or financial resources. The way the Meltzer Commission tried to quantify the costs that are incurred by developed countries in their attempts to maintain a functioning financial regime does not seem to fit well into the leadership role assumed by these countries. Attempts on the side of developing countries to make sure that their interests are protected in the new architecture should be given fair support. The world is getting more complex every day. Simple formulas that worked effectively in the past may no longer work today. Nevertheless, wisdom is needed while followers seek to play their role. Refusing to support a change just because it is initiated by a “hegemon” is doomed to be counterproductive. Striking compromises within the limits of sound economics and the stated desire to also deploy the international financial architecture to quicken the process of development in poorer followers is the key in governing the transition to the new architecture. Quick progress is urgently needed. Allowing the process of redesign to drag on is risking the loss of the momentum to change, which in turn would add to the sources of instability in the world financial system.

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Comments

Eiji Ogawa

Paper 4: "Strengthening the International Financial Architecture: Where Do We Stand?" by Morris Goldstein

Mr. Goldstein focuses on the lending policies and practices of the IMF to provide an assessment about strengthening the international financial architecture. He discusses (1) the interest rate and maturity of IMF loans, (2) the size of IMF rescue packages, and (3) various dimensions of IMF conditionality, including (3a) ex post macroeconomic policy conditionality versus prequalification based on structural policies, (3b) the scope of IMF conditionality, (3c) the roles of currency-regime choices and private-creditor burden sharing in conditionality, and (3d) links between fund assistance/conditionality and implementation of international financial standards. He surveys discussions in the Council on Foreign Relations Report, the Meltzer Report, the U.S. Treasury Department, and so on.

As for the size of IMF rescue packages, Goldstein notes that large rescue packages may contribute to moral hazard on the part of private creditors to emerging economies. If it is true that a huge rescue package causes moral hazard, the IMF should lend smaller amounts to crisis-hit countries in order to prevent it. On the other hand, it has been suggested that a regional financial arrangement should be quantitatively complementary to the IMF. A reduced IMF rescue would require a stronger role of the regional financial arrangement in rescuing crisis-hit countries. However, I would like Mr. Goldstein to explain whether it is expected that such a complementary regional financial arrangement would have the possibility of causing the lender moral hazard. What does Goldstein think about the role of a regional financial arrangement in the situation of smaller IMF rescue?

Next, as for the issue of ex post policy conditionality versus preconditions, if countries qualifying for short-term fund liquidity assistance need to meet some preconditions, they could contribute to preventing not only moral hazard but also the first-generation type of currency crisis that is caused by fundamental factors such as fiscal deficits. However, I agree with the CFR report that rejected the all-or-nothing approach to eligibility for IMF assistance. It is better to provide an incentive in the form of a lower interest rate for well-performing countries. The IMF should exclude from financing those countries that do not meet the preconditions. The IMF should keep the position of "a lender of last resort." In relation to the preconditions, I believe that the contingency credit line (CCL) is conceptually a good facility to prevent currency crisis caused by temporary shortage of international liquidity. We should revise some factors that make the

CCL unpopular; for example, the interest rate on the CCL, which is the same as that on the Supplemental Reserve Facility (SRF), and commitment fees that a country of good economic performance has to pay.

The third comment on Goldstein's paper is related to the scope of conditionality. I suspect that the IMF should require crisis-hit countries to carry out extensive economic programs that include structural policies. The IMF stressed that the economic programs for Thailand, Indonesia, and Korea had an objective to restore market participants' confidence in the crisis-hit countries' economies and their currencies because the Asian currency crisis co-occurred with a financial crisis. The economic programs included structural policy, such as financial-sector and corporate governance reform, as well as monetary and fiscal policies. I suspect that the economic programs could contribute to restoring confidence, at least immediately after their announcement. We could see depreciation of these currencies immediately after the announcement. For this reason, I think that the IMF should require crisis-hit countries to carry out monetary, fiscal, and exchange rates policies in the short term and financial-sector policies in the long term. I agree, however, with Mr. Goldstein's definition of the IMF's core competence as the macroeconomic policies and financial-sector policies.

The last comment on Goldstein is related to the currency regime. I have the same view against the two corner solutions for the exchange rate system as Mr. Goldstein. I think that some countries, especially East Asian countries that have carried out good macroeconomic policies, can adopt an intermediate exchange rate system. Freely floating exchange rate systems bring out both large volatilities and misalignments, while currency board systems deprive central bankers of independence in monetary policies. It is important that the exchange rate policy should be consistent with monetary and fiscal policies to prevent the first-generation type of currency crisis. However, it is noteworthy that their consistency alone will be not prevent the second-generation type of currency crisis that is caused by self-fulfilling speculation. To prevent this, the IMF role as a lender of last resort is needed.

Paper 5: "Reforming the International Financial Architecture: East Asian View," by Mario B. Lamberte

Mr. Lamberte's paper surveys discussions about the current issues related to the international financial architecture in the East Asian context. He takes up nine issues: (1) governance structure for reforming the international financial architecture, (2) capital account liberalization and capital controls, (3) exchange rate regime, (4) international standards, (5) capital adequacy requirements, (6) Highly Leveraged Institutions (HLIs) and credit rating agencies, (7) private sector involvement, (8) the Bretton

Woods Institutions, and (9) regional financial arrangement. He discusses the East Asian view on the issues by contrasting it with the view of G-7.

Lamberte cites a statement of the G-24 and Prime Minister Mahathir to criticize the current G-7 lead reforming of the international financial architecture. I surely feel that the United States, rather than the G-7, which includes European countries and Japan, has the initiative to proceed in the reforming of the international financial architecture. I agree with the idea that the G-20's agenda should pay greater attention to international cooperation for surveillance over investors such as HLIs. We should place more importance on discussion in a forum that includes emerging market countries, especially in the field of international finance.

As for capital controls, controls on capital outflows can be considered as a self-help defensive move during crisis periods. Such control should be temporary, and the monetary authorities should preannounce an exit strategy from the capital control at an appropriate time. We should consider capital controls or regulations that bring about sound liabilities management of a country. A lesson from the Asian currency crisis is that too many shares of short-term liabilities in capital inflows caused the crisis. One of the solutions is regarded as a Chilean type of capital control.

Next, I agree with the recommendation of the Asian Policy Forum (APF) on an exchange rate system for East Asian countries. East Asian countries should adopt a currency basket system because they have significant shares of trades with various regions, including the United States, Japan, the EU, and the intraregion. I would like, however, to point out a problem of coordination failure in choosing a currency basket system. If one of the East Asian countries switches to a currency basket system while the others keep the dollar peg system, the country with a currency basket system might face a possible adverse situation due to movements of the yen / dollar exchange rates. Thus the monetary authorities of the country hesitate to adopt a currency basket system and keep the dollar peg system. It follows that all of the monetary authorities are forced to keep the dollar peg system if they have the same thinking. East Asian countries might face a situation in which they are forced to keep a dollar peg system instead of adopting a currency basket system even if they find that they should adopt the latter. Accordingly, they might need to form an international coordination in adopting their optimal exchange rate system.

The last comment on Lamberte's paper is related to a regional financial arrangement. Lamberte cites the APF's proposal that a regional finance arrangement provide a lender of last resort facility together with the implementation of an effective surveillance system over Asian economies. I think that such a regional financial arrangement needs a permanent institution in order to implement an effective surveillance. Lamberte cites Wang's statement that they do not necessarily need it. I would like Mr. Lamberte to explain the demerits of an institutional approach.

Paper 6: "Appropriate Exchange Rate Regimes in Developing Countries: The Case of Korea," by Chae-Shick Chung and Doo Yong Yang

Mr. Chung and Mr. Yang's paper analyzes the recent development of the correlation between domestic financial variables and U.S. financial variables after they review issues on the choice of exchange rate systems in developing countries. They recognize that Korea has adopted a floating exchange rate system during the postcrisis period from October 1998 to the present day. They summarize the merits and demerits of a flexible exchange rate system.

In an empirical part of their paper, their purpose is to find out whether there are significant changes in interrelations among six financial variables before and after the Korean financial crisis. The variables include short-term interest rates and the stock price index for Korea and the United States and exchange rates of the Korean won / U.S. dollar and Japanese yen / U.S. dollar. They use both variance decomposition of a VAR estimation and a multivariate GARCH model to analyze their interrelations in terms of levels and volatility. They obtain a result that the correlation between domestic financial variables and foreign ones becomes higher after the crisis.

As Chung and Yang refer to the policy maker's objectives for an exchange rate policy, we should consider what objectives a policy maker should have in choosing his exchange rate system. Chung and Yang tell us that a policy maker's objectives are focused on increasing the country's welfare—that is, minimizing macroeconomic fluctuations. Prof. Takatoshi Ito and I (Ito, Ogawa, and Sasaki 1998) have assumed that a policy maker has an objective to minimize fluctuations of trade balances. In a way, both of the objectives seem to increase the country's welfare in the sense of minimizing fluctuations of macroeconomic variables. But policy makers, in fact, tend to have other objectives, such as minimizing only foreign exchange risks against the U.S. dollar. The Asian currency crisis occurred under the dollar peg system, which was adopted to achieve this objective.

Chung and Yang seem to recognize that Korean monetary authorities have adopted a floating exchange rate system during the postcrisis since October 1998. However, I have an impression that the Korean won has seemed to be linked more closely to the U.S. dollar when I watch and compare movements of an exchange rate of Korean won / U.S. dollar with one of Korean won / Japanese yen, as I demonstrate in Paper 2 in this volume (Ogawa 2000). In other words, the Korean monetary authorities have seemed to return to the de facto dollar peg system. One of the reasons might be that the U.S. dollar has depreciated against the Japanese yen. Is it true that the Korean monetary authorities have adopted a floating exchange rate during the postcrisis period?

Another comment on Chung and Yang is related to their empirical analysis on the interrelationship between the exchange rates of the Korean won / U.S. dollar and the Japanese yen / U.S. dollar. The result of their comparison between them indicates that the Korean won / U.S. dollar innovations had 3 percent (during the precrisis period) or 9 percent (during the postcrisis period) of correlation with Japanese yen / U.S. dollar innovations. This implies that the monetary authorities might link the Korean won to the Japanese yen at a correlation level of 3 percent or 9 percent. In other words, the empirical results cover only the Korean monetary authorities' exchange rate policy for the exchange rate of the Korean won / Japanese yen. I am interested in the Korean monetary authorities' exchange rate policy for the U.S. dollar as well as for the Japanese yen. I suggest that Mr. Chung and Mr. Yang analyze the interrelationship among the Korean won, the U.S. dollar, and the Japanese yen by using the three exchange rates in terms of another currency. For example, Frankel and Wei (1994) used data on exchange rates in terms of the Swiss franc.

Finally, they have an empirical result that the JPY exchange rate is a major driving force in the Korean stock price index, KOSPI. The JPY exchange rate in their analysis is not the Korean won / Japanese yen exchange rate but the Japanese yen / U.S. dollar exchange rate. It is easier to imagine causality from the Korean won / Japanese yen exchange rate to the Korean stock price index through increasing exports. I would like them to explain the relationship between the Japanese yen / U.S. dollar exchange rate and the Korean stock price index.

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Comments

Il SaKong

The recent Asian financial crisis gave impetus to the debate on the international financial architecture, although the basic framework of the existing international financial architecture was laid down more than fifty years ago when the Bretton Woods system was established. Consequently, there have been apparent needs for reforming the existing international financial architecture for some time as the international economic and financial environment has changed substantially.

Through the Asian financial crisis, the global community realized the fact that we indeed live in the age of globalization, especially financial globalization, which makes the existing international financial architecture obsolete to a large extent. So, ever since the Thai baht crisis occurred in July 1997, there has been a burgeoning literature regarding reform of the international financial architecture.

Both Goldstein and Lamberte deal with general issues of reform regarding the international financial architecture. In doing so, Goldstein focuses his attention on the lending policies and practices of the IMF, while Lamberte concentrates his discussion on the current issues for international financial architecture from the East Asian perspective. On the other hand, Drs. Chung and Yang take one of the important issues for new international financial architecture: the exchange rate regimes for developing countries, based on the Korean case.

Since these papers cover important issues related to a new international financial architecture in detail, I do not think I need to go into these issues here. Instead I would like to make some brief remarks on critical issues for reforming the international financial architecture.

In my view, there are five critical issues for reform. There has been substantial progress made on only one issue, while major action is yet to be taken by the global community on the remaining four. These five critical issues are: (1) short-term capital flows and Highly Leveraged Institutions (HLIs); (2) exchange rate regimes; (3) private sector involvement or burden sharing in the crisis prevention and resolution processes; (4) reform of the Bretton Woods Institutions and the establishment of regional financial institutions, such as a regional monetary fund; and (5) global standards.

Substantial progress has already been made on the global standards issue during the last three years or so in terms of developing codes for enhancing transparency of the public and private sector and multilateral institutions. However, continued efforts, especially on the part of emerging economies, should be made to upgrade their standards to the best practices. Of course, a gradual approach is unavoidable. It is, however, important to make sure that gradualism is not used as an excuse for keeping the status quo.

Regarding the short-term capital flow issue, as Lamberte indicates, there is already a broad international consensus that short-term capital flows are volatile and make emerging economies particularly vulnerable. So, developing economies might utilize controls on short-term capital inflows à la the Chilean scheme, or controls on capital outflows à la the Malaysian scheme. In my view, in times of emergency emerging economies in particular should be allowed to have some safeguards or speed bumps for both capital inflows and outflows.

One of the valuable lessons we learned from the recent Asian financial crisis is the fact that strong economic fundamentals are important, but they are not enough to prevent financial crises and their contagion. In this regard, having the proper financial infrastructure in place before externally opening up capital markets is critical, and correct sequencing of liberalization is just as important. The worst combination is a wrongly sequenced market opening without prudent financial supervisory / regulatory institutional bases. The Korean term-structure mismatch was caused by such an erroneous policy mix.

With regard to the exchange rate regime issue, we should be concerned with both the national level and the global level regimes; for example, dollar-pegged versus basket-based exchange rate regimes at the national level and the target zone exchange rate regime for international key currencies. This issue needs to be looked at more fully by Chung and Yang.

For private sector burden sharing, I believe it is desirable to institutionalize the IMF's involvement at the early stage of financial crisis in mediating between borrowers and lenders.

Goldstein discusses reform of the Bretton Woods Institutions in detail. I agree with most of the points he makes in his discussion. The emphasis on the division of work between the IMF and the World Bank by Goldstein is well taken, and these institutions should concentrate on their core competence while preventing "mission creep." I also agree with Goldstein in emphasizing the fact that developing countries are underrepresented in terms of their quota and voting rights in these institutions, and readjustments should be made based on their economic strength.

I would like to make one more point in connection with the IMF's conditionality. That is that IMF conditionality generally contributes toward depoliticizing sensitive reform issues in the crisis countries. In the case of Korea, the government successfully utilized this beneficial aspect of IMF conditionality, especially with regard to necessary structural adjustments.

Finally, with regard to the regional monetary fund, considering the IMF's operational and resource constraints, I would like to see a regional monetary fund—that is, an Asian Monetary Fund—established to supplement the role of the IMF, with prescribed conditionalities to help prevent moral hazard problems. Due to the lack of leadership, the global community cannot expect enough public goods to be provided to help maintain global financial stability. Therefore, regional-level public goods should be provided to fill the gap.

Part III

Regional Financial Arrangements: Issues and Prospects

7. Do We Need a Regional Lender of Last Resort?

Pakorn Vichyanond

Introduction

After the eruption of Asian financial crises in 1997–98, the International Monetary Fund (IMF) drew numerous comments on both sides. On one hand, some asserted that the IMF was very helpful in orchestrating rescue funds from various donors as well as itself. Moreover, the IMF package helped retrieve investor confidence and credibility of crisis countries. On the other hand, some pungently criticized that the IMF administered policy medicines that were totally wrong, thus exacerbating instead of ameliorating or correcting the problems. In other words, the economic depression was partly due to the IMF stringencies. These two camps led to confusion about who is right.

As the IMF was severely attacked as an inefficient international lender of last resort, some countries proposed the establishment of an Asian monetary fund (AMF) to function as a complement to the IMF so that crisis countries would be given enough curative funds in time. However, creation of an AMF was opposed by other influential countries on the grounds that its job would be repetitive of the IMF's and would motivate crisis countries to defy or diverge from the direction of IMF's policy prescriptions. This paper thus intends to give an impartial and conceptual analysis of whether we need a regional lender of last resort by covering pertinent problems and their underlying causes, limitations, and reasonable resolutions.

The first section will examine the role of international lender of last resort, its objectives, constraints, and techniques of operations. The next section investigates how the IMF comes into play and whether it fulfills all obligations of an ideal international lender of last resort. This section also itemizes weaknesses of the IMF. The following section analyzes possible contributions of a regional lender of last resort if it is established. Included are various scenarios in which a regional lender of last resort is likely to do better or worse than the IMF or the comparative advantages each might offer. The next section considers how a regional lender of last resort, if founded, can complement the IMF, how the IMF's role should be amended, what cautions a regional lender of last resort should take, and what possible supplements might be added to such a lender in different circumstances. The paper concludes with remarks on whether we need a regional lender of last resort, and if so, what role it should play in conjunction with the IMF.

As implied above, this paper does not represent a literature review on international lender of last resort. Instead, it aims at synthesizing viewpoints of different authors as well as those of the writer. It therefore refrains from quoting each different author one by one. Nevertheless, their

valuable contributions are well recognized by listing in the references.

Why International Lender of Last Resort?

In the 1990s, financial liberalization and integration around the world gave opportunities to surplus units to invest abroad in order to seek higher returns. Conversely, deficit countries exploited cheap foreign borrowings so as to close their financial gaps at lower costs. Not surprisingly, the volume of international capital movements surged to an unprecedented level. However, imprudence emerged on the part of borrowers as well as lenders with regard to proper debt management. Consequently, credit and currency exposure rose beyond debt servicing capacity, thus weakening investor confidence to such an extent that it sparked massive withdrawals of capital funds and severe, widespread financial crises. This clearly demonstrates two important lessons. First, in the current arena of mobile capital, investor confidence is extremely vital, and it is very intricate, depending on numerous characteristics of debtor countries (e.g., whether the prevailing exchange rate reflects an equilibrium on the external account, whether existing reserves suffice for net foreign exchange liabilities or likely capital outflows in the short run, how stable or fragile the financial system is, future prospects of economic growth, external account, and politics). Second, the gigantic volume of global capital inflows and outflows has proved to be insurmountable for a small developing or emerging country, as evidenced by the Asian financial crisis in 1997–98.

In principle, there are three channels to avoid or alleviate adverse effects of international capital mobility. First, capital controls could be adopted, seeking to limit short-term capital inflows and / or limit the extent or frequency of capital outflows. Thus far, few developing countries opted for this route because controls were hardly efficient (due to various loopholes) and also costly in terms of capital market access. Second, concerted efforts may be exerted upon strengthening macroeconomic fundamentals and financial structure for the purpose of restoring foreign investors' confidence. Third, troubled countries may resort to an international lender of last resort like the IMF. In handling the crisis, the IMF could act as a lender as well as a manager, cooperating with many parties in arranging financing packages. Among these three channels, the third one is the quickest to yield some resolutions in both liquidity and solvency crises.

At this point it is worth distinguishing liquidity from solvency crises. Solvency is affiliated with economic fundamentals of debtor countries. Many factors that affect debt servicing capacity come into play, such as export earnings, foreign exchange reserves, incompressible imports, national income, targeted economic growth, domestic fiscal and monetary policies, interest rates, inflation rates, existing as well as expected savings-investment gaps, and projected debt service profile. Typical solvency crisis

gradually emerges as a result of lingering problems. Although the solvency crisis is easier to forecast than the liquidity crisis, the former is harder and takes longer to resolve than the latter. In addition, liquidity shortage, which can occur unexpectedly or may arise because of financial contagion, is preventable by carrying adequate emergency credit lines.

Ideally, a lender of last resort is meant for remedying only liquidity crises because its main objective is to minimize the chance of financial disruption and instability in the macro framework. Meanwhile, it ignores lending for the sake of solvency, as that concerns the status of each individual party that is not under its responsibility. However, sovereign debtors are rarely allowed to go bankrupt, so an international lender of last resort typically offers aid in both liquidity and solvency cases. Essentially, an international lender of last resort assists sovereign debtors in two respects—crisis correction and crisis prevention. These two functions often aim at restoring investor confidence. To achieve its goals, the international lender of last resort must possess sufficient financial resources, be able to make proper allocation of those resources, and be able to monitor as well as supervise its member countries. Stating that in a crisis the lender of last resort should lend freely, at a penalty rate, and on good collateral, the classic and famous contribution of Bagehot (1873) can be generalized in the international context to some extent. For instance, the IMF introduced its Supplemental Reserve Facility (SRF) at the end of 1997 to serve crisis countries with short-term loans at penalty rates. Penalty also took the form of policy conditionalities when SRF loans were made to Korea, Russia, and Brazil. Since sovereign debtors seldom bear a bankruptcy status, except in some cases of the London and Paris Clubs, "good collateral" of borrowing from the international lender of last resort is equivalent to the denial of market access.

As most international lenders of last resort are confronted with scarce financial resources, such support must be offered selectively to countries that can meet a series of preconditions. This selectivity serves as an incentive for policy commitments and implementation in the direction that is compatible with warding off a crisis, conforming to prudential standards, and reducing financial vulnerability. Otherwise, a number of difficulties would arise, including moral hazard, shortage of rescue funds, and failures to rectify fundamental problems in debtor countries. Too much stability can also instigate moral hazard as well. One clear-cut example of such incidence was the excessive foreign borrowing of Southeast Asian private corporations in the first half of the 1990s when capital account transactions were liberalized but exchange rates were not; the rates were kept rather rigid or tightly pegged to the U.S. dollar. Therefore, the task of international lenders of last resort is very delicate, as either too many rescues or too much stability can easily induce moral hazard. The dilemma is worsened when the problem countries are too big to fail, as their insolvency could disrupt not only the global financial order but also world economic

growth. The IMF encountered such situations so many times that most of the IMF's rescue operations in the past were meant for the purpose of solvency instead of liquidity. It is thus worth examining the IMF's basic structure, including primary objectives, operating mechanisms, and existing facilities together with their exclusive features.

IMF Stories

The IMF was founded in 1945 for the following purposes: monetary cooperation, expansion of international trade, exchange rate stability, lending to correct balance-of-payments problems, and reducing the duration as well as the degree of external disequilibrium. Later on its roles were expanded to cover soundness of the banking system (March 1996), special data dissemination standards (April 1996), capital account liberalization (April 1997), good public governance (July 1997), and standards and guidelines on accounting, auditing, financial disclosure, asset valuations, and corporate governance (April 1998).

Each member country's quota (which reflects its membership fee, voting right, and borrowing limit) is determined by GDP, (gross) current account position, and official reserves. Ordinarily, member countries remit 75 percent of their membership fee in local currencies and 25 percent in Special Drawing Right (SDR) or usable currencies. In case any member is short of SDR or usable currencies, it can borrow from other countries and repay the lenders later on by credits from the IMF. SDR was originated in 1969 as a result of liquidity crunch. The allocation of SDR is based on quotas. Even though the SDR serves as one type of international reserve, it cannot be utilized on a commercial basis. In other words, it is only recorded as a book entry.

The following list describes different types of credit facilities offered by the IMF for different purposes or circumstances.

1. The *Standby and Extended Arrangements* are given to countries that encounter balance-of-payments problems. Conditionalities and performance criteria are imposed, contingent upon some economic variables such as monetary base, short-term borrowing, government guarantee for borrowing, accounting, and auditing. Normally, the standby arrangements have maturities of two to three years, while the extended arrangements are for three to five years.
2. The *Emergency Financing Mechanism* represents borrowing in the form of a swap. That is, borrowers deposit their local currencies in the IMF while the IMF offers SDR or usable currencies in return. This credit typically matures in three years and entails the SDR interest rate x 1.07.
3. The *Supplemental Reserve Facility* was introduced in 1997 for countries facing extreme short-term needs due to capital flight. Its primary purpose is to subdue or prevent the problems of contagion

effect and loss of market confidence. The facility is a term loan that can be disbursed twice in one year but must be repaid within two to two and a half years. Its charge is the SDR interest rate increased by 0.5 percent semiannually.

4. The *Financing for Debt and Debt Service Reduction* was designed for heavily indebted countries such as those in Latin America for the purpose of refinancing. This facility was terminated in May 2000 because it was deemed unnecessary.
5. The *Currency Stabilization Fund* was supplied to the countries that were pressured by high inflation and wanted to cope with such inflation by fixed exchange rate or currency board, which necessitated funds to defend the exchange rate at the beginning period. This fund was abolished in May 2000 as the IMF does not support fixed exchange rate or currency board anymore.
6. The *Contingent Credit Line* is, since 1999, offered to the countries that have not yet encountered problems but are exposed to adverse contagious effects.

The IMF ordinarily draws funds not only from SDR, members' currencies, and reserve positions but also borrowings from its member countries, such as the General Agreement to Borrow (similar to term loan) and New Agreement to Borrow (similar to overdraft). Not surprisingly, the IMF's liquidity ratio (net uncommitted usable resources divided by liquid liabili-

Table 7.1. IMF's financial resources and liquidity position (in billion SDR)

	1997	1998	1999.4	1999.5	1999.5 US$
Total Resources	149.2	165.1	212.5	214.2	287
Members' currencies	144.7	149.4	205.0	206.4	277
Gold holdings	3.6	3.6	3.6	3.6	5
SDR holdings	0.6	0.7	3.6	3.9	5
Other assets	0.3	0.3	0.4	0.3	0
Nonusable resources	98.5	111.5	128.8	127.0	170
Usable resources	50.7	53.6	83.7	87.2	117
Net uncommitted usable resources	22.7	19.5	56.7	60.1	81
Balances available under the GAB/NAB	18.5	18.6	34.0	34.0	46
Liquid liabilities	47.1	60.6	63.6	62.0	83
Liquidity ratio (%)	48.2	32.2	89.2	96.9	96.9
US$/SDR	1.34925	1.40803	1.35123	1.34196	

Source: IMF's Financial Resources and Liquidity Position, June 1999.

ties) grew from 48 percent in 1997 to 97 percent in 1999 (Table 7.1). Consequently, the volume of IMF assistance rose steadily and substantially in the second half of the 1990s (Table 7.2).

This assistance together with attached conditionalities helped rectify fundamental problems and contribute to financial stability to a large extent in some borrowing countries. At a global level, the IMF made substantial progress in promoting disclosure of economic statistics as well as indicators, in developing voluntary codes of good practice or governance, and in raising the degree of transparency in member countries' economic policies. Such progress as well as long experience in rescuing troubled countries enhanced the expertise of the IMF together with its credibility.

Yet contentious issues about the IMF were plentiful, as it was widely criticized by academics, government officials, people in the countries receiving aid from the IMF, and outsiders. The following list examines these shortcomings item by item.

1. Even though the IMF was successful in replenishing its resources to such an extent that its net uncommitted usable resources grew as mentioned above, resource allocation was restricted by the quota rule. This quota limited an access to emergency funds for ailing countries despite the availability of resources and the fact that the IMF's central objective was to bail its member countries out of financial difficulties.
2. Some may assert that the IMF set up certain facilities so as to assist its members facing particular financial stresses. Nevertheless, all provisions of assistance had to be backed up by enough votes in the IMF Board of Directors. And the rule stipulated that countries with a higher quota command more votes. Since large industrial countries made substantial contributions in accordance with their GDP, they were granted larger quotas and thus entitled to more votes than small developing countries that were more vulnerable to

Table 7.2. IMF's commitment of liquidity support to the crisis countries (as of January 1999; U.S. dollars)

Country	Standby / EFF	SRF
Mexico (1995)	17.8 billion (Standby)	—
Thailand (1997)	4.0 billion (Standby)	—
Indonesia (1997)	11.2 billion (Standby EFF)	—
Korea (1997)	7.6 billion (Standby)	13.4 billion
Russia (1998-1999)	1.3 billion (EFF) in 1998	11.2 billion in 1998
	2.2 billion (EFF) in 1999	0.4 billion in 1999
Brazil (1988)	5.4 billion (Standby)	12.6 billion

Source: IMF

financial difficulties. In short, the "one dollar, one vote" in the IMF, instead of the "one country, one vote" in the UN, generated adverse voting biases that shifted the basis of fund allocation from the needs of desperate member countries to the discretion of major members.

3. What is more worrisome is the involvement of national interests in several respects. For instance, influential members logically desired to assist their trading partners and direct the course and pace of world economic growth in their favor. Simultaneously, they bore in mind how much their financial institutions already lent to which debtor countries and they never wanted those debtors to go bankrupt. Nevertheless, amid most debt negotiations or policy discussions, creditor countries rarely compromised by agreeing to some requests from the IMF as a means to bail out deficit countries, because such provisions will burden their residents or taxpayers. Instead, debtor countries were often pressed to be the only party that had to comply with IMF's stringencies. Overall, unequal votes in the IMF led to asymmetric policy prescriptions or biased resolutions of payment disequilibrium.
4. On some occasions, the IMF demanded that its member countries open up domestic markets to foreign investors and increasing competition. In principle, no one doubts the merit of competition. But in practice, target countries questioned the viability of such opening, especially when domestic private businesses were not ready, because too much or too rapid liberalization can destabilize the economies of recipient countries. At this point, one may wonder whether the IMF had any legitimacy to interfere with domestic affairs of ailing countries in the direction that benefited large member countries as stated above and in item 3. The IMF's answer is likely to be affirmative because most IMF funding comes from large member countries, so they claimed that they were entitled to protect their national interests. That is why critics were tempted to brand the IMF as a "rich men's club."
5. It is irrefutable that the IMF possessed a high-caliber staff. However, that staff's strong capability was not utilized in developing country-specific research that took into account sociopolitical factors or special characteristics of problem countries and incorporated them into country programs. Most IMF economists lacked extensive experience in and acquaintance with ailing economies. That gave rise to inefficient surveillance. Besides, the IMF staff's country recommendations were subject to the discretion of the IMF Board of Directors, which could be easily biased as mentioned in items 3 and 4.

6. In connection with item 5, the IMF team stuck fast to orthodox policy prescriptions—that is, fiscal austerity, a tight monetary policy, and drastic structural reforms. The IMF resorted only to its prototype models, regardless of different circumstances, surroundings, and particular features of deficit countries. In other words, such models were both out of date and out of tune with reality. In some cases, IMF prescriptions even aimed at the wrong causes of relevant problems. For example, the IMF kept on demanding reduction of fiscal spending in the countries whose crises stemmed from extravagance of private entities. Eventually, IMF's restrictive conditionalities became ineffective in rescuing the diseases, resulting in economic recession, social depression, widespread business bankruptcies, and financial defaults. These negative consequences worsened investor confidence, the opposite of IMF's intention.
7. Timing is another controversial issue. The IMF often assigned crisis countries to undertake structural reforms, such as the one in the financial sector, on the grounds that those structural defects contributed to the crisis and it was desirable to rectify such defects as soon as possible. The analysis may be right, but corrective reforms were not only painful to several parties but also time-consuming, and they may even generate a vicious circle—the one between commercial banks' capital adequacy / NPL / loan loss provisioning and economic downturn. Therefore, the IMF drew widespread flak for adopting too abrupt an approach. Gradual assignment should yield better adjustment on the part of debtor countries.
8. Bureaucratic friction and procedure within the IMF was partly blamed for slow credit approvals and disbursements. This inefficiency was particularly distressing for the countries encountering liquidity gaps.
9. The IMF was harshly denounced on its corrective roles as well as preventive roles. That must have been partly attributed to the weak surveillance, orthodox approach, and bureaucracy as mentioned above.
10. Contrary to its advice favoring transparency, the IMF staff excluded themselves and their documents from outsiders, criticisms, and suggestions. Confidentiality was constantly demanded, triggering widespread suspicions about what was behind the scene; that is, whether the IMF staff truly understood the prevailing problems, whether they were compelled to adopt specific approaches for the interest of certain parties or countries, or whether they ran out of innovative ideas that suited the true status of ailing countries.

Regional Lender of Last Resort

The above complaints about the IMF may have convinced readers that the first step to improve order in the international financial system is to overhaul the IMF in several ways. The system of votes and quotas should be changed for the purpose of reducing possible biases in decision making. Research staff ought to familiarize themselves more with the countries in their charge so that they take into account local characteristics or business modality. Besides, they should add more flexibility to their approach so as to make it more realistic. That is, instead of orienting themselves too much toward neoclassical economics (whereby an orderly and sound fiscal and monetary stance would automatically engender corrective adjustments), they should give some attention to the Keynesian approach (whereby countercyclical measures are needed in order to remedy economic downturn and finally revive the economy). Practical country programs could be a combination of the two approaches, depending on the prevailing situations, constraints, sociopolitical characteristics, and priority. In addition, bureaucratic procedures in the IMF should be streamlined so that decision making can be expedited at times of urgent needs. Needless to say, given the gigantic size or network of the IMF and its complicated institutional framework, the above-recommended steps of revamping are very difficult to achieve, if possible at all. Politics is another factor that could easily obstruct or prolong the renovation of IMF, regardless of how valid the reasons are for the overhaul.

The next step in repairing the international financial disorder is to set up a regional lender of last resort. A regional monetary organization is nothing new. For example, the Arab Monetary Fund was set up by the Economic Council of the League of Arab States in 1976 with the aim of assisting member countries in eliminating payment and trade restrictions, in achieving exchange rate stability, in developing capital markets, in correcting payment imbalances through short- and medium-term loans, in coordinating monetary policies, and in encouraging capital flows among member countries.[1] Another regional monetary organization is the Latin American Reserve Fund, established in 1991 as the successor to the Andean Reserve Fund.[2] The aims are to assist members in correcting payment imbalances through loans or guarantees with maturities of up to four years, to coordinate monetary and exchange rate policies, and to promote liberalization of trade and payments in the Andean subregion. Still to be analyzed are how justifiable is a regional lender of last resort, on what grounds, how it should function, and what should be its relationship with the IMF.

Developing countries in the same region or proximity tend to have common characteristics, such as the following:

1. Small size and small amount of foreign exchange reserves
2. Similar culture
3. Similar natural resources and specialties

It is rational for these countries to form a regional lender of last resort or pooling of foreign exchange reserves for the following reasons.

1. The volume of international capital flows through each small developing country is far more than multiples of its foreign trade and services. Those small developing countries are thus better off sharing their foreign exchange reserves to cope with capital mobility. Such sharing will enable concerned authorities to tone down the excessive magnitude of exchange rate fluctuations that tend to be an outcome of massive capital flows. Consequentially, less exchange rate volatility will help facilitate resource utilization on the home front.
2. Each member country will have access to more rescue funds than those from the IMF whose quota system represents a formidable constraint. Besides, as there are fewer member countries in the regional group than in the IMF, each of them is given a larger share of borrowing from the common pool of emergency foreign exchange.
3. Strong acquaintance with member countries' socioeconomic-political-cultural background enables the regional lender of last resort to closely and efficiently monitor the overall situations of member countries, detect subtle symptoms, arrive at correct assessments, and give proper advice or policy recommendations.
4. As member countries are in the same proximity and have similar resources or specialties, they are most vulnerable to contagion of financial crisis that occurs in any particular member country. Therefore, forming a regional lender of last resort creates mutual benefits. That is, the crisis country that encounters a liquidity shortage is not the only party that benefits from the regional lender of last resort. Its neighboring countries, which contribute to the regional lender of last resort, are saved from possible contagion. In other words, if a crisis occurs, investor confidence may deteriorate to such an extent that it triggers an exodus of capital funds, thus dwindling foreign exchange reserves in the region. So the common funds help both the troubled country and her neighbors in preventing liquidity crisis as well as its consequential financial contagion.
5. Regional economies are increasingly linked with up with each other through trade, investment, and financial transactions. For example, intra-ASEAN exports grew from 18 percent of total ASEAN exports in 1992 to 22 percent in 1994–97. In these circumstances, each country has a strong stake in the financial status of its neighbors.
6. Peer review is likely to be more reliable and updated than that by outsiders. In other words, there is a case for regional surveillance and monitoring because it is better tailored to local circumstances and situations.

Given that small developing countries in most regions typically do not possess extensive foreign exchange reserves (see reserves of Thailand, Malaysia, Indonesia, and the Philippines in contrast with those of NIC and industrial countries in Table 7.3), pooling those reserves may not suffice as a common buffer stock. The regional lender of last resort may have to tap funds from commercial sources to supplement members' contributions. This participation of private creditors will not do any harm, since the regional lender of last resort will not operate on a concessional basis and more private participation means more market discipline and accountability.

If the rationales for establishing a regional lender of last resort as mentioned above are agreeable, then some may question whether it may overlap with the operations of IMF, thus entailing a wasteful use of resources. Others may even argue for the IMF in that the prescribed policies (e.g., fiscal austerity, high interest rates, reforms of financial system) were the factors that deserved credit for successful retrieval of some

Table 7.3. Foreign exchange reserves of Asian and other countries (in million U.S. dollars)

Country	1993	1994	1995	1996	1997	1998
Thailand	24,078	28,884	35,463	37,192	25,697	28,434
Malaysia	26,814	24,888	22,945	26,156	20,013	24,728
Indonesia	10,988	11,820	13,306	17,820	16,087	22,401
Philippines	4,545	5,866	6,235	9,902	7,147	9,101
Sum (T, M, I, P)	**66,425**	**71,458**	**77,949**	**91,070**	**68,944**	**84,664**
Taiwan	83,575	92,457	90,311	88,040	83,505	90,339
Hong Kong	42,986	49,251	55,398	63,808	92,804	89,601
South Korea	19,704	25,032	31,928	33,237	19,710	51,963
Singapore	48,066	58,177	68,695	76,847	71,289	74,928
Sum (NIC)	**194,331**	**224,917**	**246,332**	**261,932**	**267,308**	**306,831**
China	21,199	51,620	73,579	105,029	139,890	144,959
Sum (NIC + China)	**215,530**	**276,537**	**319,911**	**366,961**	**407,198**	**451,790**
Germany	72,727	72,219	77,794	75,803	69,853	64,133
France	20,008	23,520	23,142	23,120	27,097	38,753
Switzerland	31,650	33,554	34,685	36,775	36,899	38,346
U.K.	34,630	38,530	39,180	37,120	28,880	27,360
Italy	25,140	30,107	32,942	44,064	53,431	25,447
Canada	10,471	10,219	12,629	18,028	15,122	19,911
Japan	88,720	115,146	172,443	207,335	207,866	203,215
Sum (7 industrial countries)	**283,346**	**323,295**	**392,815**	**442,245**	**439,148**	**417,165**

investor confidence, as evidenced by the building up of foreign exchange reserves. But it is obvious that whatever successes the IMF side may claim, they came at high social costs (e.g., poorer living conditions, higher unemployment). Therefore, the two sides should reach a compromise: a regional lender of last resort should be set up, while the IMF should be adjusted. Their functions should be separated in consonance with a major principle in economics: division of labor depending upon different comparative advantages. The regional lender of last resort should be responsible for cushioning only liquidity, not solvency, for the following reasons.

1. Advancement in information technology, telecommunications, and integration of financial markets around the world has increased the pace and extent of capital mobility. That poses a powerful liquidity threat to developing countries, since foreign investors (e.g., hedge funds) can move or react very quickly (depending upon market sentiment), resulting in strong and ominous volatility of capital flows.
2. The regional lender of last resort can closely monitor and correctly assess the economic as well as financial status of its member countries. Its surveillance will indicate their updated and genuine liquidity positions. The best function that it could serve is thus liquidity provision.
3. Its smaller size and leaner bureaucracy in comparison to the IMF will enable the regional lender of last resort to move quicker, which is more suitable with liquidity shortage and necessary short-term adjustments.
4. Countries in the same region are subject to the common set of external shocks. When those "monsoonal effects" come, they are abrupt and acute. That is why the regional lender of last resort should be assigned to extend liquidity assistance.
5. Part of the resources of the regional lender of last resort come from commercial sources of funds, which typically demand reasonable rates of return in a short time frame.

The IMF, on the other hand, should handle only the countries encountering insolvency problems due to the following reasons.

1. Resolution of structural disequilibrium normally takes time, thus corresponding to the IMF's bureaucracy and its time lag.
2. Diverse staff and experiences of the IMF are qualified to set targets for desirable structural reforms and to devise efficient ways and means to achieve such targets.
3. As the IMF hardly counts on commercial sources of funds, it is not under much pressure from creditors regarding the time frame or maturities of its loans extended to ailing member countries.

To tactfully accomplish its goal as a liquidity cushion, the regional lender of last resort needs to lay down a definite guideline for its organization and operation, such as the following.

1. It must possess an explicit and efficient department of monitoring

and supervision because economic surveillance and monitoring form the bedrock on which coherent policy formulation rests. This department has to keep in close touch with liquidity positions as well as the economic fundamentals of its members. Regular and rigorous checkups are essential for the preventive care. The obtained information will help detect and distinguish liquidity or solvency problems at their early stage so that proper remedial or preventive actions are timely and neither too troublesome nor costly.

2. It has to clearly stipulate definite conditions and terms of lending; otherwise moral hazard may occur among central banks of its member countries. Examples of these conditions or prerequisites are as follows.

2.1 Credits are solely for liquidity purposes or when liquidity-related problems arise, such as when net capital outflows amount to A percent of reserves per week for B consecutive weeks, or local currency depreciates by C percent per week for D consecutive weeks.

2.2 In exchange for credits from the regional lender of last resort, borrowers have to place enough collateral that is internationally marketable. This collateral helps ensure that credits are for liquidity needs, not solvency. In addition, the requirement of collateral will help restrict the volume of borrowing from the regional lender of last resort.

2.3 Across-the-board limits are placed not only on the extent but also on the maturity of credits available from the regional lender of last resort. The extent will have no relationship with quota or GDP such as the IMF, while the only maturity will be short term.

2.4 The frequency of borrowing from the regional lender of last resort is restricted in order to confine the total effective volume and maturity of lending, improve financial discipline or management, and prevent moral hazard.

2.5 The interest rate to be charged on loans from the regional lender of last resort will be on a commercial basis, not concessional, and slightly above the market rate for three reasons: (a) member countries have to contribute their scarce foreign exchange reserves to this regional pooling on top of the contributions to the IMF; (b) some funds are borrowed from commercial sources for relending; and (c) moral hazard is to be averted.

2.6 As a means to prevent future crises, the regional lender of last resort will give advice to its member countries on how to manage their liquidity positions given the likely course of global financial markets. The suggestions are not compulsory, but the countries that follow are given normal access to their regular credit lines; otherwise the credit lines are reduced or their terms are toughened. In any case, relevant details must be explicitly stated and proper steps strictly adhered to so as to achieve objectivity.

3. All the above-mentioned conditions will be announced in advance. Otherwise there could be some adverse effects; for example, biases in lending may emerge, as occurred in the IMF due to subjectivity or political influence. The absence of advanced announcement will leave the market with uncertainties regarding the whole repayment capacity of debtor countries, and so investor confidence is not strengthened as originally desired by the regional lender of last resort. Announcement of lending conditions beforehand will not induce moral hazard on the part of member countries' central banks because the conditions clearly indicate that available credits are limited and solely allotted for liquidity purposes. On the contrary, announcement of clear-cut terms ahead of time will encourage borrowers to be more cautious on their cash management.

Thus far, it may be noted that moral hazard is frequently mentioned. This is because although required collateral helps ensure that borrowing is for liquidity and not solvency purposes, collateral cannot guarantee against moral hazard on the part of member countries' central banks. A regional lender of last resort must therefore carefully monitor borrowers' true status and intentions. As for private creditors of the regional lender of last resort, they are not prone to moral hazard because demand for funds or credits extended by the regional lender of last resort has limits explicitly stated beforehand.

A regional lender of last resort as suggested above will lead to more available emergency credit for member countries facing liquidity problems. That will help maintain financial stability and preserve (or restore) investor confidence in the region.

Complements, Cautions, and Supplements

Setting up a regional lender of last resort to prevent and rescue liquidity crises while narrowing the responsibilities of IMF to cover only solvency crises ought to help preserve the global financial order more efficiently, as each agency is assigned the duty for which it has comparative advantages. Furthermore, an establishment of regional pools will complement, not supplant the IMF in several respects, as follows.

1. Available resources for international last-resort lending will increase, enhancing the ability to maintain financial stability in the world market. To certify this point, Table 7.4 demonstrates that the five ASEAN members (Thailand, Indonesia, Malaysia, Philippines, and Singapore) together with South Korea, China, and Japan (or the Big 3) commanded substantial and growing surplus on their current account as well as balance of payments throughout the 1990s. Had they formulated an ASEAN + 3 lender of last resort in the early 1990s, they would have been able to prevent the Asian financial crisis.

2. The quick pace of a regional lender of last resort's operation will provide liquidity to problem countries in time and avert crisis. Timing is extremely vital in this matter, because if liquidity rescue comes too late, crisis could easily emerge and become rampant as a result of weakening investor confidence and immediate retrieval of funds.
3. Detailed information from reliable surveillance conducted by a regional lender of last resort will certainly be useful to the IMF, as the

Table 7.4. External accounts of East Asian countries (amounts in million U.S. dollars)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
					Current Account				
Thailand	–7,281	–7,572	–6,304	–6,364	–8,086	–13,554	–14,691	–3,024	14,230
Indonesia	–2,988	–4,260	–2,780	–2,106	–2,792	–6,431	–7,663	–4,889	3,972
Malaysia *	–870	–4,183	–2,167	–2,991	–4,520	–8,469	–4,596	–4,792	9,376
Philippines	–2,695	–1,034	–1,000	–3,016	–2,950	–1,980	–3,953	–4,351	1,287
Singapore	3,122	4,880	5,915	4,211	11,400	14,436	14,509	15,032	17,614
ASEAN	**–10,712**	**–12,169**	**–6,336**	**–10,266**	**–6,948**	**–15,998**	**–16,394**	**–2,024**	**46,479**
S. Korea	–2,003	–8,317	–3,944	990	–3,867	–8,507	–23,006	–8,167	40,558
China	11,997	13,272	6,401	–11,609	6,908	1,618	7,243	29,718	n.a.
Japan	44,080	68,200	112,570	131,640	130,260	111,040	65,884	94,354	120,696
Big 3	**54,074**	**73,155**	**115,027**	**121,021**	**133,301**	**104,151**	**50,121**	**115,905**	**161,254**
ASEAN+3	**43,362**	**60,986**	**108,691**	**110,755**	**126,353**	**88,153**	**33,727**	**113,881**	**207,733**
					Financial Account				
Thailand	9,098	11,760	9,475	10,500	12,167	21,909	19,486	–16,877	–14,508
Indonesia	4,495	5,697	6,129	5,632	3,839	10,259	10,847	–603	–10,347
Malaysia *	1,784	5,621	8,746	10,805	1,288	7,639	9,479	2,742	–2,550
Philippines	2,057	2,927	3,208	3,267	5,120	5,309	11,277	6,498	959
Singapore	3,947	2,346	1,793	–1,212	–8,841	–4,734	–2,812	–3,851	–17,641
ASEAN	**21,381**	**28,351**	**29,351**	**28,992**	**13,573**	**40,382**	**48,277**	**–12,091**	**–44,087**
S. Korea	2,896	6,741	6,994	3,216	10,732	17,273	23,924	1,922	–3,424
China	3,255	8,032	–250	23,474	32,645	38,674	39,966	22,978	n.a.
Japan	–30,710	–67,660	–100,280	–102,210	–85,110	–63,980	–28,100	–118,050	–116,760
Big 3	**–24,559**	**–52,887**	**–93,536**	**–75,520**	**–41,733**	**–8,033**	**35,790**	**–93,150**	**–120,184**
ASEAN+3	**–3,178**	**–24,536**	**–64,185**	**–46,528**	**–28,160**	**32,349**	**84,067**	**–105,241**	**–164,271**
					Current Account + Financial Account				
Thailand	1,817	4,188	3,171	4,136	4,081	8,355	4,795	–19,901	–278
Indonesia	1,507	1,437	3,349	3,526	1,047	3,828	3,184	–5,492	–6,375
Malaysia *	914	1,438	6,579	7,814	–3,232	–830	4,883	–2,050	6,826
Philippines	–638	1,893	2,208	251	2,170	3,329	7,324	2,147	2,246
Singapore	7,069	7,226	7,708	2,999	2,559	9,702	11,697	11,181	–27
ASEAN	**10,669**	**16,182**	**23,015**	**18,726**	**6,625**	**24,384**	**31,883**	**–14,115**	**2,392**
S. Korea	893	–1,576	3,050	4,206	6,865	8,766	918	–6,245	37,134
China	15,252	21,304	6,151	11,865	39,553	40,292	47,209	52,696	n.a.
Japan	13,370	540	12,290	29,430	45,150	47,060	37,784	–23,696	3,936
Big 3	**29,515**	**20,268**	**21,491**	**45,501**	**91,568**	**96,118**	**85,911**	**22,755**	**41,070**
ASEAN+3	**40,184**	**36,450**	**44,506**	**64,227**	**98,193**	**120,502**	**117,794**	**8,640**	**43,462**

*1998 figure is from Department of Statistics, Malaysia and Bank Negara Malaysia.

Source: International Financial Statistics 1999, IMF.

former is in closer touch with member countries than the latter. And that data will serve the IMF well in designing correct and appropriate policy prescriptions for problem countries so as to achieve both rescue and prevention purposes. Information sharing will also help in constructing and operating effective early warning systems.

Four cautions deserve some attention. First, in order to stave off biases on resource allocation or utilization, the IMF's country quota and voting system (which is based on quotas) should not be adopted by regional lenders of last resort. Instead, their decision on lending should be objective, strictly adhering to the prior regulations, which are nondiscriminatory nationwise. Such impartial operations will be consistent with the commercial orientation of private sources of funds that regional lenders of last resort depend upon to some degree. Second, as substantial contributions to regional lenders of last resort may come from wealthy nations, lending decisions may be subject to political interference. Best efforts should be exerted to avert such interference. For instance, regional last-resort lenders' definitive market-oriented rules and rates will help obliterate political prejudices. Besides, offering credits to troubled countries in the region at the prevailing market prices will automatically pressure those countries to manage their economies more prudently. Third, regional lenders of last resort should be as transparent and accessible regarding information disclosure as they can. That will help facilitate the market mechanism and subdue speculation as well as herding. Fourth, regional lenders of last resort should continually perform country monitoring and surveillance, a responsibility they are more capable of maintaining than the IMF because of proximity, acquaintance, and peer pressure.

Another market-oriented channel that regional lenders of last resort may employ is credit guarantee. This is almost equivalent to direct lending in that the agencies will have to closely monitor country profiles and evaluate credit risks of possible client countries so that they can charge appropriate premiums. However, this option will fortunately lessen the chance of prejudices because it necessitates less funds and thus less contributions from member countries.

Supplements to regional last-resort lending should not be neglected. Direct fund recycling within the region, such as via the development of regional bond markets and merging of mature capital markets, will help facilitate flows of funds from surplus to deficit units, bypassing financial intermediaries—especially those outside the region. These means of intraregional direct fund recycling are suggested for the purpose of reducing the credit exposure to out-of-the-region or external markets, thereby decreasing the vulnerability to massive withdrawals of funds across the region.

Furthermore, countries within each region ought to try their best at reducing currency exposure as well, because considerable exchange risks together with deteriorating investor confidence can also spark financial

crises, as exemplified by the Thailand case in 1997. Various methods of lowering currency exposure should be explored to see whether they are workable in different regions. Examples of these methods are: a bilateral payment arrangement and its generalized forms; a clearinghouse for regional trade settlements; direct quoting and trading of regional currencies (not via major vehicle currencies); development of a regional currency index as an option for financial settlements; and establishment of regional forward foreign exchange markets, which will help encourage more use of local currencies in intraregional trade transactions by offering direct forward cover between one regional currency and another. Major vehicle currencies should be avoided, since their drastic shifts in exchange rates can spur substantial capital outflows, burdening the regional lender of last resort. In contrast, a regional currency index should be devised, which will also facilitate the development of regional bond markets.

Conclusion

An immediate analogue to the pairing between regional lenders of last resort and the IMF is the one between regional development banks and the World Bank. If left by itself, the World Bank can hardly cover details of all member countries' development programs. Neither can it closely monitor implementation or progress of concerned projects, given that its staff is far apart from the action sites. So a regional development bank in each continent, such as the Asian Development Bank and Inter-American Development Bank, can play a complementary role because it is closer to and more acquainted with the countries that undertake development projects. These regional units are able to closely oversee the progress, obstacles, and efficiency of fund utilization. Such information is valuable not only to regional development banks but also to the World Bank, since the World Bank does need the best monitoring and surveillance possible. Some critics may argue that the two represent unnecessary duplication and wasteful uses of resources. However, if they are thoroughly aware of how complicated and far-reaching development projects are in 146 member countries of the World Bank, and also of how bureaucratic and time-consuming a huge institution like the World Bank can be, they are likely to agree that dividing responsibilities to development banks by region can help expedite the progress of most development projects to a satisfactory degree.

The same is applicable to the pairing between regional lenders of last resort and the IMF. What should be stressed here is that short-term credits or balance-of-payments support alone are not enough. Regional lenders of last resort should be continually cautious that what matters most for developing countries is long-term macroeconomic adjustment. In other words, proper structural adjustments are needed before developing countries can achieve sustainable economic growth or before their

degree of vulnerability to crisis decreases satisfactorily. A mere survival from liquidity crisis does not guarantee that other economic or financial difficulties will not occur in the future. And chronic or recurring liquidity shortages could easily become insolvency problems whose resolutions are truly formidable.

In order to offset or minimize IMF's weaknesses and properly assist ailing countries, an international financial reform should include the following elements.

1. Setting up regional lenders of last resort together with firm and unbiased rules on their operations, contributions, funding, credit extension, and the terms involved.
2. Dividing responsibilities or functions of the IMF and regional lenders of last resort so that the former takes care of the countries troubled by long-term structural imbalances, while the latter offers liquidity rescue to the countries facing short-term financial difficulties.
3. Organizing systematic cooperation between the IMF and regional lenders of last resort.

The above three steps will enable developing countries to gain robust investor confidence, successfully cope with dynamic capital mobility, and achieve desirable structural adjustment. More liquidity resilience and improved economic fundamentals will help reinvigorate crisis countries, and such changes will favor industrial countries as well.

An example of a group of nations that can formulate a strong regional lender of last resort is the one consisting of ASEAN countries together with South Korea, China, and Japan, or the so-called ASEAN + 3. This ASEAN + 3 agreed at the ADB meeting in Chiang-Mai, Thailand, in May 2000 to commit swap arrangements that will help each other handle any foreign exchange predicament. What could be done further is to gradually institutionalize such a commitment and then enlarge it to offer multilateral credit facilities instead of just swaps. The evolution will reach its final stage when those multilateral credit facilities become operations of the ASEAN + 3 regional lender of last resort.

Two key features that deserve strong attention are gradualism and consistency. Before any step of financial reform is undertaken, there should be no doubt that all concerned parties are ready to cope with it. Lessons from the past are abundant that too rapid a change can bring about disaster or turmoil later on. Policy consistency is also essential. Otherwise, desired results may not materialize. Financial liberalization when financial intermediaries were immature, opening up capital accounts without liberalizing exchange rate movements in Southeast Asian countries in the early 1990s, and subsequent financial crisis serves as a good example that gradualism and consistency should be given top priority before any policy actions are pursued.

Finally, most central monetary authorities must be aware by now that

dealing with capital mobility is a very delicate issue, and so are regional lenders of last resort. For instance, supervision or surveillance alone does not guarantee prevention of problems of excessive commitments in credit markets. Similarly, frequent liquidity aids easily tempt borrowers and lenders to be imprudent. On the other hand, if regional lenders of last resort reduce rescue packages for the sake of avoiding moral hazard, that could weaken investor confidence and instigate or aggravate liquidity crunch. In short, moral hazard and investor sentiment is very sensitive. Capital mobility can foster growth and development, but it should be well managed, and regional lenders of last resort can play an important role. Otherwise, liquidity tension could emerge and slacken capital mobility, foregoing the benefits of global financial integration.

Notes

1. There are twenty-two members of the Arab Monetary Fund: Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates, and the Republic of Yemen.
2. There are five members of the Latin American Reserve Fund: Bolivia, Columbia, Ecuador, Peru, and Venezuela. Details of the Arab Monetary Fund and Latin American Reserve Fund can be found on the IMF web site.

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8. A Proposal for Asian Arrangements to Borrow

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Introduction

Before the financial crisis broke out in 1997, few would have argued for the creation of any type of regional arrangement in East Asia. East Asians did not have any formal incentives or strong motivation encouraging regional integration. According to Lawrence (1996), East Asians—more broadly, Asians—faced great obstacles with respect to forming regional arrangements of their own that were patterned after those in Europe and North America. Because of the successful economic performance, a market-led process of integration was already taking place in East Asia. Given their history of enmity, competition, and the uneven distribution of power, many neighboring countries were not even thinking of creating a regional bloc. The East Asian countries were not afraid of being excluded from any regional arrangements. They were also hardly prepared to make the structural adjustments and policy changes required for successful implementation of a regional arrangement.

However, the financial crisis of 1997 was a major financial breakdown, and as such it made many East Asians aware of the need for regional financial arrangements that could forestall future crises.[1] In September 1997, Japan proposed an "Asian Monetary Fund" (AMF) to prevent the recurrence of the Asian currency crisis and to institutionalize financial cooperation among the countries within the region. The advocates of the AMF avowed the need for a regional lender of last resort, referring to the fact that the IMF allocation of funds for Asia is inadequate considering the size of the Asian economies vis-à-vis speculative international capital. The United States and the IMF, on the other hand, strongly objected to the idea of the AMF, asserting that the AMF would threaten the stability of the global financial order by weakening the IMF's voice in promoting structural adjustments in recipient countries and by also aggravating the moral hazard problem.

Eichengreen (1999) and others dismiss the contention that an East Asian regional fund may have a comparative advantage in diagnosing regional economic problems and prescribing appropriate solutions on the basis that it will increase competition in the market for ideas. A more serious argument is that East Asians are not ready for, or capable of, creating and managing an effective regional monetary fund. According to Eichengreen, in contrast to Europe, for example, East Asia lacks the tradition of integrationist thinking and the web of interlocking agreements that have encouraged monetary and financial cooperation in Europe.

For over a half-century, European countries have worked hard to develop a wider web of political and diplomatic agreements that encourage them to cooperate on monetary and financial issues. Certainly such a web does not exist in East Asia. Furthermore, East Asians may not be prepared to negotiate an international treaty that includes provisions for sanctions and fines for countries that do not adjust their domestic policies accordingly. This unwillingness would make it difficult for a regional fund to impose politically unpopular policies on the member countries and, hence, may pose a serious moral hazard problem.

But moral hazard is not a problem that will beset only regional arrangements. The IMF is not immune to this problem. For instance, the task force report of the Council on Foreign Relations (1999) advised the IMF to adhere consistently to normal lending practices to redress the moral hazard problem. The reasons why an East Asian regional fund would suffer more from the moral hazard problem than the IMF have not been made clear. As Sakakibara (2000) puts it, if those countries unaffected by the East Asian crisis do not have any political incentive to contribute their own money, they should say so instead of using the moral hazard argument as an excuse for opposing regional arrangements in East Asia.

As for East Asia's limited capacity, Eichengreen has a point. If the European experience proves to be any guide, East Asia may take many years to develop an effective cooperative financial arrangement. However, it must also be pointed out that having suffered such a painful and costly financial crisis, the East Asian countries are prepared to set aside their differences and to work together to develop a regionwide self-defense mechanism to the extent that it could help protect themselves from future crises.

Despite heated debates on how to prevent the recurrence of crises in the region, we have, as of yet, no tangible solutions. Some proposals have been dismissed as unrealistic in spite of their publicity, while others are still in need of a concrete framework and suitable instruments. While the recovery of the East Asian economies has been much faster than expected, the search for regional arrangements is now, once again, gaining momentum. Very recently, Asia's three powerhouses—China, Japan, and Korea—along with the ten members of ASEAN, during the Asian Development Bank annual meeting in Chiang Mai, Thailand, agreed to expand an existing network of arrangements designed to ward off a crisis similar to the one that rocked the region in 1997. The plan, dubbed the Chiang Mai Initiative, calls for a network of bilateral currency swap-and-repurchase arrangements and implies the establishment of a system of pooled reserves that central banks could draw upon to buy time when their currencies come under speculative attack. The initiative is widely perceived as a major step toward strengthening financial cooperation among the East Asian countries.

Despite many misgivings about the role of regional financial arrange-

ments that have grown in number in recent years, the Chiang Mai Initiative would not require a new institution a la IMF. Although the details of the Chiang Mai Initiative are under careful study and still unknown, this regional financial arrangement could be complementary to the facilities of the IMF. In other words, this contractual arrangement would placate outsiders' worries about any instability in the global financial system that might result from potential conflicts of interest with the IMF and the moral hazard problem.

This paper aims to present a blueprint for a regional arrangement to borrow (RAB) in East Asia. The regional arrangements to borrow may be characterized as contingent credit lines based on the participants' commitment to lend up to predetermined ceilings. A typical example of the RAB would be the IMF's General Arrangements to Borrow (GAB). The IMF established the GAB in 1961 to supplement its ordinary quota-based resources in coping with the growing strain on the par value system caused by the balance of payments problems of the United States and the United Kingdom. Eight of the major industrial countries, and the central banks of two others, committed to provide up to U.S.$ 6 billion. On the other hand, the credit facilities of the European Monetary System (EMS), established in the early 1970s, provide an example of a successfully operating RAB. The credit mechanism of the European Community focused on providing international liquidity to member countries experiencing balance of payments deficits by drawing on other member countries' loans. Depending on the purpose of the loans, conditions for and ceilings on borrowing varied.

The idea for the Asian Arrangements to Borrow (AAB) was inspired by both the IMF's GAB and the short-term financing facilities of the EMS.[2] In principle, the AAB assumes a similar scheme for the central banks of participating countries in providing the contingent credit line in the private sector. The operation of the contingent credit facilities does not require the establishment of a regional fund and, therefore, the administrative costs can be minimized. If carefully designed, it can supplement and complement the role of the IMF, without challenging its authority as the international lender of the last resort.[3] The AAB, as proposed in this paper, would serve as a milestone on the road to closer and deeper financial cooperation in the region.

The organization of this paper is as follows. In the first section, the multilateral credit arrangements at work will be briefly reviewed. The possible roles for the General Arrangements to Borrow (GAB) and the New Arrangements to Borrow (NAB) in coping with the regional financial crisis will be examined. The origin and the role of the credit facilities under the EMS will also be reviewed. In the second section we consider major issues related to the promotion of a regional financial arrangement. In the third section, a blueprint for the Asian Arrangements to Borrow (AAB) will be presented. In section four, the challenges and tasks for the AAB are critical-

ly assessed and discussed in detail. In the final section, the major findings of our study will be summarized.

Review of Multilateral Arrangements to Borrow

The General Arrangements to Borrow (GAB)

The quota subscriptions of the IMF's member countries are the principal source of financing for the IMF. However, in 1962, the largest industrial countries became concerned that if any one of them were to draw on the resources of the IMF, the amount they would potentially borrow would significantly reduce the amount of usable resources readily available to other countries. Accordingly, they agreed to stand ready to lend supplemental funds to the IMF, if such funds were needed to forestall or cope with an impairment of the international monetary system. This agreement was named the General Arrangements to Borrow (GAB).[4] The General Arrangements were subject to several revisions, as will be shown in this section. The potential amount of credit currently available to the IMF under the GAB totals SDR 17 billion (about U.S.$ 23 billion), with an additional SDR 1.5 billion available under an associated arrangement with Saudi Arabia. The GAB has been activated ten times; it was last activated in July 1998 for an amount of SDR 6.3 billion, in connection with the financing of an extended arrangement for Russia. Prior to the July 1998 activation for Russia, the most recent activation occurred in 1977, when the IMF borrowed for lending to the United Kingdom and Italy under standby credits, and in 1978 to finance a reserve tranche purchase by the United States.

The General Arrangements in 1962–82

The General Arrangements to Borrow were established in 1962 by the IMF in cooperation with eight of the major industrial countries and the central banks of two others.[5] The General Arrangements were the first credit lines arranged by the fund to supplement its ordinary, quota-based resources. Since then, the General Arrangements have remained as the IMF's longest-lasting borrowing arrangements.

The General Arrangements were a product of the times. They were designed to help the fund deal with widespread and growing concern about the adequacy of the official reserves of international liquidity owing to the large drawings by two major reserve centers—the United States and the United Kingdom—and the disruptive effects of short-term speculative capital movements. The General Arrangements were a conditional credit line of defense, incorporated within the fund's ordinary lending procedures, and they could be drawn on only with the consent of the participants. The credit arrangements assigned to the participants were based on their present and prospective balance of payments and reserve positions. The credit lines established for individual participants are shown in Table 8.1.

The GAB participants could be called on by the fund to finance either a standby arrangement or an "exchange transaction" that did not require a standby arrangement. Each participant of the GAB reserved the right to decide whether or not to lend to the fund. There were five main steps to be followed before the GAB was to be activated:

- First, the managing director had to come to an agreement, after consultation, that the GAB resources were needed to forestall, or cope with, an impairment of the system.
- Second, the managing director then had to consult with the executive directors and the GAB participants on a possible proposal for a GAB activation plan.
- Third, the GAB participants then had to accept the proposal as a group.
- Fourth, each participant then notified the fund, individually, that it had accepted the proposed call under its credit line.
- Fifth, the proposal then had to be approved by the Executive Board.

Table 8.1. GAB participants and credit amounts, 1962

Participant	Units of Participant's Currency	U.S. Dollar Equivalent (in millions)	Percentage Share
United States	US$2,000,000,000	2,000	33.33
United Kingdom	£357,142,857	1,000	16.66
Deutsche Bundesbank[1]	DM 4,000,000,000	1,000	16.66
France	NF 2,715,381,428	550	9.16
Italy	Lit 343,750,000,000	550	9.16
Japan	¥90,000,000,000	250	4.16
Canada[2]	Can$216,216,000	200	3.36
the Netherlands	f. 724,000,000	200	3.36
Belgium	BF 7,500,000,000	150	2.50
Sveriges Riksbank[1]	SKr 517,320,000	100	1.66
Total		6,000	100.00

Source: Ainley (1984)

(1) Both the Sveriges Riksbank and the Deutsche Bundesbank are empowered, by domestic legislation, to lend to the Fund. They are, therefore, participants in the GAB in their own right and not simply agents of their respective governments. The commitment of Sweden was transferred to the Sveriges Riksbank between December 1961, when the Group of Ten agreed to establish the General Arrangements, and October 1962, when they entered into force.

(2) The amount for Canada, initially fixed at Can$ 208,938,000, was increased before the General Arrangements came into force to maintain a credit line equivalent to US$ 200 million following the devaluation of the Canadian dollar in May 1962.

The maturity of lending by GAB participants is, essentially, five years. However, the fund could repay earlier if the GAB beneficiary is committed to repaying within five years, so the creditors of the GAB could get their money back earlier in a crisis. The interest rate paid by the IMF in the loans under the GAB was not high, partly because the GAB was seen as a cooperative effort to protect the international monetary system, and partly because the GAB claims should be seen as secure investments. A new interest formula was adopted in 1975, which meant that the fund should pay interest quarterly to the GAB creditors at the same rate it levied charges on drawings financed by the GAB, but not less than 4 percent per annum.

The provisions under the January 1962 decision did not allow a participant to transfer all or part of its GAB claims without the prior consent of the fund. In practice, however, these provisions did not stand in the way of transfers among GAB participants, which enhanced the liquidity of GAB claims. The provisions were updated and broadened in March 1979, when the IMF decided to give participants the freedom to transfer, at any time, all or part of their GAB claims to another participant at a mutually agreed upon price.

Between 1964 and 1970, the General Arrangements were activated six times to help the fund finance four large drawings by the United Kingdom and two by France. The total borrowings from the GAB in this period amounted to the equivalent of U.S.$ 2,155 million, all of which had been repaid by August 1971. The details are shown in Table 8.2.

The IMF had called on the GAB participants to finance large conditional drawings on the fund (in the so-called credit tranches) by the United Kingdom. The United Kingdom's current account was weak for much of the 1960s, but the policy options, especially devaluation, were limited by the reserve-currency role of the pound sterling and the sizable overhead of sterling balances held in London. The General Arrangements were also

Table 8.2. Fund financing involving the GAB, 1964–1970 (millions of US $)

			Financed by		
Date	Member	Amount of Drawings	GAB	Fund Gold Sales	Fund Currency Holdings
Dec. 1964	U.K.	1,000	405 (41%)	250 (25%)	345 (34%)
May 1965	U.K.	1,400	525 (38%)	400 (28%)	475 (34%)
Nov. 1967	U.K.	1,400	476 (34%)	365 (26%)	559 (40%)
June 1968	France	745	265 (36%)	182 (24%)	298 (40%)
June 1969	U.K.	500	200 (40%)	50 (10%)	250 (50%)
Sept. 1969/ Feb. 1970	France	985	284 (29%)	200 (20%)	401 (51%)
Total		6,030	2,155 (36%)	1,447 (24%)	2,428 (40%)

Source: Ainley (1984)

activated for France, in similar circumstances to those of the United Kingdom, first to resist a devaluation of the franc in 1968 and then to support one in 1969. Surprisingly, however, the General Arrangements were not activated for the United States in the 1960s. Successive U.S. administrations were unwilling, for domestic political reasons, to accept the conditions attached by the fund to drawings on the credit tranches. The U.S. drawings in this period were all within the unconditional gold tranche and hence they were financed without recourse to the GAB.

The General Arrangements were activated three times in the 1970s. They were used to help finance large drawings by the U.K. in January 1977, by Italy in May 1977, and by the United States in November 1978. The 76 percent of the proposed drawings by the U.K. (SDR 2.6 billion), 75 percent of the proposed drawings by Italy (SDR 337 million), and 34 percent of the drawings by the U.S. (SDR 777 million) were financed by the GAB. The U.S. authorities mobilized SDR 2.3 billion, mainly in Deutsche mark and yen, to defend the dollar. The details of how the fund financed these drawings are shown in Table 8.3.

The General Arrangements, which had been activated during the period 1962–78, were useful to the fund in that they provided an additional source for financing its lending to member countries and allowed the fund to preserve its ordinary resources for drawings by other members that did not participate in the GAB. The General Arrangements had always been controversial, however, and some members, including industrial as well as developing countries, were overtly critical of the nonglobal aspects of the GAB. The main criticisms were as follows:

- First, the General Arrangements were exclusive. The number of participants was limited, and they had agreed to lend to the fund only to finance their own transactions with it. Several countries, and not solely developing countries, resented this exclusiveness of the GAB.
- Second, the General Arrangements were seen as reducing the fund's authority. They gave a small club of rich members an effective veto over important decisions by the fund to enter into transactions.

Table 8.3. Fund financing involving the GAB, 1977–1978 (millions of SDR)

			Financed by		
Date	Member	Amount of Drawings	GAB	Fund Gold Sales	Fund Currency Holdings
Jan. 1977	U.K.	3,360	2,560 (76%)	300 (9%)	500 (15%)
May 1977	Italy	450	337 (75%)	37.5 (8%)	75 (17%)
Nov. 1978	U.S.	2,275	777 (34%)	—	1,498 (66%)
Total		6,085	3,674 (69%)	337.5 (6%)	2,073 (30%)

Source: Ainley (1984)

- Third, the General Arrangements were the raison d'etre of the Group of Ten, which played a much greater role in discussing fund issues, such as the creation of the SDR. This later prompted the developing countries to form their own group, the Group of Twenty-Four, in November 1971, to protect the interests of the developing countries in the international monetary field.

The participants examined the problems raised against the GAB on several occasions before 1982, but very little came of it. The General Arrangements, therefore, stayed virtually the same from 1962 to 1982. There were three main reasons for this inertia, particularly in the 1970s. First, the participants did not view the fund as a necessary line of support in this period. As the international monetary system moved from the fixed regime to the floating regime, there was less need for the participants to defend a particular exchange rate, less need to approach the fund to support such action, and less need for the fund to use the GAB. Second, the rapid growth of the Euromarket as a source of credit offered a more expensive but unconditional alternative to borrowing from the fund. The expansion of the U.S. Federal Reserve's swap network and the European Community also provided other sources of official credit for the main industrial countries. Third, more generally, the most powerful industrial countries were reluctant to take on new international commitments at a time when their own economies were making the difficult, often painful adjustment to rising inflationary pressures, higher oil prices, and deep-rooted structural imbalances.

Reform of the GAB (1982–83)

It took a crisis to establish the GAB. It took another crisis to persuade the participants to reform them. Reform of the GAB came as a direct response by the major industrial countries to debt crises. Debt crises can be traced back to the growing inflationary pressures of the late 1960s and 1970s, to the oil price increases of 1973–74 and 1979–80, and to the unexpected depth and severity of the world recession after 1980. In the early 1980s, the major industrial countries—notably the United States—moved decisively to monetary restraint, which was designed to break the upward trend in inflation and the inflationary expectations of their economies. The result was slow growth, weak import demand, and very high interest rates for foreign as well as domestic borrowers. For the borrowing countries, these changes in the world economy meant growing strains on both their current and capital accounts. Major borrowers, such as Mexico and Brazil, were forced to rely increasingly on more expensive short-term loans. The total outstanding external debt of the nonoil developing countries amounted to U.S.$ 626 billion in 1982, compared with just U.S.$ 90 billion in 1971. Much of it was concentrated among a small group of major borrowers in Latin America and Eastern Europe.

In the summer of 1982, Mexico and then Brazil were unable to obtain

new loans or to roll over existing ones. The result was higher spreads for virtually all borrowers, irrespective of their particular circumstances, and an abrupt reduction in the availability of credit for specific countries. This situation finally developed into the default of the major borrowing countries.

The immediate crisis was averted by a series of ad hoc rescue packages involving the BIS, central banks, governments, the commercial banks, and crucially, the fund. But the debt crisis and the consequent requests for fund support on a large scale highlighted the inadequacy of fund resources. Despite two general quota increases in 1977 (32.5 percent) and 1980 (50 percent), which raised the total quota to SDR 61 billion, the fund's ordinary resources from quota subscriptions had not kept pace with either the growth in world trade and capital flows or with the growing needs of deficit members for balance of payments assistance. In September 1982, U.S. Treasury Secretary Donald Regan proposed, at the annual joint meetings of the fund and the World Bank, to increase the fund quota sufficiently enough to cover members' needs for temporary financing in normal circumstances. He also suggested the adoption of an additional permanent borrowing arrangement that would be available to the IMF on a contingency basis for use in extraordinary circumstances. The reform and enlargement of the GAB immediately followed from this proposal. Secretary Regan's proposal did not refer specifically to the GAB, leaving open the possibility that lenders to the crisis fund could include countries that were not Group of Ten participants. However, the General Arrangements offered a ready-made framework for the proposal. It was quicker and easier for the Group of Ten to adapt the GAB than to start afresh with a new fund.

The revision of the GAB, agreed upon by the Group of Ten and by the Executive Board in January and February 1983, respectively, became effective on December 1983. The main changes were as follows:

First, the total of individual credit lines under the GAB was increased to SDR 17 billion.

Second, the shares of individual participants in the increased total were rearranged to reflect the changes in their economic and financial positions since 1962 and their ability to provide resources to the fund. The shares of the original and revised GAB are shown in Table 8.4. As in 1962, the size of the individual credit lines was decided rather informally. There was no single or precise formula.

Third, Switzerland became a new participant, through the Swiss National Bank, in the GAB. In the past, the fact that Switzerland was not a member of the fund meant that the fund could not call on the GAB to finance transactions with Switzerland.

Fourth, the revised GAB allowed the fund to enter into borrowing arrangements with members that are not GAB participants. As one of the forms of association with the GAB, a borrowing arrangement could authorize the fund to call on the GAB to finance transactions with the nonpartic-

ipant member. In this case, a nonparticipant would have virtually the same rights and responsibilities as a GAB participant.

Fifth, the fund concluded an associated borrowing arrangement with Saudi Arabia. Under the arrangement, Saudi Arabia agreed to stand ready to lend the fund up to SDR 1.5 billion on a revolving basis over five years. The procedure for making calls, the interest rates, and most other terms and conditions were essentially the same as those in the revised GAB.

Sixth, the fund could call on the participants to finance drawings by nonparticipants according to the revised GAB only in certain well-defined circumstances. Such drawings were only to be made in support of adjustment programs. Furthermore, special criteria had to be met in order for the managing director to propose calls on the GAB to finance transactions with nonparticipants. The criteria were stricter than those for participants. In particular, the criterion referring to problems that could "threaten" the stability of the international monetary system was much more severe than that which allows the GAB to be activated for the benefit of participants to forestall or cope with an "impairment" of the system.

Finally, GAB creditors were expected to earn interest at a rate equal to the combined market interest rate. The market interest rate was determined on the basis of a weighted average of yields on short-term market instruments denominated in the five currencies that make up the SDR basket. It was also agreed to denominate the individual credit lines in SDRs. This would avoid unintended changes in the value caused by exchange

Table 8.4. Original and revised GAB: Individual credit arrangements

1962		1963	
Participants	Amount (millions of US $) (%)	Participants	Amount (millions of SDRs) (%)
U.S.	2,000 (3.33)	U.S.	4,250 (25.00)
Deutsche Bundesbank	1,000 (16.66)	Deutsche Bundesbank	2,380 (14.00)
Japan	250 (4.16)	Japan	2,125 (12.50)
France	550 (9.16)	France	1,700 (10.00)
U.K.	1,000 (16.66)	U.K.	1,700 (10.00)
Italy	550 (9.16)	Italy	1,105 (6.50)
Canada	200 (3.36)	Canada	892.5 (5.25)
the Netherlands	200 (3.36)	the Netherlands	850 (5.00)
Belgium	150 (2.50)	Belgium	595 (3.50)
Sveriges Riksbank	100 (1.66)	Sveriges Riksbank	382.5 (2.25)
Swiss National Bank	—	Swiss National Bank	1,020 (6.00)
Total	6,000	Total	17,000

Source: Ainley (1984)

rate fluctuations.

These reforms of the General Arrangements strengthened the fund in several important ways:

- First, the tripling of the GAB represented a major addition to the fund's resource base. The fund found itself in a much more secure financial position.
- Second, the fund found itself in a position to continue assisting its members on an appropriate scale. It thus remained an effective agent for adjustment and an important catalyst for other financial flows.
- Third, the enlargement of the GAB meant that the fund was in a better position to meet the potential borrowing needs of the main industrial countries.
- Fourth, the GAB had become more open and less exclusive. The fact that the fund could tap the GAB for lending to nonparticipants was potentially very significant.
- Fifth, the fund's liquidity would be considerably strengthened as the Group of Ten admitted outsiders into their club. The participation of Switzerland set an important precedent, as did the association of Saudi Arabia.

On the other hand, the revised GAB still left a number of questions unanswered:

- First, it could be argued that its overall size might still be insufficient to cover the potential demands on the fund by both participants and nonparticipants.
- Second, it could be argued that the conditions for activating the GAB for nonparticipants were overly restrictive. The developing countries were very concerned that the definition of a "threat" to the international monetary system would be made by the GAB participants and not by the fund alone.
- Third, the possible use of the GAB for the benefit of nonparticipants might be only temporary. If the crisis atmosphere of 1982 had given way to a more settled international outlook, the participants might have decided to restore the GAB to its original role as a source of finance available exclusively for drawings by the Group of Ten of the fund.
- Fourth, the enlargement of the GAB, in preference to a much larger quota increase, could be interpreted as a shift to a more conservative role for the fund in the mid-1980s.

The New Arrangements to Borrow (NAB)

Following the Mexican financial crisis in December 1994, participants in the June 1995 G-7 Halifax Summit called on the G-10 and other financially strong countries to develop new financing arrangements. Following the

meeting, the IMF's Executive Board adopted a decision establishing the New Arrangements to Borrow (NAB) on January 27, 1997. Mainly because of a delay in approval by the U.S. Congress, however, the New Arrangements were not immediately implemented. Only after the Thai crisis spread to neighboring countries and many East Asian countries came to support Japan's proposal for the Asian Monetary Fund in late 1997 did the United States and the other developed countries become aware of the severity of the Asia-wide crisis. The compromise plan, envisioned during the gathering in Manila in November 1997, was to strengthen the ability of the IMF to provide funds through an early approval of the New Arrangements and cooperative lending agreement.[6]

The New Arrangements finally became effective on November 17, 1998. The NAB is a set of credit arrangements between the IMF and twen-

Table 8.5. NAB participants and amount of credit arrangements

Participants	Amount (millions of SDRs)
Australia	810 (2.38%)
Austria	412 (1.21%)
Belgium	967 (2.84%)
Canada	1,396 (4.11%)
Denmark	371 (1.09%)
Deutsche Bundesbank	3,557 (10.46%)
Finland	340 (1.00%)
France	2,577 (7.58%)
Hong Kong	340 (1.00%)
Italy	1,772 (5.21%)
Japan	3,557 (10.46%)
Korea	340 (1.00%)
Kuwait	345 (1.01%)
Luxembourg	340 (1.00%)
Malaysia	340 (1.00%)
the Netherlands	1,316 (3.87%)
Norway	383 (1.13%)
Saudi Arabia	1,780 (5.24%)
Singapore	340 (1.00%)
Spain	672 (1.98%)
Sveriges Riksbank	859 (2.53%)
Swiss National Bank	1,557 (4.58%)
Thailand	340 (1.00%)
U.K.	2,577 (7.58%)
U.S.	6,712 (19.74%)
Total	34,000 (100%)

ty-five members and institutions to provide supplementary resources to the IMF, enabling it to forestall or cope with an impairment of the international monetary system. The NAB also aims to deal with an exceptional situation threatening the stability of that system, as under the GAB. Basically, the New Arrangements do not replace the existing GAB, which remain in force. However, the New Arrangements are to be the first—and principal—recourse in the event of a need to provide supplementary resources to the IMF. The total amount of resources available to the IMF under the NAB is SDR 34 billion. The NAB participants and their credit amounts are shown in Table 8.5. Commitments from individual participants are based on relative economic strength, as measured by the actual IMF quota as a predominant criterion. The decision will be in effect for five years from its effective date and may be renewed.

A proposal for calls on the NAB by the fund's managing director becomes effective only if it is accepted by the NAB participants, and the proposal is then approved by the Executive Board. The New Arrangements may also be activated to finance drawings on the fund by nonparticipants, as in the GAB. The NAB has been activated once to finance an extended arrangement for Brazil in December 1998, when the IMF called on funding of SDR 9.1 billion, of which SDR 2.9 billion was used. The fund repaid the outstanding amount in March 1999, when its liquidity position improved substantially due to the bulk of the quota increases following the effectiveness of the Eleventh General Review of Quotas.[7]

Participants in the NAB are scheduled to meet once a year at the time of the annual meetings of the fund to discuss macroeconomic and financial market developments, especially those that could have an impact on the stability of the financial system and lead to a possible need for the fund to seek supplementary resources. The chairmanship of the NAB grouping rotates annually, and the IMF headquarters staff provides secretarial support for the group.

Credit Arrangements of the European Community

The origin of the credit mechanisms of the European Union goes back to the late 1960s, when divergences in inflation rates and in external balances began to appear among member states of the European Community (EC).[8] Aspeculative attack against the French franc in favor of the Deutsche mark in May 1968, which put a great deal of tension on the bilateral parities of EC currencies, resulted in heated discussion on the necessity for the coordination of economic and monetary policies among the member states and to establish monetary facilities for mutual balance-of-payments assistance.

The credit mechanisms of the EC are composed of three distinctive but mutually complementary instruments: the Very Short Term Financing Facility, the Short Term Monetary Support Facility, and the Medium Term Financial Support Facility. These facilities have the common goal of

providing international liquidity to member states experiencing balance-of-payments deficit. However, they differ not only in their maturity, but also in the conditions attached to borrowing. Here we will review the major characteristics of these facilities one by one.

The Short Term Monetary Support Facility

The Short Term Monetary Support (STMS) facility aims at providing a certain amount of credit to its members in return for their commitment to lend on request from other members. The STMS facility became operational in February 1970 on the basis of an agreement between the central banks of the six member states. Under the agreement, the central bank of each member state committed itself to providing, on request, funds not exceeding a given ceiling—equal to its debtor quota—to the other central banks of the member states experiencing short-term balance-of-payments difficulties.

Initially, this facility had a total quota of 1 billion units (1 unit of account = 1 U.S. dollar) of account available to the central banks of the member states. The total quota was broken down in the following way: 300 million units for France and Germany respectively, 200 million units for Italy, and 100 million units for the Netherlands and Belgium (together with Luxembourg). According to the above agreement, the central bank of a participant country could borrow from the other four central banks up to its quota. At the same time, it was obliged to lend up to the same quota to the other banks. In addition, the total extension (or rallonge) of the quotas could attain a maximum of 1 billion units of account.

The STMS facility is governed by an agreement between the central banks of the member states and is administered by the European Monetary Cooperation Fund (EMCF), with the Bank of International Settlements (BIS) as its agent.[9] The granting of short-term monetary support is linked to the need for short-term financing caused by a temporary balance-of-payments deficit. Credits are granted without economic policy conditions, but they trigger subsequent consultations. They are extended for a period of three months, originally with the possibility of renewal for another period of three months. With the amendments introduced in the context of the European Monetary System, a new agreement allows credits under the STMS facility to be renewed for an additional three months, raising the maximum duration from six to nine months.

The STMS facility was fully revised and strengthened in February 1974. The central banks of nine member states agreed to increase the total amount of the quotas. More importantly, a debtor quota (borrowing ceiling) and a creditor quota (commitment ceiling) were separately arranged, the latter being twice as high as the former. In addition, extensions beyond the debtor and the creditor quotas (so-called rallonges) could be applied to any member state. The central bank of a member state may borrow from its partners under the STMS facility a total amount equal to its debtor quota plus one-half

of the total available (creditor) rallonge. The central bank of a member state is committed to lend to its partners under this facility a maximum amount equal to its creditor quota plus the total (creditor) rallonge.

The STMS facility was used by Italy in 1974, but it has not been used since the launch of the EMS. Participants and the amount of debtor and creditor quotas are shown in Table 8.6. As of January 1995, all of the fifteen EU member states took part in the STMS facility and the total amount of credit available from the facility is ECU 15,450 million.[10]

Table 8.6. Short-term monetary support facility (million of ECU)

1. Participants and amounts of quotas as of March 1979

Participant	Debtor Quota	Creditor Quota	Percentage (%)
Belgium	580	1,160	7.34
Denmark	260	520	3.29
Germany	1,740	3,480	22.03
France	1,740	3,480	22.03
Ireland	100	200	1.27
Italy	1,160	2,320	14.67
Netherlands	580	1,160	7.34
U.K.	1,740	3,480	22.03
Total	7,900	15,800	100.0
Rallonge	4,400	8,800	

2. Participants and amounts of quotas as of January 1995

Participant	Debtor Quarter	Creditor Quarter	Percentage (%)
Belgium	580	1,160	5.81
Denmark	260	520	2.60
Germany	1,740	3,480	17.43
Greece	150	300	1.50
Spain	725	1,450	7.26
France	1,740	3,480	17.43
Ireland	100	200	1.00
Italy	1,160	2,320	11.62
Netherlands	580	1,160	5.81
Austria	350	700	3.50
Portugal	145	290	1.45
Finland	220	440	2.20
Sweden	495	990	4.96
U.K.	1,740	3,480	17.43
Total	9,985	19,970	100.0
Rallonge	4,400	8,800	

Source: Apel (1998: 71)

The Very Short Term Financing Facility

In the middle of the increased uncertainty concerning the prospects for the Bretton Woods system, the central banks of the six member states of the European Community and of the three prospective member states signed an agreement to narrow the margins of fluctuation between community currencies. Under the Smithsonian agreement, any community currency could fluctuate within a margin of plus or minus 2.25 percent of its parity against the U.S. dollar. Meanwhile, under the Basel agreement, which is sometimes referred to as the "snake in the tunnel," any two community currencies could fluctuate within the much narrower margin of 2.25 percent.

The Very Short Term Financing (VSTF) facility was established in April 1972 to finance the marginal intervention required to stabilize the bilateral exchange rates between community currencies. Under the VSTF facility, the central banks of strong currencies have an obligation to provide a sufficient amount of their currencies required for official intervention to defend the existing exchange rate margin. For example, if the exchange rate of the French franc per unit of the German mark sharply increases, the central bank of France needs to intervene in the foreign exchange market by selling German marks. Through the VSTF facility, France can borrow German marks from Germany. This obligation came about because the official reserve holdings that one country can use in order to intervene in the foreign exchange market are not sufficient to cope with the unprecedented magnitude of private capital movements. In addition, the ERM crisis in 1992–93 shows that even this EMS institutional framework was not sufficient to fend off speculative attacks.

In the case of European monetary cooperation, the German Bundesbank took on the role of the regional lender of last resort. For example, during the EMS crisis in September 1992, the credit that the Bundesbank supplied reached about 93 billion German marks. Because the liabilities that weak currency countries incur can be repaid in ECU, the value of German credits decreased after the devaluation of some European currencies. The expected loss of the Bundesbank was estimated to be in excess of 1 billion German marks in its VSTF facility (Collignon 1996).

With the introduction of the EMS in 1979, the terms and conditions of the VSTF facility were revised several times. According to the 1987 agreement between the central banks, which is known as the Basel/Nyborg agreement, the major features of the VSTF are as follows.

First, the debtor central bank is given seventy-five days, from the end of the month in which the debt is incurred, to reimburse the principal and interest. At the request of the debtor central bank, this initial settlement date may be extended for a period of three months. This request is automatically granted, provided that the total amount of indebtedness of the central bank in the VSTF facility does not exceed a ceiling equal to 200 percent of the debtor quota of the central bank concerned under the STMF

facility. Moreover, any debt already renewed automatically for three months may be renewed for a further three months, subject to the agreement of the creditor central banks.

Second, any debt exceeding the 200 percent ceiling may be renewed once for three months, subject to the agreement of the creditor central bank or of central banks if the debtor central bank has loans outstanding with more than one creditor central bank.

Third, when the reimbursement of a financing operation falls due, settlement by the debtor central bank is to be effected preferably in the creditor's currency. Any debt not settled in the creditor's currency may be settled by transfers of ECU assets or that of other reserve components in accordance with the composition of the debtor central bank's reserves.

Fourth, since the unit of account of the VSTF facility managed by the EMCF is the ECU, debtor and creditor balances are also denominated in ECU. However, since the loans and reimbursements are usually effected in assets denominated in national currencies, the conversion from the national units of account to the ECU is done on the settlement day on the basis of the daily rate for the ECU established by the commission.

Fifth, interest payments apply to loans granted under the VSTF operations. Following the 1985 amendment, the interest rate is calculated as a weighted average of the most representative rates on the domestic money market of the countries whose currencies make up the ECU basket.

To summarize, the operation of the VSTF facility is closely linked to the STMS facility in its purpose of stabilizing bilateral exchange rates between community currencies. At the same time, determination of the creditor and debtor ceilings is linked to those under the STMS facility. In addition, appropriate market interest rates are applied to loans under the VSTF facility.

The Medium Term Financial Assistance Facility

The Medium Term Financial Assistance (MTFA) facility was established in 1972 with an aim to extend loans to any member state in difficulty or seriously threatened with difficulties as regards its balance of payments. Whether difficulties with the balance of payments result from the current account or the capital account does not matter. Under the MTFA facility, credits are extended for a period of two to five years. The debtor country is subject to economic policy conditions decided by the Council of Ministers. In formulating conditions and monitoring the performance of the debtor country, the commission and the Monetary Committee assume the key advisory roles. The MTFA facility has creditor ceilings but no specified debtor ceilings for individual countries, except that the borrowing of a member state normally cannot exceed half of the total creditor ceilings. The creditor ceilings for participants are as follows: 600 million units of account for Germany and France respectively, 400 units for Italy, and 200

units for Belgium-Luxembourg and the Netherlands respectively.

Meanwhile, the Community Loan Mechanism (CLM) was established in 1975 to assist the member states experiencing current account problems due to the oil price shock. The CLM could be differentiated from the MTFA facility in the sense that the former used funds from the outside. The community was allowed to borrow up to 3 billion U.S. dollars. In 1988, the MTFA was merged with the CLM to form a new credit facility called the Medium Term Financial Support (MTFS) facility. This decision was made to provide a flexible financial safety net in order to encourage full liberalization of the member states' capital flows. Borrowing under the MTFS facility is subject to conditions aimed at reestablishing a sustainable balance-of-payments status. The current ceiling for total borrowing under the MTFS facility is set at ECU 16,000 million.[11]

ASEAN Swap Arrangement

Following the "Joint Statement on East Asia Cooperation," issued by the ASEAN + 3 leaders at their informal meeting in Manila in November 1999, the finance ministers of ASEAN, China, Japan, and Korea (ASEAN + 3) convened a meeting in Chiang Mai in May 2000 in order to exchange views on economic and financial situations and discuss further cooperation in the East Asian region. As a move toward regional self-help and support mechanisms in East Asia through the ASEAN + 3 framework, thirteen countries jointly recognized the need to establish a regional financing arrangement to supplement the existing international facilities. As a start, they agreed to strengthen the existing cooperative frameworks among the monetary authorities in East Asia through the "Chiang Mai Initiative." The Chiang Mai Initiative involves an expanded ASEAN Swap Arrangement that would include all ASEAN countries and a network of bilateral swap and repurchase agreement facilities among the ASEAN countries, China, Japan, and Korea. Here we will review the existing ASEAN Swap Arrangement.

In August 1977, the five original ASEAN countries, in pursuit of their common objective to promote monetary cooperation, established an ASEAN Swap Arrangement for a period of one year. Since then, the ASEAN Swap Arrangement has been renewed several times in accordance with Article X, laid down in the Memorandum of Understanding on the ASEAN Swap Arrangement. The last renewal, for an additional five years, was made in Kuala Lumpur on January 27, 1999.

Under the swap arrangement, the maximum total outstanding amount of U.S. dollars provided by each participant was U.S.$ 40 million. This amount was too tiny to fend off the volatile capital reversal that occurred during the previous Asian financial turmoil. In principle, the amount of swap to be granted to a participant was to be provided in equal shares by the other participants. However, a participant may refrain from swapping by informing its decision thereof to the other member countries, and may,

at its discretion, provide reasons for its decision. As a consequence, other participants, on a voluntary basis, are allowed to increase their shares. In case the total amount of swap committed collectively by the participants does not sufficiently meet the requested amount, the amount of swap granted shall be reduced accordingly. The maximum outstanding amount of U.S. dollars received by any participant under the arrangement shall not at any point in time exceed U.S.$ 80 million (on the basis of a gearing ratio of 1:2).

As shown briefly above, the ASEAN Swap Arrangement is a very primitive financing arrangement compared to various well-organized European mechanisms. This is mainly due to the loose monetary cooperation in ASEAN. Furthermore, there does not exist a regional lender of last resort, although Singapore could be a candidate. Furthermore, the swap arrangement is denominated in U.S. dollars, which implies that this financing mechanism has nothing to do with regionwide exchange rate coordination. The ASEAN countries might use this arrangement to defend their dollar-pegged exchange rate systems when their currencies are under sharp pressure of depreciation.

The level of utilization was also very low. From 1979 to 1992, only four ASEAN countries activated this facility: Indonesia in 1979, Malaysia in 1980, Thailand in 1980, and the Philippines in 1981 and 1992. During the Asian financial crisis of 1997–98, the ASEAN Swap Arrangement was not utilized. In fact, this regional arrangement would not help much to minimize the disruption of financial meltdown since the massive scale of liquidity provision was required to finance the external imbalance caused by the liquidity run. Although new members are expected to join the expanded ASEAN Swap Arrangement under the Chiang Mai Initiative, Cambodia, Laos, Myanmar, and Vietnam would not contribute much because they are really poor developing countries. Unless Singapore shows leadership in the ASEAN by contributing a very meaningful amount of credit, this swap arrangement would not be a useful instrument to cope with the contemporary crisis except for being a symbolic cooperative scheme.

Major Issues for Asian Financial Arrangements

Rationale for Asian Financial Arrangements

A genuine assessment of whether any type of regional financing arrangement is necessary in Asia will depend on an analysis of the nature of the 1997 financial crisis in Asia and the possibility of its recurrence in the future. If the financial crisis was due to a temporary lack of international liquidity in the region, any financial facility that can directly and adequately cope with this liquidity problem should be promoted. On the other hand, if the crisis reflected the deep-seated structural problems associated with

deteriorating fundamentals—such as the overborrowing syndrome of the private sector and the high rate of nonperforming loans in the financial sector—then the benefits of a regional financing arrangement, in the absence of any binding structural reforms, need to be carefully evaluated.

According to Chang and Velasco (1998), the Asian crisis was no more than a liquidity crisis. Thus they openly stated that the crisis was primarily caused by the illiquidity of a financial sector where the potential short-term obligations in foreign currency exceeded the amount of foreign currency it could access on short notice.[12] They claimed that the illiquidity of the financial system was almost entirely rooted in the previous bout of financial liberalization, which accentuated the maturity mismatch between international assets and liabilities. In addition, capital flows from abroad, caused by an opening of the capital account and a fall in world interest rates, magnified the problem by making available huge amounts of resources that could be intermediated by domestic banks. When this mismatch met head-on with the panicking international creditors and their refusal to roll over short-term loans, the stage was set for an immediate illiquidity crisis and the resultant bank runs.

Although this classical view also emphasizes the danger of undertaking immature financial and capital account liberalization that is not matched by the necessary regulatory supervision (Furman and Stiglitz 1998), a number of economists have stressed the moral hazard and structural weakness.[13] We believe that both domestic structural weakness and the inherent instability of the international financial markets led to the Asian crisis. While identification of which factor was the leading cause of the crisis might help in some regards, an approach that treats each cause with equal weight will likely bear proper policy guidance.

The speed of recovery in East Asia since the middle of 1999 has been impressive. More encouraging is the widespread expectation that the ongoing recovery will continue in 2000 and help East Asia return to its precrisis trend of growth. Despite the optimistic outlook for East Asian recovery, there is widespread concern that the economic upswing underway in the crisis-hit countries does not necessarily mean that the region is completely out of the crisis zone. In the eyes of many Western creditors and investors, many of the vulnerabilities that brought about the crisis have not disappeared. In the eyes of East Asians, few of the structural deficiencies of the international financial system that contributed to the crisis have been rectified (Park and Wang 2000).

The need for a regional financing arrangement is basically related to the question of how effectively the existing international monetary system can cope with a financial crisis. The existing international financial system has been questioned and numerous proposals have been put forward to reform the international financial system by G-7 and G-22 governments, multilateral organizations, private institutions, scholars, and pundits since

the Asian financial crisis erupted. However, the urgency of reform in the G-7 countries has receded considerably with the rapid recovery of East Asia. The slow progress has been further complicated by the perception that a new financial architecture, if not carefully designed, may not be effective in sustaining global financial stability. As long as the structural problems on the supply side of capital are not adequately addressed, the East Asian countries will remain as vulnerable to future crises as they were before. Instead of waiting until the G-7 creates a new architecture whose effectiveness is at best questionable, it would be in the best interest of East Asians to work together to create their own self-defense arrangements (Park and Wang 2000).

Furthermore, financial panic for a country or region is not necessarily a crisis for other countries. Of course, there is always the possibility of contagion. During the 1997–98 crisis, the contagion fear became real for the United States after the Russian crisis of August 1998. Until then, the East Asian crisis had been an "Asian" crisis that had not affected the United States. As long as a crisis remains country-specific, or regional, there is no urgent political need for unaffected countries to pay the significant costs associated with playing the role of international lenders of last resort. Realism, not altruism, dictates policy decisions in G-7 and other countries. The United States and Japan act in their own national interest, and no one can criticize them for doing that as long as we respect the nation-state as the decision-making unit (Sakakibara 2000).

Although many Western economists and policy makers have dismissed the contention that a regional financing arrangement could be structured and managed to be complementary to the role of the IMF, an Asian regional financing arrangement could provide additional resources to the IMF while joining forces to work on matters related to the prevention and management of financial crises. Furthermore, the East Asian countries' joint efforts to monitor economic and financial market developments in the region will support the IMF's global surveillance activities. In this regard, an East Asian regional financing arrangement, along with a regional surveillance process, can be explored while avoiding institutional duplication and reducing operational costs as well. Furthermore, in contrast to the European Union, East Asia has not yet started a regional monetary arrangement concerning exchange rate stabilization. Thus, at present it will be difficult to expect policy coordination among East Asian countries regarding foreign exchange market intervention similar to that adopted by European countries in the 1970s and 1980s. At the initial stage, it may be desirable for the East Asian countries to concentrate on extending and developing short-term credit arrangements by utilizing the foreign reserve holdings in the region.

Institutional Considerations for Asian Financial Arrangements

The institutional characteristics of a regional financing arrangement will be critically affected by its relationship with the IMF and the possible formation of a regional monetary fund. For the sake of discussion, we may consider four possible forms of regional financing arrangements:

- A special credit arrangement to borrow under the supervision of the IMF
- Anew credit arrangement under the supervision of the ADB
- Acredit arrangement under a regional monetary fund
- A credit line arrangement among central banks in the region, without any extra institutionalization

Asian Arrangements to Borrow under the Supervision of the IMF

Similar to General Arrangements to Borrow (GAB) or New Arrangements to Borrow (NAB), the IMF may play the role of the financial intermediary for its participants by introducing Asian Arrangements to Borrow (AAB) under IMF supervision. In this case, the IMF is in itself the main body of the agreement, which will become a borrower to the participating creditor countries as well as the lender to the borrowing countries. By securing region-specific credit lines in the case of a financial crisis, the IMF's role as the lender of last resort will be strengthened. However, the growing influence of Asian participants may weaken the IMF's supranationality. In addition, there may be potential conflicts of interest between the AAB and the existing GAB or NAB.

The Asian Development Bank as the Secretariat for the AAB

Although the Asian Development Bank (ADB) does not have similar contingent credit arrangements such as the GAB or NAB, its primary function is financial intermediation as a regional development bank. To save costs with respect to the establishment of a new institution to operate Asian Arrangements, the Asian Development Bank could competently manage its role of funding emergency liquidity. Considering that the ADB did not play a greater role as crisis manager or lender during the previous Asian crisis, if the ADB is given the role of being the management agency of the AAB, its prestige as a regional development bank will be greatly enhanced. Furthermore, the ADB could justify its role by contending that region-specific financing arrangements would effectively forestall and contain region-specific crisis contagion. If the ADB takes on only a minimal administrative role, however, there remains the problem of who will supervise the operation of the AAB. Furthermore, many others contend that the regional development bank should concentrate on its primary long-term development projects, such as poverty alleviation and so forth.

Asian Arrangements to Borrow and the Asian Monetary Fund

If the Asian Monetary Fund (AMF) is to be established, the AAB will be the important instrument for mobilizing the necessary funds to provide under the AMF, along with quota contributions from the participants. If the AAB is to be operated under the AMF in a similar way to the IMF's GAB or NAB, strict conditionalities should be imposed on the borrowing country. The AAB then becomes an agreement between the AMF (borrower) and its counterparty creditors, because the AMF would utilize the AAB just for mobilizing the funds needed to assist countries in emergency situations. If the AMF does not attach IMF-like conditionalities, it may face a moral hazard problem that the international financial community might raise. In this regard, relevant but binding policy recommendations should be imposed on borrowing countries. Without due lending disciplines in place, the AMF would likely become bankrupt primarily due to the lax supervision of assistance.

In promoting a regional monetary fund in East Asia, Japan has a very important role to play as the second largest economy in the world and as a member of the G-7. In order to attract wider support from other East Asian countries, Japan must state what its national interests are and what it is prepared to do to support the establishment of an East Asian regional monetary fund. In particular, Japan must find ways in which it can collaborate with China on resolving regional financial issues. In addition, most of all Japan should be prepared to provide a large share of the resources needed to realize the idea of a regional monetary fund without dominating the other countries.

Contingent Credit Lines for the Central Banks

Regional financial arrangements may be managed without any institutional support, quite similarly to the case of the General Agreement on Trade and Tariffs (GATT). In this scheme, the central banks in the region should open credit lines in preparation for the case where a participant needs emergency loans. The idea of contingent credit lines means that a member country becomes obliged to lend a certain amount to other members, but at the same time, it attains the right to borrow corresponding to its commitment. To make the arrangement workable, it is required that the responsibility and the right of the participating central banks should be specified. Accordingly, the provisions of contingent loans should be drawn immediately without conditions, and they should be paid back without delay in preparation for the next emergency loans.

This operation of the contingent credit lines for the central banks will be different from the current financing facilities of the IMF, thus being supplementary to the latter in principle. However, this has several shortcomings. First, there is no institutional infrastructure, and hence the supervision and enforcement of the agreement may be not strong enough. Second,

the risk of default on borrowing needs to be adequately dealt with, particularly with respect to how a defaulting country should be penalized.

East Asian countries already have bilateral swap and repurchase arrangements between their central banks. The idea of the AAB could be regarded as a way of extending bilateral swap arrangements into multilateral ones. Yet in most cases, these swap arrangements purport to procure funds for foreign exchange market intervention. The U.S. Federal Reserve Board (FRB) adopted swap arrangements with central banks in fourteen countries and the Bank for International Settlements (BIS). In the early 1960s, the main purpose of the swap arrangements was to facilitate the United States' role in supporting stability in the European foreign exchange market. However, after the adoption of flexible exchange rates in 1973, the FRB also utilized the arrangements as a financing facility.

Japan also has a brief history of swap arrangements. The central bank of Japan agreed to a swap arrangement with the New York FRB for the first time in 1963. The arrangement secured funds for foreign exchange market intervention and supplemented foreign reserves when they were insufficient. Japan also set up swap arrangements with the central banks of Germany and Switzerland in order to sustain stability in the international financial markets. Accomplishments accredited to swap arrangements have been limited, yet the agreements symbolize the intimate cooperation of the central banks in stabilizing exchange markets. This alone may be conducive to maintaining stability and allows for the exchange of mutual information pertaining to exchange markets. Similarly, Korea and Japan agreed to a swap arrangement between their central banks that amounted to U.S.$ 5 billion as of October 1999, under the New Miyazawa Initiative for trade and financial assistance. However, in the case of the Korea-Japan bilateral swap arrangement, the funds cannot be used to intervene in foreign exchange markets or to protect against sudden capital outflows.

Similarly, the central banks in East Asia have repo (repurchase) arrangements. The repo arrangement is a financial contract that enables a country to take on a very short term loan, usually for less than three months, on illiquid assets as collateral. Korea had repo arrangements with seven central banks around the time of its currency crisis. However, Korea's repo arrangements put immoderate limitations on exchangeable securities. Furthermore, the question arises about whether or not the terms of duration and amount will be sufficient in times of future crises.

Asian Arrangements to Borrow are mutual agreements among the participants. The participants are, in theory, borrowers and lenders as well. However, in practice, there will be some selectivity bias, which means that a group of participants could be consistently of borrower status, while the other group could be of lender status. On the borrowers' side, however, these public contingent credit lines (CCLs) are potentially unilateral. Compared to private CCLs—market-based liquidity procurement schemes—

the AAB, as a public CCL arrangement, will have pros and cons. On the positive side, member countries will not pay commitment fees for the arrangement, because each member is, in theory, both a lender and a borrower. Second, due to the relatively high costs of commitment fees, the countries applying for private CCLs will be mostly limited to riskier countries. Thus, less risky countries will not apply for the private CCLs, fearing that they are regarded in the marketplace as lemons. Thus, public CCLs, with appropriate surveillance processes, will reduce the adverse selection problem that exists in the marketplace. Third, many emerging market economies are concerned that private CCLs will crowd out normal credit supply as private financial institutions will want to maintain a certain level of risk exposure in each country. This dynamic hedging strategy will reveal the incentive to decrease other types of loans provided by private financial institutions. On the other hand, the AAB, like the CCL facility of the IMF, will be an additional liquidity injection into the country in need, not necessarily offsetting other capital inflows.

The fact that there have been few examples of the private CCL arrangement in the past shows that improvements are necessary in the incentive structure in order to involve more countries and private financial institutions in the private CCLs. The case of Mexico also vividly illustrates the incentive problems associated with the private CCLs. In 1997, Mexico arranged for U.S.$ 2.7 billion worth of private CCLs with thirty-one private commercial banks. The country succeeded in withdrawing funds when the contract was nearing expiration, and the financial institutions were unwilling to extend their CCL arrangements with Mexico. Private financial institutions are likely to be reluctant to provide funds at times of crisis or to extend the contract with potentially vulnerable countries. Thus, public CCLs could be alternative contingent credit lines to address the incentive problems associated with private CCLs.

Moral Hazard

The moral hazard problem means that there exist distortions in international capital markets—in particular when there is a quasi lender of last resort. Liberal economists reject the notion that markets are intrinsically unstable and need to be stabilized by an international lender of last resort. They argue that markets are intrinsically stable, efficient, and smoothly operating and that contagion effects are negligible. They argue that an international lender of last resort would create a greater problem rather than a solution.[14] However, the herding behavior of investors, volatility, and contagion continue to be the reality. The IMF, as a quasi lender of last resort, has recently strengthened principles governing its lending activities to address the moral hazard problem by adhering to the classic Bagehot rules of lending (a) freely to solvent borrowers, (b) against good collateral, and (c) at a penalty rate (Fischer 1999).

If any Asian financing arrangement involves the moral hazard problem, we should look at how the Asian arrangement would undermine the Bagehot rules. The contention that only tough conditionalities would relieve the moral hazard problem is a simple-minded approach. The tough conditionalities would not necessarily discipline emerging market economies to adhere to sound macroeconomic and financial policies. The Asian Arrangements to Borrow, in our view, has nothing to do with a presumed regional lender of last resort. As the devil is in the details, our regional scheme is aimed at institutionalizing the private CCLs by establishing multilateral contingent credit arrangements among the central banks in East Asia. Therefore, the moral hazard problem could be avoided by applying the Bagehot rules. For example, the borrowing country ought to offer a certain amount of its currency as collateral. It should also be required to pay at market interest rates on loans.

Credibility and Sustainability

In order for members to maintain their commitment to lend, it is a prerequisite for them to have confidence in their ability to borrow in return. First, the credit ceiling and the borrowing ceiling should be well balanced to ensure the continual operation of the credit facility. The borrowing ceiling should be set so as not to jeopardize the overall framework in case of default.

Second, the decision procedure should be transparent and fair. Because the AAB does not necessarily require any operational institution, we do not require institutional discretion to provide the necessary emergency funding to a country. In this sense, the automatic approval of borrowing may be desirable. But automatic lending, based on precommitment, may not completely avoid the moral hazard problem on the part of the borrower. Accordingly, we should secure a mechanism to safeguard against risks of overborrowing and default.

Architecture for the Asian Arrangements to Borrow

Basic Characteristics of the Asian Arrangements to Borrow

The AAB aims to promptly provide emergency loans for Asian countries faced with liquidity problems. The Asian Arrangements shall be activated as a first line of defense for the country faced with a temporary shortage of international liquidity before officially requesting emergency loans from the IMF. Bilateral swap and repo arrangements would be useful for stabilizing the exchange rates between the Asian currencies. However, the main purpose of the AAB is to cope with the liquidity problem. The Asian Arrangements should be distinguished from the funding facilities to maintain the central parities among participating countries under the regional monetary system.

The Asian Arrangements would not require the establishment of a formal institution or the raising of quota subscriptions. They are based on the credit arrangements among participants, as in the case of the credit mechanism of the European Community. Any participant who calls on the AAB would be able to borrow funds to a certain amount without a string of conditionality. A request by a participant for additional funds over the amount automatically provided would be granted with the approval of the member countries. The Asian Arrangements do not play the role of a lender of last resort in that the total credit arrangements of the AAB are limited.

Ceilings to Borrowing and Credit Arrangements

To avoid or reduce the moral hazard problem embodied in the automatic lending system of the AAB, it would be desirable that the limit of borrowing assigned to each participant be linked with their credit commitments. For example, the ceiling of the automatic lending would be assigned up to 100 percent of each participant's own credit commitment. Only when two-thirds of the member countries reach an agreement, an additional 100 percent of credit commitment could be provided.

The credit allocations among the participants would be determined based on the foreign reserve positions, and different criteria would be applied in determining a credit quota between developed and developing countries. If the amount of credit commitment were set too large, some countries would not be willing to participate in the AAB. Because the total borrowing of an individual participant should be proportional to its own credit commitment, too excessive a credit assignment to each participant could lead to the failure of repayment, which would threaten the stability of the system. On the other hand, if the total credit quota of the AAB is not sufficient to ease the liquidity problem of the crisis-hit countries, then the AAB would be of no value.

The appropriate amount of the total credit commitments to secure the effectiveness and the stability of the AAB would be U.S.$ 30–50 billion, when considering the current scales of foreign reserves of Asian countries. In Table 8.7, two alternative credit arrangement schemes for the East Asian countries are proposed; the total credit commitments in one scheme amount to U.S.$ 30 billion, while those in another scheme amount to U.S.$ 50 billion. In the former, the ratio of credit commitments relative to the foreign reserves is about 2 percent for Japan and 3–4 percent for developing countries. On the other hand, in the latter case the ratio for Japan increases to 3.6 percent and those for developing countries are around 5–7 percent. Based on these schemes, suppose that the AAB were called upon concurrently by Korea, Malaysia, Indonesia, and Thailand—all of which suffered from the currency crisis in 1997–98—up to the maximum level of 200 percent of each country's credit ceiling. Despite the huge amount of

concurrent drawings, the proportion to the total credit arrangements with an AAB of U.S.$ 30 billion would be only 46.6 percent. This implies that an AAB on this scale would work effectively even when currency crises simultaneously break out due to a contagion effect.

The total outstanding credit arrangements of U.S.$ 30 billion are the same as those to be committed with the Miyazawa Plan. In addition, they seem to be reasonable when considering the overall size of the IMF's GAB plus NAB, which amount to SDR 34 billion (about U.S.$ 50 billion). The credit provided to Korea along with the IMF's Supplemental Reserve Facility (SRF) just after the currency crisis hit the Korean economy was U.S.$ 12 billion. If an AAB of U.S.$ 30 billion were in effect, the maximum credit Korea could draw is U.S.$ 6 billion. It would be U.S.$ 10 billion with an AAB of U.S.$ 50 billion. Such figures seem to be substantial.

When some participant calls on the AAB, credits requested would be allocated to the other participants in proportion to their credit arrangements. To borrow funds over the amount of automatic lending, two-thirds of the participants of the AAB should approve the proposal. The voting power should be distributed proportionally to the credit commitments.

Terms and Conditions for Lending and Borrowing

To address the moral hazard problem, risk-adjusted market interest rates should be applied to lending under the facility. The levels of risk premium charged would be determined with the agreement of the participants. To prevent abuse of automatic lending, some conditions should be satisfied before making a call on the AAB. For example, the nominal exchange rates should

Table 8.7. Credit arrangement schemes for the AAB (in US$ hundred millions)

	Credit Arrangements		Foreign Reserves	Ratios (%)	
Participants	A	B	(Base Point) (C)	A / C	B / C
Japan	70 (23.3%)	120 (24.0%)	3,345 (2000.5)	2.09%	3.59%
Korea	30 (10.0%)	50 (10.0%)	868 (2000.5)	3.46%	5.76%
Hong Kong	40 (13.3%)	65 (13.0%)	939 (2000.4)	4.26%	6.92%
Taiwan	45 (13.3%)	75 (15.0%)	1,035 (1999.11)	4.35%	7.25%
Singapore	30 (10.0%)	50 (10.0%)	753 (2000.4)	3.98%	6.64%
Malaysia	12 (5.0%)	20 (4.0%)	334 (2000.5)	3.59%	5.99%
Indonesia	10 (3.3%)	15 (4.0%)	281 (2000.4)	3.56%	5.34%
Philippines	5 (1.7%)	10 (2.0%)	140 (2000.4)	3.57%	7.14%
Thailand	12 (5.0%)	20 (4.0%)	313 (2000.5)	3.83%	6.39%
China	46 (15.0%)	75 (15.0%)	1,595 (2000.4)	2.88%	4.70%
Total	300 (100.0%)	500 (100.0%)	9,603	3.12%	5.21%

Source: Data of foreign reserve holdings are drawn from IMF's *International Financial Statistics* (July 2000) except for Taiwan.

soar more than 20 percent or the stock of the foreign reserves drop more than 20 percent from the average level of the most recent three months. These would be reasonable indicators for measuring currency crises.

Six months would be appropriate for the maturity of the lending, and it would be automatically extended for another six months. With the approval of two-thirds of the member countries, it could be revolved for a further six months just one time. The debtor countries should deposit as collateral—in their own currencies—an amount equivalent to the credit drawings to the creditor countries. Countries that do not redeem the principal and interest by the due date would be deprived of the right to automatically draw funds for some period. Again, an exception could be made if two-thirds of the member countries approve the extension.

Other Operational Modalities

In order for the AAB to be implemented, there are many minor issues to be resolved. For example, the following four suggestions are offered:

- First, the AAB would be reviewed every two years. Accordingly, the credit lines would be rearranged on the basis of foreign reserve positions.
- Second, the chairmanship of the AAB should rotate every two years. The chairman should be authorized to appoint the secretary-general.
- Third, the ADB may serve as the secretarial support for the AAB. Otherwise, the central banks of member countries may take turns to provide the required service.
- Fourth, the exiting AAB claims should be transferable to other member countries to enhance their liquidity.

Agenda for the Asian Arrangements to Borrow

Feasibility

In the aftermath of the Asian financial crisis, despite the rapid recovery of the East Asian countries, there is the lingering possibility of a recurrent crisis. Hence there is, to a certain extent, a tacit yet common understanding that regional financial cooperation is necessary. Of course, the specific plans for financial cooperation will take into account possible conflicts of interest both with the IMF and between the countries in the region. A possible proposal is the initiation of the Asian Arrangements to Borrow. This arrangement would overcome shortcomings of such proposals as the AMF, credit line arrangements with private financial institutions, and repo/swap arrangements between central banks.

Geopolitically, the Asian Arrangements to Borrow will minimize the opposition voiced by the United States and the IMF against the formation of a regional monetary fund such as the AMF. However, it will still be important to persuade the IMF to acknowledge that the AAB is a useful

alternative to the launch of a regional fund, reiterating the example of a similar financing facility under the EMS system in Europe. In addition, the Asian Arrangements to Borrow will allay any resentment expressed by China to the increasing influence of Japan, as well as encourage Asian developing countries, such as those in ASEAN, to participate in the cooperation.

Practically, the Asian Arrangements to Borrow will be a mutually advantageous cooperative scheme where participants share in both the obligations and benefits and where conditions to financing facilities are not too exacting. This will prove attractive to China and other developing countries. If the AAB sets loose conditions on the size of usable resources in relation to that of each country's foreign reserves, more developing countries are bound to join. Accordingly, to balance such asymmetry related to the loose conditions, Japan and other developed countries will need to participate as a counterweight in the financing facility. Although the AAB limits Japan's role in the region, Japan is likely to agree to the proposal, realizing the importance of the long-run benefits in terms of regional financial stability and market integration.

In sum, unlike the AMF, the Asian Arrangements as such will preclude any reason for objection by the United States and the IMF. In addition, the reaction of China and Japan will most likely be positive. These circumstances will make the Asian Arrangements to Borrow the most feasible alternative in terms of financial cooperation.

Anticipated Benefits

The Asian Arrangements to Borrow will provide immediate liquidity to countries that begin to experience instability in the exchange rate due to temporary liquidity shortage caused by sudden reversal of capital flows. This will effectively contain full-blown development of currency crises, not to mention contagion in the region. To take an example, if Korea has committed resources of U.S.$ 3 billion in the AAB, it can borrow up to U.S.$ 6 billion. This is comparable to the U.S.$ 5 billion proposed as part of the currency swap arrangement under the Miyazawa Plan. Moreover, compared to the IMF support package of SDR 2.9 billion (U.S.$ 4 billion) in response to the 1998 financial crisis in Brazil, the credit support in the AAB is by no means a small figure. Therefore, the mere existence of this financial arrangement should act as a buffer that will avert speculative attacks in advance, and it will go so far as to provide stability to the entire international financial system.

It should be noted, however, that in order to respond instantaneously to calls for assistance, the participating countries will be restricted in that they will be unable to divert their committed resources for other uses. The question then arises: Will the AAB be effective and credible in providing liquidity in regional crises without running into serious problems? To enhance such credibility and effectiveness, countries with sizable foreign

reserves such as Japan and China will need to take up the role of initial lenders of credit. Another possible reason for ineffectiveness is the failure to realize that the Asian Arrangements to Borrow will only focus on dealing with temporary liquidity shocks. For countries suffering from structural imbalances, the AAB will only provide momentary relief, not permanent solutions. It will be necessary to differentiate between instances of temporary illiquidity and structural incapability to repay debt, in which case the IMF will be called on to provide assistance.

Still, the Asian Arrangements to Borrow will have an additional role other than just functioning as a regional financial cooperation. Hopefully, the AAB will be a milestone in strengthening economic cooperation in various fields. It will be the first-ever policy cooperation mechanism in Asia and will act as an important foundation for other future regional cooperative pursuits. For a start, the Asian Arrangements to Borrow can initiate a surveillance mechanism to examine policies among participating countries in order to enhance efficiency in cooperation. Such policy coordination among Asian countries could improve regional bargaining power in international relations, even when apparent geographical ties do not exist as in North America and the EU.

Action Plan

The action plan for the Asian Arrangements to Borrow should start with consensus building among China, Japan, and Korea. For regional financial cooperation to be any kind of success, the active participation of the three powerhouses in this region is essential. In addition, in order for the AAB to be a truly regional mechanism for financial stability, the ASEAN member countries that have experienced currency crises—such as Thailand and Indonesia—must join in also. In principle, however, the AAB will open its doors to anyone. This will minimize exclusive regionalism and appease any tensions expressed by the IMF or non-Asian countries. However, for efficiency in the new arrangement, it would be desirable to expand their membership step-by-step. The first-tier participants should include Japan, China, Korea, and countries in ANIES (Taiwan, Hong Kong) and ASEAN. A possible obstacle may be persuading China, Hong Kong, and Taiwan to join simultaneously. When the arrangement earns sufficient credibility, more countries will be able to join. For example, there is no reason why countries like Australia and New Zealand should not participate. Their participation should rest on thorough deliberation amongst the countries involved. If the United States happens to ask for a role, such a membership proposal should be welcomed. Even if the United States does not ask, the cooperation should suggest that it should have a role in order to legitimatize the AAB's credibility and effectiveness.

Conclusion

The Asian currency crisis has greatly increased awareness of the importance and necessity of East Asian regional financial cooperation. This awareness has formed a general understanding for the need to develop a new financial architecture in order to prevent a recurrence of currency crises. Since the crisis, Japan, fearing its diminishing influence in the Asian region, has been the most active in proposing various measures in regional financial cooperation. However, the AMF, proposed by Japan, must overcome strong opposition from outsiders and insiders. The United States and the IMF fear that the AMF would potentially undermine the existing international financial system by which the United States holds its hegemony. On the other hand, China is cautious about strengthening Japan's hegemony in the Asian region. In response to the opposition, Japan has instead launched and executed the Miyazawa Plan, a newly devised support initiative in the region. The Miyazawa Plan, specifically directed toward crisis-afflicted Asian countries to reinvigorate the economy in the medium term, would play a positive role in indirectly preventing the recurrence of currency crises. But it is not an effective and systematic approach to preventing currency crises or to stopping their contagion. Accordingly, Malaysia's Prime Minister Mahathir has proposed the initiation of the East Asia Monetary Fund (EMF). The United States and the IMF, however, are not keen on this idea either.

A more realistic and feasible financial cooperation plan is the multilateral Asian Arrangements to Borrow. No single country can exhibit excessive influence in the AAB, and more importantly, the AAB will not overlap with the functions of other established international financial institutions. The Asian Arrangements to Borrow stipulates in advance the credit loan limits for each member country. When a particular country asks for a loan, the AAB would allow a loan up to the agreed-upon loan limit. Unlike in the IMF or the AMF, where the member countries form a fund based on quota subscriptions and provide credit when necessary, the AAB would work out a financing facility almost automatically after the need arose. Though member countries would have to agree upon the specific action plans for the multilateral arrangements, there are still six general principles for its implementation:

- First, the credit limit for each country should be proportional to its foreign reserves. This will give a criterion to the amount of capital the country can borrow.
- Second, as a means to supplement the IMF's role, the AAB will be applied and activated before the request for any IMF support funds. In addition, the loan extracted from the AAB will be unconditional, unlike with the IMF.

- Third, when a country applies for support, the country first willing to provide loans will have precedence in giving assistance. Otherwise, the assistance will be constituted according to the previously determined allotment of resources to each member country.
- Fourth, to minimize the moral hazard associated with the borrowing country, the market interest rate and a risk premium will determine the interest on the loan.
- Fifth, the conditions to applying for the loans will be limited. The AAB will be applicable only in such situations as a sudden depreciation of the currency or a sudden decrease in foreign reserves three months prior to the application.
- And finally, for effective management, the ADB might set up a specialized office to supervise the AAB.

The Asian Arrangements to Borrow will automatically provide liquidity to countries that have started to experience turbulence in their foreign exchange market. Accordingly, these arrangements will be able to prevent currency crises and provide a firm and meaningful milestone in terms of financial cooperation. As a rule, the arrangement should initiate itself through multilateral means. In the meantime, until it becomes fully established, Korea, China, and Japan should begin with a three-country arrangement and gradually take steps to include the ASEAN countries. Actively inducing the United States to participate will be necessary in providing credibility and efficiency in the arrangement.

Notes

1. Fred Bergsten (2000), in his article in the *Economist*, asserts that in the medium term, at least, the most important changes to the world financial architecture are likely to come from the new regional arrangements being fashioned in East Asia. As a result, he imagines that for the first time in history, the world is becoming a three-bloc configuration.
2. Bergsten (2000) also notes that the ASEAN + 3's Chiang Mai Initiative is similar to the network installed by the G-10 in the early 1960s, when they faced the first global monetary hiccups of the postwar period. The G-10 network was incorporated into the IMF's GAB.
3. The role of the IMF as an international lender of last resort is still incomplete, since it does not have the power to create international reserve money. According to Fischer (1999), however, the classic Bagehot rules for the lender of last resort have been incorporated into the operation of the IMF. Two elements of the Bagehot rules (penalty rate and the notion of lending freely) have been incorporated into the Supplemental Reserve Facility (SRF), which can make short-term loans in large amounts, at penalty rates, to countries in crisis. With regard to the last element of the Bagehot rules (good collateral), the loss of market access that would result from default and the fact that the fund would be regarded as preferred creditor would likely be sufficient collateral.
4. Here we refer to and summarize the IMF's pamphlet, "The General Arrangements to Borrow," authored by M. Ainley (1984).
5. They were the United States, Deutsche Bundesbank, the United Kingdom, France, Italy, Japan, Canada, the Netherlands, Belgium, and Sweden.
6. Ad hoc financing package provisions arranged in the Manila Framework as the second line of defense have not actually been implemented on a permanent and assured basis.
7. During the 11th General Review of Quotas, the quota was increased from SDR 145.6 billion to SDR 212 billion.
8. Information on the credit arrangements of the EU draws on Apel (1998), chapters 1 and 2.
9. The European Monetary Cooperation Fund was established in April 1973 with a view to promoting economic and monetary union. However, it was given more limited tasks than was originally planned: (1) the cooperation necessary to facilitate the gradual narrowing of the margins of fluctuation of the EC currencies against each other; (2) the administration of the short-term monetary support facility; and (3) the multilateralization of positions in the very short term financial support financing facility resulting from intervention carried out by the central banks in EC currencies. See Apel (1998), 40.
10. If the central banks of the member states holding 66.6 percent of the debtor quotas borrowed up to their ceiling from the other central

banks holding 33.3 percent of the creditor quotas, the total amount of credit outstanding becomes ECU 6,657 million. If the amount of creditor rallonge of ECU 8,800 million is added, the total amount of credit available becomes ECU 15,450 million.

11. Italy was granted a loan of ECU 8 billion in four tranches on January 18, 1993.
12. *Insolvency* is defined as the inability of an economic agent to fulfill its obligations. However, in the case of illiquidity, the economic agent is fundamentally solvent but is not able to meet its obligations when they fall due. In practice, the distinction between the two concepts is not easy to draw. Insolvency may depend on the general state of confidence of the market, which may be measured by its degree of illiquidity. See De Bonis (1999) for more details.
13. Following an insightful paper by Krugman (1998), the term *moral hazard* has been used quite extensively to explain the excessive risk-taking behavior by borrowers and lenders prior to the outbreak of the Asian crisis. Corsetti, Pesentil, and Roubini (1998) also show moral hazard as a source of financial fragility during boom times.
14. Kindleberger (1973, 1989) argues that the world financial market is intrinsically unstable without an international lender of last resort. Schwartz (1986), Meltzer (1986), and recently Bordo et al. (1996) rejected Kindleberger's idea on two grounds. First, an international lender of last resort would exacerbate the risk of moral hazard by sovereign borrowers as well as by international banks. Second, the authority to create base money, which is the very raison d'etre of a lender of last resort, remains within the purview of national central banks.

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9. China and Asian Monetary Cooperation

Yongding Yu

Introduction

This paper explains China's attitude and policy toward Asian monetary cooperation during recent years. The first section looks back at China's economic performance during the 1990s, especially its performance during the Asian financial crisis. In this section, it is noted that China's economic performance during the crisis was largely affected by global rather than regional factors. The second section recounts the Chinese government's policy responses toward the Asian crisis and China's deflation over the past few years. This section shows that relying almost entirely on its own resources, China was able to overcome the difficulties brought by domestic and external factors. The third section discusses China's attitude and policy toward an Asian monetary policy. It is argued that unless China can be presented a clearer picture of the benefits that it can obtain, it is not very likely to actively participate in institutionalized arrangements on regional monetary cooperation. The last section puts forward some thoughts on how to proceed in regional monetary cooperation from China's point of view. It is emphasized that the most important obstacle to the establishment of an institutionalized arrangement on regional monetary cooperation in Asia is the lack of trust. If Asian countries do not have the political will and a long-term agenda for regional cooperation and integration, any regional cooperation plans, the implementation of which will be at the expense of national sovereignty, are unfeasible. In this section, several important fields have been identified in which cooperation and coordination should be achieved among Asian countries. Based on this cooperation and coordination—with the passage of time—Asian monetary cooperation could be institutionalized and a high degree of economic integration could be achieved.

China's Economic Growth and Its External Environment

China's Economic Performance before the Asian Financial Crisis

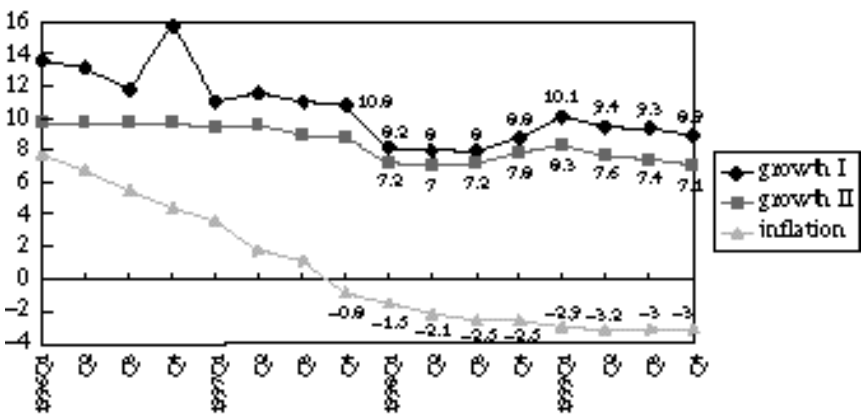
Since 1978, China's economic growth has been spectacular. From 1978 to 1993, its average annual growth rate was 9.3 percent. In 1993 and 1994, the annual growth rate further increased to over 13 percent and 11 percent, respectively. Along with rapid economic growth, inflation began to pick up since 1985. In 1994, China's inflation reached a record high of 21.7 percent.[1] In 1995, despite the government's restrictive macroeconomic policy aimed at suppressing inflation, which was initiated in the second half of

1993, China's growth rate was still as high as 10.8 percent, while inflation dropped to 14.8 percent.

In 1996, China realized the objective of maintaining a relatively high growth while lowering inflation substantially. On the one hand, China registered a growth rate of 9.7 percent in real terms, and on the other hand, inflation dropped further to 6.1 percent.

In the first quarter of 1997, the economic prospects for the Chinese economy seemed very promising. However, in the second quarter of 1997, China's growth rate began to slow down, evidently accompanying the steady decline of inflation (Figure 9.1).

With the benefit of hindsight, now we can say that something fundamental happened in the Chinese economy in 1997 or earlier. That is, due to structural changes, the Chinese economy was no longer a shortage economy, and it has become demand-side constrained. At the time, however, the government was unsure whether the fall in inflation was a change in trend or was temporary. As a result, it maintained a so-called moderately tight macroeconomic policy. In October of 1997, the retail price level began to fall. In response to the slackness of the market, enterprises cut production to reduce inventories. Starting in the fourth quarter of 1997, the growth rate of the GDP fell significantly. The fall of incomes in turn led to reductions in consumer expenditure and enterprise investment. A deflationary spiral set in.



Source: National Economic Research Institute (NERI); *China Macroeconomic Analysis*, various issues.
Notes: growth I=growth rate of the total value-added of industrial production; growth II=GDP growth rate. Inflation is measured by the change of the retail sale of consumer goods price index.

Figure 9.1. China's growth rates and inflation

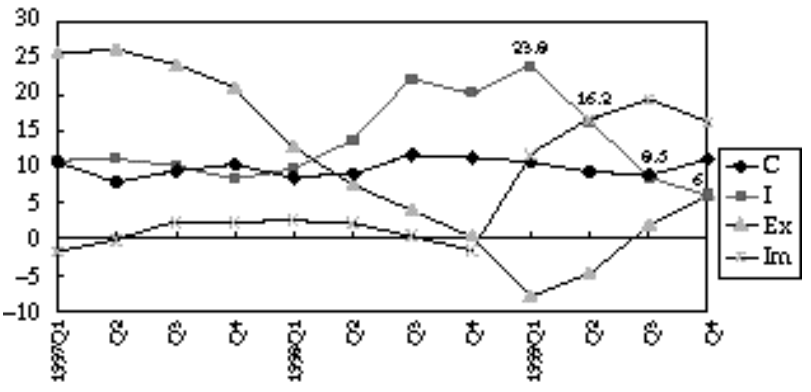
The Impact of the Asian Financial Crisis on the Chinese Economy

When the Thai baht fell suddenly in July of 1997, China watched the Asian drama unfolding with bewilderment. China's economic growth slowed down significantly in the last quarter of 1997. However, as mentioned above, this was a result of the tight macroeconomic policy since the middle of 1993 rather than the contagion effect. Owing mainly to capital control, the Chinese economy succeeded in avoiding the international speculative attacks and capital flights that led to currency crises and financial crises in other Asian economies. At the initial stage, the impact of the Asian financial crisis on the Chinese economy was limited and mainly psychological.

In October 1997, when international speculators launched their attack on the Hong Kong dollar, the Chinese government began to be very nervous. Hong Kong's economic stability is extremely important for Mainland China politically as well as economically. The Chinese government implicitly pledged its full support for the Hong Kong Monetary Authority's efforts in defending the pegging system.

Owing to China's relatively isolated financial system and strong external position, the impact of the Asian financial crisis was manifested mainly on China's export performance. With the Asian financial crisis deepening, the growth rate of China's exports dropped drastically (Figure 9.2). The trend continued until the second quarter of 1999.

Empirical studies show that China's export elasticity with respect to its trade partners' incomes is relatively high. In contrast, its export elasticity with respect to exchange rates is low. In other words, the relationships



Source: National Economic Research Institute (NERI); *China Macroeconomic Analysis*, various issues.

Figure 9.2. The growth rates of components of aggregate demand

between increases in China's exports and the relative value of RMB vis-à -vis its trading partners' currencies are statistically insignificant (Table 9.1).[2] Thus the devaluation of currencies of the crisis-affected economies played only a minor part in China's worsening export performance. The expectations on the devaluation of the RMB during the crisis up until recently were entirely misplaced, which resulted from a lack of understanding of China's trade relationship with its partners and its trade promotion mechanisms. It is worth mentioning, however, that devaluation of the Japanese yen, which culminated in August of 1998, once exercised tremendous pressure on the RMB.

Another important point is that all the Asian countries (excluding Japan) put together occupy only a small share of China's total exports. In fact, the main cause of the slowdown in China's exports during the crisis was the decrease in the growth rates of Hong Kong, America, Japan, and Europe. These economies are China's major trade partners, accounting for 24 percent, 18 percent, 17 percent, and 16 percent of its total exports in 1997, respectively.[3] In contrast, China's exports to ASEAN countries and Korea accounted for only 10 percent of its total exports in 1997.

China's export performance deteriorated greatly during the period between the fourth quarter of 1998 and the second quarter of 1999 (see Figure 9.2). The deterioration was a result of the global economic slowdown after the Russian financial crisis and Hong Kong's recession. The economic performance of the U.S. economy played a particularly important role in determining China's export performance (Figure 9.3).

Table 9.1. China's export elasticity

Country	Income elasticity	Exchange rate elasticity
Indonesia	0.50	0.10
Malaysia	0.30	0.16
Thailand	0.27	–0.03
Singapore	0.42	–0.20
Philippines	0.14	0.13
Korea	0.55	–0.13
America	2.87	
Japan	0.49	–0.04
Germany	0.25	1.34
France	0.12	1.82
Italy	0.01	1.92
UK	2.49	–1.62

Source: China's customs statistics; IMF *Statistics of International Finance.*
Note: Mr. Cong Liang did the calculations.

Based on the above analysis, three conclusions can be drawn. First, the impact of the Asian financial crisis on China was mainly on its exports. Therefore, the impact of the crisis on the Chinese economy was indirect rather than direct. Second, the impact was mainly made via the income effect instead of the substitution effect. Third, China's export performance during the Asian financial crisis was largely impacted by global rather than regional factors. This argument is supported by the fact that only after the Asian financial crisis had led to an upheaval in the global economy in 1998 did China's economic situation worsen significantly.

Macroeconomic Management in China during and after the Asian Financial Crisis

Channels of the Contagion Effect on the Chinese Economy

The Asian financial crisis affected the Chinese economy mainly through the following mechanisms:

- *The income effect.* As already mentioned, China's export performance worsened due mainly to the recession in crisis-hit Asian economies, Japan, and the overall slowdown of world economic growth.
- *The substitution effect.* Despite the fact that the income effect has greater impact on China's exports than the substitution effect, the devaluation of Asian currencies, especially the devaluation of the Japanese yen, has also put pressure on China's export performance.
- *Investor confidence.* China's financial system has been flawed with problems such as high ratio of nonperforming loans, low capital adequacy, poor management, and lack of transparency. The bankruptcy of the infamous Guangdong International Trust and Invest-

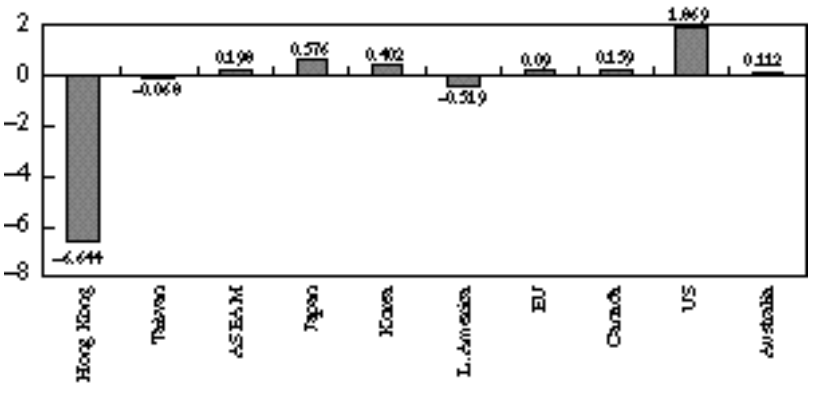


Figure 9.3. Contributions to China's export growth, January–May 1999 (percentages) (*Source:* China's customs statistics, 1998–1999).

ment Company (GITIC) in 1998 dealt a heavy blow to the confidence of the international financial community in China's financial system. Consequently, international capital inflows slowed down significantly. In the international capital market, the borrowing cost for Chinese financial institutions and enterprises rose significantly.

- *Devaluation expectations.* The devaluation expectations discourage capital inflows and encourage capital outflows. In 1998, despite China's strong external position and tight capital control, while it had a surplus of about U.S.$ 30 billion, its official foreign exchange reserves increased by only U.S.$ 6 billion, due perhaps mainly to the devaluation expectations. This has put great strain on the Chinese economy.

China's Policy Responses toward the Asian Financial Crisis

During the Asian financial crisis, the most important task faced by the Chinese government was to maintain the stability of the RMB while achieving a favorable international balance of payments. After a three-year effort, China succeeded in its policy objectives (Table 9.2).

In order to achieve the above-mentioned objectives, the Chinese government implemented three major policies: a nondevaluation policy, capital control, and an expansionary macroeconomic policy accompanied by financial and enterprise restructuring.

Nondevaluation Policy

The Chinese government reckoned that to maintain the RMB's pegging to the U.S. dollar—though officially, China's exchange rate regime is "managed floating"—was a much better alternative than to float or to devaluate the RMB. The main arguments that persuaded the government to maintain the pegging were as follows. First, China needs financial stability more than anything. Hong Kong's pegging needs Mainland China's support. The devaluation and the devaluation expectations would trigger financial panic, which, if allowed to develop, would lead to the collapse of the economy. Second, the RMB's devaluation would lead to competitive devaluation in Asia, which would worsen the Asian crisis and boomerang. Third, the income effects of Japanese and other Asian economies' recessions on

Table 9.2. China's balance of payments (billion U.S. dollars)

	1993	1994	1995	1996	1997	1998	1999
Current account	–11.9	7.7	1.6	7.2	30.0	29.3	15.6
Capital account	23.5	32.6	38.7	34	23	–6.3	7.6
Reserve assets	–1.8	–30.5	–22.5	–31.6	–35.7	–6.4	–8.5
Error and omission	–9.8	–9.7	–17.8	–15.6	–17.0	–16.6	–14

Source: NERI: *China Macroeconomic Analysis,* various issues; SAFE: *Foreign Exchange* 7 (2000).

China's exports cannot be offset by the RMB's devaluation. In other words, devaluation would fail to promote the exports of China. Fourth, Chinese exports' foreign content was as high as 57 percent; the competitive edge achieved by devaluation would be offset immediately to a large extent by the price increases in foreign inputs of export goods. Fifth, by means of other policy measures, China would still be able to maintain a trade surplus, current account surplus, and capital account surplus. For example, China could use an export tax rebate to encourage enterprises to increase exports. Sixth, because China has strict and effective capital control, as long as it could maintain a current account surplus it would be able to maintain the RMB's exchange rate. In fact, due to the current account surplus and continuing capital inflows, there was an excessive supply of the dollar on the official foreign exchange market of China. In other words, if there were no devaluation expectations, the RMB would have to bear revaluation pressure rather than devaluation pressure. Although on the black market the RMB was lower than the official rate, the transaction volume on the black market was small owing to capital control, and the influence of the black market on the determination of the RMB's official rate was minimal. Seventh, the RMB was not grossly overvalued. On the other hand, to maintain the RMB's current value would force China's exporting enterprises to raise productivity further so as to improve their competitiveness. The Chinese government believed that with capital control, a healthy external position, a strong current account and capital account (Figures 9.4 and 9.5), and huge foreign exchange reserves, China should be able to maintain the stability of the RMB. The Chinese government's conviction was borne out by the unfolding events over the past several years. Experience shows that under effective

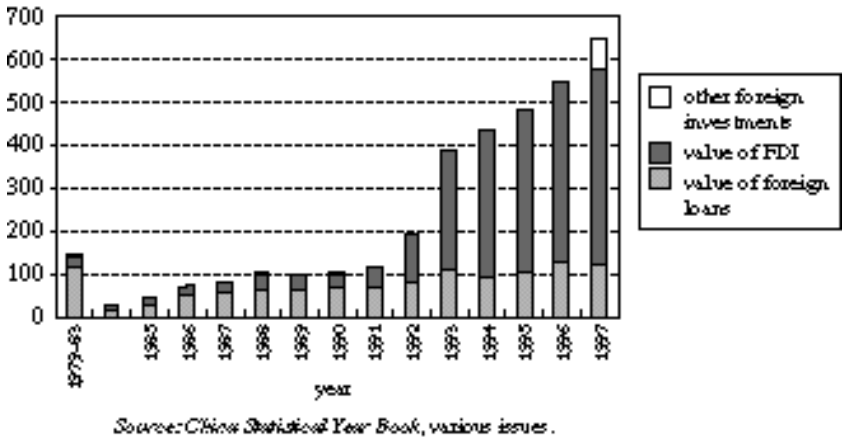


Figure 9.4. Foreign capital inflow (USD 100 million) (*Source: China Statistical Year Book,* various years).

capital control, even if investors have lost confidence in the Chinese economy, a large-scale outflow of capital is not likely.

Capital Control

In terms of its weak financial system, high nonperforming loans (NPLs), and high debt-equity ratio, the Chinese economy was very similar to the crisis-affected Asian economies. During the Asian financial crisis, many foreign observers predicted that China would fall soon. However, neither the RMB has fallen nor has a financial crisis occurred in China. With the benefit of hindsight, most economists would agree that the capital controls were the key enabling China to weather the storm of the Asian financial crisis successfully.

The Chinese leadership decided that China should not relinquish capital controls too hastily. First, without capital controls, the economically and financially weak economies will be exposed to international speculators' attack and suffer huge loses of foreign exchange reserves. As a result, their level of economic development will be dragged back for decades. China's financial reform is far from completed. International speculators could exploit the points of vulnerability in China's financial system more easily than they did in other Asian economies. Second, if a country still needs to maintain the fixed exchange rate, without capital controls it will lose the independence in implementing monetary policy. Third, the inherently unstable flows of short-term capital, if left unregulated, will bring about undue instability in an economy whose market mechanism is imperfect and capital markets shallow and underdeveloped.

In 1998, alarmed by the prevalent evasion of capital controls, the government further strengthened the control of capital flows. All foreign exchange transactions under the current account as well as capital account had to undergo stricter checking and clearing procedures. The efforts were

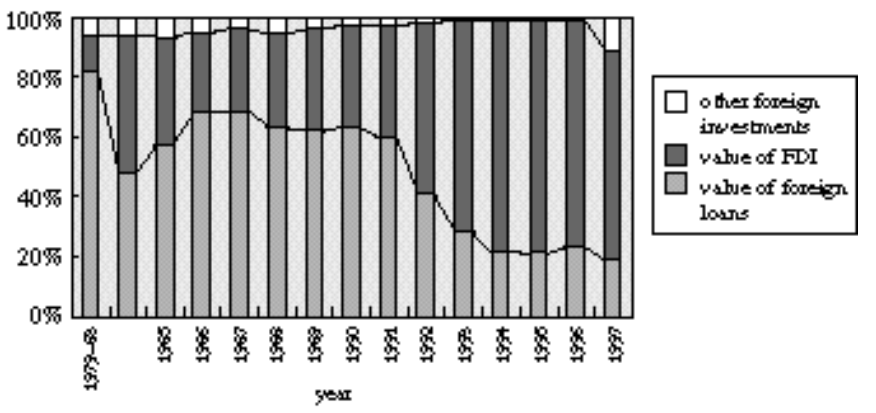


Figure 9.5. The structure of foreign capital inflow (as % of total foreign capital) (*Source: China Statistical Year Book*, various years).

successful in maintaining both stable inflows of capital and a healthy structure of capital inflows (see Figures 9.4 and 9.5).

Expansionary Macroeconomic Policies and Restructuring

Faced with the slowdown of the economy, the Chinese government changed its macroeconomic stance in a timely move in late 1997 and early 1998. First, the Chinese government cut interest rates, which have been cut six times since then. Second, after the monetary policy had become impotent due to the credit crunch caused by the high nonperforming loans, the government shifted to an expansionary fiscal policy in mid-1998. Third, while using the expansionary monetary and fiscal policy to maintain growth, the government made a great effort to reduce nonperforming loans by rescheduling, write-off, and debt-for-equity swap. Consequently, the credit crunch was alleviated. Fourth, while pushing for financial reforms, the government launched a campaign to make loss-making state-owned enterprises (SOEs) profitable within three years starting at 1997, and it introduced a modern corporate system. Since then large numbers of SOEs have become shareholding companies through joint ventures, listed on the stock exchanges or debt-for-equity swap programs. Measurements were also taken to encourage mergers and acquisitions among enterprises. A large number of SOEs that failed to turn around went bankrupt since then. Fifth, in some specific sectors, in order to reduce oversupply, the government closed down some enterprises temporarily or put limits on their production. Beginning in 1999, in the economy as a whole, enterprises' profitability increased markedly and the number of loss-making enterprises dropped significantly.

In short, during the Asian financial crisis, by relying on its own efforts, the Chinese economy weathered the storm successfully.

Asian Monetary Fund and Asian Monetary Cooperation

During the Asian financial crisis, the IMF and U.S. government's responses to the crisis were criticized by many Asian governments. For some Asian economies, the IMF's rescue package came too late and too little, and the conditionality was too harsh. Compared with the response of the IMF and the United States to the Russian and Brazilian crises, it is fair to criticize them as being insensitive to the plight of Asian countries. During the Asian financial crisis, Japan played a more positive role. The Japanese government played a leading role in the package organized by the IMF. Japan's contribution of $19 billion far surpassed any other country's contribution. Later Japan further provided bilateral assistance to crisis-hit economies in the form of trade credit, investment finance, and so on. According to the Ministry of Foreign Affairs of Japan, the total amount of assistance by Japan has reached $80 billion. Japan's contribution in tackling the Asian financial crisis and its aftermath should be appreciated and praised. On the other

hand, however, we should also recognize the fact that the sluggishness of the Japanese economy, especially the devaluation of the Japanese yen since 1995, has caused difficulties to many Asian economies. During the Asian financial crisis, China's exports—and hence its economy—were put under great strain by the depreciation of the Japanese yen. Asian economies need the Japanese economy to play the role of locomotive. If the Japanese government had done more in this respect, its contribution could have been even more appreciated.

The experience of the Asian financial crisis shows that Asian economies indeed need to strengthen their regional cooperation. But if the regional cooperation needs special institutional arrangements in addition to the existing international arrangements, both bilateral and multilateral, then we must think very hard about the merits of such arrangements and be very honest about the cost and benefits of such arrangements.

According to a paper by Mr. Shinohara, the AMF will have three primary functions:

- *Promoting policy dialogue.* The AMF should provide a venue for exchanges of opinions on economic situations and foreign exchange, as well as on money and capital market trends.
- *Providing emergency financial support.* Fund mobilization is realized by (1) borrowing from member countries (member countries should earmark a significant amount of their foreign exchange reserves as a contribution to the AMF); (2) borrowing from capital markets (member countries should offer another proportion of foreign exchange reserves to AMF as a last pledge); (3) extending guarantees to member countries. The AMF should have the ability to raise funds of at least $100 billion.
- *Prevention of future crises.*

It is obvious that the most essential function of the proposed AMF is that of providing emergency financial support to would-be crisis-affected countries. Ideally, the emergency financial support provided by the AMF will be more immediate and the conditions for providing such support will be less harsh and more in line with the "Asian way."

The strongest arguments against the AMF are those of duplication and moral hazard. In theory, to establish an AMF side-by-side with the IMF is duplication. The IMF is assumed to be responsible for supervising member countries' financial soundness, issuing early warning for disasters coming, and, most importantly, providing rescue packages to member countries that are suffering from currency crisis and/or financial crisis. But in practice, the IMF is under the heavy influence of some big powers. The IMF's decisions are not always based on pure economic considerations. The AMF proposal per se was a product of the dissatisfaction felt by Asian countries toward IMF's insensitivity to Asian countries' suffering. If the IMF fails to carry out the functions entrusted to it by the member countries, the cre-

ation of a regional institution to carry out functions similar to those of the IMF should not be accused of being "duplicative." An Asian Monetary Fund may provide better supervision, advice, and information for Asian countries. By pooling Asian funds together, an Asian Monetary Fund can provide rescue packages to its Asian member countries more quickly and more efficiently. A well-designed AMF could provide an important complement to the IMF in the same way that the Asian Development Bank complements the World Bank.

Moral hazard is a stronger argument. However, an Asian monetary fund may not necessarily lead to moral hazard. The moral hazard issue can be minimized by careful design of the Asian Monetary Fund. Experience since the Asian financial crisis shows that the moral hazard factor seems to have been overemphasized at the expense of economic growth, which has led to disastrous results for the unsuspicious followers of the moral hazard orthodoxy.

Having said all that, some Chinese economists think that before an Asian Monetary Fund can be established, three important questions have to be answered. First, there is a cost-benefit problem. Compared with the IMF, an AMF can be regarded as a smaller insurance company. Up to a certain limit, the greater the insurance company, the more efficient the company. Other things being equal, a monetary fund on a global scale should be more efficient than a regional monetary fund. Therefore, the question is: Faced with two insurance companies, whose policy are you going to buy—that from the well-established bigger company (though its services are often unsatisfactory) or that from an untested smaller one? Another related question is: Are we prepared to accept another big bureaucratic institution at the taxpayers' expense and risk investing in a huge, untried project? One may argue that the proposed AMF is not a replacement but a supplement to the IMF. Yet we do not know what is meant by "supplement" precisely. If there are no qualitative differences between the functions of the AMF and IMF, the supplement is not very meaningful. It may reduce the strength of the IMF. Moreover, supplementing the role of the IMF would run the risk of releasing the IMF from the responsibility it should assume. For many Chinese economists, a better alternative is to reform the IMF from within, rather than to establish a regional monetary fund to supplement it. Second, the supposed main feature of the AMF is to come to the rescue in time. In my opinion, a program for regional cooperation should be more positive and preventive in nature. One important factor contributing to the Asian financial crisis is the unsupervised and unregulated across-border movement of international capital driven by the greed of international speculators and the hysteria of innocent investors. Why should we not put more effort into preventing a temporary disequilibrium of international balance of payments from developing into a full-scale financial crisis regionwide? During the Asian financial crisis,

international speculators used some Asian countries' territory as a springboard to attack other Asian countries' currencies. Why shouldn't Asian countries do something to prevent this from happening? I suggest that this kind of help is more useful than ex post rescue packages. Therefore, the question of what priority we should give to Asian monetary cooperation also needs to be answered. Third, Asian economies must figure out a fair share of the financial burdens and benefits among potential members of the AMF. Many Chinese economists are not very comfortable with the idea that a would-be member country should commit a large proportion of its foreign exchange reserves to an untested regional bureaucratic organization. The procedure for deciding the use of the funds is not very clear. In the first section of this paper, I have actually shown that during the Asian financial crisis, China's currency stability and financial stability depended on China's own efforts, especially its capital controls. On the one hand, without external financial support, the Chinese economy can stand on its own feet. On the other hand, if something goes wrong, whether any funds can help is doubtful. China is different from Japan in that Japan has a much wider investment interest in other Asian countries. To a large extent, rescuing Asian economies amounts to rescuing Japanese overseas enterprises. Furthermore, Japan runs a large trade surplus vis-à-vis the rest of the Asian region, and perhaps will continue to do so in the future. To sustain the process, Japan needs to recycle funds back to the rest of the Asian region. Of course, there is nothing wrong with Japan in doing so. What I am trying to say is that, as a potential participant in the AMF, China's interest is not identical to other potential participants in the fund. In the first section, I showed that during the Asian financial crisis, the export performance of China worsened significantly, which in turn led to the slowdown of the Chinese economy. However, I also pointed out that the impact of the negative shock on exports of China was more global than regional in nature. Therefore, the attention of China has been very naturally focused more on global issues than on regional issues. For many Chinese economists, it is difficult to envisage what benefits China can get, other than being praised as a responsible good guy, by participating in the AMF after surrendering a large chunk of its foreign exchange reserves. Chinese economists remember vividly that in 1992 when the British pound was attacked by Soros, the Bundesbank refused to come to the rescue. Frustrated and bitter Chancellor of the Exchequer Norman Lamont had to let the British pound fall. It is not rare that at the critical moment when you need help badly, even a close ally, a fellow member in a model economic and political community, will not budge. Although I am a staunch supporter of Asian economic cooperation, I share this suspicion. I strongly believe that being very positive is not enough for building cooperation on a solid basis; we must also be 100 percent honest on identifying our self-interest and common interests.

Finally, the Japanese government's attitude toward its own initiation did not help in convincing China of the virtue of the proposed AMF. The Japanese government is not very firm on its own proposal. Whenever the U.S. government raises an objection or reservation, the Japanese government backtracks. The Japanese government did not spell out its proposal in detail. Up until now, I do not know what is the most authoritative version of Japan's AMF proposal. According to my personal experience, many high-ranking Japanese government officials already regard the AMF as a lost cause. Therefore, nobody should blame China for being not positive enough.

In the final analysis, the most important obstacle to the establishment of the AMF is the lack of trust. In my opinion, until Asian countries have established a very high level of mutual trust based on common interests, we cannot establish a supranational regional institution. I think the European countries have set a very good example for us. If we do not have the political will and a long-term agenda for regional cooperation and integration, any regional cooperation plans, the implementation of which will be at the expense of national sovereignty, are unfeasible. In short, there is still a long way to go before the idea of AMF can be realized.

The Prospect for Asian Monetary Cooperation

China is very positive about Asian monetary cooperation. However, for the Chinese government, trade and technological cooperation is more fundamental and they are the basis and precondition for close monetary cooperation. While being supportive of the AMF in general terms, the Chinese government seems very cautious about any form of institutionalized monetary cooperation. The Chinese government emphasizes the importance of mutual understanding and patience. The Chinese government prefers Asian monetary cooperation within the IMF framework. Until now, the Chinese government prefers to implement regional monetary cooperation on a contractual basis rather than on an institutionalized basis.

According to the Joint Ministerial Statement of the ASEAN + 3 Financial Ministers Meeting of May 6, 2000, at Chiang Mai, Thailand, the ASEAN + 3 agreed to strengthen policy dialogues and regional cooperation activities in the areas of capital flows monitoring, self-help and support mechanisms, and international financial reforms. They recognized the need to establish a regional financing arrangement to supplement the existing international facilities. They agreed to establish a network of institutions to conduct research and training on issues of mutual interest. Besides these general statements, the statement declared that the "Chiang Mai Initiative" involves an expanded ASEAN Swap Arrangement that would include ASEAN counties and a network of bilateral swap and repurchase agreement facilities among ASEAN countries, China, Japan, and the Republic of

Korea. The Chiang Mai Initiative has attracted great media attention. However, we still need to know what details can be worked out on the swap arrangement. Perhaps the swap arrangement marks an important turning point on the road to Asian monetary cooperation in history.

With or without a formal institution in the form of the AMF, however, regional cooperation could be strengthened in many fields, some of which are discussed here.

Trade Policy

Asian economies should coordinate their development strategies and industrial policies. Asian governments should also exchange their visions on future growth of the world economy, the future pattern of international division of labor, and their perception of their counterparts' visions on these issues. By this kind of exchange, Asian economies will be able to adjust their individual export drive so as to avoid excessive competition and waste of resources and to ensure the sustainability of exports and balance of current accounts.

During a global recession, all countries try to increase their exports and reduce their imports. Consequently, the global recession worsens. A country's trade policy should aim at raising the country's openness rather than increasing its net export so as to raise the growth rate of the economy. By raising a country's openness, the growth potential of the country will rise without having any negative impact on its trade partners' growth. If the economy is under demand-side constraint, the country should use an expansionary macroeconomic policy and carry out structural reform to increase domestic demand rather than export its way out.

In promoting regional trade, Japan should play a leading role in Asia. For many years, Japan has run a large trade surplus in the Asian region. Japan should further open its domestic markets to allow more imports. Japan is the most advanced country in the Asian region. It should lead Asia in global competition in high tech and other industries. By increasing its technological transfer to other Asian countries, and more imports from them, Japan can make a great contribution to the economic stability and hence financial and monetary stability in the region. Compared with Japan's huge economic scale, its degree of openness measured by trade volume/GDP ratio is among the smallest in the Asian region. Japan has much to do in this regard.

For many years, China has run a large trade surplus (but mainly to Hong Kong and the United States). This process is not sustainable. A trade surplus is not and should not be the objective of China's trade policy. Following China's entry into the WTO, China's imports will increase significantly. China will have to struggle for its current account balance. Its increase in exports will be largely offset by its even faster increase in imports.

China will speed up its adjustment of industrial structure. Along with

this adjustment, it will further adjust its trade structure. It will strive to increase its export of high-tech content and high value-added goods. This is also the objective of other Asian economies' trade policy. To avoid excessive competition, China is very eager to discuss the question of how to harmonize the adjustment of industrial structures in the Asian region with other Asian economies.

Macroeconomic Policy

Each economy should make the domestic economic situation transparent to other economies. Asian governments should regularly study and exchange views on their partner's macroeconomic situation and coordinate each other's macroeconomic policy based on these studies and exchanges. For example, the Japanese government's macroeconomic policy will decide not only the course of Japan's domestic economy but will also have important implications to its neighbors. If we have a clear idea about the Japanese government's policy intention and planned course of action, we will be in a much better position to formulate our macroeconomic policy.

In China's self-interest, we hope that Japan can always maintain a steady growth rate. China's economic growth will benefit directly from Japan's economic revival. If Asian economies really want to strengthen their monetary cooperation, especially to stabilize their currencies, they must further coordinate their monetary policy.

Exchange Rate Policy

Are the different exchange rate regimes that coexist currently in Asia compatible? How do we accommodate these different exchange rate regimes and make them conducive to the economic development of each country and the region as a whole? Asian governments need to exchange their opinions on these issues. We particularly want to know the Japanese government's intention on the yen's exchange rate vis-à-vis the U.S. dollar.

It is fair to say that the RMB's exchange rate will be determined largely by the exchange rate between the yen and dollar. We will be very grateful if Japan can maintain a stable exchange rate vis-à-vis the U.S. dollar. We will be even more grateful if Japan can prevent the yen from devaluing to more than 110 yen for 1 U.S. dollar. In the summer of 1998, when the Japanese yen devalued to 147 yen to 1 U.S. dollar, the RMB was put under tremendous pressure. If it were not for Chinese leaders' responsible attitude and wisdom, the RMB may have already devalued.

A more fundamental and unresolved issue is the exchange rate regimes and currency alignment in the Asian region. During the financial crisis, most crisis-affected countries gave up the fixed exchange rate regime and shifted to the floating regime. If all countries concerned have made this choice, then it is the end of the story. Under this circumstance, there seems no need to discuss the AMF. Asian countries' experience

shows that a fixed exchange rate regime tends to invite speculative attack, which would trigger instability in the currency. However, due to lack of flexibility in the economic structure, a less-developed country needs a stable currency. Therefore, to choose a middle way—to peg national currency to a basket of reserve currencies—seems a favorable solution. China has chosen this approach. China will increase the weights of the Japanese yen and the euro in the basket in due course.

There is much talk about the internationalization of the Japanese yen. However, to allow the yen to play this role, the Japanese must make it more easily available, which may imply that Japan must accept a large trade deficit.

Crisis Prevention, Crisis Management, and Assistance to Facilitate Adjustment

Asian countries should strengthen their cooperation in supervision and regulation of capital flows. The host country and guest country should cooperate to ensure smooth flows of capital across borders without infringing on the freedom of the market. The host country and guest country should provide each other full information relevant to the flows of capital.

The host country should help the guest country to stop the flow of hot money. If the Japanese government had warned its businessmen to refrain from extending too many cheap loans to Thailand, and if the so-called carry trade had not developed to an unsustainable level, the bubble economy and the consequent financial crisis may have failed to happen. Of course, in this regard the host countries should take the blame first.

Asian governments might be willing to provide funds for countries in trouble to preempt a looming speculative attack (to deter speculators from launching an attack). Asian governments can assist each other by not allowing their own territory to be used by speculators to launch an attack on a neighboring country.

Asian governments can join forces to establish physical and institutional infrastructure; such a clearing system will reduce settlement risk. More experienced governments should provide technical assistance on risk management and on how the central banks should deal with speculative attacks with a combination of financial instruments. Guidelines should be formulated beforehand so that when speculative attacks occur, central banks can intervene on foreign exchange markets in a coordinated fashion. After the attack, emergency funds could be provided bilaterally or multilaterally so as to reduce the pain of adjustment. However, as already discussed, there is still a long way to go to institutionalize such mutual assistance regionwide. The Chiang Mai Initiative may be all we can get for now and in the near future.

To implement cooperation, Asian governments can first try to have the relevant communication and consultation on a regular basis, such as

holding quarterly or annual meetings. As a second step, establishing a research institute may be necessary. The institute should consist of representatives from major Asian economies who are highly qualified scholars with official positions and officials from financial authorities. The institute should have publications, such as newsletters, reports, and so on. In the Age of IT, the institute should fully use the new technology available to speed up the exchange of information and ideas and the networking regionwide. The institute should keep a close eye on major Asian countries' economic situations and issue its evaluations. The institute should formulate all sorts of emergency plans in case that a crisis erupts. The institute can also help to coordinate different rescue packages based on bilateral agreements. The nature of the institute can change following the passage of time. When the conditions are matured, the institute could evolve into a sort of AMF.

In the new century, faced with the challenge of other continents, Asian economists should provide their clear visions for cooperation of the Asian economies. We might need a grand plan for Asian integration that covers political cooperation as well as economic integration. It should pay great attention not only to short-term financial rescue packages but also to implementation of a concerted long-term economic adjustment to allow a parallel development for all Asian economies.

Notes

1. Inflation is measured by the retail sale of consumer goods price index.
2. In Table 9.1, the signs of exchange rate elasticity of China's exports to a few countries are wrong (positive rather negative). However, the estimated residues for these countries are very high. In other words, the factors influencing China's exports to these countries are complicated, and changes in the income levels in these countries as well as changes in exchange rates cannot explain the changes in China's exports to these countries.
3. Of Mainland China's exports to Hong Kong, a large proportion has as its final destination the United States.

10. Financial Cooperation and Coordination in East Asia: An ASEAN Perspective

Khee Giap Tan and Kang Chen

Introduction

The idea of an "Asian Monetary Fund" (AMF) was first advanced by Japanese bureaucrats from the Ministry of Finance, notably Japanese Vice Minister for International Affairs Eisuke Sakakibara in September 1997, soon after the East Asia Financial Crisis (EAFC) sparked off from Thailand in July 1997. We have observed from the idea's first inception that responses to an AMF have been quite amazing, starting from outright dismissal to skepticism, hesitation, and rekindled to the recent groundswell of support from a wide spectrum of interests globally, although pockets of objection still remain.

It is often widely argued that the proposal for an AMF was mainly due to dissatisfaction with the role and performance of the International Monetary Fund (IMF) during the EAFC. Such a train of thought is most in evidence amongst political leaderships, particularly from those seriously affected economies, academic quarters, and policy makers of East Asia. We tend to think, however, that the dissatisfaction with IMF is only the triggering point. The current groundswell of support for AMF—albeit in different versions, more appropriately to be referred to as regional financial arrangements (RFAs)—reflects a deeper desire and spirit within East Asia even before the EAFC. The AMF proposal is just one of the many prevailing regional mechanisms to reflect this urge for such embedded calls from East Asia that were galvanizing into action.

We view it, therefore, as counterproductive to the process of shaping and fine-tuning the AMF concept to link its need and legitimacy to dissatisfaction with IMF's performance during the EAFC. We should focus instead on the actual requirements, deep-seated problems, operating mechanisms, financial architecture, and other prerequisite conditions in East Asia that are to be embraced by the unifying RFAs. It is in this context that the perspective from ASEAN will be quite relevant to any future regional RFAs, shared and burdened with the heavy international reserves-endowed economies of Northeast Asia, including Japan, China, Hong Kong, Taiwan, and South Korea. In essence, the starting point of a pragmatic and operational AMF must realistically be first initiated and experimented on within the framework of ASEAN plus three (ASEAN + 3).

Even within East Asia, many parties concerned initially reacted to the calls for an AMF with skepticism and hesitation—or at best, endorsement in principle, having big reservations about its implementation. While real-

izing that globalization and financial market development have outgrown the purposes and effectiveness of the IMF, initially even most political leaders and policy makers in East Asia are understandably uncomfortable to see any move or effort that is likely to compromise the existing functions and responsibilities of the fund. We suspect the biggest negative element toward the acceptability of an AMF when the idea was first presented was self-inflicting in the sense that the concept was floated without clear and concrete designation of modality, objectives, and other conditionalities.

Reactions from the Group of Seven (G-7) on an AMF were, expectedly, acute apprehension and outright dismissal. Although they felt threatened by geopolitical considerations and the course of globalization influences, objections from G-7—in particular from the United States—were often directed at its nonviability rather than their underlying strategic interests in East Asia. While we are unambiguous on the need for an AMF or a unified RFA, the thrust of the paper tends to emphasize hurdles or barriers that need to be overcome for an effective, integrated RFA rather than to address its justifications. The performance of the IMF in the EAFC thus becomes a side issue, and dwelling on it too much will risk sidetracking the course of the debate and its core arguments.

In the next section, we will look at the existing RFAs in ASEAN + 3 and examine the underlying reasons as to why they have been less than effective. The following section then reviews the taxonomy of geopolitical implications and the global economic reality of RFAs. The final section deals with how we can shape, fine-tune, and unify RFAs by looking at paramount issues including overriding objectives, guiding principles, fund structure, burden sharing, conditionality, qualifying incentives, financial architecture reform, and other prerequisite conditions within the ASEAN + 3 framework instead of the overambitious push to Asia-wide coverage. We conclude by highlighting the mounting difficulties, challenges, and the steep road ahead toward a framework of cooperating and coordinated RFAs in East Asia.

Inertia and Difficulties with the Existing RFAs within ASEAN + 3

It is rather strange that although RFAs do exist within East Asia, they were never quite activated or depended upon during this recent round of the EAFC. Seriously battered economies, with the exception of Malaysia, sought the IMF's financial assistance instead. It is therefore relevant to understand the reasons behind such inertia and difficulties in terms of their objectives, structure, and modus operandi. Such understanding is most crucial if we are to effectively revamp or organize a unified RFA for East Asia and if we are to have a better appreciation of ASEAN's perspective in terms of its requirements, expectations, and commitments. However, one should

recognize that the mere existence of RFAs in different modalities since the 1970s, be it multilateral or bilateral in nature, clearly vindicated the undeniable desire and justification for regional financial cooperation and coordination. The pertinent lesson that remains to be learned here is: Why have the existing RFAs within ASEAN-10 and Northeast Asian countries—namely China, Japan, and Korea, or ASEAN + 3—been ineffective or marginalized?

The existing RFAs within ASEAN + 3 are the *ASEAN Swap Arrangement* (ASA), *ASEAN Arrangement to Borrow* (AAB), *Bilateral Purchase Agreements* (BPAs) in ASEAN, and other *Bilateral Financial Facilities* (BFFs) between ASEAN and Northeast Asian economies. As reflected by the acronyms, ASA and AAB are multilateral cooperation, while BPAs and BFFs are bilateral facilities, of which all four categories are essentially government-to-government short- to medium-term arrangements with an extension clause coordinated through central banks. These RFAs were formed over the past decades, spreading through different time periods representing the desire and needs of participating members at different stages of political economic development. Since such economic grouping is politically diverse in nature and economically of different maturity by structure, the negotiated RFAs tend to be highly discretionary in terms of participation intensity and financial contribution. RFAs also tend to be loosely held in a way that enables members to place their national agenda before the group's interests. It is perhaps this circumstantial background, voluntary arrangements, and characteristic differences in political leadership that contributed to the inertia and ineffectiveness of the existing RFAs in East Asia.

It is a well-known fact that since its inception in 1967, ASEAN has been a fairy successful forum in terms of political cooperation, but not in terms of economic cooperation. ASAwas part of the agenda to enhance the organization in anticipation of more intense intra-ASEAN trade under the Preferential Trading Agreement. Reviewing the case of ASA, it was first initiated in February 1976 against the background of a precarious international environment of the oil shocks of 1973–74 by five founding members of ASEAN, namely Indonesia, Malaysia, the Philippines, Singapore, and Thailand. The ASAwas formed with the objective to provide mutual relief for members encountering short-term or temporary liquidity difficulties to ensure consistency in macroeconomic policies and promote regional financial stability. The ASA has been extended eight times, and all founding members except Singapore have drawn on such facilities—mostly in 1979 to 1981.

Three ASEAN members—namely Malaysia, Singapore, and Thailand—are included in the IMF's New Arrangements to Borrow (NAB), established in January 1997 but made effective only in November 1998. NAB was modeled along the General Arrangements to Borrow (GAB) as a

supplemental fund under the IMF initiative beyond what is available under the Standby Arrangement. AAB has a very similar objective to ASA for mutual relief of temporary balance of payments shortfalls, in which signatory countries are expected to agree beforehand to commit on funds to be made available, although the quantum was never quite explicitly specified and has never been activated. Several commonalities are found between ASA and AAB in terms of modus operandi, U.S. dollars denominated, voluntary participation, and equitable financial contribution amongst members. However, we believe that the low level of utilization and loose commitment for multilateral RFAs such as ASA and AAB are due to the following factors.

In contrast to the total trade volume, foreign debts, and net foreign direct investment flows of ASEAN members, ASA amounting to a maximum of U.S.$ 200 million contributed equally by all members is considered far too small to be of practical significance. A workable contribution scheme based on a set of agreed economic indicators or formulae should enlarge the pool of the financial facilities without causing an excessive burden to members.

Although AAB does not specify the duration of facilities "temporarily" made available, the short duration of maturity for ASA—up to the maximum of only three months—may not be sufficient to stabilize short-term liquidity or balance of payment difficulties that often last more than three months. The maturity duration extended to swap facilities is directly linked to the maximum quantum made at the disposal of members.

ASA's rigid and lengthy operational procedures reduce the effectiveness of facilities when multiple requests by members are subjected to priority based on the chronological order of applications received. Such rigidity will be eased somewhat if the quantum of the facilities is enlarged.

Equitable financial obligation, regardless of members' economic strength and voluntary participation where members are allowed to opt out from the contribution commitment at their own discretion, can directly affect the maximum quantum of the committed swap facilities and undermine its credibility. Firm commitment from members may be necessary if RFAs are to be effectively invoked.

ASA's complicated pricing policy on swap facilities, drawn through designated agent banks by rotation, subjecting borrowers to interest rate and exchange rate risks, discourages utilization. Restricting ASA and AAB to be denominated in U.S. dollars alone not only hampers the lender's flexibility in terms of the foreign exchange reserve management but also leads to overdependency on a single currency.

BPAs were set up with the objective of obtaining credit from lenders in exchange for securities meant for coping with very short term liquidity problems. BPAs serve to convince the market about the determination between central banks cooperating to stabilize exchange rate fluctuations,

although such facilities so far have never been activated. Bilateral financial agreements such as BPAs tend to suffer similar drawbacks to the multilateral ASAand AAB, as follows.

- Rigid and lengthy operational procedures requiring professional expertise are mostly lacking among central banks of member countries.
- Exchanging of credit does not improve the international reserves or liquidity of afflicted countries and associated costs incurred in terms of custody and earning losses from their coupons.
- The short duration of treasury bills—one month maximum maturity—may not be adequate to restore stability, and being denominated in U.S. dollars alone tends to limit the participation level to holders of U.S. government securities only.
- Voluntary participation at the bilateral level and incomplete cooperation amongst members within the same grouping fail to enhance the spirit of collective commitment to and responsibility for the region.

Other BFFs between ASEAN and other industrialized countries—especially Japan—do exist, although the quantum is rather small. Such BFFs are usually for purposes such as facilitating trade financing, promoting private investment activities, economic structural reforms, human resource development, and reducing social vulnerability. In summary, we can say that serious inertia and weaknesses found in the existing RFAs include members' lack of total support for full-scale financial commitment, inflexibility in reacting to needs arising from rapidly changing circumstances, and a rigid or obsolete mode of operations. Financial facilities made available amongst members are mostly of relatively shorter term commitments and tend to be fragmented in nature; they may not stand up to the onslaught of massive cross-border capital flows, exchange rate volatility, rapid globalization in trade, and swift changes in members' balance of payment positions.

A proposal by Bank Indonesia made in March 2000 attempts to modify or improve some of the weaknesses and inertia currently found within the existing ASA, AAB, and BPAs by increasing the quantum of facilities, lengthening the duration of maturity, simplifying the mode of operation, and inviting total participation from members. In December 2000, Bank Negara Malaysia announced that the ASA initiated by the original ASEAN-5 is now being extended to ASEAN-10 to incorporate Brunei, Cambodia, Laos, Myanmar, and Vietnam. The swap facilities quantum has also been raised from U.S.$ 200 million to $ 1 billion through a two-tier contribution system.

Fully acknowledging the inertia and weaknesses, as an extension to the "Joint Statement on East Asia Cooperation" of the Manila Framework in November 1999, a significant step was developed under the Chiang Mai Initiative in May 2000 during the thirty-third annual meeting of the Asian Development Bank. In fact, ASEAN + 3 unanimously agreed to further

strengthen their policy dialogues and regional cooperation activities in the areas of capital flows monitoring, international financial reforms, self-help, and support mechanisms. The major themes included extending the ASA and broadening the BPAs to incorporate China, Japan, and Korea as a first step toward an Asian monetary bloc.

Such a positive step forward reaffirmed the previous desire for closer regional cooperation and reflects the justification for responsibility sharing within the common interest of a sustained economic growth and stability in East Asia through some mutual support mechanisms. We would therefore like to see the Chiang Mai Initiative as a cohesive force within East Asia in working toward a unified RFA, be it the AMF or whatever name we may assign to it. The serious questions that still need to be answered are: Why does East Asia need an integrated RFA, and What are the overriding objectives and guiding principles?

RFAs: A Taxonomy on Their Geopolitical Implications and Global Economic Reality

Considerations for needs and objectives and guiding principles on RFAs must be viewed taxonomically from the perspective of geopolitical global economic development. Identifying strategic interests and policy implications on these two fronts would reveal issues at stake and potential hurdles needed to be overcome. Fudging or avoiding discussion on sensitive issues would blur arguments and sidetrack the course of debate (see Shinohara 2000). It is true to say that currently there is no organized effort—be it institutional setup or contractual arrangements—available to play or even supplement the role of the IMF in East Asia. There is indeed a vacuum created by the lack of an integrated regional financial cooperation in East Asia, such as the Structural Funds of Europe and the European System of Central Banks (ESCB), where there exist greater unification of financial arrangements and monetary policies.

Services provided by international agencies such as the IMF or BIS can be viewed as public goods, and there is group asymmetry in terms of individual nations' taste and/or endowments. The cost-benefit structure is such that dominant players benefit less, but those benefited more have little to contribute. The principle-agent problem does exist where a nation's interests are represented by the political leadership rather than the community. These are some of the prevailing collective-action problems. A unified regional financial arrangement can be viewed as club goods, where some nations meet the sufficient conditions of being privileged. In terms of the scope of regional coverage, ideally it should be of a less diverse grouping involving more specialized functions and local familiarity. The structural design of RFAs would have to cater to the benefit of the dominant players if a bigger share of financial burden is to be expected. Yet one

should be aware of the difficult balancing act of overdominance by a few players of the other members. Therefore, an effective regional financial arrangement necessarily involves calculation or trade-offs on geopolitical implications and regional economic reality.

Geopolitical Implications

Although an AMF was first broached by Japanese bureaucrats soon after the EAFC in 1997, we think it has more to do with postwar Japanese in search of a new economic role and new political leadership in Asia. Such a desire arises from the confidence gained over decades of rapid industrialization. The Japanese economic retardation of the entire 1990s—from which recovery is now anticipated—also led to attempts to reassert Japanese leadership and improve her economic linkages within East Asia. Being the economy with the largest international reserves in the world, amounting to U.S.$ 336 billion as of August 2000, Japan became the natural candidate to lead or push for a unified RFA in East Asia. Of late we have seen pledges of financial commitment from Japan to the region such as the U.S.$ 30 billion "New Initiative to Overcome the Asian Currency Crisis," announced by Minister Miyazawa in October 1998, encompassing short-, medium-, and longer-term support for economic recovery in East Asia. The board of the ADB also approved the setup of "Asian Currency Crisis Support Facilities" in March 1999 through contribution from the Japanese government amounting to U.S.$ 3.4 billion in the form of interest payment assistance and guarantees to be administered by ADB.

Although the idea for an AMF ended in November 1997 following the adoption of the Manila Framework Group, which has no formal status, secretariat, or institutional foundation, the EAFC has led all affected countries to rethink and revisit the need for RFAs to forestall future crises. Prime Minister Mahatir of Malaysia expressed the most enthusiastic support for AMF when it was first announced, while Senior Minister Lee Kuan Yew of Singapore commented initially that AMF is welcome if it complements instead of competes against IMF's facilities. Deputy Prime Minister Lee of Singapore expressed caution in March 2000 concerning the practical difficulties of AMF in that no Asian country is in a position to play financier except Japan, and she alone may not be enough to solve the problems. Furthermore, he said: "Just as in the IMF, the same question will arise with the AMF—which country is behind it or influencing it? I do not think there is any government in Asia which will be seen by other Asian countries as being total impartial."

As resources of the IMF were becoming more strained following the Russian and Latin American crises, Western opinion on an AMF began to shift from objection to sympathy, although political strategic considerations still linger on. As expressed by the director of the Institute for International Economics in Washington, D.C., there are three reasons why

the AMF will work if its participation is broadened beyond the initial "Asia only" concept:

> First, no Asian country could effectively lead the effort. Any hint of Japanese domination will be roundly rejected by the rest of the region, as occurred a year ago, and Japan's continued economic weakness precludes its early leadership in any event. China, despite its highly responsible performance during the crisis to date, is not yet ready for such a role (and might not be welcome either). There are no other candidates. Second, an "Asia only" grouping would risk dividing rather than uniting the two sides of the Pacific. It would thus revive all the risks inherent in Prime Minister Mahatir's "East Asian Economic Group" proposal of a decade ago which was firmly rejected in favor of APEC. . . . It would be especially foolhardy to risk dividing Asia and the Americas at this time of the global crisis, with its desperate need for leadership from the United States. Third, the United States could indeed play a decisive role in making an APMF (Asia Pacific Monetary Fund) work. (Bergsten 1998)

For historical reasons not difficult to understand, China initially expressed reservations on the Japanese initiative, but Premier Zhu Rong Chi subsequently said in September 1998 that China had reconsidered positively toward an AMF. The support from China is vital and significant for the revival of AMF, as it will serve to balance the structure, influence, and interests of any future unified RFA as it evolves. An interesting development took place in September 2000, in which IMF's managing director Horst Koehler actually endorsed the idea of an AMF as a positive step if it is organized parallel to the IMF—exactly the approach suggested earlier by the Japanese authorities but aborted later. Deputy Governor Stephen Grenville of the Reserve Bank of Australia expressed at the same time that Australia has an open mind about an AMF and the potential of joining it.

On the whole, all members of ASEAN + 3 actually expressed support for some version of an AMF or at least the embedded spirit that culminated in the May 2000 Chiang Mai Initiative. The political reality seems to suggest that collective leadership—with financial contributions based on some agreed-upon formula reflecting each member country's economic strength—would be a good starting point to get the momentum moving, at least in East Asia. The urgency and pace for a unified RFA would have to be dictated by the development of the international financial markets and the globalization process.

Regional Economic Reality

Throughout the discourse on RFAs, especially in the context of an AMF, it is rather unfortunate that geopolitical considerations tend to veil needs or arguments based on international financial and trade development. We think the most valid and defensible justification for an AMF of some sort

must be born out of a genuine desire by its members that it should serve as the most effective means of achieving regional growth and stability. Irrespective of whether the argument is to reform existing institutions such as IMF or start a new institution or arrangement such as an AMF, we believe that the following economic considerations in terms of globalization-driven outcomes, exchange rate regime, and regional macropolicy surveillance and peer group review remain valid.

First, RFAs can be justified as one aspect of the necessary regional financial architecture with recognition of greater globalization and increasingly internationalized financial markets vis-à-vis growing intraregionalization and interregionalization of trade, services, and capital flows. In 1997, the total volume of trade for ASEAN amounted to U.S.$ 768 billion, although it shrank to $563 billion in 1998. Net foreign direct investment for ASEAN was U.S.$ 17 billion and $15 billion respectively for 1998 and 1999, while outstanding foreign debt for ASEAN stood at $549 billion and $443 billion respectively over the corresponding periods. There is a genuine need indeed for cushioning short-term liquidity difficulties. Looking at the scale of the trade volume and capital flows, just the quantum of the existing RFAs seems grossly inadequate, not to mention the effectiveness of the facilities structure and operational mechanism.

Second, the design of RFAs must necessarily accompany reforming of the regional financial architecture as a prerequisite condition. Since ASEAN members are essentially operating on open and trade-oriented economies, exchange rate stability is paramount for international exports and imports. Under an inflexible exchange regime, foreign exchange reserves will fall, foreign debt will accumulate, or both. A currency board system that works well during normal times may need financial support during regional financial turbulence, as the experience of Hong Kong has shown. An effective managed-float exchange rate regime, although it is essentially market driven, would still need financial reserves to smooth exchange rate fluctuation, notwithstanding healthy foreign exchange reserves accumulation. With an "appropriate" exchange rate regime, RFAs can therefore be a useful psychological deterrent to preempt unwarranted speculation, and perhaps the success of RFAs can be judged by the fact that they are not frequently deployed. In the context of enhancing exchange rate stability, ASEAN + 3 does have the capability and capacity. The combined international reserves for ASEAN + 3 amount to U.S.$ 781 billion as of August 2000, of which Japan made up 43 percent, followed by China with 20 percent, Korea with 11 percent, and the remaining 26 percent from ASEAN-10.

Third, ASEAN has enjoyed decades of rapid economic development through an export-oriented strategy since the 1970s. One lesson learned from the EAFC is the need for regional monitoring and an information surveillance scheme to ensure sustained regional growth and stability. It is

most worrisome that members of ASEAN (except Singapore) have been running their economies with a serious fundamental disequilibrium that culminated in massive exchange rate depreciation. This is reflected by their chronic current account deficits, lasting consecutively for eight to thirteen years and ranging between 2.5 percent to 10 percent of their GDP three years prior to the EAFC in 1997. It is therefore argued that price incentives can be integrated into RFAs where members are encouraged to participate in the information surveillance scheme, and monitoring on macro fundamentals of neighboring economies can then be extended to peer group review. It is in this aspect that RFAs can be justified most strongly through division of labor and specialization of duties among international agencies on the grounds of regional familiarity.

Shaping, Fine-Tuning, and Unifying RFAs

It seems to us that one of the most fundamental ingredients of a credible and effective RFA hinges on the quantum of financial resources that can be made available and how financial obligations are to be met. While there is no scientific formula to arrive at the "correct" amount, a rough estimate of an ideal credit line at any one time is approximately U.S.$ 50 billion to $100 billion, if based on the economic indicators mentioned earlier. Some economists suggest a credit line of at least half of the $126 billion disbursed by the IMF, ADB, the World Bank, and other parties to Indonesia, Korea, and Thailand during the EAFC. Given the current combined international reserves of $781 billion, a serious challenge is to decide how the ceiling of facilities is to be determined and in what form of contingent credits these resources are to be made available.

The next crucial but sensitive issue is the sharing of financial obligations amongst members of ASEAN + 3. A recent study commissioned by the ASEAN secretariat suggests the construction of a contribution index weighted according to individual members' international reserves, per capital GNP, and population size for ASEAN + 3. The total fund under the RFA scheme was estimated to be U.S.$ 39.1 billion, or 5 percent of the total international reserves for ASEAN + 3. After taking into consideration the whole structure of multiples, the total funds can be as large as $ 86.7 billion (Olarn and Bhasu 2000). Such a contribution index that reflects relative economic strength appears to be a fair and logical approach. This, however, prompts the next sticky question: Does the biggest contributor have the biggest veto power over issues and matters pertaining to the RFAs?

As to who has charge on matters or veto power pertaining to RFAs, the issue concerns the appropriate structure: Should regional financial cooperation and coordination be under contractual arrangement or institutional arrangement? We think one should focus more on linking the issue

to intended objectives of RFAs. The important guiding principles to consider are as follows.

Through a series of "loose" forums and "new" initiatives such as the Manila Framework Group, APEC finance ministers meetings, the New Miyazawa Initiative, and the Chiang Mai Initiative, regional financial cooperation and coordination should ultimately work toward a formal status with highly focused and agreed-upon terms of reference under a permanent secretariat. Whether in the future a unified RFA is to be housed under one of the existing regional institutions or empowered with a new regional institutional standing, the paramount concern is that when catering to diverse interests of group members over a prolonged period, one needs to provide an institutional foundation for effective coordination, continuity, and galvanizing support.

Whatever the limitations of existing international agencies such as IMF, Bank for International Settlements (BIS), or the Work Bank, we should attempt to improve from within by scrutinizing the institutional terms of reference to reflect changed circumstances—encompassing political, economic, and social. Hence, any future RFAs should consider specialization of duties and international division of labor without wasteful duplication of functions. With such understanding, an institutional approach to future RFAs should not exacerbate outsiders' anxiety that may result from potential rivalry and conflict of interests within the existing global financial architecture.

As with the terms of reference for any future unified RFA, a balanced and pragmatic approach is not to attempt to do too much and cast the net too wide. A less ambitious start should begin with just the economies of ASEAN + 3 and stick to the East Asian region for the time being by withstanding tests of future crises. While waiting for the international financial architecture to evolve and take shape, managing short-term liquidity problems and nonmarket-driven exchange rate misalignments may be the broad objectives to be further fine-tuned and narrowed down to specific definitions through further discussions. As a regional institution involving diverse economic groups, political systems, and social-cultural settings, consensus building and rationalization should be the way to galvanize support. The hierarchy of the decision-making process or overconcentration of veto power should be delinked from financial obligations in order to enhance faith and the spirit of cooperation.

The underlying resolution of any future integrated RFAs must be to cope with but not to prevent the globalization process in trade and cross-border capital flows. Therefore a salient feature of any RFA must be its preventive capacity and preemptive ability. RFAs cannot and will not be perceived as successful if they have to be employed too often; in fact, the essence of the approach is that they would seldom be needed. Such a philosophical approach then brings out a few important considerations

that encompass conditionalities, moral hazard problems, and prerequisite conditions.

On conditionalities and moral hazard problems, we are of the view that genuine commitment must be encouraged but not compulsory, and intensity of participation must be voluntary but not imposed. It is therefore more sustainable to work out a system of incentives for both providers of financial obligations and drawers of facilities. We therefore propose the general principle of a qualifying incentive scheme in terms of pricing built in to a voluntary information disclosure checklist. In other words, costs incurred, quantum allocated, and accessibility to financial facilities will be tied to the extent of voluntary compliance with the information disclosure criteria encompassing macroeconomic policies, financial prudential measures, banking regulations, capital movements, and level of international reserves.

A peer-group review process to be conducted through dialogues prior to potential macro instability will be less sensitive and may be more effective, with greater information transparency, and it should have—in theory, at least—a direct bearing on the needs for facilities draw down (Rana 2000). Such transparency will also be beneficial to members who are net facilities lenders or potential foreign direct investors. To put it differently, it is also not inconceivable that members may request a specific level of standby credit line in exchange for greater information disclosure, undertaking specific reform measures, and observing certain ongoing domestic surveillance procedures. Regional policy experts, technical government officials, and university academics may work through the various institutional channels for monitoring purposes.

After rapid economic growth averaging 6 percent to 9 percent per annum for emerging and newly industrialized economies of East Asia throughout the past three decades, it has become apparent that the high efficiency of their export-driven manufacturing sector is not matched by the increasingly internationalized financial sector. A major lesson learned from the EAFC is the need to reform member's domestic financial infrastructure as a prerequisite condition for moving into an integrated RFA. Broad policy issues pertinent to mention here include adopting the appropriate exchange rate regime, imposing restrictive usage (except for the Japanese yen) of local currency for nonresidents and by geographical boundary, and sequencing and spacing the liberalization strategy on current and capital accounts for some members (Tan and Chen 2000a). While it remains an extremely remote possibility, there is no harm in beginning the discussion on the implications of a common Asian currency as a distant objective for greater regional economic integration.

A consistent public relations exercise must be coordinated as future RFAs evolve in order to minimize misunderstanding and miscommunication. Such an objective can be achieved through a more transparent

approach in the design, formulation, and implementation of conditionalities. Frequent consultations with other international agencies and joint responsibility on reforming the global financial system would serve to enhance regional contributions.

Concluding Remarks

Among the most fundamental obstacles that lie on the steep road ahead for forming a cooperating and coordinated RFA is that succinctly put by Kim et al (2000): "Given their history of enmity, rivalry and uneven distribution of power, many neighboring countries were not even thinking of a regional bloc. East Asian countries were not afraid of being excluded from any regional arrangements; hardly were they prepared to make the structural adjustments and policy changes required for successful implementation of a regional arrangement."

Do East Asians have any formal incentives or strong motivations to encourage regional integration, even in the aftermath of the EAFC? We think the verdict remains open, and serious interest and concerted effort are yet to be seen. We must, however, anticipate foreseeable problems or difficulties that may arise along the path of setting up an integrated RFA, and we belive that potential areas of disagreement can surface. At the political level, any concealed regional hegemony interests or domination may cause unease amongst members of ASEAN + 3. Disparity in terms of enthusiasm and interests between the leadership of more-developed economies and the less-developed countries can undermine the resolution for a comprehensive RFA. The political terrain suggests that any structural adjustments that may incur heavy political costs are likely to be resisted by the governing authorities. It is therefore proposed that the policy reform effort required for successful implementation of a regional arrangement must be done on a gradual basis instead of the big-bang approach.

In the aftermath of the EAFC, worrisome trends in regional financial development and practices are emerging. First, market competition may now be tempered with more regulations. Second, international financial activities may now be confronted by interventionist authorities. Third, market efficiency is beginning to be hampered by restraint on information flows and lack of transparency, and finally, greater accessibility to financial markets may now be delayed as momentum for greater opening slows down under the pretext of prudence and stability (Tan 2000). In the context of financial development and banking sector reform, it seems the issue at stake is not about opening up more or maintaining the status quo. Rather the core concern should be the capacity to cope and the ability to deal with cross-border capital flows and increasingly globally integrated financial markets. *Yet such worrisome trends, if not corrected, would mean a greater need for RFAs—which could mean that more instability and cooperation amongst*

ASEAN + 3 may eventually end up as a futile exercise to defend the indefensible.

It appears that globalization in trade and internationalized financial activities are inevitable in the current interdependent global economy. The crunch of the matter is not only to have the ability to seize favorable opportunities for economic takeoff; more important is the ability to be nimble in adjusting and adapting to unfavorable international and regional environments. Most crucial of all is the ability to quickly restructure and return to the potential growth path. During the restructuring process, rules from textbooks may not be of much use, and lessons and experiences of the developed economies cannot be directly relevant. Policy makers in their dealing with the developing economic system must continue to be pragmatic and creative (Tan and Chen 2000). *Yet if economic development strategies are wrongly prioritized and there are frequent policy reversals for some member economies, it would mean a broader gap to bridge and a greater financial burden to shoulder for the more successful member economies, which ultimately will be certain to undermine solidarity amongst ASEAN + 3.*

In conclusion, we think discussion on the concept of an AMF has been extensively appraised, and of late this idea has also been widely corroborated. It will now be necessary to get the discussion going, pin down the basic framework, and dwell on the specifics. It is likely to be a rather long and painful process before we can see results, given the diversity of ASEAN + 3. Hopefully a more concrete regional financial arrangement can be arrived at before another major financial crisis disrupts the current uneven and still highly precarious economic recovery of East Asia.

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Comments

Anne O. Krueger

When the Thai financial crisis broke in the summer of l997, the international community's response appeared significantly less supportive than that which had met the Mexican tequila crisis of l994. The Japanese government therefore proposed an Asian Monetary Fund (AMF), to be modeled on the International Monetary Fund (IMF). In response, the international community "wakened up" and began raising resources in support of first Thailand, then later Korea and Indonesia.

It was never entirely clear whether the Japanese proposal was intended to spur the members of the IMF into action, or whether the Japanese were serious in believing that a fund should in fact be formed. Either way, the United States seriously opposed the proposal, and the idea of an AMF was dropped.

The papers in this session have considered the financial situation of the Asian countries from a variety of perspectives. Pakorn Vichyanond's paper represents a very balanced and useful survey of the arguments that have been made both for and against the launching of an AMF. Wang's paper proposes an "Asian Arrangements to Borrow," which would have some of the features of an AMF. Yu's paper sets forth the Chinese perspective on Asian monetary cooperation, while the Tan and Chen paper gives the ASEAN perspective.[1] Together, the four perspectives provide an interesting and useful analysis of the issues associated with international finance for the East and Southeast Asian region.

Turning first to Vichyanond's paper, I have already indicated that I find it well balanced, and generally agree with it. So let me just make a couple of points. First of all, I find the liquidity-solvency distinction somewhat murky when it comes to countries. After all, Mexico could have sold off some of her oil assets during the l994 crisis, and Thailand had plenty of assets that could have been sold. But countries are different from residents within a country in that they are sovereign and sovereign debt raises a host of issues.

I agree with Vichyanond, however, that there are problems for an international lender. In this day and age, the value of outstanding (and sometimes due) private debt greatly exceeds the amount the IMF could conceivably lend to any given country. That in turn poses a significant problem: if the IMF lends without conditionality (including some mechanism to prevent private lenders from refusing to roll over their debt), not only is there a risk that the underlying problems that led to a rundown of foreign exchange reserves and a current account deficit will continue, but

private creditors will surely withdraw their funds, thus exacerbating the situation rather than improving it. The real problem is to determine the conditions that are necessary to restore credibility with minimum social disruption; given uncertainties as to likely market responses, this is no easy task.

I do have some disagreement with Vichyanond over his description in "IMF Stories." When a country has a very weak banking system and has incurred significant foreign currency denominated liabilities at a fixed exchange rate, the essential medicine is to alter the exchange rate to a realistic level—or better yet, let the exchange rate float to a realistic level. But doing that (which is essential to stop currency flight and the failure to roll over debt) puts further strains on the banking system. Indeed, when nonperforming loans (NPLs) are already significant, as they were in Mexico, Thailand, Malaysia, Indonesia, and Korea, altering the exchange rate puts further strain on the system. If banks themselves have borrowed in foreign currency, the depreciation of the currency results in an increase in the liability side of their balance sheets without a commensurate increase in the asset side. If, instead, bank borrowers incurred foreign currency-denominated debt directly, their increased payments to their foreign creditors will impair their ability to service their domestic obligations. Either way, the financial system is impaired. Moreover, until the problems associated with the banking system are addressed, it is difficult for economic growth to resume.

Indeed, the experience of the crisis countries plus Japan provides convincing evidence: in Mexico and Korea, the authorities moved rapidly to remove NPLs from the banking systems and took measures necessary for domestic credit expansion to resume. By contrast, Japan, and to a lesser degree Thailand, have done less to restore the health of their banks, and the consequences have been a longer period of recession.

But it is not enough simply to remove NPLs from the banking system. It is essential that measures be taken to reduce significantly the incentives for banks to repeat their indiscriminate lending performance. That, in turn, means imposing capital adequacy requirements (so that owners have an incentive not to undertake risky loans) and strengthening prudential supervision. Without removing bad paper from banks' portfolios, recovery cannot begin; without providing incentives and an environment in which a buildup of NPLs cannot recur, the problem is that a future crisis is in the making. Hence, given the situations that arose in Korea, Thailand, and the other crisis countries, the IMF had little or no choice in insisting that banking systems be strengthened as a condition for their support. Of course, such strengthening was in the individual countries' interests in any event; but it was nonetheless an essential component of recovery programs.

Vichyanond pleads for gradualism in policy steps. Again, it seems to me that evidence suggests the opposite. Countries such as Mexico and

Korea, which acted quickly to alter their exchange rate regimes and strengthen their financial systems, have recovered from crisis much more rapidly than countries that have been slow in addressing these problems.

As to the IMF voting structure, again there is an element of disagreement. First of all, most creditors (and sources of new funds) are in the rich countries. If the IMF were so structured that those members were in fundamental disagreement with the policy packages put in place, their citizens would surely refuse to roll over debt and would in other ways continue attempting to withdraw their funds from crisis countries. Thus an IMF-like agency without the confidence of private creditors in rich countries would be virtually forced, by private sector reactions, to heed private sector sentiment as much if not more than the current IMF voting structure imposes. In this regard, I also note Vichyanond's concern that IMF resources could not be extended in sufficiently large amounts to the crisis-afflicted countries because of the quota rule. In response I would simply point out that, given the level of liabilities to private creditors, the IMF could not have lent enough to the four Asian crisis countries even in the absence of that rule to restore confidence. Private investors had to be convinced that the countries would in fact recover.

Finally, one last point. Vichyanond believes (his item 6) that the IMF fiscal austerity programs resulted in "economic recession, social depression, widespread business bankruptcies, and financial defaults." I do not know which countries he has in mind, but in fact there is strong evidence that the actual recovery paths of Mexico in l995 and Korea and Thailand following the l997 crisis were far better than those anticipated at the time. Malaysia imposed capital controls, so there is no evidence from that country, while Indonesia failed by and large to achieve a sufficiently stable political situation to restore investor confidence or to carry out the IMF program, so neither of those countries provides a test case. But, given Korea's robust economic growth over the past two years, it is difficult to assert that the IMF program was a failure.

Space limitations preclude further comments, except to point out that the IMF staff had VERY little time to prepare programs. In the case of Korea, it was thirty-six hours from the time when the Korean authorities approached the IMF (after having repeatedly stated that under no circumstances would they do so) and the time when the package was put together. At that point, gross reserves are alleged to have been around $2 million and disappearing at a rate greater than that per hour! To ask that IMF staff should have been transparent, or to have moved faster, seems to me to be missing the point. My view is that the staff did amazingly well, given time constraints and earlier assertions that an approach to the fund would not be made. Even in the case of Thailand, the government fought to defend the currency for a number of months before bowing to the inevitable.

Turning then to Vichyanond's discussion of a regional lender of last

resort, I have some questions. The first one is prompted by the magnitude of private international capital flows: given the magnitude of those flows, it seems to me very likely that a regional fund is less well situated to support countries in times of crisis than a global fund. Moreover, when there is "contagion" across countries (perhaps due to similarities in their policies), it would appear that regional pooling of resources cannot help the situation. Indeed, since the total available funds in the region to ward off a run on the currency would be the same, while the existence of any supranational regional institution would inevitably entail a longer period of time prior to the release of funds, such a regional authority could be counterproductive. Although Vichyanond counts as a benefit the possibility of "being saved from contagion," that assumes that crises are the result of irrational speculators and that individual countries do not have attackable weaknesses in policy. In the cases of the Asian countries and Mexico, there were demonstrable policy weaknesses. Once Thailand had succumbed to crisis, it was inevitable for speculators to test other countries whose fundamentals were not entirely sound. If it is accepted that Thailand's policy stance was inappropriate and had to change, it can plausibly be argued that the existence of a regional authority might in fact have delayed the crisis at the cost of bigger losses of foreign exchange to defend the exchange rate prior to its collapse.

Finally, with respect to Vichyanond, it seems to me that he underestimates the difficulty of quickly "providing liquidity" while simultaneously having a realistic assessment of the situation. I am less sanguine than he that being close to a country provides better insights into the situation. Indeed, it could be argued that the authorities in Korea, Mexico, and Thailand were among the last to recognize a situation that global traders had recognized for months. I do not believe that the analogy between the regional development banks and the World Bank to an IMF and regional banks is appropriate. After all, the World Bank can finance a dam while the Asian Development Bank finances, for example, an agricultural research and extension project. Money by its nature is fungible, and complementarities, if any, would surely be different.

Turning then to Yongding Yu's paper, I found his contribution to be very useful. Indeed, as an exposition of the considerations leading to the Chinese authorities' decisions, it should be required reading for the entire financial community. I have only a few comments.

On balance, I find myself in agreement with the three reservations that Chinese economists hold. Let me therefore just briefly expand on a couple of points. First of all, I am not surprised that the Chinese estimate that the elasticity of their exports with respect to the exchange rate is very low. After all, China has not been a market economy in its entirety, and even those portions of it that are now guided by market incentives are relatively recent to do so. I would have been surprised if, given Chinese incentives,

the exchange rate played a significant role in producers' decisions. As China moves toward a more market oriented economy, however, there is every reason to believe that price responsiveness of the economy will gradually, but greatly, increase.

Second, I wonder about "coordination of development strategies and industrial policies," both as to its desirability and to its feasibility. I believe that experience has repeatedly demonstrated that economic policy in the industrial field works best when uniform, across-the-board incentives are laid down that are compatible with social objectives. Within that framework, individual citizens choose their own best courses of action, given their talents, and economic growth performance is vastly superior to situations in which central planners attempt to determine what the thrusts of new industrial production shall be. Efforts to ascertain the future international division of labor may be useful as exercises to infer where comparative advantage lies and steps that may strengthen the competitive abilities of individual economic agents, but to agree as to what should be produced where is a recipe for slow economic growth at best. As to feasibility, I wonder how there can be coordination on trade policy in countries as different as China, where much economic activity is still undertaken by the state sector, there are still capital controls, the labor market is still fairly rigid, and where the tradition of market-oriented decision making is very recent; and Korea, which has been an active player in the global marketplace for several decades. In between lie economies such as Indonesia and Malaysia, with their very different economic structures, not to mention India.

Finally, I am skeptical about Dr. Yu's prescriptions for crisis prevention and management. I do not know how a host country can help another country in the event of capital outflow. Likewise, speculators generally do not have a single geographical location, and to prevent a country's citizens from carrying out their desired transactions internationally would constitute a strong break with past economic policy for most countries in the region.

Turning then to the Kim-Ryou-Wang paper, there are a number of valuable features. The paper starts with a good account of the GAB and NAB, which is a significant contribution in itself. I have a few minor comments and many of the same questions that I raised with respect to Vichyanond. Turning first to the minor points, let me start by noting simply that Mexico and Brazil did not at any point during the debt crisis of l982 default. Their debt was rolled over as part of a package negotiated with the IMF. Second, I certainly disagree with the iconoclastic notion that assigning equal weight to all suggested causes of the Asian currency crisis is acceptable. As already noted, interactions between financial and exchange rate variables greatly intensify the severity of a crisis: when both financial and balance-of-payments crises happen simultaneously, the effects are not the sum of the effects that would occur if the two crises

happened separately; they are at least multiplicative in their harm.

Third, I do not believe that the probability of future crises remains unaltered until structural problems on the supply side have been addressed. I believe that addressing demand-side factors can also help reduce the probability of crisis. In particular, floating exchange rates and sounder financial systems can do a great deal to reduce the probability of crisis (and its severity when it does occur) regardless of any changes in the international system.

Finally, I do not agree that the Asian Development Bank should be involved in regional financial arrangements. The ADB, like the World Bank, is a development institution, and its comparative advantage lies in lending in support of development—typically long-term projects or policy reforms that will have their payoffs over the years. To saddle the ADB with an entirely new and different task would do nothing to enhance its effectiveness or credibility as a development institution—and would at the same time provide nothing additional to any Asian monetary institution that came about. That much said, however, I need only refer to my earlier remarks regarding my skepticism about any advantages for a regional financial institution. My misgivings are validated in part by the authors' proposal that the Asian Arrangements to Borrow would entail lending prior to an approach to the IMF. Had that been done in the Asian crisis, first Thailand, then Indonesia, then Korea would have been borrowing from the AAB prior to going to the IMF; the crises might have been postponed, but the countries would have ended up in the same situation at a later date with more debt. As with the earlier papers, I do not believe that "sudden reversal of capital flows" happens in the absence of underlying weaknesses in policy regimes. I am thus skeptical whether "liquidity crisis" is a meaningful term, and whether any agency could determine when the fundamentals are really sound and therefore the currency defensible. Far better to permit floating exchange rates, especially since, if the AAB were to lend in support of currencies, it would lose whenever there were subsequent devaluations or depreciations.

To summarize, I do not believe that Asian financial arrangements would harm the world economy if they were made in a manner designed to be consistent with the purview and role of the other international economic institutions. But I believe that they would not significantly strengthen the international financial system, nor even the Asian economies themselves. Partly this is because I believe that there were significant policy failures in each of the crisis countries, and that the Asian financial crisis exposed them. While there was a sharp and painful impact, those countries that then addressed those issues, including the freeing up of exchange rates and the support of the financial system, have recovered strongly.

Measures on the supply side—such as changing the BIS capital adequacy criteria so that short-term loans have a higher risk rating—as well as

on the demand side (including especially fixed exchange rates and better control of rates of domestic credit expansion) can do much to reduce the risk of future crises for the entire international economy. Many of those measures are well within the purview of individual countries; they require no international action and have already been taken. Certainly there will be future crises, but it is to be hoped that they will be less frequent and less severe as a result of the lessons emanating from the 1994–98 period.

1. *Editor's note*: Krueger's comments do not include this paper because it was submitted later to replace that presented at the conference by Subramaniam S. Pillay.

Comments

D. W. Nam

I have learned a lot from the papers and comments presented here yesterday and this morning on the issues of the Bretton Woods system and the regional financial arrangement in East Asia. Within the limit of time available, I would like to confine my comments in broad terms to three topics: the role of the IMF in reference to Korea's experience with financial crisis, the proposal for an AAB, and the internationalization of the yen and the AMF.

Morris Goldstein's paper reviews major proposals from the various entities for reforming the IMF and the World Bank, expressing his own views on each of the issues involved. I agree with most of his observations, but I would like to say a few words about what I consider to be the fundamental questions facing the international monetary system today. That is to say that in the current globalized money market, the movement of the exchange rate reflects not necessarily the change in the current account of goods and services of member countries but rather the cross-border movement of capital, particularly speculative short-term capital in quest for higher interest rate-cum-stable or favorable movement in the exchange rate of the recipient country. Under this circumstance, a country may face the situation in which its domestic currency does not depreciate in spite of the chronic deficit in the current account due to the inflow of short-term capital creating an excess supply in the exchange market. This may or may not cause a problem in some countries such as the United States (or Japan in the reverse sense of chronic surplus), but it is a matter of concern for a developing country dependent on exports for economic growth. My question is whether this is not an impairment of the existing international financial system, which was built around the floating exchange rate system, supposed by its architect to be a built-in mechanism by which to adjust imbalance of the current account of the member country. I cannot find this basic issue addressed in this forum in the deliberation on reform measures for the international financial system.

Next, as noted by Dr. Goldstein, there has been much controversy regarding the way the IMF responded to the Asian financial crisis. Here again, I raise a fundamental question as to whether the IMF really lived up to the objective set forth in Article 1 of its charter, which defines its objective as making "the general resources of the Fund temporarily available to its members . . . to correct maladjustments in their balance of payments *without resorting to measures destructive of national and international prosperity*" (italics are mine). In the particular case of Korea, I wonder if the

IMF really was able to help Korea obviate "destructive measures" by making funds available at the right time and in the right amount, so that the Korean government could effectively contain the liquidity crisis as quickly as possible and pursue structural reform in an orderly manner. Instead, in my view, the IMF, with limited resources available, had to resort to overly contractionary fiscal and monetary measures that drove a liquidity crisis into a total economic crisis, at least for a time.

Here my contention is related to the timing and size of the rescue package that the IMF provided to the affected country. When a fire breaks out in a house, nothing is more crucial than pumping water as quickly as possible. Let me illustrate the Korean experience in this regard. Since the shortage of liquidity lay at the heart of the Korean crisis, the availability of funds from external sources was the primary requisite for Korea to cope with contagion of the financial crisis. To the extent that foreign capital was readily available, the need for drastic depreciation of the won and abnormally high interest rates would be reduced and foreign creditors would be more confident that their claims would be honored. Yet, in reality, this was not the case with Korea.

To be sure, the IMF's response to the Korean crisis was prompt and efficient, arranging pledges of a funding package totaling $65 billion, which was more than enough to cover Korea's entire short-term debts outstanding at the time of the crash. The problem was that disbursement of the IMF fund was not prompt and made on a piecemeal basis because of the conditionality attached to the loans. At that time I was moved to speculate that if an amount of $30 billion or so at one shot had been applied by the IMF to Korea's dwindling reserves just for a short period of time, market confidence might have been maintained and the crisis might have been contained at an early stage, without recourse to the abrupt shift of monetary and fiscal policies. In short, the lesson to be learned from the Korean experience, it seems to me, is that timing and injection of the right amount of money is essential in containing contagion of a financial crisis. My view echoes the view expressed in the same vein by a number of speakers in the current forum.

I know that my argument raises the question of moral hazard, against which the conditionality of the IMF is regarded as an important safeguard. However, I side with the view that moral hazard has been overplayed in recent years in regard to the Asian crisis. I find it hard to believe that a man would drive less cautiously if he is insured against traffic accidents by his company. Nor can I tell to what extent businessmen or government officials are conscious of the emergency relief of the IMF when they make decisions on lending or borrowing in the international money market. I don't deny the need for imposing conditionality, but it should be made consistent with the requirement of the speedy injection of the needed amount of money to calm down the herd instinct of foreign investors char-

acteristic at the time of crisis.

In short, the IMF seems to be confronting the problem of divergence between the objectives stated in its charter and the reality of its operation in the changing conditions of the international financial market. If the objective is judged to be outmoded, it is to be rewritten. If not, the IMF should be remodeled to suit the changing conditions.

Looking back at the Korean experience, I am led to support the proposal for the Asian Arrangements for Borrowing (AAB) presented by Tae-Joon Kim, Jai-Won Ryou, and Yunjong Wang primarily for the reason that it is one way of making up the shortcomings of the IMF in dealing with the initial stage of financial crisis. In other words, the borrowing arrangement makes financial resources readily available at the critical moment to a country caught in the symptoms of financial crisis. Unlike with the IMF, disbursement of the fund is automatic and immediate in accordance with the predetermined ceiling and terms, and no condition is attached to the borrowing except for application of a market rate of interest plus some risk premium imposed in consideration of moral hazard. The AAB, if realized, will serve as the first line of defense before the affected country brings the matter to the IMF for help, and it may be able to prevent a financial fiasco from happening.

Although the proposal for the AAB is well thought out, one or two caveats may be in order. The effective operation of the AAB requires that financial commitment—proportional to the foreign exchange reserves of participating countries—is large enough to cover the real need of a country or countries to tide over financial difficulty, if it arises. The problem here is how to get all the countries in the region involved for such a purpose, including those that are not likely to need AAB assistance in the foreseeable future. In that sense, the proposal for an AAB presupposes a cooperative stance on the part of financially strong countries, including Japan and Singapore.

I also speculate that although the multilateral arrangement for borrowing will not necessarily overlap the functions of the IMF, the effect of regional borrowing may be offset by the slower action or reduced lending of the IMF. It is important, therefore, to make it clear that borrowing from the AAB is nothing but a bridge to the action of the IMF by making the maturity of the loan from the AAB as short as two or three months—instead of the six to twelve months in the proposal.

There was an argument in this forum calling for the creation of a lender of last resort for countries in the Asian region and for internationalization of yen. These proposals seem to be related to the idea of an Asian Monetary Fund (AMF) aired by Japan a few years ago. It is understandable that the affected countries in the Asian financial crisis feel strongly the need for a self-help measure on the regional level. I read an article in a Japanese magazine a few months ago, which maintained that internationalization of the

yen and creation of the AMF will serve to free Japanese businesses from foreign exchange risk associated with providing credits to foreign countries in dollar terms, as well as enhance the status of the yen as a key currency comparable to the dollar and the euro, comprising a tripartite reserve currency system in the world. At any rate, we appreciate the efforts of the Japanese government to play a role in resolving the financial crisis in Asia thus far—and preventing it from happening again in the future with the aid of the proposed AMF. However, opposition from the IMF, the United States, and European countries, as well as China, seems to be insurmountable—and they seem to have some valid reasons.

In the multicurrency world, foreign exchange risk is inevitable regardless of whether or not one currency is pegged to another or a basket of several currencies. Hence the internationalization of the yen may reduce the foreign exchange risk of Japanese businesses to some extent, but not necessarily that of other Asian countries. That's why European countries managed to arrive at a single currency system with a view to eliminate exchange risk completely among the member countries, if not with countries outside the region. The mighty German mark gave way to the euro for the common interest of countries in the European Union. I wonder how soon we can dream of a single currency in East Asia.

In short, it may be said that Japan should proceed to make the yen play a greater role in trade and other economic activities in the region and make internal conditions more palatable to foreigners to hold and use yen in their daily life—like dollars.

Listening to the discussions in the current forum in the last two days, I have come to the personal conclusion that the financial arrangement needed for East Asia now is something like the proposal for the AAB explained by Kim, Ryou, and Wang, combined with what Dr. SaKong suggested in his commentary. That is, to give some sort of institutionalization to such a scheme so that it not only provides for the emergency financing to the affected countries in the region but also provides for ways and means of preventing financial crisis, including disclosure and surveillance and promoting economic cooperation in the region. The resulting institution may be different from the AMF proposed, which has been rather controversial; the optimal design deserves further study and articulation.

Part IV

Major Findings
and
Policy Implications

Comments

Morris Goldstein

Introduction

Over the past two days, we have heard a host of interesting ideas and proposals, and we have had a productive discussion. As an outsider to the region, let me offer a few thoughts on two topics: international reserves and crisis vulnerability, and conditionality in a potential Asian Monetary Fund (or regional LOLR).

International Reserves and Crisis Vulnerability

A common characteristic of several of the Asian crisis countries is that at the time of the attack, they had a large mismatch between their liquid liabilities and their liquid assets. In particular, the ratio of short-term external debt to international reserves was typically above unity. Suffice it to say that, based on the experience of both the Mexican and Asian crises, private market participants seem to regard a low reserve cover ratio (for short-term debt) much in the same way that bulls are said to react to a "red flag"—it's a sign to attack.

Given the high international mobility of capital and its sensitivity to changes in investor sentiment—and given the large international reserves that reside in Asia—it is not hard to figure out one of the regional messages that has arisen in the wake of the crisis: namely, get yourself a bigger war chest of international reserves and initiate pooling arrangements à la the Chang Mai agreement or the like to reduce crisis vulnerability.

As far as it goes, I think this is a sensible message, but one should not go so far as to equate reduced crisis vulnerability with invulnerability.

Recall the case of Hong Kong. Prior to being attacked, it had $60–100 billion of reserves, one of the strongest banking systems in the region, and pledges of support from Beijing. Yet the Hong Kong dollar was attacked strongly, and it took huge direct intervention in the stock market by the authorities to keep the currency regime intact.

In the ERM crises of 1992 and 1993, $150–200 billion was spent on exchange market intervention in a largely futile effort to avert a host of devaluations. Mexico lost 80 percent of its reserves in a six-month period prior to the crisis, and Brazil also suffered large reserve losses during a short period.

My point is not that international reserves don't matter. They matter a lot. But given the resources or "poker chips" in the hands of the private sector, even large amounts of reserves can go rather quickly. Moreover,

reserves are not all that matters. Speculative attacks on currencies depend on a whole set of factors—including the popularity of the governing party, the level and trend of economic activity, the state of the banking system and finance companies, the government's fiscal position and its debt management policy, and the leverage ratio of corporations. Reserves are but one part of the cost/benefit calculation for a speculatory attack. This means that reducing crisis vulnerability requires progress on many fronts. A potential danger is that efforts to stockpile reserves will reduce the incentive to make headway on other dimensions of crisis vulnerability.

Policy Conditionality in an AMF

As many people in this room will no doubt recall, Japan's initial suggestion for an Asian Monetary Fund—or AMF for short—was not exactly met by applause from either the U.S. Treasury or the IMF. More recently, their response seems to be more neutral or nuanced.

While an AMF could have many functions, ranging from a forum for regional policy discussion and surveillance to a source of substantial liquidity support, I believe the key issue then as now is: What kind of policy conditionality would an AMF have and how would AMF conditionality relate to IMF conditionality? In thinking about this issue, it may be useful to consider two polar cases.

Case Number 1 is where AMF liquidity assistance essentially becomes a second line of defense behind IMF assistance, and where AMF money is disbursed only on IMF conditionality. Here, Washington, D.C., doesn't have to worry about Gresham's Law of Conditionality—that is, that weak conditionality would drive out strong conditionality if the two existed simultaneously. If IMF conditionality is designed properly and implemented, then this is a good outcome; if it is not, then this is not a good result. The larger pot of money that comes from combined IMF and AMF funds could also be two-faced: good for cushioning the recession, smoothing exchange markets, recapitalizing banks, and maybe even warding off attacks, but bad for controlling moral hazard (since there would then be more potential for short-term external creditors to obtain bailouts).

Next, consider Case Number 2. Here, AMF assistance is sizeable and comes before IMF assistance—that is, the IMF becomes the second line of defense for the region. Here too, AMF conditionality rules. Stricter IMF conditionality then comes into play only if the AMF money and conditionality don't do the job. This is a good outcome if you believe AMF conditionality will be better designed than IMF conditionality. It is a bad outcome if AMF conditionality does not do the job and only serves to delay adjustment and to increase the size of the problem.

My guess is that Washington prefers Case Number 1 to Case Number 2. Probably some of you prefer Case 2 to Case 1.

As hinted at above, much hinges on the verdict one gives to past IMF conditionality during the Asian crisis.

Asummary of my own view on this is as follows.

On fiscal policy, the IMF—like almost everyone else—underestimated the depth of the recession and the scope of contagion. As a result, fiscal policy was too tight at first and the fund (with the benefit of hindsight) was too slow in switching to a more expansionary fiscal stance. But revision of the original fiscal targets was large once the evidence came in that the recession would be more serious than expected.

On monetary policy, I would give the fund higher marks. In many of the Asian crisis countries, you were faced with a dilemma. With large unhedged positions in foreign currency, a large devaluation was poison; hence to limit falls in those currencies, you wanted high interest rates. On the other hand, with a recession looming and with high indebtedness on the part of banks and corporations, you wanted low interest rates on Keynesian grounds. There was no easy way out. On balance, I favor the option of moving interest rates up until there is some sign of quasi-stabilization, and then bring them down—à la Brazil, Korea, and others. I know of emerging-market cases where high interest rates worked and cases where they didn't. But I don't know of successful emerging market cases where—in the midst of a currency crisis and with a threat of large-scale capital flight—lower interest rates worked. I said an emerging-market case—not Australia, the United Kingdom, or Sweden.

On structural policies, I think the fund's advice and conditionality were in the right direction, particularly as regards the financial sector, but conditionality went too far and was too detailed in "noncore" areas.

If pushed, I prefer Case 1 to Case 2, but there may well be a better model out there. So far, however, I haven't heard an appealing way to address the trade-off involved. But I am open to suggestions.

Comments

Kyung Tae Lee

First let me briefly touch on the issue of complacency in the global dimension. These days I have heard a lot of warnings from foreign financial circles that the Korean people are now complacent because our economy is picking up so rapidly. Structural reform required for sustainable economic growth is either delayed or in some cases given up. But I have also observed a similar phenomenon of complacency in building the new international financial architecture. Why is progress so slow? Of course, we can point out the conflict of interests between, for example, Wall Street and the developing countries. But an underlying factor might be that Asian economies are recovering so fast, and the world economy as a whole is coming out of the imminent crisis situation so well, that the complacency is spreading into the global dimension. The urgency of reforming the international financial architecture has receded considerably with this rapid recovery of the world economy and the complacency of the G-7 countries.

The slow progress has been further complicated by the perception that the new architecture, when it is designed, may not be effective in sustaining global financial stability. Nor would it safeguard financial stability in the emerging market economies. As long as the structural problems on the supply side of capital are not substantially addressed, the East Asian countries will remain as vulnerable to future financial crises as they were before. Instead of waiting until the G-7 countries create a new architecture whose effectiveness is at best questionable, it would be in the interest of East Asia to work together to create its own system of defense. For these reasons, there has been increasing support in East Asia for developing a regional defense mechanism in the form of financial cooperative arrangements. This support has culminated in the Chiang Mai Initiative of ASEAN + 3 to create currency swap arrangements among the thirteen countries. The arrangement is now widely perceived as a major positive step toward strengthening financial cooperation among the East Asian countries.

Secondly, I am quite encouraged by the comments from Professor Anne Krueger about the prospect of regional cooperation in East Asia. I am more encouraged by her comment that many problems in East Asia, such as lack of trust and rivalry relations, are not peculiar or confined to East Asia. European countries experienced similar problems after World War II. I fully agree with her comment. In many cases, Asian people have been placing too much emphasis on the problems that have been prevalent in this region. We are ignoring new developments or changes that have

been occurring in this region, particularly after the financial crisis. Before the crisis, nobody seriously talked about East Asian economic and financial cooperation. As Dr. SaKong mentioned, the agreement among the three leaders—China, Japan, and South Korea—at Hanoi last year to conduct joint studies among research institutes is very symbolic. I also fully agree with the comment by Dr. Lamberte that we should start from the existing foundation, which is the ASEAN + 3 framework. It seems very odd that among China, Japan, and South Korea, there is no official policy dialogue mechanism so far. There is no tripartite mechanism, although there is bilateral policy dialogue. So we should think very seriously about having that kind of policy dialogue or framework between the three countries. Then I think the ASEAN + 3 framework can be more institutionalized. In other words, we can be more strongly committed to the dialogue in the ASEAN + 3 framework.

In regional economic cooperation, the importance of leadership cannot be overemphasized. Who can be the leader in East Asia? Quite naturally, we can say Japan and China, since they are the two big powers. But the reality is a bit different. It is easy to say but very hard to do. We feel that there exists a high level of mistrust between the two countries. I think China and Japan need to be more open to each other. In order to achieve the goal of regional economic cooperation, these two big powers must build a mutual trust and assume a joint leadership for other countries to follow in East Asia.

Finally, one of the lessons we learned from the Asian financial crisis, particularly the Korean crisis, is that the sequence is important—not only in capital market liberalization, but equally in domestic economic reform. We knew that Korea should have moved from government-led economic growth to market-led economic growth, so we needed deregulation and liberalization. But we ignored the fact that when the government pulls out of the managed economy, market discipline should come in. The market system evolves over time. It does not fall from the sky. For the market mechanism, we need quite complicated, well-prepared, and concerted institutional settings. Financial supervision is only one part of the institutional framework. We did not fully understand that deregulation required a lesser government role but a stronger market role. Korea's past economic development model was strongly questioned. But if the Korean model was completely wrong, how could we have managed to develop for decades—and if it was a systemic failure, how could Korea have recovered so quickly? I think we should not blame the old Korean economic model and system as a whole. It would be more correct to say that the economic system is evolving as the advanced countries did. I think Asian countries should change, but they should also restore the self-esteem and self-confidence about their capacity that they exhibited during the past few decades.

The Asian financial crises provided a strong impetus for East Asia to reform and strengthen its domestic financial systems. At the same time, a strong need has arisen for developing a framework to support regional financial cooperation to prevent and manage such crises in the future.

The Chiang Mai Initiative (CMI), agreed among ASEAN + 3 countries (China, Japan and South Korea), is now widely perceived as a major step toward strengthening financial cooperation in East Asia. However, if the ASEAN+3 countries continue to explore further development beyond the CMI, they will face much tougher challenges and tasks. East Asian countries need to tell the international community clearly what they are motivated to do, how they will develop an action plan, and how they believe it fits in the existing global financial system.

This book identifies major issues related to regional financial cooperation and provides comprehensive analyses, policy implications, and recommendations. It discusses obstacles and misgivings to overcome in the process of building a regional architecture. It highlights challenging tasks in order to achieve regional financial stability. It reviews previous proposals for regional financial arrangements and makes new proposals for constructing a better cooperative scheme.

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94320
9 788932 230306
ISBN 89-322-3030-7
89-322-3020-X(세트)
값 10,000원
Price USD 10